

# PUBLIC HEALTH REPORTS.

VOL. XXV.

JULY 1, 1910.

No. 26.

## BERIBERI IN THE UNITED STATES.

Beriberi, or "endemic multiple neuritis" or "kakke" as it has been variously called, is a disease not without interest to the American physician and health officer, sporadic cases and outbreaks having been reported in several of the States.

In 1890 Putnam reported several cases among New England fishermen of what was possibly beriberi and referred to other cases of what seemed to be the same disease antedating these by ten years.<sup>a</sup>

A series of 71 cases was reported among the patients in the State Insane Hospital at Tuscaloosa, Ala., during the years 1895 and 1896.<sup>b</sup> The first case developed in February, 1895, in a white woman. There were no other cases until the following November when 7 developed. In the next six weeks 5 more appeared. Then there were no new cases until September, 1896, when 58 were recorded. Of the total of 71 cases, 21 were fatal. Sixty-four of the cases were among white patients, and of these 15 were fatal, while of the 7 cases among negroes 6 were fatal.

A somewhat similar outbreak, which was probably also beriberi, is reported to have occurred in 1895 at the Arkansas State Insane Hospital at Little Rock.

The superintendent of the Texas state lunatic asylum at Austin, in his annual report for the year ended August 31, 1907, states that in the early part of July an epidemic of beriberi developed in that institution and that there were over 200 cases with 20 deaths. The disease was confined to the patients, none of the attendants being affected. It was also stated that since 1891 there had been each year a limited number of cases of the disease, occurring usually in the summer and fall, but that it had never assumed an epidemic form until 1907.

In the monthly bulletin of the California state board of health for December, 1909, there was published a list of 25 deaths from beriberi reported in California during the years 1907, 1908, and 1909. Of these, 22 were Japanese, 2 Chinese, and 1 German. The list was published with the note:

The following list of deaths from beriberi is given to show that this disease is present and widely, though sparsely, distributed. \* \* \* A similar number of deaths in Japan would argue some 500 or 600 existing cases.

<sup>a</sup> Putnam (James J.) *Journal of Nervous and Mental Disease*, Vol. XV, No. 8, p. 495.

<sup>b</sup> Bondurant, E. D., *New York Medical Journal*, Vol. LXVI, p. 685.

An outbreak of beriberi among convicts in South Carolina was reported April 8 of this year in the Public Health Reports, page 437. There were at least 17 cases and several deaths. The diagnosis was confirmed by an officer who had had experience with the disease in the Philippine Islands. The local physicians stated that similar cases had occurred not infrequently in past years.

Various theories as to the etiology of beriberi have been advanced from time to time. These have consisted mainly of two general classes, the one assuming the disease to be an infection and the other assuming it to be due to faulty nutrition or intoxication. In this connection a paper read before the Far Eastern Association of Tropical Medicine at Manila on the 10th of last March by Dr. H. Fraser, delegate from the government of the Malay states, is of considerable interest, as being perhaps the most satisfactory piece of work which has so far been done on the subject.<sup>a</sup>

Doctor Fraser experimented with chickens in lots of 12. One lot was fed upon white, polished rice; another lot of 12 upon unpolished rice. In the lot to which polished rice was fed, 8 cases of beriberi appeared between the sixtieth and seventieth day. Those fed upon unpolished rice remained well. The feeding was continued for several weeks and the chickens in the lot fed upon polished rice began to die. The lot fed on unpolished rice continued to remain well. This same experiment was repeatedly made with other groups of chickens with the same result. Then lots of chickens in which beriberi had been produced were fed with unpolished rice and they rapidly recovered.

The next experiment was to feed two lots of chickens as in the first instance, one upon polished rice and the other upon unpolished rice until beriberi had been produced in chickens fed upon polished rice. Then the food was changed. Those which had been fed upon polished rice were fed upon unpolished rice and those which had up to this point been fed upon unpolished rice were given polished rice. The result was that the sick chickens recovered and after the usual period of approximately sixty days the chickens that were then receiving the polished rice developed beriberi. Later an opportunity presented for performing the experiment upon man. Two hundred and fifty laborers, who were being sent to a part of the country in which beriberi had not existed to work upon railroad construction, were divided into two lots, half of them being fed upon polished rice, the other half upon unpolished rice. The men were carefully picked to exclude any cases of beriberi, incipient or otherwise, from among them. Beginning with the sixtieth day, cases of beriberi appeared among the laborers who were being fed upon polished rice; none among the others. The feeding was continued for a sufficient length of time to show that no cases would develop among those that were fed upon unpolished rice. Then the food was reversed. Those who had been previously fed upon polished rice were given the unpolished, and vice versa, with the same result as that which had been obtained in the experiments with chickens. The cases of beriberi proceeded to recover, while after a period of approximately sixty days cases of the disease appeared among the group of laborers to which originally unpolished rice had been fed, but which later received the polished rice.

---

<sup>a</sup> New York Medical Journal, April 30, 1910, p. 762.

To ascertain, if possible, the reason why a diet of polished rice apparently produced the disease, the polishings from rice were fed to chickens affected with beriberi, with the result that they recovered. Then a group of chickens was placed upon a diet of polished rice and was fed in addition a sufficient amount of polishings to make up for that which had been removed from the rice used. No beriberi developed among the chickens in this group. It was found that chickens did not develop beriberi until the polishings given with the rice were reduced to less than half of that which had been removed from the whole rice.

The statement is also made that during the preceding year, unpolished rice had been used in all the public institutions in the Straits Settlements, and that cases of beriberi had ceased to develop in these institutions.

Doctor Aron of the Philippine Medical School also presented a paper before the association giving the result of work which seemed in many ways to corroborate the results obtained by Fraser.

As previously noted on page 647, Passed Assistant Surgeon Heiser reported that in view of the findings above referred to, the beriberi patients in the hospitals of the bureau of health of the Philippine Islands have been treated by administering rice polishings, with the result that the cases rapidly recovered and that unpolished rice was being used in institutions in which beriberi had been formerly rife and that the disease had completely disappeared.

