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## TREATMENT OF DRUG ADDICTION.

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It is not the function of the Public Health Service to pass upon the merits of the various methods of treating narcotic drug addiction, but in view of the recent decisions of the United States Supreme Court, a digest of which has been published in Public Health Reports,<sup>1</sup> it seems desirable that the medical profession should be advised at least to the extent of aiding its members to determine what does and what does not constitute legitimate professional practice. The court having decided that narcotic drugs may not be prescribed or dispensed to an addict except for the purpose of cure, and one of the recognized methods of curative treatment being the reduction method, which consists in tapering off the dosage until the patient is "off the drug," while various other methods involve the maintenance of a certain dosage during a period in which the patient is prepared, by other medication, for abrupt or rapid withdrawal, it is important that physicians should understand to what extent and in what manner the legitimacy of these curative treatments is affected by the recent court rulings.

For this purpose, all methods of curative treatment may be divided into two broad classes—the "ambulatory" and the "institutional." The ambulatory treatment may be defined, for the present purpose, as any treatment in which narcotic drugs are prescribed or dispensed to a patient for self-administration by the patient, so that he has control and possession of the drugs, and is physically free to use them in any manner he desires, regardless of the physician's instructions. The institutional treatment may be defined, for the present purpose, as any treatment in which narcotic drugs, if used at all, are administered by a physician or by a nurse under a physician's direction.

One of the purposes of the Harrison law, as declared by the Supreme Court in the Doremus case, was to prevent the possibility of narcotic drugs being illegally disposed of without payment of the tax and without the use of order forms. Obviously, the use of narcotic drugs under the institutional treatment fully precludes this illegal

<sup>1</sup> Public Health Reports, vol. 34, No. 22, May 30, 1919, pp. 1195-1197.

disposition, while their use under the conditions of the ambulatory treatment, as above defined, clearly facilitates it. The latter form of treatment readily lends itself to abuse by unscrupulous physicians who merely make a pretense of cure, and most of the successful prosecutions of physicians for illegitimate practice under the Harrison law have been in cases where the physician professed to be using the ambulatory reduction treatment for the purpose of cure.

Investigations have been made of the merits of the ambulatory treatment from the medical standpoint, and it is found that genuine cures have rarely been effected by it. Competent authorities, therefore, feel justified in advising against the use of this so-called method of curative treatment. In so far as the question of legitimacy of medical practice in the treatment of drug addiction depends on the presence or absence of professional good faith, the physician using this method must realize that he places himself in the power of his patients, and that his good faith becomes, to a great extent, dependent upon theirs. Reputable physicians can not afford to run this risk, except, possibly, in a few rare and exceptional cases. Among the medical objections to the ambulatory treatment are the facts that hypodermic administration by the patient often leads to serious abscesses through lack of sufficient sterilization; that for the same reason, and through common use of a needle by several patients, syphilis and other communicable diseases are occasionally transmitted; and that this method does not give the physician an opportunity to control the amount administered at each dose and the intervals between doses, and thus determine the minimum physiological requirements of the patient.

In order to avoid misunderstanding, two points require mention. One is that by the phrase "narcotic drugs," as used in the foregoing paragraphs, is meant only opium, coca leaves, or any compound, manufacture, salt, derivative or preparation thereof, since these are the drugs with which the Harrison law deals. The other point is that nothing in the recent court decisions affects the right of physicians to use these drugs in the treatment of disease or pathological conditions other than drug addiction, including the alleviation of pain. If drug addiction becomes necessarily incidental to such treatment, its continuance is legitimate, so long as conditions exist which medically justify it. Addicts may thus be divided into two classes, the legitimate and the illegitimate. As to the former class the rights and duties of physicians are well expressed in an article in the Weekly Bulletin of the New York City Health Department of May 3, 1919, from which we quote the following:

"Every physician must feel free to treat such cases in accordance with his own professional conscience and judgment, and no reputable physician should hesitate to do so. In this, as in all cases with which

a physician has to deal, it is his duty to seek the underlying cause of the patient's condition, and direct his treatment to the elimination of that, wherever practicable, rather than to the alleviation of symptoms; many cases of drug addiction owe their origin to professional carelessness in this respect. But where it is not possible to remove the cause, and where its continuance renders necessary or desirable, in the practitioner's honest judgment, the use of morphine, or other narcotic, he need not fear getting into legal difficulties by continuing its use, even though the patient be an addict. In fact, it is highly desirable that patients of this class be freely treated by reputable physicians, rather than be compelled to rely on questionable sources for the relief to which they are rightfully entitled."

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## OCCURRENCE OF MALARIA AND ANOPHELINE MOSQUITOES IN NORTHERN CALIFORNIA.

By WILLIAM B. HERMS, Associate Professor of Parasitology, University of California, and Consulting Entomologist of the California State Board of Health.

California has made remarkable strides in the control of malaria during the past 10 years, having reduced the prevalence of this disease by at least 60 per cent. This is not only the result of organized effort here and there in the more highly malarial districts, but is even more largely the result of widespread, intelligent individual action. At this rate we are encouraged to believe that the end of the next 10 years will see this State practically free from malaria, despite the increasing difficulties which are due to the multiplication of irrigation projects.

Although malaria has existed in California for at least 70 years, no systematic and concerted community effort in the control of anopheline mosquitoes was undertaken until the summer of 1910, when an antimalaria-mosquito organization was effected at Penryn, Placer County. From this time on, interest in mosquito abatement has grown apace,<sup>1</sup> and the need of a State-wide malaria-mosquito survey has become more apparent as a basic principle in a program for the control of malaria, the danger of which disease was so forcibly presented in 1909 by Dr. Wm. F. Snow,<sup>2</sup> then secretary of the State board of health.

Many incidental collections of mosquitoes have been made in various parts of California during the past score of years by various workers with no attempt, however, to carry out a serious systematic mosquito survey prior to 1916. The tremendous task involved in carrying out a State-wide mosquito survey is only partly measured by the 153,650 square miles of territory included within the boundaries of California—an area equal to the combined land surface of

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<sup>1</sup> Herms, W. B., 1910. Antimosquito Organization in California. California State Board of Health Monthly Bulletin, Nov., 1910, pp. 313-317.

<sup>2</sup> Snow, Wm. F., 1909. Malaria the Minotaur of California. California State Board of Health Monthly Bulletin, Dec., 1909, pp. 109-112.

New York, Maine, Ohio, New Hampshire, Vermont, Connecticut, New Jersey, Delaware, and Rhode Island. In addition to this vast area, there must be considered an enormous range in elevation in the inhabited area and widely separated communities with steep mountain ranges between.

Little progress was made until 1916, when, on March 4, the State board of health passed the following resolution, namely: "That the State board of health undertake, in cooperation with the University of California, a survey of malaria and mosquitoes in California, under the direction of Prof. W. B. Herms, assisted by Mr. S. B. Freeborn, provided the funds of the board will permit of the financing of the plan." It was estimated that the expense of the survey for the first summer would be approximately \$2,150, including cost of automobile, operation and repairs, hotel expenses, and general equipment, the salaries of the writer and Prof. Freeborn being borne by the University of California.

"The object of the survey <sup>1</sup> was threefold: First, scientific, in that an accurate knowledge of the specific occurrence and distribution of mosquitoes and malaria was desired; second, economic and remedial, in that accurate information relative to the breeding places of the anopheline species was needed in order that definite and practical suggestions for control could be offered; and third, educational, in so far as literature was distributed, lectures were given, conferences were held, and much personal work was done among the ranchers.

"The objectives of the survey defined from the very start the methods which were pursued. The itinerary of each trip was prepared in advance and adhered to very closely. Adult mosquitoes were easily located in their hiding places during the day, commonly under bridges, in culverts, and in outhouses. By the use of cyanide bottles made of shell vials (1 to 1½ inches deep and ¾ inch in diameter) representative collections were made. After collecting the mosquitoes they were at once placed between cotton wadding in small pill boxes, and each box was given a number which corresponded to a number on a map. Breeding places were then located, descriptions were made, and photographs taken in many instances. Usually, this peculiar performance attracted attention and soon one or more persons were being told the object of our work. Health officers and other public officials were frequently taken into the field and given lessons in the recognition of mosquito larvæ, particularly of the anophelines, and were given suggestions for control measures. In nearly all communities resident physicians were consulted relative to the occurrence of malaria in the vicinity, and blood smears were examined wherever available. Public lectures, previously scheduled, were given, usually

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<sup>1</sup> Herms, W. B. 1917. A State-wide Malaria-mosquito Survey of California. *Jour. Econ. Entomology*, Vol. 10, No. 3, pp. 359-370.

illustrated with local material. Perhaps the most noteworthy lecture given during the summer was that at Redding before the State convention of county supervisors. This lecture was well attended and, evidently, well received. Hundreds of copies of the State board of health Special Bulletin No. 9, by the writer, on Malaria and Mosquito Control, were distributed. In most of the seriously infested localities a house-to-house distribution was made."

Motor transportation was used, and a complete equipment was carried. This equipment consisted of maps, including topographic maps, collecting outfits, pill boxes, and vials, microscope, stain, slides, cameras, and personal effects. The work of the first summer (1916) was greatly accelerated by the assistance of four advanced students who furnished their own motor transportation and living expenses, receiving university summer session credit for the work. The summer's work began April 13 and ended August 14, covering a total of 7,036 miles in 31 northern California counties. The highest elevation reached was about 8,000 feet in the Sierra Nevada Mountains. "We had encountered rain, hail, snow, storm, heat, and cold, and were often subjected to dangers and hardships, but we had visited the home of the mosquito and had seen at first hand conditions good and bad as they actually exist."<sup>1</sup>

The itinerary<sup>2</sup> of the first summer's work included, first, the San Francisco Bay region south to Palo Alto, from San Francisco northeast into the Vaca Valley, to Davis and Woodland, thence, northward on both the west and east sides of the Sacramento River and including Sacramento, Yolo, Sutter, Yuba, Glenn, Tehama, and Shasta Counties, continuing northward to Redding, Dunsmuir, Yreka, and Hornbrook, over the Siskiyou Mountains to Ashland, Oreg., thence easterly to Klamath Falls and directly south into California again through Modoc, Lassen, and Plumas Counties, easterly into the State of Nevada (Reno), westerly into Sierra County, Calif., and southerly through Nevada, Placer, and Eldorado Counties. The final trip of the season included the counties bordering the Pacific from Marin County to Del Norte County.

During the summer of 1917 the work of the survey was carried into middle and southern California, interrupted, however, by frequent demands for inspection of military camps in various parts of the State. The summer of 1918 saw the work of the survey held in complete abeyance, both Freeborn and the writer having accepted commissions in the Army in the meantime. A completion of the State survey is contemplated during the summer of 1919.

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<sup>1</sup> Herms, W. B. 1916. Progress report on State-wide mosquito survey. California State Board of Health Monthly Bull., Vol. 12, No. 4, pp. 192-196.

<sup>2</sup> Herms, William B. 1917. A State-wide Malaria-Mosquito Survey of California. Loc. cit., pp. 366-367.

For purposes of convenience in publishing this report, all counties north of and including the following are classed as northern California, namely, San Mateo, Alameda, Contra Costa, Sacramento, and Eldorado—a total of 30.

Although no preference was made in collecting mosquitoes, this report will deal only with the anophelines, and in order to correspond more or less with the accepted faunal areas of the State the following arbitrary grouping of counties has been made:

A. Sacramento Valley counties: Butte, Colusa, Glenn, Sacramento, Solano, Sutter, Yolo, Yuba.

B. Northern mountain counties: Shasta, Siskiyou, Tehama.

C. Sierra counties: Eldorado, Nevada, Placer, Plumas, Sierra.

D. Plateau counties: Lassen, Modoc.

E. Inland coastal valley counties: Contra Costa, Lake, Napa.

F. Coastal counties: Alameda, Del Norte, Humboldt, Marin, Mendocino, San Francisco, San Mateo, Sonoma, Trinity.

TABLE I.—*Number of deaths from malaria, and average annual death rate per 100,000 for northern California for 10 years, 1909–1918, inclusive.*

	Population. <sup>1</sup>			Deaths from malaria.			Malaria death rate per 100,000. (Annual.)		
	1909–1913 inclusive.	1914–1918 inclusive.	1909–1918 inclusive.	1909–1913 inclusive.	1914–1918 inclusive.	1909–1918 inclusive.	1909–1913 inclusive.	1914–1918 inclusive.	1909–1918 inclusive.
<b>Sacramento Valley counties:</b>									
Butte.....	142,736	168,518	311,254	57	20	77	39.9	11.9	24.7
Colusa.....	35,986	39,818	75,704	2	0	2	5.1	0	2.5
Glenn.....	37,098	42,016	79,114	4	5	9	10.8	11.9	11.4
Sacramento.....	352,423	407,846	760,269	45	16	60	12.5	3.6	7.9
Solano.....	139,885	148,535	288,420	1	2	3	.7	1.3	1.0
Sutter.....	31,910	33,080	64,990	5	3	8	15.7	9.1	12.3
Yolo.....	69,817	70,598	140,415	13	4	17	18.6	5.6	12.1
Yuba.....	51,080	64,680	105,760	18	7	25	35.2	12.8	23.6
<b>Total.....</b>	<b>863,825</b>	<b>965,040</b>	<b>1,828,875</b>	<b>145</b>	<b>56</b>	<b>201</b>	<b>16.8</b>	<b>5.8</b>	<b>10.9</b>
<b>Northern mountain counties:</b>									
Shasta.....	95,690	99,635	195,315	31	34	65	32.4	34.1	33.3
Siskiyou.....	95,130	99,785	194,915	4	6	10	4.2	6.0	5.1
Tehama.....	57,265	58,280	115,545	23	5	28	40.1	8.6	24.2
<b>Total.....</b>	<b>248,075</b>	<b>267,700</b>	<b>505,775</b>	<b>58</b>	<b>45</b>	<b>103</b>	<b>23.4</b>	<b>17.5</b>	<b>20.3</b>
<b>Sierra counties:</b>									
El Dorado.....	37,460	37,460	74,920	5	8	13	13.3	21.3	17.4
Nevada.....	74,775	74,775	149,550	3	5	8	4.0	6.7	5.3
Placer.....	92,685	98,890	191,575	19	3	22	20.5	3.0	11.5
Plumas.....	26,665	28,178	54,843	1	2	3	3.4	7.1	5.4
Sierra.....	20,540	20,740	41,280	1	0	1	4.8	0	2.4
<b>Total.....</b>	<b>252,125</b>	<b>260,043</b>	<b>512,168</b>	<b>29</b>	<b>18</b>	<b>47</b>	<b>11.5</b>	<b>6.9</b>	<b>9.1</b>
<b>Plateau counties:</b>									
Lassen.....	24,188	24,923	49,111	1	2	3	4.1	8.0	6.1
Modoc.....	31,638	34,460	66,098	0	1	1	0	2.9	1.5
<b>Total.....</b>	<b>55,826</b>	<b>59,383</b>	<b>115,209</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>1.8</b>	<b>5.0</b>	<b>2.5</b>

TABLE I.—Number of deaths from malaria, and average annual death rate per 100,000 for northern California for 10 years, 1909–1918, inclusive—Continued.