That more may be learned of the prevalence and geographic distribution of beriberi in the United States it will be appreciated if health officers and others knowing of cases of this disease will write to the Surgeon-General of the Public Health and Marine-Hospital Service, Washington, D. C.

# UNITED STATES.

REPORTS TO THE SURGEON-GENERAL, PUBLIC HEALTH AND MARINE-HOSPITAL SERVICE.

---

## PLAGUE-PREVENTION WORK.

### Infected Ground Squirrels.

Twelve plague-infected squirrels have been reported found in California as follows: In Alameda County 1, found on May 30; in San Benito County 4, 1 found on May 31, 1 on June 4, and 2 on June 5; in San Joaquin County 2, found June 1; in Santa Clara County 5, of which 1 was found on May 30, 1 on May 31, 1 on June 3, 1 on June 4, and 1 on June 5.

### Additional Data on Locations of Plague-Infected Ground Squirrels.

Passed Assistant Surgeon McCoy reports, June 16:

*Week ended May 21, 1910.*

#### SAN BENITO COUNTY.

Dunne Ranch, 14 miles north of Hollister, Gilroy Township, (Rancho Ansaymas y San Felipe).

San Luis Ranch, 16 miles north of Hollister, Gilroy Township (Rancho Ansaymas y San Felipe).

#### SANTA CRUZ COUNTY.

McGrath Ranch, 4 miles northeast of Watsonville.

#### STANISLAUS COUNTY.

Mills Ranch, 6 miles west of Crows Landing (sec. 2, T. 7 S., R. 7 E.).

*Week ended May 28, 1910.*

#### STANISLAUS COUNTY.

Barnes Ranch, Crows Landing (sec. 10, T. 7 S., R. 7 E.).

Sharp Ranch, 11 miles southwest of Crows Landing (sec. 26, T. 7 S., R. 7 E.).

#### SAN BENITO COUNTY.

Orr Ranch, 3½ miles northwest of Hollister (T. 12 S., R. 6 E.), Rancho Bolsade de San Felipe.

## MONTEREY COUNTY.

Badasci Ranch (Rancho Rincon de la Punta Monte, on line between R. 4 and 5 E., T. 16), about  $1\frac{1}{2}$  miles west of Gonzales.

*Week ended June 4, 1910.*

## SAN BENITO COUNTY.

Macomber Ranch, 5 miles south of Tres Pinos (T. 14 S., R. 6 E.), Rancho de los Paicines.

## SANTA CLARA COUNTY.

Yerba Buena Ranch, 1 mile north of Coyote (Rancho Yerba Buena y Socayre).

## Foci of Squirrel-Plague Infection.

Doctor McCoy reports, June 18:

During the past 2 weeks 2 foci of heavy infection of plague among ground squirrels have been found. One of these is in Santa Clara County about 20 miles southeast of San Jose. The other is in San Benito County about 15 miles southeast of Hollister.

Authentic reports from both of these localities show that the squirrels are dying in considerable numbers, and that many sick ones are to be seen going about in a dazed, helpless condition. Indeed, our hunters and some citizens report that in many cases it is a very simple matter to actually go into a field and pick up sick squirrels.

A considerable number of squirrels have been received from both these localities, and a large percentage of them when examined in the laboratory were found to present the usual lesions of plague infection in the ground squirrel.

Doctor McCoy further reports:

## SAN FRANCISCO, CAL.

Last case of human plague sickened January 30, 1908. Last plague-infected rodent trapped October 23, 1908. Total number of rats found infected to date, 398.

Week ended June 11, 1910. Premises inspected, 1,518. Houses destroyed, 16. Buildings condemned, 7. Nuisances abated, 125. Poisons placed, 6,860. Rats trapped, 2,139. Rats found dead, 27. Squirrels trapped, 5. Gophers trapped, 19. Rats identified, 2,166, as follows: *Mus norvegicus*, 1,698; *Mus rattus*, 96; *Mus musculus*, 285; *Mus alexandrinus*, 87. Average number of traps set daily, 7,645. Examined bacteriologically, 1,541 rats, 5 squirrels, and 5 gophers.

## BERKELEY, CAL.

There is no record of rodent plague in Berkeley. The last case of human plague sickened August 28, 1907.

Week ended June 11, 1910. Rats trapped, 196. Rats identified, 196, as follows: *Mus norvegicus*, 172; *Mus musculus*, 24. Rats examined bacteriologically, 172. No plague infection found.

**OAKLAND, CAL.**

Last case of human plague sickened October 26, 1909. Last case of rodent plague found December 1, 1908.

Week ended June 11, 1910. Rats found dead, 13. Rats trapped, 672. Rats identified, 685, as follows: *Mus norvegicus*, 566; *Mus rattus*, 11; *Mus musculus*, 105; *Mus alexandrinus*, 3. Rats examined bacteriologically, 580. No plague infection found.

**ALAMEDA COUNTY, CAL. (Exclusive of City of Oakland).**

Last case of human plague sickened, 2 miles southwest of Sunol, September 26, 1909. Last case of rodent plague found May 30, 1910. To the present time 81 ground squirrels and 1 wood rat have been found infected.

Week ended June 11, 1910. Ranches inspected, 7. Ground squirrels shot, 93; found dead, 3. Gophers shot, 1. Rabbits shot, 18. Acres covered with poison, 715. Examined bacteriologically, 96 squirrels, 1 gopher, and 18 rabbits. One plague-infected squirrel was found.

The plague-infected squirrel was found May 30, at Mulqueeny Ranch, Midway.

**COLUSA COUNTY, CAL.**

There is no record of human or rodent plague in Colusa County. Week ended June 11, 1910. Ranches inspected, 5. Ground squirrels shot, 48. Ground squirrels examined bacteriologically, 48. No plague infection found.

**LOS ANGELES COUNTY, CAL.**

The last case of human plague sickened August 11, 1908. A plague-infected rodent was found August 21, 1908.

Week ended June 11, 1910. Rats trapped, 2. Ground squirrels shot, 306. Examined bacteriologically, 306 squirrels and 2 rats. No plague infection found.

**MERCED COUNTY, CAL.**

There is no record of human or rodent plague in Merced County.

Week ended June 11, 1910. Ranches inspected, 5. Ground squirrels shot, 189. Kangaroo rats shot, 1. Examined bacteriologically, 177 ground squirrels and 1 kangaroo rat. No plague infection found.

**MONTEREY COUNTY, CAL.**

There is no record of human plague in Monterey County. The last plague-infected rodent was found May 25, 1910. Total number of ground squirrels found infected to date, 3.

Week ended June 11, 1910. Ranches inspected, 29. Ground squirrels shot, 1,022. Ground squirrels examined bacteriologically, 1,016. No plague-infected squirrels found.

**ORANGE COUNTY, CAL.**

There is no record of human or rodent plague in Orange County.

Week ended June 11, 1910. Ground squirrels shot, 64. Ground squirrels examined bacteriologically, 64. No plague-infected squirrels found.

**RIVERSIDE COUNTY, CAL.**

There is no record of human or rodent plague in Riverside County.

Week ended June 11, 1910. Ranches inspected, 3. Ground squirrels shot, 147. Ground squirrels examined bacteriologically, 147. No plague-infected squirrels found.

**SAN BENITO COUNTY, CAL.**

A fatal case of human plague occurred in San Benito County, June 11, 1910. The last case of rodent plague was found June 5, 1910. Total number of plague-infected squirrels found to date, 15.

Week ended June 11, 1910. Ranches inspected, 35. Ground squirrels shot, 631; found dead, 3. Ground squirrels examined bacteriologically, 627. Four plague-infected squirrels found.

The plague-infected squirrels were found at Macomber Ranch, 5 miles south of Tres Pinos, as follows: On May 31, 1 ground squirrel; on June 4, 1 ground squirrel; and on June 5, 2 ground squirrels.

The above-mentioned fatal case of human plague in San Benito County occurred at Hollister, June 11, and was reported by Doctor McCoy June 18. The patient was a Mexican employed in the vicinity.

**SAN BERNARDINO COUNTY, CAL.**

There is no record of human or rodent plague in San Bernardino County.

Week ended June 11, 1910. Ranches inspected, 3. Ground squirrels shot, 68. Ground squirrels examined bacteriologically, 68. No plague-infected squirrels found.

**SAN JOAQUIN COUNTY, CAL.**

There is no record of human plague in San Joaquin County. The last plague-infected squirrel was found June 1, 1910. Total number of ground squirrels found infected to date, 2.

Week ended June 11, 1910. Ranches inspected, 25. Ground squirrels shot, 271. Rabbits shot, 5. Examined bacteriologically, 263 squirrels and 5 rabbits. Two plague-infected squirrels found.

The plague-infected squirrels were found June 1 at Crocker and Winship Tract, 10 miles southwest of Tracy.

**SAN LUIS OBISPO COUNTY, CAL.**

There is no record of human plague in San Luis Obispo County. A plague-infected rodent was found January 29, 1910.

Week ended June 11, 1910. Ranches inspected, 22. Ground squirrels shot, 291. Rabbits shot, 1. Examined bacteriologically, 273 ground squirrels and 1 rabbit. No plague infection found.

**SANTA CLARA COUNTY, CAL.**

There is no record of human plague in Santa Clara County. The last plague-infected rodent was found June 5, 1910. Total number of ground squirrels found infected to date, 16.

Week ended June 11, 1910. Ranches inspected, 17. Ground squirrels shot, 567; found dead, 3. Ground squirrels examined bacteriologically, 555. Five plague-infected squirrels found.

The plague-infected squirrels were found at Yerba Buena Ranch 1 mile north of Coyote, as follows: One squirrel found on May 30 and 1 on May 31; on June 3, 1 squirrel, on June 4, 1 squirrel, and on June 5, 1.

**SANTA CRUZ COUNTY, CAL.**

There is no record of human plague in Santa Cruz County. The last plague-infected rodent was found May 9, 1910. Total number of ground squirrels found infected to date, 2.

Week ended June 11, 1910. Ranches inspected, 16. Ground squirrels shot, 168. Ground squirrels examined bacteriologically, 151. No plague-infected squirrels found.

**STANISLAUS COUNTY, CAL.**

There is no record of human plague in Stanislaus County. The last plague-infected rodent was found May 21, 1910.

Week ended June 11, 1910. Ranches inspected, 2. Ground squirrels shot, 59. Ground squirrels examined bacteriologically, 59. No plague-infected squirrels found.

Assistant Surgeon Chapin reports:

**SEATTLE, WASH.**

No case of human plague since October 30, 1907. The last plague-infected rat was found February 8, 1910. Total number of plague-infected rats to date, 22.

Week ended June 4, 1910. Rats received, 922. Rats necropsied, 709. No plague-infected rats found.

Week ended June 11, 1910. Rats received, 970. Rats necropsied, 828. No plague-infected rats received.