	Population. <sup>1</sup>			Deaths from malaria.			Malaria death rate per 100,000. (Annual.)		
	1909–1913 inclusive.	1914–1918 inclusive.	1909–1918 inclusive.	1909–1913 inclusive.	1914–1918 inclusive.	1909–1918 inclusive.	1909–1913 inclusive.	1914–1918 inclusive.	1909–1918 inclusive.
<b>Inland coastal valley counties:</b>									
Contra Costa.....	166,710	201,210	367,920	4	2	6	2.4	1.0	1.6
Lake.....	27,630	27,630	55,260	0	0.	0	0	0	0
Napa.....	101,050	109,528	210,578	2	1	3	1.9	.9	1.4
<b>Total.....</b>	<b>295,390</b>	<b>338,368</b>	<b>633,758</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>2.0</b>	<b>.9</b>	<b>1.4</b>
<b>Coastal counties (exclusive of San Francisco):</b>									
Alameda.....	1,301,585	1,595,087	2,896,672	15	6	21	1.1	.4	.7
Del Norte.....	12,090	12,115	24,205	0	0	0	0	0	.0
Humboldt.....	173,415	190,431	363,846	1	1	2	.6	.5	.6
Marin.....	131,330	155,155	286,485	0	0	0	0	0	0
Mendocino.....	121,759	130,505	252,264	1	1	2	.8	.7	.8
San Mateo.....	141,792	178,477	320,269	3	0	3	2.0	0	.9
Sonoma.....	248,035	273,135	521,170	10	3	13	4.0	1.0	2.5
Trinity.....	16,505	16,505	33,010	1	1	2	.6	.6	.6
<b>Total.....</b>	<b>2,146,511</b>	<b>2,551,410</b>	<b>4,697,921</b>	<b>31</b>	<b>12</b>	<b>43</b>	<b>1.4</b>	<b>.5</b>	<b>.9</b>
<b>San Francisco (city and county).....</b>	<b>2,129,914</b>	<b>2,317,582</b>	<b>4,447,496</b>	<b>44</b>	<b>16</b>	<b>60</b>	<b>2.7</b>	<b>.7</b>	<b>1.3</b>
<b>Summary:</b>									
<b>Sacramento Valley counties.....</b>	<b>863,835</b>	<b>965,040</b>	<b>1,828,875</b>	<b>145</b>	<b>56</b>	<b>201</b>	<b>16.8</b>	<b>5.8</b>	<b>10.9</b>
<b>Northern mountain counties.....</b>	<b>248,075</b>	<b>257,700</b>	<b>505,775</b>	<b>58</b>	<b>45</b>	<b>103</b>	<b>23.4</b>	<b>17.5</b>	<b>20.3</b>
<b>Sierra counties.....</b>	<b>252,125</b>	<b>260,043</b>	<b>512,168</b>	<b>29</b>	<b>18</b>	<b>47</b>	<b>11.5</b>	<b>6.9</b>	<b>9.1</b>
<b>Plateau counties.....</b>	<b>55,826</b>	<b>59,383</b>	<b>115,209</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>1.8</b>	<b>5.0</b>	<b>3.5</b>
<b>Inland coastal counties.....</b>	<b>295,390</b>	<b>338,368</b>	<b>633,758</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>2.0</b>	<b>.9</b>	<b>1.4</b>
<b>Coastal (exclusive of San Francisco).....</b>	<b>2,146,511</b>	<b>2,551,410</b>	<b>4,697,921</b>	<b>31</b>	<b>12</b>	<b>43</b>	<b>1.4</b>	<b>.5</b>	<b>.9</b>
<b>San Francisco (city and county).....</b>	<b>2,129,914</b>	<b>2,317,582</b>	<b>4,447,496</b>	<b>44</b>	<b>16</b>	<b>60</b>	<b>2.7</b>	<b>.7</b>	<b>1.3</b>
<b>Total.....</b>	<b>5,991,676</b>	<b>6,749,526</b>	<b>12,741,202</b>	<b>314</b>	<b>153</b>	<b>467</b>	<b>5.3</b>	<b>2.2</b>	<b>3.7</b>
<b>Grand total (omitting San Francisco).....</b>	<b>3,861,762</b>	<b>4,431,944</b>	<b>8,293,706</b>	<b>270</b>	<b>137</b>	<b>407</b>	<b>7.0</b>	<b>3.1</b>	<b>4.9</b>

<sup>1</sup> The population figures given are the total added populations of each year during the period and are not the actual populations. These figures are used in order to compute more conveniently the annual death rates for the periods which they cover.

TABLE II.—Occurrence and distribution of anopheline mosquitoes in northern California, based on results of malaria-mosquito survey made in 1916 and 1917.

	Number of collections made.	Total number mosquitoes of all species collected.	Total number of anophelines.	Total number <i>A. quadrimaculatus</i> .	Total number <i>A. punctipennis</i> .	Total number <i>A. pseudopunctipennis</i> .	Total per cent anophelines.	Total per cent <i>A. quadrimaculatus</i> .	Total per cent <i>A. punctipennis</i> .	Total per cent <i>A. pseudopunctipennis</i> .	Annual malaria death rate per 100,000; average for 10 years.
<b>Sacramento Valley counties:</b>											
Butte.....	22	168	98	59	24	15	58	60	24	16	24.7
Colusa.....	25	295	142	128	9	14	48	90	9	10	2.5
Glenn.....	18	212	123	106	3	14	58	86	3	13	11.4
Sacramento.....	7	83	60	49	3	8	72	82	5	13	7.9
Solano.....	7	125	10	1	6	3	8	16	69	30	1.0
Sutter.....	8	95	80	77	1	2	94	96	1	3	12.3
Yolo.....	4	59	18	13	1	4	31	72	5	23	12.1
Yuba.....	6	30	29	27	0	2	97	98	0	7	28.6
Total.....	97	1,069	560	460	38	62	52.7	82.1	6.8	11.1	10.9
<b>Northern mountain counties:</b>											
Shasta.....	15	109	67	26	5	36	61	39	7	54	33.3
Siskiyou.....	8	128	43	42	1	0	34	97	3	0	5.1
Tehama.....	14	107	58	52	5	1	54	90	8	2	24.2
Total.....	37	344	168	120	11	37	48.8	71.4	6.6	22.6	20.3
<b>Sierra counties:</b>											
El Dorado.....	9	50	25	2	18	5	50	8	72	20	17.4
Nevada.....	11	80	47	2	40	5	50	4	85	11	5.3
Placer.....	18	127	59	10	35	14	47	17	69	23	11.5
Plumas.....	4	14	5	5	0	0	30	100	0	0	5.4
Sierra.....	7	59	3	3	0	0	5	100	0	0	2.4
Total.....	48	330	139	22	93	24	42.1	15.8	65.9	17.3	9.1
<b>Plateau counties:</b>											
Lassen.....	10	125	6	6	9	0	5	100	0	0	6.1
Modoc.....	5	114	22	22	0	0	19	100	0	0	1.5
Total.....	15	239	28	28	9	0	11.7	100	0	0	3.5
<b>Inland coast valley counties:</b>											
Contra Costa.....	7	57	2	2	0	0	3	100	0	0	1.6
Lake.....	3	24	14	8	1	5	58	57	7	36	0
Napa.....	4	72	21	0	5	16	29	0	24	76	1.4
Total.....	14	153	37	10	6	21	24.2	27	16	57	1.4
<b>Coastal counties (exclusive of San Francisco):</b>											
Alameda.....	41	265	4	0	3	1	2	0	75	25	.7
Del Norte.....	1	1	0	0	0	0	0	0	0	0	0
Humboldt.....	4	14	3	1	2	0	21	33	67	0	.6
Marin.....	5	113	15	8	3	4	13	53	20	27	0
Mendocino.....	9	83	71	8	2	61	85	11	3	86	.8
San Mateo.....	4	42	6	0	0	6	14	0	0	100	.9
Sonoma.....	12	110	17	3	0	14	16	18	0	82	2.5
Trinity.....	2	9	4	1	1	2	44	25	25	50	.6
Total.....	78	637	120	21	11	88	18.8	17.5	9.1	73.4	.9
Grand total.....	289	2,769	1,052	661	159	232	38	62.8	15.1	22.1	4.9



### Summary and Conclusions.

Of a total of 796 deaths in California due to malaria, reported by the State board of health during the 10 years from 1909 to 1918, inclusive, 467 or 58.7 per cent, occurred in the northern third of the State as indicated above. The average annual mortality rate for the State in these 10 years (population total for the years, 27,127,056) was 2.93 per 100,000, while for the northern third it was 3.7 for the same period, and, exclusive of San Francisco where only imported cases occurred, it was 4.9. No doubt the great majority of the San Francisco cases originated in the territory included in this report, although some San Joaquin Valley cases almost certainly are included, which number would not, however, materially alter the rate in the face of the large population. A marked decrease in the malaria death rate for the State has taken place in this period, namely, from 4.85 per 100,000 in 1909 with a total of 112 deaths to 1.79 in 1918 with a total of 56 deaths, a decrease of 63 per cent in 10 years.

Considering only counties with a high malaria rate, the following show a notable reduction based on five-year periods, comparing the years 1909-1913, inclusive, and 1914-1918, inclusive: Placer County shows a reduction of 85 per cent; Tehama 76 per cent; Sacramento 71 per cent; Butte 70 per cent; Yolo 70 per cent, and Yuba 63 per cent. It is of interest to note that the first organized malaria-mosquito crusades in the State were inaugurated in Placer, Tehama, and Butte Counties.<sup>1</sup> Much of the good accomplished in Sacramento, Yolo, and Yuba Counties is attributable to individual effort under the able leadership of county and city health officers, and farm advisors aided by numerous lectures and conferences on the part of the writer and others. This actually means that there have been about 125 lives saved in that period and no doubt over 50,000 cases of malaria were prevented in these six counties alone during this period of 10 years.

On the other hand, Shasta County has maintained a very high annual rate, namely, 33.3 average for 10 years, with a slight increase during the past few years, and at the present time it occupies the first place in the list of malarial counties. Prior to this, Tehama County occupied first place at 40.1 per 100,000, but now reduced to 8.6, a noteworthy example of what can be accomplished. Eldorado County has been steadily creeping to the top of the list, showing an increase of 60 per cent during the past five years, with a rate of 21.3 per 100,000 for that period. In justice to Shasta County it should be said that a determined stand against malaria has recently been taken and one or more well-organized malaria-mosquito campaigns will be in effect during the summer of 1919.

<sup>1</sup> Herms, W. B., *Malaria: Cause and Control*. MacMillan Co., N. Y. XI+163 pp. (See pp. 81-138 for description of early work in Placer, Butte, and Tehama Counties.)

Unfortunately, little or no effort has been put forth in the direction of malaria control in Eldorado County. In this connection it is perhaps significant to note that no increase of population has been reported in this county during the past 10 years, suggesting that there may be reasons for this backwardness.

For the period 1909-1913, the 10 counties in northern California having the highest malaria rates were Tehama (40.1), Butte (39.9), Yuba (35.2), Shasta (32.4), Placer (20.5), Yolo (18.6), Sutter (15.7), Eldorado (13.3), Sacramento (12.5), and Glenn (10.8). For the following period 1914-1918 there is a decided shifting in position with the order as follows: Shasta (34.1), Eldorado (21.3), Yuba (12.8), Butte (11.9), Glenn (11.9), Sutter (9.1), Tehama (8.6), Lassen (8.0), Plumas (7.1), Nevada (6.7). Owing to the small population of Lassen and Plumas, and the fact that only three deaths from malaria have been reported from these counties, it is hardly fair to include them in the above list, which, if omitted, would place Siskiyou (6.0) and Yolo (5.6) among the upper ten.

Examining this data it will be seen that Tehama has dropped to seventh place, Butte to fourth, Yuba holds its third place, but with a heavy drop in rate, Shasta has risen from fourth to first place, Placer has dropped from fifth to fourteenth, Yolo from sixth to twelfth, Sutter has risen from seventh to sixth, Eldorado has risen from eighth to second place, Sacramento has dropped from ninth to thirteenth, Glenn has risen from tenth to fifth place, and Nevada County has taken its place among the leading ten, occupying tenth place.

More than 50 per cent of all the mosquitoes collected during the survey of northern California were taken in the three divisions (Sacramento Valley, northern mountain, and Sierra counties) where has occurred about 80 per cent of all the malaria, i. e., in 16 out of 30 counties. This is not startling, but when it is known that about 50 per cent of these mosquitoes were anophelines and that 80 per cent of these were *Anopheles quadrimaculatus* and *Anopheles punctipennis*, efficient carriers of malaria, then it is clear that we have the key to the situation—two out of every five mosquitoes captured were at least potential carriers of malaria.

In the Sacramento Valley counties 52.7 per cent of all mosquitoes collected were anopheline, with 82.1 per cent *Anopheles quadrimaculatus* and 6.8 per cent *A. punctipennis*. In the northern mountain counties, practically a continuation of the Sacramento Valley in faunal relation, 48.8 per cent were anopheline, of which 71.4 per cent were *A. quadrimaculatus* and 6.6 per cent *A. punctipennis*. In the Sierra counties 42.1 per cent were anophelines, with *A. punctipennis* the predominant species (66.9 per cent), and *A. quadrimaculatus* second (15.8 per cent). The remaining species of *Anopheles*

(*A. pseudopunctipennis*) ranged from 11.1 per cent of the total anophelines in the Sacramento Valley to 22 per cent in the northern mountain counties, with 17.3 per cent in the Sierra counties.

Anopheline mosquitoes occurred much less abundantly in the coastal and inland coastal valley counties, 18.8 per cent for the former and 24.2 per cent for the latter, with *A. pseudopunctipennis* the predominant species, i. e., 73 per cent of all anophelines were *A. pseudopunctipennis* in the coastal counties and 57 per cent in the inland coastal valley counties. Malaria is very rare in these counties, Table I showing an average annual rate of 0.9 per 100,000 in the former and 1.4 per 100,000 in the latter. Thus it would appear that *Anopheles pseudopunctipennis* is either a very weak carrier of malaria or is not a carrier at all.

This conclusion is supported by the results of numerous mosquito collections made in every coastal county to the Mexican border.