**SMALLPOX IN THE UNITED STATES.****Reports Received During Week ended July 1, 1910.**

For reports received from January 1, 1910, to June 24, 1910, see Public Health Reports for June 24, 1910. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Alabama:</b>				
Birmingham.....	June 12-18.....	2	.....	
Mobile.....	June 12-18.....	8	.....	
Montgomery.....	June 12-18.....	4	.....	
Total for State.....		14	.....	
<b>Kansas:</b>				
<b>Atchison County—</b>				
Atchison.....	Apr. 1-30.....	5	.....	
Butler County.....	Apr. 1-30.....	2	.....	
Cowley County.....	Apr. 1-30.....	1	.....	
Decatur County.....	Apr. 1-30.....	1	.....	
Doniphan County.....	Apr. 1-30.....	10	.....	
Edwards County.....	Apr. 1-30.....	1	.....	
Ellsworth County.....	Apr. 1-30.....	1	.....	
Finney County.....	Apr. 1-30.....	2	.....	
Graham County.....	Apr. 1-30.....	1	.....	
Greenwood County.....	Apr. 1-30.....	3	.....	
Harvey County.....	Apr. 1-30.....	1	.....	
Kearny County.....	Apr. 1-30.....	1	.....	
Kingman County.....	Apr. 1-30.....	2	.....	
Labette County.....				
Parsons.....	Apr. 1-30.....	8	.....	
Leavenworth County.....	Apr. 1-30.....	1	.....	
Miami County.....	Apr. 1-30.....	1	.....	
Montgomery County.....	Apr. 1-30.....	27	1	
Coffeyville.....	Apr. 1-30.....	7	.....	
Norton County.....	Apr. 1-30.....	3	.....	
Osage County.....	Apr. 1-30.....	5	.....	
Osborne County.....	Apr. 1-30.....	1	.....	
Pawnee County.....	Apr. 1-30.....	3	.....	

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended July 1, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Kansas—Continued.</b>				
Reno County.....	Apr. 1-30.....	15		
Riley County.....	Apr. 1-30.....	1		
Rush County.....	Apr. 1-30.....	3		
Saline County.....	Apr. 1-30.....	3		
Scott County.....	Apr. 1-30.....	4		
Sedgwick County.....	Apr. 1-30.....	3		
Wichita.....	Apr. 1-30.....	6		
Sheridan County.....	Apr. 1-30.....	1		
Thomas County.....	Apr. 1-30.....	1		
Wyandotte County.....	Apr. 1-30.....	4		
Kansas City.....	Apr. 1-30.....	20		
Total for State.....		148	1	
<b>Louisiana:</b>				
New Orleans.....	June 12-18.....	20		
Total for State.....		20		
<b>Maine:</b>				
Biddeford.....	May 1-31.....	1		
Total for State.....		1		
<b>Maryland:</b>				
Allegany County—				
Cumberland.....	May 1-31.....	1		
Total for State.....		1		
<b>Missouri:</b>				
St. Louis.....	June 12-18.....	4		
Total for State.....		4		
<b>New York:</b>				
Erie County—				
Buffalo.....	May 1-31.....	1		
Tonawanda Township.	May 1-31.....	2		
Niagara County—				
Niagara Falls.....	May 1-31.....	1		
North Tonawanda.....	May 1-31.....	1		
St. Lawrence County.....	May 1-31.....	19		
Schenectady County.....	May 1-31.....	2		
Total for State.....		26		
<b>North Carolina:</b>				
Forsyth County.....	Feb. 1-28.....		1	
Rowan County.....	Feb. 1-28.....		1	
Alamance County.....	Mar. 1-31.....	26		
Alexander County.....	Mar. 1-31.....	1		
Ashe County.....	Mar. 1-31.....	5		
Beaufort County.....	Mar. 1-31.....	4		
Burke County.....	Mar. 1-31.....			Few.
Cabarrus County.....	Mar. 1-31.....	4		
Caldwell County.....	Mar. 1-31.....	2		
Catawba County.....	Mar. 1-31.....	18		
Chatham County.....	Mar. 1-31.....	1		
Chowan County.....	Mar. 1-31.....	3		
Craven County.....	Mar. 1-31.....	1		
Currituck County.....	Mar. 1-31.....	9		
Davie County.....	Mar. 1-31.....	8		
Davidson County.....	Mar. 1-31.....	2		
Durham County.....	Mar. 1-31.....	1		
Forsyth County.....	Mar. 1-31.....	2		
Franklin County.....	Mar. 1-31.....	5		
Gaston County.....	Mar. 1-31.....		2	
Graham County.....	Mar. 1-31.....	4		
Greene County.....	Mar. 1-31.....	15		
Guilford County.....	Mar. 1-31.....	19		
Halifax County.....	Mar. 1-31.....	40		
Hartford County.....	Mar. 1-31.....	1		
Johnston County.....	Mar. 1-31.....			Several.
Jones County.....	Mar. 1-31.....	1		
Lee County.....	Mar. 1-31.....	5		
Lenoir County.....	Mar. 1-31.....	1		
Lincoln County.....	Mar. 1-31.....	1		
Mecklenburg County.....	Mar. 1-31.....	1		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended July 1, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
North Carolina—Continued.				
Montgomery County	Mar. 1-31	36		
Nash County	Mar. 1-31	20		
New Hanover County	Mar. 1-31	4		
Onslow County	Mar. 1-31	2		
Orange County	Mar. 1-31	6		
Pamlico County	Mar. 1-31	2		
Pitt County	Mar. 1-31	6		
Polk County	Mar. 1-31	7		
Rockingham County	Mar. 1-31	48		
Rowan County	Mar. 1-31	9	1	
Stokes County	Mar. 1-31	40		
Surry County	Mar. 1-31	4		
Union County	Mar. 1-31	8		
Washington County	Mar. 1-31	3		
Wayne County	Mar. 1-31			Few.
Wilkes County	Mar. 1-31	20		
Wilson County	Mar. 1-31	8	1	
Yancy County	Mar. 1-31	26		
Alamance County	Apr. 1-30	5		
Alexander County	Apr. 1-30	20		
Ashe County	Apr. 1-30	5		
Bladen County	Apr. 1-30	11		
Cabarrus County	Apr. 1-30	6		
Caldwell County	Apr. 1-30	1	1	
Catawba County	Apr. 1-30	14		
Chatham County	Apr. 1-30	2		
Columbus County	Apr. 1-30	15		
Currituck County	Apr. 1-30	7		
Durham County	Apr. 1-30	6		
Forsyth County	Apr. 1-30	1		
Graham County	Apr. 1-30	4		
Greene County	Apr. 1-30	4		
Gulford County	Apr. 1-30	13		
Johnston County	Apr. 1-30	2		
Lenoir County	Apr. 1-30	2		
Madison County	Apr. 1-30	5		
Martin County	Apr. 1-30	1		
Mecklenburg County	Apr. 1-30	6		
Montgomery County	Apr. 1-30	6		
Nash County	Apr. 1-30	24		
New Hanover County	Apr. 1-30	5		
Onslow County	Apr. 1-30	3		
Pitt County	Apr. 1-30	15		
Richmond County	Apr. 1-30	2		
Robeson County	Apr. 1-30	2		
Rowan County	Apr. 1-30	8		
Stanley County	Apr. 1-30	12		
Stokes County	Apr. 1-30	20		
Union County	Apr. 1-30	16		
Vance County	Apr. 1-30	4		
Wake County	Apr. 1-30	9		
Warren County	Apr. 1-30	20		
Washington County	Apr. 1-30	1		
Watauga County	Apr. 1-30	11		
Wayne County	Apr. 1-30	2		
Wilkes County	Apr. 1-30	15		
Wilson County	Apr. 1-30	12		
Alamance County	May 1-31	5		
Alexander County	May 1-31	27		
Anson County	May 1-31	2		
Ashe County	May 1-31	2		
Bladen County	May 1-31	5		
Cabarrus County	May 1-31	2		
Caldwell County	May 1-31	6		
Catawba County	May 1-31	6		
Columbus County	May 1-31	8		
Currituck County	May 1-31	1		
Durham County	May 1-31	11		
Forsyth County	May 1-31	14		
Gaston County	May 1-31	12		
Gulford County	May 1-31	12		
Henderson County	May 1-31	4		
Iredell County	May 1-31			Several.
Johnston County	May 1-31	2		
Lincoln County	May 1-31	1		
Lenoir County	May 1-31	8		
Martin County	May 1-31	3		
Mecklenburg County	May 1-31	8		
Montgomery County	May 1-31	5		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended July 1, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>North Carolina—Continued.</b>				
Nash County.....	May 1-31.....	6		
New Hanover County.....	May 1-31.....	3		
Orange County.....	May 1-31.....	26		
Perquimans County.....	May 1-31.....	1		
Person County.....	May 1-31.....	1		
Pitt County.....	May 1-31.....	2		
Robeson County.....	May 1-31.....	1		
Rowan County.....	May 1-31.....	15		
Sampson County.....	May 1-31.....	2		
Scotland County.....	May 1-31.....	5		
Stanley County.....	May 1-31.....	8		
Stokes County.....	May 1-31.....	4		
Union County.....	May 1-31.....	1		
Watauga County.....	May 1-31.....	9		
Wayne County.....	May 1-31.....	4		
Wilson County.....	May 1-31.....	4		
Wake County.....	May 1-31.....	13		
Total for State.....		995	7	
<b>Tennessee:</b>				
Davidson County—				
Nashville.....	June 12-18.....	1		
Hamilton County—				
Chattanooga.....	June 12-18.....	1		
Knox County—				
Knoxville.....	June 12-18.....	2		
Shelby County—				
Memphis.....	June 12-18.....	1		
Total for State.....		5		
<b>Texas, general.....</b>				
San Antonio.....	Apr. 1-31.....		2	
	May 1-31.....	5		
Total for State.....		5	2	
<b>Virginia:</b>				
Lynchburg.....	June 12-18.....	1		
Total for State.....		1		
Grand total for the United States.....		1,220	10	