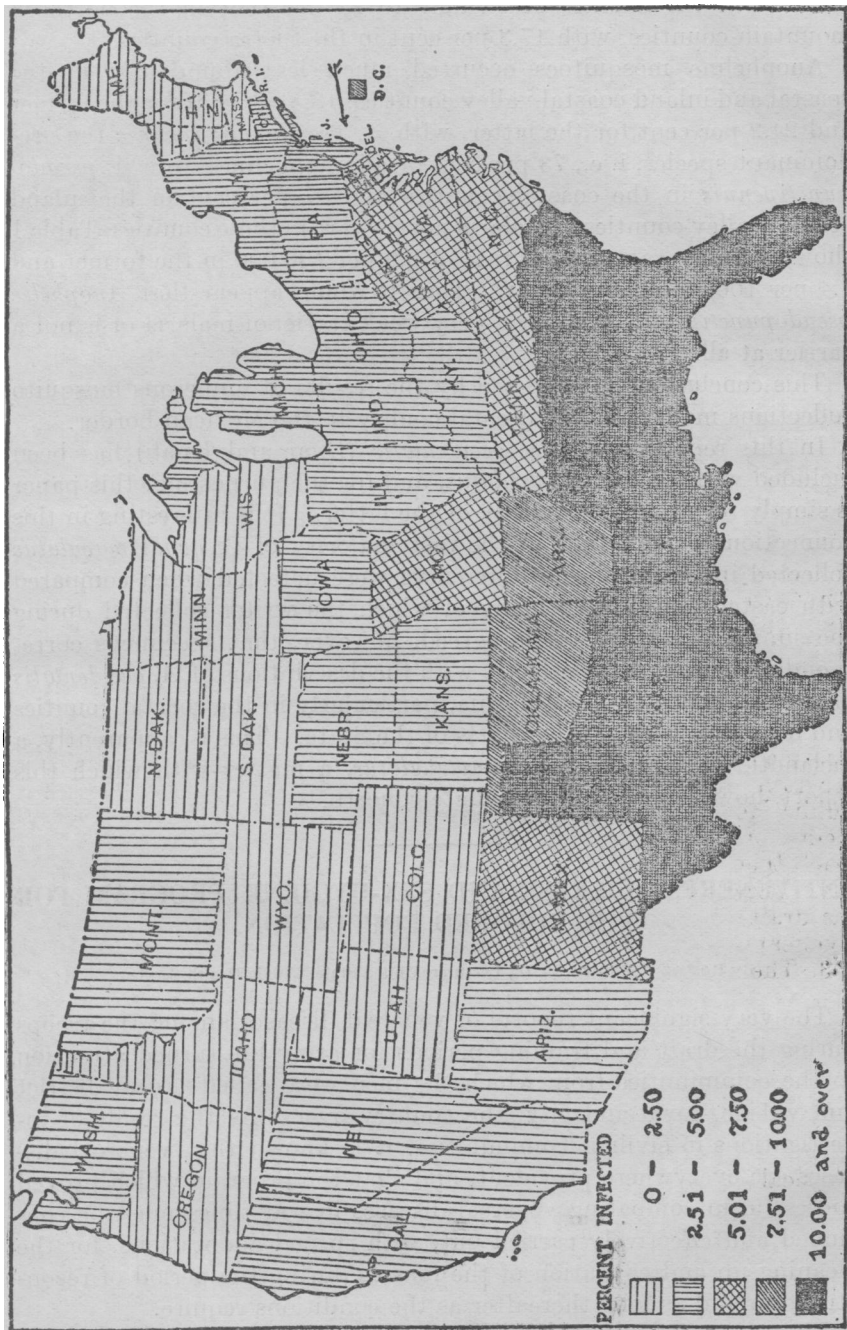
In this report *Anopheles occidentalis* (Dyar and Knab) has been included with *A. quadrimaculatus*, and for the purposes of this paper is simply regarded as a variety of the latter. It is interesting in this connection to note that in the vast majority of *A. quadrimaculatus* collected in California no differences were detected when compared with eastern specimens, many of which the writer collected during the summer of 1918. It is agreed, however, that specimens corresponding more or less perfectly with the descriptions of *A. occidentalis* have been collected in California, particularly in the coastal counties and here and there in other parts of the State. This is, apparently, a melanotic variety of *A. quadrimaculatus*, a matter with which this report, however, has no immediate concern.

## ANTIVENEREAL-DISEASE AND SEX-HYGIENE PROGRAM FOR THE COLORED POPULATION.

By ROSCOE C. BROWN, M. D., Lecturer, United States Public Health Service.

The very significant reports of venereal diseases among the troops during the draft and training periods for army life turned attention to the communities from which the men were called—rural district and village, town and city, the country over. As the result of investigations in civilian communities, it is known that venereal diseases are everywhere prevalent, and that the program which proved successful in combating venereal diseases in war times must be continued and effectively carried out, with special adaptations, for the cleaning up and education of the masses during the period of reconstruction and as long thereafter as the conditions require.

The report of the Surgeon General of the United States Army, 1918, shows a relative venereal disease incidence of 2.8 to 1 of in-



The figures here used were furnished by the Medical Records Section, office of the Surgeon General of the Army.

fections among colored troops as compared with white. Without definite statistics from civilian sources of examination and treatment of venereal diseases, this army record is taken as the index of prevalence of the venereal infections among the people of the Nation at large which sent these men into the camps.

Diseases as they affect races in a common habitat show few exceptions where the relatively greater or less susceptibility or immunity follows racial lines as such, and in these exceptions only where apparent race differentiation has been coincident with inherent physiologic change. Recent, reliable information does not except the so-called "social diseases."

The map giving graphic presentation of the relative prevalence of the venereal diseases among the second million men drafted, according to the sectional areas of the country, shows the heaviest incidence in the southern belt taking in South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas.

In the study of this exhibit, three facts stand out conspicuously, namely:

1. The States of the southern belt showing the greatest prevalence of the venereal diseases have the largest mass of the colored population, 5,643,191 in this group of seven States out of the total of 9,827,763 in the entire country of 48 States (1910 census); that is, more than one-half of the colored population in about one-seventh of the States.

2. Little had been done to instruct this mass of the colored population in sex matters and to offer adequate and efficient means for the treatment of the venereal diseases among them before the military program of the War Department and the civilian attack by the Public Health Service, in cooperation with the State health departments, provided for educational propaganda and clinical facilities to reach them. (This, however, is a difference in degree rather than in kind, because no element of the country's population had, prior to the draft revelations, realized the great need for sex education and venereal disease treatment.)

3. The underlying and predisposing causes of this great prevalence of venereal diseases are unwholesome housing and living, the lack of protective working conditions (domestic and industrial), and the serious need of opportunities and equipment for wholesome training, diversion, and recreation.

Here, indeed, for most of this mass of the population, is a difference of both kind and degree which inhibits in largest measure their physical and moral welfare.

Lieut. Col. A. G. Love, Medical Corps, United States Army, and Maj. C. B. Davenport, Sanitary Corps, United States Army, in a paper read before the National Academy of Sciences under the title, "A Comparison of White and Colored Troops in Respect to Incidence of Disease," stated the following: "Combining the data of the last 10 years, the rate of all venereal diseases for colored troops is a little less

than double that for whites. The difference between the races in incidence of venereal diseases is probably due partly to a difference in social pressure, partly to a difference in ability to control the sex instinct." It may be that the latter difference is dependent upon the former, as the ability to control habits and emotions is the product of the environment which involves individuals and the social conditions and contacts which affect them.

Hence, no program for the effectual and permanent solution of the venereal disease problem can neglect these predisposing factors. Yet, the comprehension and betterment of these alone will not suffice, for there is the present, positive need for treatment of all existing foci of the venereal infections. There should be—and must be, if the more dire consequences of the venereal diseases would be avoided—understanding of and cooperation in the following four-fold program.

#### A. Medical—Clean Out the Infections.

Venereal diseases are not always the result of a breach of moral laws. Many of the infected are innocent, especially among wives and children, and some infections are accidental. But however contracted, a venereal disease is dangerous, and if not treated and cured will produce in sequence early and acute suffering and deformity, and serious conditions in later life. Particularly serious and deplorable is the spreading of venereal diseases whereby not only other dangerous foci for further infection are made, but in many cases innocent women and children pay the price of recklessness, ignorance, or indifference in hospitalization, surgical operations, invalidism and blindness and, withal, a miserable and shortened existence.

The hospital, the clinic, the doctor, and the nurse here have a special opportunity, as well as duty, to render a service in which great need and difficulty only increase the obligation and do not pardon delay or excuse incompetency. If adequate facilities and prepared personnel are lacking, no greater demand rests upon medical men and women and institutions than that for training and attack upon the ages-old scourge of health and efficiency—the venereal diseases.

Neither the lack of facilities nor the difficulty or denial of access to existing facilities should retard immediate and direct efforts to cure and control the venereal diseases. Every physician should be competent to recognize, diagnose, and treat venereal disease lesions, and certainly one or more physicians in each locality, according to the size and needs of the place, should have adequate and efficient clinic or office facilities to treat them. If such facilities are lacking, they should be established as early as practicable.

In the established hospitals and clinics where there are means for treating the venereal diseases but which do not provide for colored patients, efforts should be made to gain admission for them and for their doctors and nurses to attend them. This cooperative service has in a number of cases been provided and has proved effective.

Where this can not be obtained, and in communities where there is a large colored population, special clinics for colored patients and with colored doctors, nurses, and attendants who are familiar with their needs should be established. Freedmen's Hospital, Washington, D. C., under the maintenance and regulation of the United States Government, the Colored Division of the General Hospital, Kansas City, Mo., under municipal maintenance and regulation, and a large number of private and institutional hospitals in many cities are notable examples of the administration and management in the care of the sick of the colored population by their own prepared men and women.

The use of capable colored women trained for public-health nursing also is a vital need. In emphatic relation to the possible success of the program of attack and control is the importance of the public-health nurse who serves to educate the mass which needs practical instruction and demonstration, and to direct, supervise, and follow up the welfare, curative and constructive, of those who need treatment.

#### **B. Law Enforcement—Clean Up the Community.**

This can not be accomplished by spasmodic and sporadic efforts which stir up conditions without securing definite action and concrete results. A "clean-up" is not an easy task, nor is it a pleasant one. But here, too, the need is intensified by the difficulties. The pride of a city wanes, efficiency suffers, resistance falters, and security fails just in proportion as vicious conditions exist and breed victims which use up the substance of a community and eat out its heart.

The members of the bar and the courts who, like the progressive doctor, should be interested not only in present practices but also in future control and prevention, and civic organizations (if there is none, one should be created without further delay in every community) have the chief responsibility for this part of the program and by initiative and cooperative effort should use all available means to establish and enforce regulations and laws which will give the community a clean status on the "blue book" of civic preferment.

#### **C. Educational—Bare the Facts.**

Bare the facts—not ruthlessly, except for the ruthless, but with special consideration of the needs according to age and sex, living, working, schooling, and playing conditions.

If those with opportunities and duties to give instruction are not prepared, they should get information and guidance from the United

States Public Health Service, the United States Bureau of Education, and the State boards of health and boards of education. They should use literature, lectures, talks, and conferences, show films and display exhibits as the needs determine and the facilities permit.

Into the promotion of this part of the program should enter the interest, indorsement, and support of the church, the school, business and industry, the professions, social workers—indeed, all organizations with personnel and means to spread the wholesome propaganda of the campaign and to aid in a practical way in securing definite results.

#### D. Social Measures—Keep the Community Wholesome.

A very essential factor in preventive venereal disease measures and proper physical control in the community is the social service worker. As directors and members in the social sections of departments of public welfare, as supervisors and attendants of places of amusement and recreation, as probation officers, and in a score or more of activities for a wholesome community, the social workers, trained and in sympathetic attitude toward the problems and needs, are indispensable in that large and important part of the program which directs attention and effort to the removal of the negative underlying and predisposing conditions for social ills.

Without proper provision for care and control of the natural outlets for the play and excitement instincts of life, there is little security for health and morals, for both are largely dependent upon the social conditions which influence them according as the community environment and community life are good or unfavorable.

Many government departments of charities and correction, school boards, insurance companies, and numerous social welfare agencies provide for the training and use of social workers. No community can longer safely deny itself organization for the large returns of good results from the services of social workers competently trained and in sufficient numbers to meet the several needs. This, more largely than any other provision of the program, depends upon the interest, initiative, and means of the citizens at large who make up the community.

This should be well understood: No program, however complete in detail it may be, can do more than guide the efforts of those who must make it effective in meeting the special needs of each community. Yet, the accumulated experiences which enter into the program for attack upon venereal diseases and the promotion of sex hygiene as outlined, indorsed, and presented by the Government, should give a large measure of encouragement and help toward the aims and ends desired and worked for.

The results of the operation of the program will depend upon the thoroughness of the plan of execution. Hence, and before all, when-



ever and wherever the campaign is to be launched, or special adaptation or adjustment of program is to be secured, a thorough survey should be made by a small, interested, tactful, and competent group of citizens, and the plan of action determined by the first-hand, unbiased information that the survey supplies.

Only in this comprehensive and systematic way can assurance be given of the solution of the complex problem of combating the venereal diseases of to-day and promoting sex hygiene as the chief preventive measures now and the guarantee of security to posterity.

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## NARCOTIC DRUGS—INTERPRETATION OF HARRISON ACT.

COURT DECIDES PHYSICIAN WHO GIVES PRESCRIPTION DOES NOT SELL THE DRUG.

The issuance of a prescription for narcotic drugs by a physician, not "in the course of his professional practice only," without participating in the sale by the druggist, is not a sale which is prohibited by the Harrison Act, according to a decision<sup>1</sup> of the United States Circuit Court of Appeals, fourth circuit.

The defendant, a physician, issued prescriptions for narcotic drugs to addicts to keep them supplied and not for the purpose of effecting a cure. He was indicted for unlawfully dispensing, distributing, and selling morphine sulphate. It was charged that the prescriptions were not issued "in the course of his professional practice only" and that there were no written orders on the prescribed form. The prescriptions were filled by different druggists, and, it being shown that there was no participation by the defendant in the different sales made by the druggists, the court held that the mere issuance of the prescriptions by the defendant was not a sale or such dispensing or distribution as amounts to a sale. The court said:

Resolving all conflicting testimony against the defendant, no direct sale, barter, exchange, or gift, and no dispensing or distribution that would denote participation in a sale, barter, exchange, or gift by him, was proved. He registered and paid the tax. Afterwards he gave prescriptions for morphine and cocaine to the persons named in the indictment, who were drug addicts, calling for such quantities of the drugs as to indicate that he was merely gratifying the craving of the addicts and that he was not seeking to cure them of the habit. The drugs were not furnished by the defendant. On the contrary, the prescriptions were carried by the recipients to different registered druggists and by them filled. There was no evidence that defendant was interested in the business of any of the druggists, or had any arrangement to share the profits of the sales with them, or that he was agent for any druggist, or that he even knew where the prescriptions were to be carried. What the statute forbids is sale, barter, exchange, or gift, including such distribution and dispensing by a physician, not in the course of his practice, as would amount to participation in a sale, barter, exchange, or gift. The mere issuance of a prescription by a physician, to be filled by any druggist, without participation by the physician in the sale made under it, would not be a sale as charged in the indictment, or such distribution or dispensing as amounts to a sale.

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<sup>1</sup> Foreman v. United States, 255 Fed. 621.

In this connection reference is made to the case of *United States v. Jin Fuey Moy*, an abstract of which was published in the Public Health Reports, April 4, 1919, page 688, in which case the United States District Court for the Western District of Pennsylvania decided that the giving of such a prescription was a violation of the provisions of the Harrison Act.

### DEATHS DURING WEEK ENDED JULY 5, 1919, IN CITIES.

From the "Weekly Health Index," July 8, 1919, issued by the Bureau of the Census, Department of Commerce.