*Plague in the United States.*

[June 11–July 1, 1910.]

Place.	Date.	Cases.	Deaths.	Remarks.
<b>California:</b>				
San Benito County—				
Hollister.....	June 11.....		1	

## MORBIDITY AND MORTALITY.

## WEEKLY MORBIDITY AND MORTALITY TABLE, CITIES OF THE UNITED STATES.

[For smallpox see special tables.]

Cities.	Week ended—	Esti- mated popu- lation, 1910.	Total deaths from all causes.	Tuber- culosis.		Ty- phoid fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Allentown, Pa.	Jan. 29	48,111	12	2	1	1	1	3	1	6	1	1	1		
Do.	Feb. 5		18	1	1	1	1	6	5	5	4				
Do.	Feb. 12		21	2	1	6	6	6	1	1	1	1	1		
Do.	Feb. 19		10	2	1	4	1	8	3	3	2				
Do.	Feb. 26		21	5	2	1	20	2	2	2	2				
Do.	Mar. 5		24	2	5	4	15	2	2	2	1	1	2		
Do.	Mar. 12		22	3	3	4	9	2	2	2	1	1	1		
Do.	Mar. 19		22	4	1	1	5	1	1	1	6	6	2		
Do.	Mar. 26		22	2	2	4	9	1	2	2	15	15	1		
Do.	Apr. 2		19	1	2	1	2	6	5	5	23	23	2		
Do.	Apr. 9		24	3	3	1	1	1	4	2	34	34	2		
Do.	Apr. 16		28	1	3	2	1	2	2	2	29	29	2		
Do.	Apr. 23		16	1	3	3	8	2	2	2	60	60			
Do.	Apr. 30		11	1	2	2	6	4	4	4	74	74			
Do.	May 7		11	1	1	1	6	1	4	1	84	84	1		
Do.	May 14		22	1	3	3	3	8	1	118	118	3	2	1	
Do.	May 21		17	8	1	1	5	1	2	86	86	3	2	1	1
Do.	May 28		20	1	1	1	1	1	1	55	55	1	5		
Altoona, Pa.	June 18	5,782	10	1	1	1	1	1	1	1	1	1	1		
Ashtabula, Ohio.	June 11	17,060	8	1	1	1	1	1	1	1	1	1	1		
Do.	June 18		7	1	1	1	1	1	1	1	1	1	1		
Baltimore, Md.	do.	583,475	158	62	16	11	31	11	17	11	7				
Bayonne, N. J.	do.	51,802	2	1	1	1	9	2	8	3	1				
Biddeford, Me.	do.	17,847	15	1	4	2	1	2	8	1	1				
Binghamton, N. Y.	do.	46,545	37	7	5	10	1	7	0	39	39	4	2		
Birmingham, Ala.	do.	55,945	196	50	24	6	54	2	51	7	151	151	4	2	
Boston, Mass.	do.	629,868	7	2	7	1	6	1	2	1	6	6	3		
Braddock, Pa.	do.	21,594	38	5	2	1	1	2	2	2	1	2	3		
Bridgeport, Conn.	do.	93,126	11	1	2	1	1	2	2	2	3	3			
Brockton, Mass.	do.	55,525	6	1	1	1	1	1	5	1	3	3			
Camden, N. J.	do.	90,791	8	1	1	1	1	1	2	2	2	2			
Chicopee, Mass.	do.	21,225	10	3	1	3	3	6	5	5	5	5	1		
Carbondale, Pa.	do.	15,939	102	23	19	1	6	6	6	50	50	3	4		
Chattanooga, Tenn.	do.	34,773	626	135	70	19	1	167	10	130	16	442	5	60	4
Chelsea, Mass.	do.	40,506	16	1	2	2	2	2	2	9	9	1	1		
Cincinnati, Ohio	do.	353,108	12	1	1	1	1	1	1	1	1	1	1		
Chicago, Ill.	do.	2,282,927	3	7	3	1	7	6	7	7	7	7	7		
Covington, Ky.	do.	52,325	23	7	3	1	7	2	2	14	55	3	9		
Canton, Ohio.	do.	40,570	10	8	6	2	2	4	4	27	27	1	4		
Carlisle, Pa.	do.	102,982	40	8	6	2	2	2	2	27	27	1	4		
Cambridge, Mass.	do.	522,475	12	121	3	7	7	6	6	7	7	7	7		
Cleveland, Ohio.	June 17	36,320	7	12,925	7	13	2	2	1	3	3	3	3		
Charlotte, N. C.	June 18	158,649	2	28,143	13	2	2	2	2	2	2	2	2		
Columbus, Ohio.	do.	12,121	32	111,889	32	3	3	1	1	1	1	1	1		
Cambridge, Ohio.	do.	12,121	32	3	3	3	3	3	3	3	3	3	3		
Columbus, Ga.	do.	17,925	13	2	2	2	2	2	2	2	2	2	2		
Danville, Ill.	do.	28,143	32	3	3	3	3	3	3	3	3	3	3		
Dayton, Ohio.	do.	111,889	32	3	3	3	3	3	3	3	3	3	3		
Detroit, Mich.	June 11	393,536	161	13	1	1	20	2	15	17	17	17	17		
Do.	June 18		150	13	1	1	6	1	1	1	1	1	1		
Dubuque, Iowa.	June 8	47,585	4	3	3	3	2	2	4	4	4	4	4		
Do.	June 16		20	3	3	3	8	1	1	1	1	1	1		
Duluth, Minn.	June 11	76,915	4	3	3	3	10	3	3	3	3	3	3		
Dunkirk, N. Y.	June 18	18,778	19	1	1	1	10	3	3	3	3	3	3		
Elizabeth, N. J.	do.	69,154	10	1	1	1	10	3	3	3	3	3	3		
Elmira, N. Y.	do.	35,776	33	4	2	2	10	12	1	5	5	5	5		
Erie, Pa.	do.	64,862	11	2	2	2	1	1	1	1	1	1	1		
Everett, Mass.	do.	33,886	49	7	2	2	1	1	1	1	1	1	1		
Fall River, Mass.	do.	106,661	3	22,687	3	22,687	3	22,687	3	22,687	3	22,687	3		
Freeport, Ill.	do.	21,950	7	25,501	7	25,501	7	25,501	7	25,501	7	25,501	7		
Galesburg, Ill.	do.	25,501	43	1	3	3	10	2	18	18	18	18	18		
Gloucester, Mass.	do.	107,948	8	16,753	8	16,753	8	16,753	8	16,753	8	16,753	8		
Grand Rapids, Mich.	do.	16,753	2	15,050	2	15,050	2	15,050	2	15,050	2	15,050	2		
Greensboro, N. C.	do.	15,050	18	2	3	2	2	1	3	6	6	6	6		
Harrison, N. J.	do.	38,485	11	5	2	2	5	2	2	7	7	7	7		
Haverhill, Mass.	June 11		2	2	2	2	5	2	2	4	4	4	4		
Do.	June 18		2	2	2	2	5	2	2	4	4	4	4		
Hoboken, N. J.	do.	71,572	2	2	2	2	5	2	2	4	4	4	4		

## MORBIDITY AND MORTALITY—Continued.

Weekly morbidity and mortality table, cities of the United States—Continued.