*Deaths from all causes in certain large cities of the United States during the week ended July 5, 1919, infant mortality (per cent), annual death rates, and comparison with corresponding week of preceding years.*

City.	Population July 1, 1918, esti- mated.	Week ended July 5, 1919.		Average annual death rate per 1,000. <sup>2</sup>	Per cent of deaths under 1 year.	
		Total deaths.	Death rate. <sup>1</sup>		Week ended July 5, 1919.	Previous year or years. <sup>3</sup>
Atlanta.....	201,732	42	10.9	C 17.8	16.7	C 10.1
Baltimore.....	669,981	201	15.6	A 14.9	27.9	A 22.1
Boston.....	785,245	155	10.3	A 13.5	13.5	A 15.4
Buffalo.....	473,229	107	11.8	C 14.4	19.6	C 16.8
Cambridge.....	111,432	28	13.1	A 10.1	7.1	A 19.0
Chicago.....	2,566,681	519	10.4	A 12.7	16.0	A 17.6
Cincinnati.....	418,022	94	11.7	C 10.1	8.5	C 6.2
Cleveland.....	810,306	130	8.4	C 8.9	15.4	C 17.3
Columbus.....	225,296	51	11.8	C 14.6	7.8	C 7.9
Dayton.....	130,655	22	9.2	C 10.8	8.7	C 7.4
Denver.....		60			6.7	
Fall River.....	128,392	28	11.4	C 10.6	21.4	C 34.6
Grand Rapids.....	135,450	24	9.2	C 11.2	4.2	C 10.3
Indianapolis.....	290,389	70	14.2	C 11.2	15.2	C 16.1
Jersey City.....	318,770	82	13.4	C 13.1	31.7	C 20.0
Kansas City.....	813,785	60	11.5	C 14.1	13.0	C 9.4
Los Angeles.....	568,495	103	9.4	A 11.8	5.8	A 10.3
Louisville.....	242,707	73	15.7	C 11.2	11.0	C 9.6
Lowell.....	109,081	22	10.5	A 15.1	18.2	A 25.6
Memphis.....	154,759	52	17.5	C 31.7	26.9	C 14.9
Milwaukee.....	453,481	94	10.8	A 11.5	20.9	A 14.4
Minneapolis.....	383,442	62	8.4	C 9.1	9.7	C 23.9
Nashville.....	110,215	32	14.0	C 24.5	18.8	C 16.1
Newark.....	428,684	97	11.8	C 11.3	16.5	C 22.6
New Haven.....	154,865	43	14.5	C 9.4	20.9	C 21.4
New Orleans.....	382,273	96	13.4	A 17.9	10.2	A 10.2
New York.....	5,215,879	1,090	10.9	C 11.4	11.8	C 13.9
Oakland.....	214,206	23	5.6	A 9.1	13.0	A 8.4
Omaha.....	180,264	21	6.1	C 11.0	14.3	C 10.5
Philadelphia.....	1,761,371	360	10.7	A 11.9	12.8	A 16.2
Pittsburgh.....	593,303	136	12.0	C 13.6	20.6	C 18.7
Portland, Oreg.....		55			9.1	C 2.3
Providence.....	263,613	53	10.5	C 12.9	22.6	C 16.9
Richmond.....	190,719	55	17.8	C 24.0	29.1	C 8.1
Rochester.....	264,856	50	9.8	C 10.4	6.0	C 11.3
St. Paul.....	257,699	44	8.9	C 8.5	11.4	C 16.7
San Francisco.....	478,530	129	14.1	C 11.9	5.4	C 6.4
Spokane.....		22			4.5	C 12.5
Syracuse.....	161,404	37	12.0	C 18.8	21.6	C 26.5
Toledo.....	262,234	50	9.9	A 12.3	14.0	A 11.6
Washington, D. C.....	401,681	136	17.7	A 14.3	13.2	A 11.8
Worcester.....	173,650	59	17.7	C 11.1	11.9	C 27.0

<sup>1</sup> Annual rates per 1,000 estimated population.

<sup>2</sup> "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1918.

<sup>3</sup> Population estimated as of July 1, 1919.

<sup>4</sup> Data are based on statistics of 1915, 1916, and 1917.

*Summary of information received by telegraph from industrial insurance companies for week ended July 5, 1919.*

Policies in force.....	40,446,862
Number of death claims.....	5,401
Number of death claims per 1,000 policies in force, annual rate.....	7.0

# 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.

#### Telegraphic Reports for Week Ended July 12, 1919.

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.	Cases.	DELAWARE—continued.	Cases.
Malaria.....	12	Mumps:	
Measles.....	6	Odessa.....	1
Mumps.....	1	Ophthalmia neonatorum:	
Pellagra.....	4	Atlanta.....	1
Poliomyelitis.....	1	Smallpox:	
Scarlet fever.....	3	Warwick.....	1
Smallpox.....	2	Syphilis:	
Tuberculosis.....	32	State.....	4
Typhoid fever.....	14	Tuberculosis:	
Veneral diseases.....	109	Cheswold.....	1
Whooping cough.....	7	Felton.....	1
		Wilmington.....	1
ARKANSAS.		FLORIDA.	
Chicken pox.....	9	Diphtheria.....	4
Hookworm.....	1	Dysentery.....	4
Influenza.....	2	Influenza.....	4
Malaria.....	108	Malaria.....	33
Measles.....	21	Scarlet fever.....	2
Pellagra.....	7	Typhoid fever.....	10
Scarlet fever.....	4		
Smallpox.....	5	GEORGIA.	
Trachoma.....	4	Conjunctivitis (acute infectious).....	1
Tuberculosis.....	20	Chicken pox.....	4
Typhoid fever.....	12	Diphtheria.....	12
Whooping cough.....	30	Dysentery (amebic).....	2
		Dysentery (bacillary).....	8
CONNECTICUT.		Gonorrhea.....	317
No outbreaks or unusual prevalence.		Hookworm.....	5
		Influenza.....	4
DELAWARE.		Malaria.....	94
Chancroid:		Measles.....	20
State.....	2	Mumps.....	13
Diphtheria:		Paratyphoid fever.....	1
Wilmington.....	1	Pneumonia (acute lobar).....	4
Gonorrhea:		Poliomyelitis.....	1
State.....	14	Scarlet fever.....	12
Measles:		Septic sore throat.....	3
Arden.....	1	Smallpox.....	18
New Castle.....	1	Syphilis.....	182

GEORGIA—continued.		Cases.	INDIANA—continued.	
Tetanus.....	1		Typhoid fever:	
Tuberculosis (pulmonary).....	21		Prevalent in—	
Tuberculosis (other than pulmonary).....	1		Noble County.	
Typhoid fever.....	44		Rush County.	
Whooping cough.....	4		Fountain County.	
ILLINOIS.			IOWA.	
Diphtheria:			Cerebrospinal meningitis:	Cases.
Chicago.....	106		Cedar Rapids.....	1
State.....	16		Chancroid:	
Gonorrhea:			State.....	4
State.....	242		Diphtheria:	
Meningitis:			Cedar Falls.....	1
Chicago.....	1		Davenport.....	3
Granite City.....	1		Tioga.....	1
Naperville.....	1		Boone County.....	1
Poliomyelitis:			Gonorrhea:	
Chicago.....	7		State.....	65
Industry.....	1		Scarlet fever:	
Richmond.....	1		Boyer.....	1
Scarlet fever:			Burlington.....	1
Chicago.....	22		Minburn.....	1
Alton.....	3		Walker.....	1
State.....	3		Union County.....	2
Smallpox:			Wright County.....	1
Anna.....	7		Smallpox:	
Galesburg.....	3		Cedar Rapids.....	1
Jonesboro precinct, Union County.....	5		Davenport.....	2
State.....	5		Ottumwa.....	1
Syphilis:			Syphilis:	
State.....	208		State.....	25
Typhoid fever:			KANSAS.	
Chicago.....	9		Diphtheria.....	7
Harrisburg.....	3		Influenza.....	12
State.....	16		Scarlet fever.....	6
INDIANA.			Smallpox.....	21
Chancroid:			LOUISIANA.	
State.....	4		Chancroid.....	31
Diphtheria:			Diphtheria.....	13
Lake County.....	1		Gonorrhea.....	156
Tipton County.....	1		Pellagra.....	10
Shelby County.....	3		Poliomyelitis.....	2
Ripley County.....	1		Smallpox.....	19
Hendricks County.....	2		Syphilis.....	88
Gonorrhea:			Typhoid fever.....	30
State.....	90		MAINE.	
Measles:			Chancroid:	
Prevalent in—			State.....	1
Jay County.			Chicken pox:	
Montgomery County.			Portland.....	3
Owen County.			Diphtheria:	
Scarlet fever:			Houlton.....	1
Prevalent in Green County.			Sanford.....	1
Smallpox:			Sheridan.....	1
Prevalent in—			Gonorrhea:	
Shelby County.			State.....	36
Lake County.			Scarlet fever:	
Wabash County.			Bath.....	1
Kosciusko County.			Farmington.....	2
Laporte County.			Medford.....	5
Vermilion County.			Portland.....	2
Elkhart County.				
Syphilis:				
State.....	49			

MAINE—continued.		Cases.
Smallpox:		
Boothbay.....		2
Lewiston.....		3
Topsham.....		1
Norway.....		1
Syphilis:		
State.....		11
Tuberculosis:		
State.....		37
Typhoid fever:		
Calais.....		1
Charleston.....		1
Portland.....		1
MASSACHUSETTS.		
Diphtheria:		
Haverhill.....		11
MINNESOTA.		
Chancroid:		
State.....		1
Gonorrhea:		
State.....		85
Smallpox (new foci):		
Blue Earth County—Mapleton village.....		1
Hennepin County—Minnetrista Township.....		3
Meeker County—Watkins village.....		2
Nobles County—Reading village.....		1
Syphilis:		
State.....		94
NEW JERSEY.		
Influenza.....		5
Pneumonia.....		22
NEW YORK.		
(New York City not included.)		
Cerebrospinal meningitis:		
Albany.....		1
New Bremen.....		1
Hempstead.....		1
Diphtheria:		
State.....		171
Gonorrhea:		
State (voluntary reports).....		75
Measles:		
State.....		263
Poliomyelitis:		
Fairfield.....		1
Scarlet fever:		
State.....		74
Smallpox:		
Worcester.....		3
Westford.....		1
East Hampton.....		10
Syphilis:		
State (voluntary reports).....		229
Typhoid fever:		
State.....		39
Whooping cough:		
State.....		135

NORTH CAROLINA.		Cases.
Chancroid.....		6
Chicken pox.....		13
Cholera infantum.....		4
Diphtheria.....		20
Dysentery (amebic).....		1
Dysentery (bacillary).....		13
Gonorrhea.....		119
Measles.....		45
Meningitis (epidemic).....		1
Ophthalmia neonatorum.....		1
Paratyphoid fever.....		1
Poliomyelitis.....		1
Pneumonia (broncho).....		1
Pneumonia (lobar).....		1
Scarlet fever.....		12
Septic sore throat.....		4
Smallpox.....		22
Syphilis.....		52
Typhoid fever.....		188
Whooping cough.....		103
OHIO.		
Diphtheria:		
Alliance—Fairmont Children's Home.....		11
Cleveland.....		13
Berea.....		6
Scarlet fever:		
Thompson Township—Seneca County Children's Home.....		12
Smallpox:		
Turtle Creek Township, Warren County..		5
Mead Township, Belmont County.....		14
Washington Court House.....		24
Typhoid fever:		
Ironton.....		3
Columbus.....		4
VERMONT.		
No outbreak or unusual prevalence reported.		
WASHINGTON.		
Mild smallpox generally prevalent throughout the State.		
WEST VIRGINIA.		
Diphtheria:		
Buckhannon.....		1
Measles:		
State.....		11
Scarlet fever:		
Charleston.....		1
Logan.....		1
Martinsburg.....		2
Morgantown.....		2
Smallpox:		
Clarksburg.....		2
Grafton.....		2
Morgantown.....		1
Typhoid fever:		
Charleston.....		3
Martinsburg.....		2
Wheeling.....		1
Williamson.....		1

## SUMMARY OF CASES REPORTED MONTHLY BY STATES.

Tables showing, by counties, the reported cases of cerebrospinal meningitis, malaria, pellagra, poliomyelitis, smallpox, and typhoid fever are published under the names of these diseases. (See names of these and other diseases in the table of contents.)

This issue of the Public Health Reports contains the monthly State reports which were received during one week only. Reports from other States appear each week as received.

State.	Cerebrospinal meningitis.	Diphtheria.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
January, 1919:									
District of Columbia.....		67		6	1		31	13	3
March, 1919:									
Maine.....		7		4			84	86	17
New Jersey.....	21	632	5	404		1	457	18	19
April, 1919:									
District of Columbia.....	2	74		48			115	59	7
Maine.....		42		1			87	16	5
May, 1919:									
Arizona.....		4		14			5	14	6
June, 1919:									
Florida.....	1	7	67	16	10		9	10	48
Massachusetts.....	25	483	8	891	3	3	492	11	45

## CEREBROSPINAL MENINGITIS.

## State Reports for March, April, and June, 1919.

Place.	New cases reported.	Place.	New cases reported.
District of Columbia (April).....	2	Massachusetts (June)—Continued.	
Florida (June):		Plymouth County—Continued.	
Pensacola.....	1	Rockland (town).....	2
Massachusetts (June):		Suffolk County—	
Barnstable County—		Boston.....	6
Provincetown (town).....	2	Worcester County—	
Essex County—		Leominster.....	1
Danvers (town).....	1	Total.....	25
Marblehead (town).....	1	New Jersey (March):	
Lawrence.....	1	Bergen County.....	5
Middlesex County—		Burlington County.....	2
Arlington (town).....	1	Essex County.....	6
Hudson (town).....	1	Hudson County.....	2
Cambridge.....	1	Hunterdon County.....	1
Lowell.....	2	Mercer County.....	1
Malden.....	2	Middlesex County.....	2
Norfolk County—		Union County.....	2
Weymouth (town).....	1	Total.....	21
Quincy.....	2		
Plymouth County—			
Norwell (town).....	1		

## City Reports for Week Ended June 28, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	1		Nashville, Tenn.....	1	1
Buffalo, N. Y.....	1	1	New Orleans, La.....	11	4
Charlotte, N. C.....		1	Philadelphia, Pa.....	3	2
Chicago, Ill.....	2		Poughkeepsie, N. Y.....	1	
Cincinnati, Ohio.....		1	Providence, R. I.....	1	
Detroit, Mich.....		1	Quincy, Mass.....	1	
Duluth, Minn.....	1		Racine, Wis.....		1
El Paso, Tex.....	1		St. Louis, Mo.....	1	1
Kansas City, Mo.....	1	1	San Francisco, Calif.....	1	1
Lowell, Mass.....	1	1			

**DIPHTHERIA.**

See Telegraphic weekly reports from States, page 1595; Monthly summaries by States, page 1598; and Weekly reports from cities, page 1606.

**LEPROSY.**

Benton Harbor, Mich., and New Orleans, La.

During the week ended June 28, 1919, leprosy was reported at Benton Harbor, Mich., and New Orleans, La., each one case.

**MALARIA.**

State Reports for March and June, 1919.

Place.	New cases reported.	Place.	New cases reported.
<b>Florida (June):</b>		<b>Massachusetts (June):</b>	
Alachua County.....	3	Essex County—	
Baker County.....	1	Haverhill.....	1
Citrus County.....	2	Middlesex County—	
Columbia County.....	1	Lowell.....	1
Dade County—		Norfolk County—	
Miami.....	1	Dedham (town).....	1
De Soto County.....	6	Franklin (town).....	1
Duval County.....	5	Needham (town).....	1
Jacksonville.....	6	Wellesley (town).....	1
Escambia County—		Suffolk County—	
Pensacola.....	4	Boston.....	1
Gadsden County.....	6	Worcester County—	
Hernando County.....	2	Northbridge (town).....	1
Hillsboro County.....	1	<b>Total.....</b>	<b>8</b>
Tampa.....	1		
Jackson County.....	1	<b>New Jersey (March):</b>	
Lake County.....	1	Camden County.....	1
Levy County.....	7	Hudson County.....	2
Marion County.....	6	Monmouth County.....	1
St. Johns County.....	3	Somerset County.....	1
St. Lucie County.....	4	<b>Total.....</b>	<b>5</b>
Seminole County.....	2		
Suwanee County.....	2		
Walton County.....	2		
<b>Total.....</b>	<b>67</b>		

**City Reports for Week Ended June 28, 1919.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alameda, Calif.....	1		Montgomery, Ala.....	1	
Atlanta, Ga.....	1		Nashville, Tenn.....	1	
Beaumont, Tex.....		1	New York, N. Y.....		1
Boston, Mass.....	1		Paterson, N. J.....	1	
Columbus, Ga.....	6		Perth Amboy, N. J.....	1	
Framingham, Mass.....	8		Savannah, Ga.....		1
Little Rock, Ark.....	2		Stockton, Calif.....	1	
Lowell, Mass.....	1	1	Tuscaloosa, Ala.....	1	
Memphis, Tenn.....		1	Wilmington, N. C.....	3	
Mobile, Ala.....		1	Winston-Salem, N. C.....	2	

**MEASLES.**

See Telegraphic weekly reports from States, page 1595; Monthly summaries by States, page 1598; and Weekly reports from cities, page 1606.

## PELLAGRA.

## State Reports for January and June, 1919.

Place.	New cases reported.	Place.	New cases reported.
District of Columbia (January).....	1	Massachusetts (June):	
Florida (June):		Essex County—	
Deval County—		Danvers (town).....	1
Jacksonville.....	2	Middlesex County—	
Gadsden County.....	3	Somerville.....	1
Jackson County.....	1	Worcester County—	
Orange County.....	1	Worcester.....	1
Putnam County.....	1	Total.....	3
Sumter County.....	1		
Walton County.....	1		
Total.....	10		

## City Reports for Week Ended June 28, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.....		2	Mobile, Ala.....		1
Birmingham, Ala.....	1	2	Nashville, Tenn.....		2
Charleston, S. C.....		3	New Orleans, La.....	1	1
Columbus, Ga.....		1	Richmond, Va.....		1
Concord, N. H.....	2		Riverside, Calif.....	1	1
Danville, Va.....		1	Waco, Tex.....		1
Lexington, Ky.....		1	Waltham, Mass.....	1	
Los Angeles, Calif.....	1	1	Wilmington, N. C.....		1

## PLAGUE-INFECTED GROUND SQUIRRELS.

## Alameda and Contra Costa Counties, Calif.

During the period June 10-23, 1919, six plague-infected ground squirrels (*Citellus beechyi*) were reported found in Alameda and Contra Costa Counties, Calif. In each case diagnosis was based upon animal inoculation and cultures. Intensive hunting and poisoning operations are being carried on.

## PNEUMONIA.

## City Reports for Week Ended June 28, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio.....	1				Cleveland, Ohio.....	4	7		
Anderson, Ind.....		1			Columbus, Ohio.....		1		
Ansonia, Conn.....		1			Dallas, Tex.....	1	1		
Atlanta, Ga.....	2				Dayton, Ohio.....	1	1		
Baltimore, Md.....	4	4			Denver, Colo.....		1		2
Binghamton, N. Y.....	1				Detroit, Mich.....	3	4	5	7
Boston, Mass.....	9	2			Duluth, Minn.....	1	1		
Brazil, Ind.....				1	East St. Louis, Ill.....		1		
Brookline, Mass.....	2	1			Elizabeth, N. J.....	1			
Buffalo, N. Y.....		2			Fall River, Mass.....	1			
Cadillac, Mich.....	1				Fort Wayne, Ind.....		1		
Camden, N. J.....	2				Fort Worth, Tex.....		5		
Chelsea, Mass.....	1	1			Freeport, Ill.....		1		
Chicago, Ill.....			66	30	Hammond, Ind.....		1		



## PNEUMONIA—Continued.

## City Reports for Week Ended June 28, 1919—Continued.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
Haverhill, Mass.	1				Philadelphia, Pa.	24	9		
Indianapolis, Ind.				4	Plainfield, N. J.		1		
Kansas City, Mo.			1		Plattsburgh, N. Y.		1		
Kearny, N. J.	1				Pontiac, Mich.	1			
Lancaster, Ohio		1			Portland, Oreg.		1		2
Lawrence, Mass.		2			Portsmouth, Va.		2		
Lexington, Ky.		1			Providence, R. I.		1		
Lima, Ohio.		1			Quincy, Ill.	1			
Los Angeles, Calif.	5	1			Richmond, Va.		1		
Louisville, Ky.		2			Rochester, N. Y.	1	1		
Lowell, Mass.	1	1			Rockford, Ill.		1		
Mankato, Minn.				1	Sacramento, Calif.	1		2	2
Milwaukee, Wis.		2			Saginaw, Mich.		1		
Minneapolis, Minn.		2			Salt Lake City, Utah		4		
Montclair, N. J.		1			San Diego, Calif.				1
Nashville, Tenn.		3			San Francisco, Calif.	14	7		
Newark, N. J.	7				Savannah, Ga.		2		
New Bedford, Mass.	1				Somerville, Mass.	1			
New Haven, Conn.				3	Springfield, Ill.		1		
New Orleans, La.		4			Springfield, Mass.	1	2		
New York, N. Y.			7	55	Syracuse, N. Y.		1		
North Tonawanda, N. Y.		1			Taunton, Mass.		1		
Norwalk, Conn.		1			Tulsa, Okla.	1			
Norwood, Ohio.	2	2			Washington, D. C.		7		
Oakland, Calif.				3	Wausau, Wis.				1
Oak Park, Ill.		1			Westfield, Mass.	1			
Oklahoma City, Okla.				1	Wilmington, Del.		3		
Omaha, Nebr.				4	Wilmington, N. C.		1		
Oshkosh, Wis.		1			Worcester, Mass.	1	1		
Paterson, N. J.			2		Yonkers, N. Y.		1		

## POLIOMYELITIS (INFANTILE PARALYSIS).

## State Reports for March and June, 1919.

Place.	New cases reported.	Place.	New cases reported.
Massachusetts (June):		New Jersey (March):	
Essex County—		Essex County.....	1
Everett.....	1		
Middlesex County—			
Belmont (town).....	1		
Melrose.....	1		
Total.....	3		

## City Reports for Week Ended June 28, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1		New York, N. Y.....	2	1
Baltimore, Md.....	2	1	Pontiac, Mich.....	1	
Chicago, Ill.....	1		Topeka, Kans.....	1	
Everett, Mass.....	1				

## RABIES IN ANIMALS.

Cheyenne, Wyo., Detroit, Mich., and Rochester, N. Y.

During the week ended June 28, 1919, there were reported one case of rabies in animals at Cheyenne, Wyo., one at Detroit, Mich., and two cases at Rochester, N. Y.

## SCARLET FEVER.

See Telegraphic weekly reports from States, page 1595; Monthly summaries by States, page 1598; and Weekly reports from cities, page 1606.

## SMALLPOX.

State Reports for January, April, May, and June, 1919—Vaccination Histories.

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>Arizona (May):</b>						
Maricopa County.....	11			1	4	6
Apache County.....	3		3			
<b>Total.....</b>	<b>14</b>		<b>3</b>	<b>1</b>	<b>4</b>	<b>6</b>
District of Columbia (January)....	13				13	
District of Columbia (April).....	59				59	
<b>Florida (June):</b>						
Clay County.....	1				1	
Duval County.....	6				6	
Jacksonville.....	1				1	
Escambia County—						
Pensacola.....	2				1	1
<b>Total.....</b>	<b>10</b>				<b>9</b>	<b>1</b>
<b>Massachusetts (June):</b>						
Essex County—						
Gloucester.....	2				2	
Hampden County—						
Ludlow (town).....	3		3			
Middlesex County—						
Belmont (town).....	1				1	
Framingham (town).....	1				1	
Lowell.....	1				1	
Suffolk County—						
Boston.....	3				3	
<b>Total.....</b>	<b>11</b>		<b>3</b>		<b>8</b>	

## SMALLPOX—Continued.

## State Reports for March and April, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
<b>Maine (March):</b>			<b>Maine (April):</b>		
Aroostook County—			Androscoggin County—		
Bagle Lake (town).....	33	.....	Auburn.....	1	.....
Houlton (town).....	6	.....	Aroostook County—		
Frenchville (town).....	5	.....	Fort Kent (town).....	2	.....
Griswold.....	16	.....	Van Buren (town).....	9	.....
Guerette.....	10	.....	Island Falls (town).....	1	.....
Androscoggin County—			Cumberland County—		
Turner (town).....	2	.....	New Gloucester		
East Livermore			(town).....	1	.....
(town).....	3	.....	Sagadahoc County—		
Kennebec County—			Bath.....	2	.....
Hallowell.....	1	.....	<b>Total</b> .....	<b>16</b>	.....
Penobscot County—					
Bangor.....	2	.....	<b>New Jersey (March):</b>		
Millinocket (town).....	3	.....	Atlantic County.....	14	.....
Sagadahoc County—			Camden County.....	2	.....
Bath.....	4	.....	Cape May County.....	1	.....
Somerset County—			Gloucester County.....	1	.....
Hartland (town).....	1	.....	<b>Total</b> .....	<b>18</b>	.....
<b>Total</b> .....	<b>86</b>	.....			

## City Reports for Week Ended June 28, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alliance, Ohio.....	1	.....	Moline, Ill.....	3	.....
Atchison, Kans.....	1	.....	Morgantown, W. Va.....	2	.....
Atlanta, Ga.....	9	.....	Muskogee, Okla.....	2	.....
Battle Creek, Mich.....	3	.....	New Orleans, La.....	6	1
Beatrice, Nebr.....	3	.....	Newport News, Va.....	1	.....
Bluefield, W. Va.....	6	.....	Norfolk, Va.....	1	.....
Boise, Idaho.....	3	.....	Norwood, Ohio.....	1	.....
Butte, Mont.....	1	.....	Ogden, Utah.....	4	.....
Cairo, Ill.....	1	.....	Oklahoma City, Okla.....	8	.....
Cedar Rapids, Iowa.....	4	.....	Omaha, Nebr.....	18	.....
Chicago, Ill.....	1	.....	Oshkosh, Wis.....	2	.....
Cincinnati, Ohio.....	6	.....	Parsons, Kans.....	2	.....
Cleveland, Ohio.....	9	.....	Pekin, Ill.....	2	.....
Covington, Ky.....	2	.....	Peoria, Ill.....	2	.....
Dallas, Tex.....	2	.....	Philadelphia, Pa.....	1	.....
Davenport, Iowa.....	7	.....	Fine Bluff, Ark.....	1	.....
Denver, Colo.....	11	.....	Portland, Me.....	1	.....
Detroit, Mich.....	10	.....	Portland, Oreg.....	48	.....
Duluth, Minn.....	1	.....	Pueblo, Colo.....	1	.....
Durham, N. C.....	1	.....	Racine, Wis.....	7	.....
Everett, Wash.....	16	.....	Roanoke, Va.....	6	.....
Great Falls, Mont.....	5	.....	Rockford, Ill.....	1	.....
Greeley, Colo.....	2	.....	Rock Island, Ill.....	4	.....
Green Bay, Wis.....	2	.....	St. Cloud, Minn.....	1	.....
Hammond, Ind.....	1	.....	St. Louis, Mo.....	1	.....
Hogquiam, Wash.....	3	.....	St. Paul, Minn.....	9	.....
Kalamazoo, Mich.....	4	.....	Salt Lake City, Utah.....	6	.....
Kansas City, Mo.....	6	.....	San Francisco, Calif.....	5	.....
Kokomo, Ind.....	1	.....	Spartanburg, S. C.....	3	.....
La Crosse, Wis.....	1	.....	Spokane, Wash.....	3	.....
La Fayette, Ind.....	1	.....	Springfield, Ill.....	1	.....
Leavenworth, Kans.....	2	.....	Steubenville, Ohio.....	1	.....
Lexington, Ky.....	2	.....	Stillwater, Minn.....	4	.....
Lincoln, Nebr.....	20	.....	Stockton, Calif.....	14	.....
Little Rock, Ark.....	2	.....	Superior, Wis.....	6	.....
Logansport, Ind.....	7	.....	Tacoma, Wash.....	10	.....
Long Beach, Calif.....	1	.....	Toledo, Ohio.....	3	.....
Lowell, Mass.....	1	.....	Topeka, Kans.....	2	.....
Marion, Ind.....	1	.....	Tulsa, Okla.....	3	.....
Marquette, Mich.....	2	.....	Walla Walla, Wash.....	1	.....
Memphis, Tenn.....	2	.....	Wichita, Kans.....	11	.....
Middletown, Ohio.....	1	.....	Winston-Salem, N. C.....	1	.....
Milwaukee, Wis.....	11	.....	Yakima, Wash.....	4	.....
Minneapolis, Minn.....	12	.....	Youngstown, Ohio.....	7	.....
Mobile, Ala.....	3	.....			

## TETANUS.

## City Reports for Week Ended June 28, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill.....	1	2	New Orleans, La.....		1
Cleveland, Ohio.....	2	1	Omaha, Neb.....		1
Columbia, S. C.....	1		Peekskill, N. Y.....		1
Columbus, Ohio.....		1	Philadelphia, Pa.....		1
East St. Louis, Ill.....	1		St. Louis, Mo.....	1	
Los Angeles, Calif.....		1	Savannah, Ga.....		1

## TUBERCULOSIS.

See Telegraphic weekly reports from States, page 1595, and Weekly reports from cities, page 1606.