Cities.	Week ended—	Esti- mated population, 1910.	Total deaths from all causes.	Tuber- culosis.		Ty- phoid fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Homestead, Pa. ....	June 7	17,630	6	1	1							6	5		
Do. ....	June 14		7	1	1			1				5	12		
Hyde Park, Mass. ....	June 18	15,776	4	1	1	2						12		2	
Jacksonville, Fla. ....	do.	42,173	18	1	1	15									
Jersey City, N. J. ....	June 11	258,965	62	1	4		1	38		17	2	42			
Do. ....	June 18		77	1	11			23	1	13	1	25			1
Johnstown, Pa. ....	do.	47,745	1	2	1					2		37			
Kalamazoo, Mich. ....	do.	37,849	9	1	2	1		1				10		3	
Kansas City, Kans. ....	do.	81,052	28	1	5	1	1	3		3		4			
Kearney, N. J. ....	do.	16,306	3							3		2			
Kingston, N. Y. ....	do.	26,285	11		2										
Knoxville, Tenn. ....	do.	38,328	11		2					1					
La Fayette, Ind. ....	do.	19,989	12		1							2			
Lackawanna, N. Y. ....	June 11			1	2			5				8			
Do. ....	June 18		8	2	2							8			
La Crosse, Wis. ....	do.	29,261	6					1				3			
Lancaster, Pa. ....	do.	50,907	13	2								8			
Lawrence, Mass. ....	do.	77,541	27	3	3					1	1	5	1		
Lebanon, Pa. ....	do.	20,592													
Lexington, Ky. ....	do.	31,171	17		4			12				16			
Los Angeles, Cal. ....	June 11		100	10	21	8		3		9		9			
Lowell, Mass. ....	June 18	95,109	27	2	1	2	2	10	2	5	5	5			
Lynchburg, Va. ....	do.	30,064								1		3		2	
Lynn, Mass. ....	June 11	85,571	23	2	2	2	2	5		3		67			
Manchester, N. H. ....	June 18	69,848	17	3	3					2		2			
Manistee, Mich. ....	do.	10,400										23	2	6	
Manitowoc, Wis. ....	do.	13,680	5			1		1		1					
Mansfield, Ohio. ....	do.	21,807				1		3		1		13			
Marlboro, Mass. ....	June 11	14,537	3												
Do. ....	June 18		4									2			
Medford, Mass. ....	do.	21,128	4					3				3			
Marinette, Wis. ....	do.	14,513	5					2							
Massillon, Ohio. ....	do.	13,796						1							
Memphis, Tenn. ....	do.	140,145	63					3	1	1		4			
Milwaukee, Wis. ....	do.	337,117	112	30	5	61	2	45	3	28	3	135	2	10	1
Moline, Ill. ....	do.	23,576	6												
Montclair, N. J. ....	June 11	18,778	9	3	2			2		1		1			
Do. ....	June 18		8	2	2			4	1			1			
Montgomery, Ala. ....	do.	44,967	21	2			1								
Morristown, N. J. ....	June 11	13,025	7	5								3			
Mount Vernon, N. Y. ....	June 18	28,632	5		1							1			
Muskegon, Mich. ....	do.	21,050								3		2			
Nanticoke, Pa. ....	June 20	14,188	3							3		1			
Nashville, Tenn. ....	June 18	107,070	42	7	5	1		2				11			
Newark, N. J. ....	do.	315,014	107	20	15	3	1	45	1	25	2			1	1
New Bedford, Mass. ....	do.	86,282	30	5	1			7				14	1		
Newburyport, Mass. ....	do.	14,872	7												
New Orleans, La. ....	do.	332,169	131	31	24	11	4	19		3		74	1		2
Newport, Ky. ....	do.	31,308	3												
New York, N. Y. ....	do.	4,563,604	1,394	585	154	46	8	502	24	386	38	783	20	52	7
Newton, Mass. ....	do.	40,067	10	2	2	1				3		38			
Niagara Falls, N. Y. ....	do.	33,407	9		1	3		7	2			9			
Norristown, Pa. ....	do.	24,739	6		2					1					
North Adams, Mass. ....	do.	20,100	3	2											
Northampton, Mass. ....	do.	21,146	4	1					1			2			
Oakland, Cal. ....	June 4		45		3	2		3		2					
Do. ....	June 11		36	2								13			2
Orange, N. J. ....	June 18	28,061	7	13	1							2			
Paducah, Ky. ....	June 11		4	6	1							50			
Do. ....	June 18		9	5	1										
Palmer, Mass. ....	do.		6		2					2					
Peekskill, N. Y. ....	do.	16,042	6					1				3			
Pittsburg, Pa. ....	June 11	570,065	144	25	6	13	3	46	5	13	1	176	5	14	
Pittsfield, Mass. ....	June 18	28,236	15		1	1		1		1		2		1	
Plainfield, N. J. ....	do.	21,567	7	2	1			4							
Portsmouth, N. H. ....	do.	11,447								2					
Portsmouth, Va. ....	do.	28,225	10					1				1			
Pottstown, Pa. ....	do.	14,065	6		1							1			
Providence, R. I. ....	do.	221,673	67	12	17	2		9	1	8		2	2	1	2
Racine, Wis. ....	do.	35,478	9					1							
Reading, Pa. ....	June 20	99,261	26			6	1	11	1	6	1	34		12	1
Richmond, Va. ....	June 18	111,078	72	4	4	4		2		3		99	1	4	1

## MORBIDITY AND MORTALITY—Continued.

Weekly morbidity and mortality table, cities of the United States—Continued.