## TYPHOID FEVER.

## State Reports for January, March, April, May, and June, 1919.

Place.	New cases reported.	Place.	New cases reported.
Arizona (May):		Maine (April)—Continued.	
Maricopa County.....	5	York County—	
Yavapai County.....	1	Berwick (town).....	1
Total.....	6	Sanford (town).....	1
District of Columbia (January).....	3	Total.....	5
District of Columbia (April).....	7	Massachusetts (June):	
Florida (June):		Berkshire County—	
Alachua County.....	5	Adams (town).....	2
Duval County.....	1	Dalton (town).....	1
Jacksonville.....	1	Pittsfield.....	1
Escambia County.....	5	Bristol County—	
Pensacola.....	2	Easton (town).....	1
Hamilton County.....	2	Fall River.....	9
Hernando County.....	1	Taunton.....	1
Hillsboro County.....	4	Dukes County—	
Tampa.....	9	Edgartown (town).....	1
Holmes County.....	2	Essex County—	
Leon County.....	1	Saugus (town).....	1
Levy County.....	1	Beverly.....	1
Madison County.....	1	Gloucester.....	1
Monroe County—		Haverhill.....	1
Key West.....	1	Lynn.....	1
Okaloosa County.....	1	Lawrence.....	4
Pinellas County.....	1	Hampden County—	
Polk County.....	1	Holyoke.....	2
St. Johns County.....	1	Springfield.....	2
Suwannee County.....	2	Hampshire County—	
Volusia County.....	1	Hadley (town).....	1
Walton County.....	3	Middlesex County—	
Washington County.....	2	Frammingham (town).....	1
Total.....	48	Everett.....	1
Maine (March):		Malden.....	1
Aroostook County—		Newton.....	1
Mapleton (town).....	2	Somerville.....	2
Kennebec County—		Norfolk County—	
Augusta.....	1	Braintree (town).....	1
Waterville.....	2	Dedham (town).....	1
Knox County—		Plymouth County—	
Camden (town).....	1	West Bridgewater (town).....	1
Piscataquis County—		Brookton.....	1
Milo (town).....	4	Suffolk County—	
Medford (town).....	1	Boston.....	3
Dover (town).....	1	Worcester County—	
Foxcroft (town).....	3	North Brookfield.....	1
Somerset County—		Templeton.....	1
Jackman (plantation).....	1	Total.....	45
Fairfield (town).....	1	New Jersey (March):	
Total.....	17	Bergen County.....	1
Maine (April):		Burlington County.....	3
Cumberland County—		Camden County.....	1
Cumberland (town).....	1	Essex County.....	3
Portland.....	1	Middlesex County.....	2
Knox County—		Monmouth County.....	3
Camden (town).....	1	Passaic County.....	3
		Union County.....	2
		Warren County.....	1
		Total.....	19

## TYPHOID FEVER—Continued.

City Reports for Week Ended June 23, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adams, Mass.	2		Marion, Ohio.	1	
Akron, Ohio.	1		Memphis, Tenn.	4	1
Annhston, Ala.	1		Milwaukee, Wis.	2	
Atlanta, Ga.	2		Minneapolis, Minn.	2	1
Bakersfield, Calif.	1		Mobile, Ala.	1	
Baltimore, Md.	4		Montgomery, Ala.		1
Berkeley, Calif.	1		Morristown, N. J.	7	
Beverly, Mass.	1		Muscatine, Iowa.	1	
Birmingham, Ala.	2		Nashville, Tenn.	2	
Boston, Mass.	1		Newark, N. J.	1	
Brunswick, Ga.	2		New Britain, Conn.	1	
Buffalo, N. Y.	3	1	New Haven, Conn.	1	
Butler, Pa.	1		New Orleans, La.	22	3
Calro, Ill.	1		Newport News, Va.	3	
Camden, N. J.	2		Newton, Mass.	1	
Centralia, Ill.	1		New York, N. Y.	10	2
Charleston, S. C.	3		Norfolk, Va.	4	1
Charleston, W. Va.	5		Oakland, Calif.	2	
Charlotte, N. C.	2		Oklahoma City, Okla.	3	
Chicago, Ill.	4		Orange, Conn.	4	
Cincinnati, Ohio.	1		Perth Amboy, N. J.	1	
Cleveland, Ohio.	3	1	Philadelphia, Pa.	21	
Coatesville, Pa.	3		Piqua, Ohio.	1	
Columbia, S. C.	3		Pittsburgh, Pa.	2	
Columbus, Ga.	4	1	Plainfield, N. J.		1
Columbus, Ohio.	1		Portland, Me.	4	
Connellsville, Pa.	1		Portsmouth, Va.	1	
Covington, Ky.	5		Poughkeepsie, N. Y.	1	
Dallas, Tex.	5		Providence, R. I.	2	
Davenport, Iowa.	1		Quincy, Mass.	1	
Decatur, Ill.	1		Reading, Pa.	1	
Detroit, Mich.	9		Redlands, Calif.	3	
Durham, N. C.	1		Reno, Nev.	3	
Elgin, Ill.	1		Richmond, Va.	1	
El Paso, Tex.	2		Riverside, Calif.	1	
Erie, Pa.	3		Rochester, N. Y.	1	
Everett, Mass.	1		Rome, N. Y.	1	
Fairmont, W. Va.	1		Sacramento, Calif.	1	
Fall River, Mass.	4	1	Saginaw, Mich.	1	
Findlay, Ohio.	1		St. Louis, Mo.	3	
Fort Worth, Tex.	2		St. Paul, Minn.	1	
Fremont, Ohio.	1		Savannah, Ga.	3	
Hammond, Ind.	1		Schenectady, N. Y.	1	
Haverhill, Mass.	1		Somerville, Mass.	1	1
Holyoke, Mass.	1		South Bend, Ind.	1	
Indianapolis, Ind.	2		Spartanburg, S. C.	1	1
Ironton, Ohio.	3		Spokane, Wash.	1	
Jersey City, N. J.	1		Taunton, Mass.	1	
Kansas City, Kans.	1		Terre Haute, Ind.	1	
Kansas City, Mo.	1		Toledo, Ohio.	1	
Knoxville, Tenn.	5	1	Topeka, Kans.		1
Leavenworth, Kans.	1		Troy, N. Y.	1	
Lexington, Ky.	2		Tulsa, Okla.	5	
Little Rock, Ark.	1		Tuscaloosa, Ala.	1	
Los Angeles, Calif.	1	1	Washington, Pa.	3	
Louisville, Ky.	2		Waterbury, Conn.	1	
Lynchburg, Va.	1		Wheeling, W. Va.		1
McKeesport, Pa.	1		Winston-Salem, N. C.	3	1
Macon, Ga.	1	1	Youngstown, Ohio.	2	2

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

City Reports for Week Ended June 28, 1919.

City.	Popula- tion as of July 1, 1917 (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.
Adams, Mass.	14,406	4							1	
Akron, Ohio	93,604	31	3		22				19	
Alameda, Calif.	28,433	4	1				2			
Allentown, Pa.	65,100		9		9				1	
Alliance, Ohio	19,581	6	1							
Alton, Ill.	28,783		1				2			
Altoma, Pa.	59,712		5							
Anderson, Ind.	24,330	9								1
Ann Arbor, Mich.	15,041	15	1							
Annistown, Ala.	14,326								1	
Ansonia, Conn.	16,954	4			1					
Appleton, Wis.	18,005	4								
Arlington, Mass.	13,073	11								
Asbury Park, N. J.	14,529	3	2		3				1	
Ashtabula, Ohio	22,008	3					1			
Atchison, Kans.	16,785								1	
Atlanta, Ga.	196,144	52	1		7		2			3
Atlantic City, N. J.	59,515	17	1		12		1		4	2
Attleboro, Mass.	19,776	4					1		2	1
Austin, Tex.	35,612	15								
Bakersfield, Calif.	17,543	8							2	
Baltimore, Md.	594,637	206	13	1	4		32	1	44	23
Barre, Vt.	12,401	7								2
Battle Creek, Mich.	30,159		4		11					
Bayonne, N. J.	72,204		5						3	
Beatrice, Nebr.	10,437	1								
Beaumont, Tex.	28,851	15								
Bedford, Ind.	10,613	2								
Bellefonte, N. J.	12,797								1	
Beloit, Wis.	18,547	5								
Benton Harbor, Mich.	11,099	2			2					
Berkeley, Calif.	60,427	11					2			
Beverly, Mass.	22,128	4							1	
Biddeford, Me.	17,760	3								
Billings, Mont.	15,123		1							
Binghamton, N. Y.	54,864	12	2		3				1	
Birmingham, Ala.	189,716	52			3		2		8	3
Bloomfield, N. J.	19,013		1							
Bluefield, W. Va.	16,123		1							
Boise, Idaho	35,951	2	2	1			3			
Boston, Mass.	767,813	181	51	2	28	2	35		59	23
Braddock, Pa.	22,000								1	
Brazil, Ind.	10,472	3		1						
Bristol, Conn.	16,318	0			1		1			
Brockton, Mass.	69,152	8	1				1		2	1
Brookline, Mass.	33,526	11			3				2	
Brunswick, Ga.	10,984	6							2	2
Buffalo, N. Y.	475,781	104	34	2	45	1	6		35	13
Burlington, Iowa	25,144	5	1							
Burlington, Vt.	21,802	0								
Butler, Pa.	28,677		2							
Butte, Mont.	44,057		1				1			
Cadillac, Mich.	10,158	2					3			
Calo, Ill.	15,995	5	2							1
Cambridge, Mass.	114,293	20	7		8				6	2
Camden, N. J.	108,117		5		1		1		6	
Canton, Ill.	13,674	1								1
Carlisle, Pa.	10,795				7					
Carnegie, Pa.	11,963				1					
Centralia, Ill.	11,838	1	1							
Champaign, Ill.	15,052	3								1
Chanute, Kans.	12,968	3								
Charleston, S. C.	61,041	21								1
Charleston, W. Va.	31,060	6	1		5		1			
Charlotte, N. C.	40,759	10								2
Chelsea, Mass.	48,405	7	1						2	1
Chester, Pa.	41,857				4		1			
Chicago, Ill.	2,547,201	473	62	6	412	6	26	1	337	66
Chicopec, Mass.	29,950	12	1						2	1
Chillicothe, Ohio	15,625	1								
Cincinnati, Ohio	414,218	93	12	4	29		11		19	14
Cleveland, Ohio	692,259	155	32	2	56		2		30	20
Clinton, Iowa	27,678	0								

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

City Reports for Week Ended June 28, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Clinton, Mass.	13,075	1					1			
Cohoes, N. Y.	25,292	6							6	
Colorado Springs, Colo.	38,965	12			2				3	4
Columbus, Ga.	26,306	22			4				1	1
Columbus, Ohio	220,135	58			15				5	6
Concord, N. H.	22,858	8					1			
Corpus Christi, Tex.	10,789		1							
Council Bluffs, Iowa	31,838	10	3							
Covington, Ky.	59,622	20	2	1			1		2	3
Cumberland, Md.	26,686	7	1				1		5	
Dallas, Tex.	129,738	36	1							5
Danville, Ill.	32,969				3				1	1
Danville, Va.	20,183						3		4	1
Davenport, Iowa	49,618						1			
Dayton, Ohio	128,939	23			11				4	
Decatur, Ill.	41,483	9	1						1	1
Dedham, Mass.	10,618	0							2	
Denver, Colo.	268,439	69	16	1	32		8			11
Detroit, Mich.	619,648	160	33	3	106	6	27	1	47	19
Dover, N. H.	13,276	3								
Du Bois, Pa.	14,994				2					
Dubuque, Iowa	40,096		1							
Duluth, Minn.	97,077	8	5		25				6	
Durham, N. C.	26,160	10								
East Chicago, Ind.	30,286	5								1
Easton, Pa.	30,854		3		1				2	
East Orange, N. J.	43,761	5			2		4		1	
East Providence, R. I.	18,485		1		1					
East St. Louis, Ill.	77,312	16	1		3		1			3
Elgin, Ill.	28,562	4			3					
Elizabeth, N. J.	88,830		1		2		6		6	2
Elmira, N. Y.	38,272	5	2							2
El Paso, Tex.	69,149	29			1		2			12
Englewood, N. J.	12,603	3							1	
Erie, Pa.	76,592		1				1			
Eureka, Calif.	15,142	3							2	
Evanston, Ill.	29,304	6			10		1			
Everett, Mass.	40,160	6			1				1	
Everett, Wash.	37,205				1		2			
Fairmount, W. Va.	16,111				1					
Fall River, Mass.	129,828	28	3	1	24	1			6	2
Findlay, Ohio	14,858	1	1		11					
Fond du Lac, Wis.	21,486	4								
Fort Dodge, Iowa	21,039	0								1
Fort Scott, Kans.	10,564	4								1
Fort Wayne, Ind.	78,014	12			4				6	1
Fort Worth, Tex.	109,597	23							2	2
Framingham, Mass.	14,149	2	1							
Freeport, Ill.	19,844	7				1		1		1
Fresno, Calif.	36,314	2								
Galesburg, Ill.	24,629	2			4					
Galveston, Tex.	42,650	7								2
Geneva, N. Y.	13,915	2								
Great Falls, Mont.	13,948	7			1		5			1
Greeley, Colo.	11,942	0								
Green Bay, Wis.	30,017	12								
Greenfield, Mass.	12,251	3								
Greensboro, N. C.	20,171	6								2
Greenwich, Conn.	19,594								1	1
Hackensack, N. J.	17,412	6	1		1					
Hammond, Ind.	27,016	7	1		10				1	
Harrisburg, Pa.	73,276				27					
Harrison, N. J.	17,345		3						2	
Hartford, Conn.	112,831	36		1	1		2		3	1
Haverhill, Mass.	49,180	9	2		3		1		2	1
Hazleton, Pa.	28,981				4					
Hibbing, Minn.	17,550		1							
Highland Park, Mich.	38,859	5	2		7		3		2	
Hoboken, N. J.	78,324	15	4		2				10	1
Holland, Mich.	12,459	1								
Holyoke, Mass.	66,503	13					2		3	1

1 Population Apr. 15, 1910.

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

City Reports for Week Ended June 28, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (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.
Hudson, N. Y.	12,898	2								
Indianapolis, Ind.	283,622	60	1		19		3		11	6
Ironton, Ohio	14,079	4								
Ironwood, Mich.	15,095	1					2			
Ithaca, N. Y.	16,017	4								1
Jamestown, N. Y.	37,431	8	3		4		1			
Janesville, Wis.	14,411	6	1							
Jersey City, N. J.	312,557		25		24		4		9	
Johnstown, N. Y.	10,678	2								1
Johnstown, Pa.	70,473		3		30		1		2	
Joplin, Mo.	33,400	3							1	
Kalamazoo, Mich.	50,408	10	3		23		2		1	1
Kansas City, Kans.	102,096		2		6				7	
Kansas City, Mo.	305,816	76	2		7		1		3	11
Kearny, N. J.	24,325	4	1		4		1		3	
Knoxville, Tenn.	59,112								3	3
Kokomo, Ind.	21,929	6					1			3
Lackawanna, N. Y.	16,219	2	2		1					
La Crosse, Wis.	31,833	16	2							3
La Fayette, Ind.	21,481	6	1							
Lancaster, Ohio	16,086	8			2					1
Lancaster, Pa.	51,437				2					
Lawrence, Kans.	13,477	3								
Lawrence, Mass.	102,923	20	3				3		4	2
Leavenworth, Kans.	19,363		1							
Lebanon, Pa.	20,947		1		2				4	
Leominster, Mass.	21,365	2			8				1	
Lexington, Ky.	41,997	18			1					
Lima, Ohio	37,145	9	1		13		1			
Lincoln, Nebr.	46,957	5			2					
Lincoln, R. I.	10,473		1							
Little Rock, Ark.	58,716	4			1				4	
Lockport, N. Y.	20,028	4			3				1	1
Logansport, Ind.	21,338	6					1			1
Long Beach, Calif.	29,163	4			1				1	
Long Branch, N. J.	15,733	1	1				1		2	
Lorain, Ohio	38,266	10			1				1	1
Los Angeles, Calif.	535,485	110	12		6		6		33	17
Louisville, Ky.	240,808	53	4		2		4		13	5
Lewell, Mass.	114,366	36	2		2	1	6		9	
Ludington, Mich.	10,566	3			2					1
Lynchburg, Va.	33,497	10							2	
Lynn, Mass.	104,534	14	3		5		6		2	4
McKeesport, Pa.	48,299		1		5				2	
Madison, Wis.	31,315	6								
Manchester, Conn.	15,859	2								
Manchester, N. H.	79,607	8	1				1		10	
Manitowoc, Wis.	13,931	7			4					
Mankato, Minn.	10,365	3								1
Marinette, Wis.	14,610	2								
Marion, Ind.	19,923						1			2
Marlboro, Mass.	15,285	7							1	1
Marquette, Mich.	12,555	1			5				1	
Martinsburg, W. Va.	12,984						4			
Martins Ferry, Ohio	10,135	0								
Mason City, Iowa	14,938	2								
Medford, Mass.	26,681	5	2							1
Melrose, Mass.	17,724	3								
Memphis, Tenn.	151,877		1				1		10	3
Meriden, Conn.	29,481		1				2		1	2
Methuen, Mass.	14,320	9					2		1	
Middletown, N. Y.	15,890								1	2
Middletown, Ohio	16,384	6								1
Millford, Mass.	14,280	2	1						2	
Milwaukee, Wis.	445,008	71	11	3	8		17		17	7
Minneapolis, Minn.	373,448	78	8	2	52		5	1	17	11
Missoula, Mont.	19,075	2					1			1
Mobile, Ala.	59,201	20								1
Moline, Ill.	27,976		2				2			
Montclair, N. J.	27,087	1							1	
Montgomery, Ala.	44,089	19			3					
Morgantown, W. Va.	14,444	1			1					

¹ Population Apr. 15, 1910.



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

City Reports for Week Ended June 28, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Morristown, N. J.	13,410	3								
Moundsville, W. Va.	11,513	5								
Mount Carmel, Pa.	20,709				10					
Mount Vernon, N. Y.	37,991	9	2							
Nanticoke, Pa.	23,811		1		1					
Nashville, Tenn.	118,136	58			2		2	1	7	4
Newark, N. J.	418,789	67	32	1	3		9	1	44	7
New Bedford, Mass.	121,622	22	1	1	11		6		12	1
New Britain, Conn.	55,385	12	5	1	3		4		14	
New Brunswick, N. J.	25,855								1	
Newburgh, N. Y.	29,893	6							1	2
Newburyport, Mass.	15,291	1			1				1	
New Castle, Pa.	41,915		1		1		1			
New Haven, Conn.	152,275	30	4		6		1		5	4
New London, Conn.	21,199	3	1				1		1	2
New Orleans, La.	377,010	125	4		4		1		29	18
Newport, Ky.	32,133	8							1	1
Newport News, Va.	22,622	9								
Newport, R. I.	30,585	8					7			1
Newton, Mass.	44,345	7	1				1			
New York, N. Y.	5,737,492	1,115	329	25	113	3	49	2	179	129
Norfolk, Va.	91,148				3					
Norristown, Pa.	31,969				9		1			
North Adams, Mass.	22,019	6								
Northampton, Mass.	20,006	7							1	
North Attleboro, Mass.	11,248	1								
North Braddock, Pa.	15,684						2		1	
North Tonawanda, N. Y.	14,060	2			4					
Norwalk, Conn.	27,332								4	
Norwich, Conn.	21,923		1							
Norwood, Ohio	23,269	5			24		1		1	
Oakland, Calif.	206,405	39	1						3	5
Oak Park, Ill.	27,816	7			35				3	
Ogdensburg, N. Y.	16,845	3								
Ogden, Utah	32,343	6	1		1					
Oil City, Pa.	20,162				49				1	
Oklahoma City, Okla.	97,588	16			1		1			1
Olean, N. Y.	16,927	4								
Omaha, Nebr.	177,777	34	1	1	13	2	4			1
Orange, Conn.	14,393	7	1							4
Orange, N. J.	33,636	8							3	
Oshkosh, Wis.	36,549	17								2
Parkersburg, W. Va.	21,059	3							1	1
Pasadena, Calif.	49,620	7	1						1	
Passaic, N. J.	74,478	10	1	1	3				5	1
Pateron, N. J.	140,512		5		1		3		6	
Peekskill, N. Y.	19,034	4								
Peoria, Ill.	72,184	9	1		1					
Perth Amboy, N. J.	42,646	5					1			
Philadelphia, Pa.	1,735,514	390	63	9	112	1	27		110	69
Phillipsburg, N. J.	15,879	3								
Phoenixville, Pa.	11,871				3					
Pine Bluff, Ark.	17,777		1				1			
Piqua, Ohio	14,275	3					1			
Pittsburgh, Pa.	556,196		12		24		3		20	
Pittsfield, Mass.	39,678	4							4	
Pittston, Pa.	18,975				1		1			
Plainfield, N. J.	24,330				4				5	
Plattsburg, N. Y.	13,111	1	1							
Plymouth, Mass.	14,001	1								
Pomona, Calif.	13,624	2								
Pontiac, Mich.	18,006	5	2		6		1			1
Port Chester, N. Y.	10,727	3					1			
Portland, Me.	64,720	16					7			
Portland, Ore.	308,399	53	3	2	2		6	1	8	2
Portsmouth, Ohio	29,356								1	
Portsmouth, Va.	40,663	27								
Pottstown, Pa.	16,987		1		5					
Pottsville, Pa.	22,717		1		1					
Poughkeepsie, N. Y.	30,786	6					3		3	
Providence, R. I.	259,895	59	5	1	1		3			1

\* Population Apr. 15, 1910.

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

City Reports for Week Ended June 28, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Pueblo, Colo.	56,084	0					1			
Quincy, Ill.	36,832	7								
Quincy, Mass.	39,022	7	1		1		1		2	
Racine, Wis.	47,465	9			1		1		3	2
Rahway, N. J.	10,361	3	1							1
Raleigh, N. C.	20,274	5			3				2	
Reading, Pa.	111,607		3		3				4	
Redlands, Calif.	14,573	3					1			
Reno, Nev.	15,514	3							4	6
Richmond, Va.	158,702	46	1		6				4	
Riverside, Calif.	20,496	7								
Roanoke, Va.	46,282	13	1		5					
Rochester, N. Y.	264,714	56	13	1	10		5	1	12	7
Rockford, Ill.	56,739	10	1		9		2			1
Rock Island, Ill.	29,452	5			1					
Rocky Mount, N. C.	12,673	4	2							
Rome, N. Y.	24,259		2		6				3	
Rutland, Vt.	15,038	1								
Sacramento, Calif.	68,984	26	1						12	5
Saginaw, Mich.	55,469	18	1				1			1
St. Cloud, Minn.	12,013		1						1	
St. Louis, Mo.	768,630	176	22		101		6		57	12
St. Paul, Minn.	252,465	39	12	1	28		3		10	7
Salem, Mass.	49,346	3	2				1		2	1
Salt Lake City, Utah	121,622	34	5	2	3		2			2
San Angelo, Tex.	10,321	4								3
San Bernardino, Calif.	17,616	14								5
San Diego, Calif.	56,412	20	1						2	
Sandusky, Ohio.	20,226	1			1					
Sanford, Me.	11,217	3								2
San Francisco, Calif.	471,023	131	7	1	4		19		16	6
Santa Barbara, Calif.	15,360	4								1
Saratoga Springs, N. Y.	13,839	4							1	1
Saugus, Mass.	10,210	2	3		6	1				
Sault Ste. Marie, Mich.	14,130	2	1							
Savannah, Ga.	69,250	26	4						3	1
Schenectady, N. Y.	103,774	15	3		3				5	2
Scranton, Pa.	149,541		2		4		2		3	
Shamokin, Pa.	21,274		1		36					
Shenandoah, Pa.	29,753						1		2	
Somerville, Mass.	88,618	14	1		1		2		5	1
South Bend, Ind.	70,967	10			4					2
Southbridge, Mass.	14,465	0								
Spartanburg, S. C.	21,935	8	2						1	1
Spokane, Wash.	157,656		2		33		17			
Springfield, Ill.	62,623	13			1					1
Springfield, Mass.	103,668	30	1		4				5	3
Springfield, Mo.	41,139	5								
Springfield, Ohio.	52,296				2					2
Steelton, Pa.	15,759				2					
Steubenville, Ohio.	28,259	5							1	
Stockton, Calif.	33,209	11					1			1
Sunbury, Pa.	16,661		1		3					
Superior, Wis.	47,167	13			6		2			1
Syracuse, N. Y.	153,559		1				6			4
Tacoma, Wash.	117,446		3		8		2			
Taunton, Mass.	35,610	10	2		3	1			3	1
Terre Haute, Ind.	67,361	11	1							
Tiffin, Ohio.	12,962	3							1	
Toledo, Ohio.	202,010	48	1		203		10		5	8
Topeka, Kans.	49,438	8	2				1			
Trenton, N. J.	112,974	31	3		33				9	4
Troy, N. Y.	78,094	21	1						12	1
Tuscaloosa, Ala.	10,824	2								
Vallejo, Calif.	13,803	1								
Vancouver, Wash.	13,805								1	
Waco, Tex.	34,615	7							1	2
Walla Walla, Wash.	23,067						1			
Waltham, Mass.	31,011				3		1			1
Washington, D. C.	369,282	6	9	1	5		8		29	8
Washington, Pa.	22,076		1							
Waterbury, Conn.	89,201	3	4	2	6		2		3	1

¹ Population Apr. 15, 1919.

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

## City Reports for Week Ended June 28, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (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.
Watertown, Mass.....	15,183	0	.....	1	.....	.....	.....	.....	.....	.....
Watertown, N. Y.....	30,404	.....	1	.....	.....	.....	1	.....	.....	.....
Wausau, Wis.....	19,666	2	.....	.....	.....	.....	.....	.....	.....	.....
Webster, Mass.....	13,484	2	.....	.....	1	.....	.....	.....	.....	.....
West Chester, Pa.....	13,403	.....	1	.....	.....	.....	.....	.....	.....	.....
Westfield, Mass.....	18,769	2	.....	.....	.....	.....	1	.....	1	1
West Hoboken, N. J.....	44,385	4	1	.....	.....	.....	.....	.....	.....	1
West New York, N. J.....	19,613	4	.....	.....	.....	.....	1	.....	.....	.....
West Orange, N. J.....	13,964	3	.....	.....	.....	.....	.....	.....	2	.....
Wheeling, W. Va.....	43,657	14	.....	.....	.....	.....	2	.....	1	.....
Wichita, Kans.....	73,597	14	1	.....	.....	.....	.....	.....	1	1
Wilkes-Barre, Pa.....	78,334	.....	4	.....	5	.....	2	.....	2	.....
Wilkinsburg, Pa.....	23,899	.....	.....	.....	.....	.....	.....	.....	1	.....
Williamsport, Pa.....	31,123	.....	3	.....	6	.....	3	.....	.....	.....
Wilmington, Del.....	95,369	29	.....	.....	.....	1	.....	.....	.....	2
Wilmington, N. C.....	30,400	17	.....	.....	2	.....	.....	.....	1	1
Winchester, Mass.....	10,812	2	.....	.....	.....	.....	.....	.....	1	.....
Winona, Minn.....	<sup>1</sup> 18,583	.....	.....	.....	1	.....	.....	.....	.....	.....
Winston-Salem, N. C.....	33,136	13	.....	.....	5	.....	.....	.....	3	1
Winthrop, Mass.....	13,105	.....	.....	.....	.....	.....	1	.....	.....	.....
Woburn, Mass.....	16,076	4	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.....	166,106	43	.....	.....	13	.....	6	.....	6	7
Yakima, Wash.....	22,058	.....	.....	.....	.....	.....	1	.....	.....	.....
Yonkers, N. Y.....	103,066	13 <sup>1</sup>	1	.....	1	.....	1	.....	.....	1
York, Pa.....	52,770	.....	1	.....	8	.....	3	.....	2	.....
Youngstown, Ohio.....	112,282	14	1	.....	13	.....	1	.....	.....	1
Zanesville, Ohio.....	31,320	4	.....	.....	.....	.....	.....	.....	.....	1

<sup>1</sup> Population Apr. 15, 1910.

## **FOREIGN.**

### **AUSTRALIA.**

#### **Influenza—State of Queensland Declared Infected—Quarantine.**

Under date of May 14, 1919, the Governor General of the Commonwealth of Australia declared the State of Queensland to be infected with influenza and ordered quarantine measures to be observed against the infected area as regarded persons and merchandise.

### **CHINA.**

#### **Cholera—Foochow.**

Cholera was reported present at Foochow, China, July 3, 1919.

### **GUATEMALA.**

#### **Quarantine Against Ports in Salvador.**

According to information dated July 6, 1919, quarantine has been declared by Guatemala against all ports in Salvador on account of yellow fever.

### **HONDURAS.**

#### **Quarantine Against La Union, Salvador.**

According to information dated July 6, 1919, quarantine has been declared by Honduras against La Union, Salvador, on account of yellow fever.

### **ITALY.**

#### **Typhus Fever.<sup>1</sup>**

Typhus fever was reported present in Italy during the week ended May 25, 1919, with 955 cases occurring in 17 provinces. Of these cases 907 occurred among Austrian prisoners, 32 among Italian soldiers, and 16 in the civil population.

### **JAPAN**

#### **Cholera—Taihoku.**

Under date of July 14, 1919, 40 cases of cholera, occurring in one village, were reported from Taihoku, Island of Taiwan (Formosa), Japan.

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<sup>1</sup> Public Health Reports, July 11, 1919, p. 1571.

**MESOPOTAMIA.****Plague—Basra and Vicinity.**

An outbreak of plague has been reported in Basra and vicinity, Mesopotamia, with a total of 228 cases from the beginning of the outbreak to May 19, 1919.

**NICARAGUA.****Quarantine Against La Union, Salvador.**

According to information dated July 6, 1919, quarantine has been declared by Nicaragua against La Union, Salvador, on account of yellow fever.

**PERU.****Yellow Fever—Payta.**

Epidemic yellow fever was reported present at Payta, Province of Piura, Peru, July 10, 1919.

**SALVADOR.****Further Relative to Yellow Fever.<sup>1</sup>**

On July 6, 1919, two cases of yellow fever were notified at La Union, Salvador, and two additional cases at San Miguel.

**STRAITS SETTLEMENTS.****Influenza—1918-1919—Singapore.**

Influenza has been reported at Singapore, Straits Settlements, with the occurrence from September 29, 1918, to April 26, 1919, of 391 fatal cases. The mortality from the disease was greatest in the months of October and November, 1918, the deaths being distributed according to weeks as follows: Week ended October 19, 37 deaths; week ended October 26, 111; week ended November 2, 87; during the weeks ended November 9, 16, and 23, there were 67, 35, and 19 deaths, respectively.

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<sup>1</sup> Public Health Reports, July 4, 1919, p. 1524.

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

Reports Received During Week Ended July 18, 1919.<sup>1</sup>

## CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Foochow.....	July 3.....	.....	.....	Present.
India:				
Bombay.....	May 11-17.....	7	6	
Rangoon.....	do.....	6	5	
Japan:				
Taiwan (Island).....	July 14.....	40	.....	In one village.
Java:				
West Java.....	.....	.....	.....	
Batavia.....	Apr. 18-May 1.....	6	3	Apr. 18-May 1, 1919: Cases, 9; deaths, 4.
Persia:				
Ardebil.....	May 2.....	.....	.....	Present.
Enzeli.....	Apr. 23.....	1	.....	
Khorram-Ahab.....	May 3.....	.....	.....	Outbreak.
Mianedje.....	Apr. 28.....	.....	.....	Do.
Zindjan.....	Apr. 21-May 4.....	.....	49	
Philippine Islands:				
Manila.....	May 11-31.....	5	1	
Provinces.....	.....	.....	.....	May 18-24, 1919: Cases, 247; deaths, 174.
Batangas.....	May 18-24.....	5	5	
Bulacan.....	do.....	29	18	
Cebu.....	do.....	90	56	
Laguna.....	do.....	8	6	
Misamis.....	do.....	9	2	
Pampanga.....	do.....	52	43	
Tayabas.....	do.....	54	44	
Siam:				
Bangkok.....	May 4-17.....	.....	161	

## PLAGUE.

China:				
Canton.....	May 25-31.....	.....	.....	Present.
Hongkong.....	May 30-June 5.....	.....	13	
Ecuador:				
Posorja.....	June 1-15.....	2	1	Bathing place 65 kilometers from Guayaquil.
Egypt.....				Jan. 1-June 11, 1919: Cases, 539; deaths, 300.
Cities—				
Suez.....	June 5-11.....	3	3	
Provinces—				
Assiout.....	do.....	35	16	6 septicemic.
Beni-Souef.....	June 5.....	3	3	
Fayoum.....	June 7-11.....	2	1	
Menoufia.....	June 8.....	1	.....	
Minieh.....	June 10-11.....	9	5	
India:				
Bombay.....	May 11-17.....	81	61	
Karachi.....	May 18-24.....	43	45	
Rangoon.....	May 11-17.....	9	8	
Japan:				
Yokohama.....	June 9.....	1	.....	
Mesopotamia:				
Bagdad.....	May 10-16.....	61	51	
Basra.....	May 3-10.....	108	89	Including suburb of Ashar; total from date of outbreak to May 19, 288 cases.
Siam:				
Bangkok.....	May 11-17.....	1	1	
Straits Settlements:				
Singapore.....	Apr. 13-26.....	2	1	
On vessels:				
S. S. City of Sparta.....	Apr. 19-21.....	1	1	From Bombay Apr. 3, 1919; case, a soldier; at sea.
Do.....	May 13-17.....	1	1	At Liverpool; case, a native member of crew. (Public Health Reports, June 27, 1919, p. 1463.)

<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 Week Ended July 18, 1919—Continued.**

## **SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Austria.....				Mar. 9-Apr. 5, 1919: Cases, 92.
Schzburg.....	Mar. 9-Apr. 5	50		
Vienna.....	do.	17		
Arores:.....				
St. Michaels.....	June 7-20.	1		
Canada:				
Nova Scotia—				
City.....				
Halifax.....	June 22-28.	25		
Counties—				
Antigonish.....	do.			Present.
Guysborough.....	do.			
Halifax.....	do.			
Hants.....	do.			
Ontario—				
Hamilton.....	June 29-July 5.	1		
Quebec—				
Quebec.....	June 15-28.	8		
China:				
Amoy.....	May 20-June 2.		6	Present.
Canton.....	May 18-31.			
Chunking.....	May 25-31.			
Chosen (Korea):				
Chemulpo.....	May 1-31.	10	3	
Fusan.....	do.	150	57	
Seoul.....	do.	2		
Czecho-Slovakia:				
Prague.....	May 31-June 14.	7	1	
Egypt:				
Alexandria.....	May 28-June 10.	69	28	
Finland.....				May 1-15, 1919: Cases, 93.
Provinces—				
Abo Och Björneborg.....	May 1-15.	4		
Kuopio.....	do.	12		
Nyland.....	do.	2		
St. Michael.....	do.	8		
Tavastehus.....	do.	16		
Vasa.....	do.	2		
Viborg.....	do.	53		
France:				
Paris.....	June 8-14.	3	1	
Great Britain:				
Cardiff.....	June 15-21.	1		
London.....	May 25-June 7.	3		
Greece:				
Salamiki.....	May 15-21.		18	
India:				
Bombay.....	May 11-17.	64	42	
Karachi.....	May 18-24.	5	3	
Rangoon.....	May 11-17.	20	13	
Italy:				
Leghorn.....	June 16-22.	1		
Messina.....	June 1-7.	3		
Milazzo.....	do.	1	1	
Naples.....	June 2-8.	28	25	
Turin.....	May 18-24.	4	1	
Japan:				
Taiwan.....	May 21-June 10.	2	4	Entire island.
Tokyo.....	May 1-31.	1		
Yokohama.....	May 26-June 1.	1		
Java:				
West Java.....				
Batavia.....	Apr. 18-May 1.	2	1	Apr. 18-May 1, 1919: Cases, 106; deaths, 23.
Mexico:				
Mexico City.....	June 1-14.	6	1	
Newfoundland:				
Outports.....	June 21-27.	12		
Philippine Islands:				
Manila.....	May 11-24.	2		Varioloid, 1.
Portugal:				
Oporto.....	June 2-14.	17	9	
Spain:				
Almeria.....	May 18-31.	40	5	
Barcelona.....	May 23-June 11.		7	
Madrid.....	May 1-31.		3	
Valencia.....	May 26-June 7.	121	17	
Straits Settlements:				
Singapore.....	Apr. 20-May 10.	3	1	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.****Reports Received During Week Ended July 18, 1919—Continued.****SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>On vessels:</b>				
S. S. Eastern .....	Apr. 25-26 .....	2	1	Death at sea. Second case landed at Woodman's Quarantine Station, Fremantle, Australia, Apr. 29. Vessel from England via Egypt and Colombo.
S. S. Karoa .....	Apr. 19 .....	1		Landed at Colombo. Vessel from the United Kingdom via Egypt and Colombo.
S. S. Khyber .....	Apr. 10-May 4 .....	4		From Liverpool, via Port Said, Suez, and Colombo. One case landed at Port Said Apr. 10, 2 cases at Colombo Apr. 22, one at quarantine, Fremantle, Australia, May 4, 1919.

**TYPHUS FEVER.**

Algeria:				
Algiers .....	May 1-31 .....	76	8	Mar. 23-Apr. 5, 1919: Cases, 118.
Austria:				
Vienna .....	Mar. 23-Apr. 5 .....	9		
Chosen (Korea):				
Chemulpo .....	May 1-31 .....	52	8	
Fusan .....	do .....	4	1	
Seoul .....	do .....	57	8	
Egypt:				
Alexandria .....	May 28-June 3 .....	251	75	May 1-15, 1919: Cases, 3.
Finland:				
Provinces—				
Abo Och Björneborg .....	May 1-15 .....	1		
Nyland .....	do .....	1		
St. Michael .....	do .....	1		
Greece:				
Saloniki .....	May 15-21 .....		2	Feb. 24-May 9, 1919: Cases, 258.
Hungary:				
Budapest .....	Feb. 24-May 9 .....	124	6	
Debreczin .....	do .....	42		May 19-25, 1919: Cases, 955, in 17 provinces, 907 being in Austrian prisoners of war, 32 in Italian soldiers, and 16 in the civil population.
Italy:				
Leghorn .....	May 26-June 1 .....	1	1	
Naples .....	June 2-8 .....	4	1	
Mesopotamia:				
Bagdad .....	May 10-16 .....	7	4	
Mexico:				
Mexico City .....	June 1-21 .....	76		
Portugal:				
Oporto .....	June 1-14 .....	52		
Spain:				
Madrid .....	May 1-31 .....		1	

**YELLOW FEVER.**

Ecuador:				
Naranjito .....	June 1-15 .....	1	1	50 kilometers from Guayaquil.
Peru:				
Payta .....	July 10 .....			Present.
Salvador:				
La Union .....	July 6 .....	2		
San Miguel .....	do .....	2		



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

**Reports Received from June 28 to July 11, 1919.<sup>1</sup>**

## **CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Apr. 20-26.....	10		
India:				
Bombay.....	Apr. 28-May 10....	12	11	
Calcutta.....	May 4-17.....		256	
Madras.....	May 18-24.....	10	8	
Rangoon.....	Apr. 28-May 10....	37	31	
Indo-China:				
Cochin-China—				
Saigon.....	Apr. 21-May 18....	113	83	City and district.
Java:				
East Java.....				Apr. 2-22, 1919: Cases, 301; deaths, 204.
West Java.....				May 2-8, 1919: Cases, 18; deaths, 3.
Batavia.....	May 2-8.....	4	2	
Philippine Islands:				
Manila.....	May 4-10.....	2		
Provinces.....				May 4-10, 1919: Cases, 122; deaths, 80.
Batangas.....	May 4-10.....	12	9	
Bulacan.....	do.....	4	2	
Cebu.....	do.....	31	13	
Laguna.....	do.....	8	7	
Pampanga.....	do.....	67	49	
Manila.....	May 11-17.....	1	1	
Provinces.....				May 11-17, 1919: Cases, 108; deaths, 129.
Batangas.....	May 11-17.....	8	9	
Bulacan.....	do.....	15	5	
Cebu.....	do.....	41	15	
Laguna.....	do.....	4	2	
Mindoro.....	do.....	19	14	
Pampanga.....	do.....	47	39	
Tayabas.....	do.....	64	45	
Siam:				
Bangkok.....	Apr. 20-May 3.....		542	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources. For reports received from Dec. 28, 1918, to June 27, 1919, see Public Health Reports for June 27, 1919. The tables of epidemic diseases are terminated semiannually and new tables begun.

## **PLAGUE.**

China:				
Hongkong.....	June 15-28.....	42	33	
Egypt:				
Cities.....				Jan. 1-May 22, 1919: Cases, 387; deaths, 221.
Cairo.....	May 15.....		1	
Provinces.....				
Assiout.....	May 17-19.....	5	1	
Beni-Souef.....	May 19.....	1	1	
Fayoum.....	May 18-19.....	1	1	
Girgeh.....	May 15.....	3	2	
Minieh.....	May 15-21.....	13	3	1 septicemic.
India.....				Apr. 27-May 10, 1919: Cases, 3,719; deaths, 3,126.
Bombay.....	Apr. 28-May 10....	90	74	
Rangoon.....	do.....	21	21	
Indo-China:				
Cochin-China—				
Saigon.....	Apr. 21-May 18....	18	14	City and district.
Java:				
East Java.....				Apr. 8-22, 1919: Cases, 52; deaths, 52.
Mesopotamia:				
Bagdad.....	Apr. 19-May 9.....	206	150	
Siam:				
Bangkok.....	Apr. 27-May 3.....	1	1	

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

**Reports Received from June 28 to July 11, 1919—Continued.**

## **SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden.....	May 13-19.....		1	
Brazil:				
Bahia.....	Apr. 20-May 3.....	2		
Canada:				
Nova Scotia—				
Halifax.....	June 15-21.....	36		
Sydney.....	June 8-21.....	3		
Ontario—				
Province.....				May 1-31, 1919: Cases, 98; deaths, 2.
Harwich.....	May 1-31.....	14	2	Township in Kent County.
Ottawa.....	June 15-21.....	2		
Peterborough.....	June 15-21.....	3		
Walpole Island.....	May 1-31.....	42		Kent County. Island in Lake St. Clair. Among Indians.
Quebec—				
Montreal.....	June 15-21.....	3		
Ceylon:				
Colombo.....	May 1-10.....	1		
China:				
Amoy.....	Apr. 30-May 19.....		7	Present.
Chungking.....	May 4-10.....			
Hongkong.....	May 11-12.....	1		
Chosen (Korea):				
Chemulpo.....	Apr. 1-30.....	9	1	
Fusan.....	do.....	144	24	
Seoul.....	do.....	1	1	
Czecho-Slovakia:				
Prague.....	May 18-24.....	2		
Egypt:				
Alexandria.....	May 14-27.....	61	22	Apr. 16-30, 1919: Cases, 121.
Finland:				
Provinces—				
Abo Och Björneborg.....	Apr. 16-30.....	1		
Kuopio.....	do.....	11		
Nyland.....	do.....	1		
St. Michael.....	do.....	18		
Tavastehus.....	do.....	8		
Vasa.....	do.....	2		
Viborg.....	do.....	80		
France:				
Paris.....	May 11-17.....	7	2	
India:				
Bombay.....	Apr. 28-May 10.....	125	86	
Calcutta.....	May 4-17.....		173	
Karachi.....	May 4-17.....	11	6	
Madras.....	May 18-24.....	23	11	
Rangoon.....	Apr. 28-May 10.....	73	30	
Indo-China:				
Cochin-China—				
Saigon.....	Apr. 21-May 18.....	11	4	City and district.
Italy:				
Milan.....	Apr. 1-30.....	12	2	
Palermo.....	May 2-8.....	3		
Japan:				
Kobe.....	May 4-31.....	48	17	
Java:				
East Java.....				Apr. 9-15, 1919: Cases, 1.
West Java.....				May 2-8, 1919: Cases, 61; deaths, 9.
Manchuria:				
Dairen.....	May 13-June 2.....	3	2	
Mexico:				
Mexico City.....	May 4-31.....	10		
Piedras Negras.....	June 22-28.....	2	2	
Newfoundland:				
St. Johns.....	June 13-19.....	2		Outports, 9 cases.
Philippine Islands:				
Manila.....	May 11-17.....	1		
Spain:				
Bilbao.....	May 1-10.....		1	
Barcelona.....	May 15-21.....		3	
Cadiz.....	Apr. 1-30.....		4	
Valencia.....	May 11-17.....	74	3	
Straits Settlements:				
Singapore.....	Mar. 24-29.....	1	1	

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

**Reports Received from June 28 to July 11, 1919—Continued.**

## **TYPHUS FEVER.**

Place.	Date.	Cases.	Deaths.	Remarks.
Canada:				
Ontario—				
Ottawa.....	June 15-21.....	3		
China:				
Changsha.....	May 11-17.....	1	1	
Chosen (Korea):				
Chemulpo.....	Apr. 1-30.....	2		
Seoul.....	do.....	22	6	
Czecho-Slovakia:				
Prague.....	May 18-24.....	1		
Egypt:				
Alexandria.....	May 14-27.....	261	73	
Finland:				Apr. 16-30, 1919: Cases, 12.
Provinces:				
Nyland.....	Apr. 16-30.....	2		
St. Michael.....	do.....	7		
Viborg.....	do.....	3		
Italy:				May 4-11, 1919: Cases, 858, in 18 provinces. Prisoners of war, 830; Italian soldiers, 9; civil population, 19.
Naples.....	May 12-June 1.....	24	5	
Venice.....	Apr. 27-May 18.....	40	4	May 12-18, 1919: Cases, 1,043, in 22 provinces. Prisoners of war, 996; Italian soldiers, 31; civil population, 16.
Mesopotamia:				
Bagdad.....	Apr. 19-May 9.....	12	5	
Mexico:				
Mexico City.....	May 4-31.....	86		
Newfoundland:				
St. Johns.....	June 21-27.....	1		From vessel.
Palestine:				
Jaffa.....				Oct. 22-Dec. 22, 1918: Cases, 8; deaths, 3.
Spain:				
Barcelona.....	May 15-21.....		1	
Tunis:				
Tunis.....	May 24-30.....	2	1	

## **YELLOW FEVER.**

Brazil:				
Bahia.....	Apr. 12-May 11.....	18	12	
Ecuador:				
Guayaquil.....	May 1-31.....	1	1	
Naranjito.....	do.....	1		
Mexico:				
Merida.....	June 30-July 1.....	5	2	State of Yucatan.
Salvador:				
St. Miguel.....	June 24.....	2		75 miles from city of San Salvador.
San Salvador.....	do.....	1	1	

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