Cities.	Week ended—	Esti- mated popu- lation, 1910.	Total deaths from all causes.	Tuber- culosis.		Ty- phoid fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Rockford, Ill. ....	June 11	200,475	.....	.....	.....	.....	.....	16	.....	2	.....	.....	.....	.....	.....
Do. ....	June 18	.....	.....	.....	.....	.....	.....	13	.....	2	.....	.....	.....	.....	.....
Rock Island, Ill. ....	do. ....	25,352	6	3	1	2	.....	6	1	.....	.....	.....	.....	.....	.....
Sacramento, Cal. ....	June 11	32,178	13	.....	.....	.....	1	.....	.....	2	.....	.....	.....	1	.....
St. Louis, Mo. ....	June 18	698,706	216	35	27	3	1	69	6	19	2	116	3	29	2
San Antonio, Tex. ....	June 11	68,969	4	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do. ....	June 18	.....	8	.....	7	6	1	.....	.....	1	1	1	.....	.....	.....
San Francisco, Cal. ....	June 11	.....	123	22	12	4	2	11	.....	8	1	18	.....	5	.....
Schenectady, N. Y. ....	do. ....	76,744	16	6	1	1	1	2	.....	.....	.....	2	.....	.....	.....
Seattle, Wash. ....	do. ....	.....	50	4	8	1	1	19	2	2	.....	35	.....	8	.....
South Bend, Ind. ....	June 18	50,741	11	2	.....	.....	.....	8	.....	1	.....	.....	.....	.....	.....
South Bethlehem, Pa. ....	do. ....	16,180	6	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springfield, Mass. ....	do. ....	47,199	29	2	2	.....	1	1	2	2	1	12	.....	9	.....
Steelton, Pa. ....	do. ....	15,055	4	3	1	.....	1	1	.....	1	.....	3	.....	4	.....
Superior, Wis. ....	do. ....	42,011	14	.....	.....	.....	.....	6	.....	2	.....	.....	.....	.....	.....
Taunton, Mass. ....	do. ....	30,898	12	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....
Trenton, N. J. ....	do. ....	95,053	3	.....	1	6	2	19	.....	2	.....	.....	.....	.....	.....
Utica, N. Y. ....	do. ....	70,911	23	2	2	.....	.....	3	.....	3	.....	.....	.....	.....	.....
Waltham, Mass. ....	do. ....	29,083	7	1	.....	.....	.....	2	.....	.....	.....	6	.....	.....	.....
Washington, D. C. ....	do. ....	237,044	109	26	14	8	.....	10	.....	5	.....	12	.....	25	1
Weymouth, Mass. ....	June 4	11,846	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do. ....	June 11	.....	2	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Do. ....	June 18	.....	2	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Wichita, Kans. ....	do. ....	52,313	12	.....	1	.....	.....	.....	.....	.....	.....	5	.....	.....	1
Williamsport, Pa. ....	do. ....	30,382	4	.....	.....	.....	.....	2	.....	.....	.....	21	.....	.....	.....
Wilmington, Del. ....	do. ....	90,260	29	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woburn, Mass. ....	do. ....	14,550	6	2	.....	1	.....	.....	.....	.....	.....	2	.....	1	.....
Worcester, Mass. ....	do. ....	137,849	48	11	6	1	.....	2	.....	5	2	38	4	1	1
Yonkers, N. Y. ....	do. ....	74,897	19	5	2	.....	.....	15	1	2	.....	2	.....	.....	.....
York, Pa. ....	do. ....	42,805	1	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	4	.....
Zanesville, Ohio. ....	do. ....	26,042	7	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....

## STATISTICAL REPORTS OF MORBIDITY AND MORTALITY, STATES AND CITIES OF THE UNITED STATES (untabulated).

CALIFORNIA—*San Diego*.—Month of May, 1910. Population, 45,000. Total number of deaths from all causes 68, including measles 1, tuberculosis 16. Cases reported: Typhoid fever 2, measles 9, scarlet fever 1, tuberculosis 3.

COLORADO—*Pueblo*.—Month of March, 1910. Population 60,000. Total number of deaths from all causes 52, including diphtheria 1, tuberculosis 9. Cases reported: Typhoid fever 15, smallpox 1, scarlet fever 12, diphtheria 6.

Month of April, 1910. Total number of deaths from all causes 40, including typhoid fever 2, diphtheria 1, tuberculosis (pulmonary) 6. Cases reported: Typhoid fever 8, smallpox 3, measles 12, diphtheria 2, scarlet fever 7.

Month of May, 1910. Total number of deaths from all causes 41, including typhoid fever 2, tuberculosis 3. Cases reported: Typhoid fever 25, smallpox 1, measles 29, scarlet fever 9, diphtheria 6.

CONNECTICUT.—Month of May, 1910. Population of localities reporting 1,037,855. Total number of deaths from all causes 1,403,

including typhoid fever 6, measles 15, scarlet fever 15, diphtheria 29, tuberculosis (pulmonary) 115. Cases reported: Typhoid fever 31 in 13 towns, measles 478 in 53 towns, scarlet fever 350 in 62 towns, diphtheria 174 in 38 towns, tuberculosis (pulmonary) 164 in 47 towns.

KENTUCKY — *Louisville*. — Month of May, 1910. Population 269,749. Total number of deaths from all causes 326, including typhoid fever 3, scarlet fever 2, diphtheria 8, tuberculosis (pulmonary) 56. Cases reported: Measles 2, scarlet fever 22, diphtheria 81, tuberculosis (pulmonary) 56.

NEW YORK — *Auburn*. — Month of May, 1910. Population 38,500. Total number of deaths from all causes 48, including diphtheria 1, tuberculosis 3. Cases reported: Scarlet fever 17, diphtheria 1, tuberculosis (pulmonary) 8.

# FOREIGN AND INSULAR.

---

## BARBADOS.

### BRIDGETOWN—Inspection of Vessels.

Acting Assistant Surgeon Le Sueur reports, June 11:

Week ended June 11. Bills of health issued to 6 vessels, of which 2 were fumigated. These vessels carried an aggregate of 291 members of crews and 241 passengers. Sanitary condition of vessels, cargoes, crews, and passengers good.

## CUBA.

### CIENFUEGOS—Inspection of Vessels.

Acting Assistant Surgeon Suarez reports, June 17:

Week ended June 11. Vessels inspected, 4. Bills of health issued, 4. Members of crews of outgoing vessels inspected, 108. Certificates of vaccination issued, 2.

No quarantinable disease reported.

### HABANA—Inspection of Vessels.

Passed Assistant Surgeon de Valin reports, June 15:

Week ended June 11. Bills of health issued, 29. Vessels inspected and passed, 22. Members of crews of outgoing vessels inspected, 898. Passengers of outgoing vessels inspected, 620. Vessels fumigated, 2.

The report of the mosquito brigade shows 20,789 houses inspected and 15,304 water deposits petrolized or suppressed during the period from June 1 to 10.

No quarantinable diseases were reported during the week ended June 11.

### SANTIAGO—Inspection of Vessels—Leprosy.

Acting Assistant Surgeon Wilson reports, June 15:

Week ended June 11. Bills of health issued to 4 vessels bound for the United States and its dependencies.

The sanitary department reports 2 new cases of leprosy found, making 5 cases now under treatment. The department also reports 2,708 houses inspected.

## ECUADOR.

### GUAYAQUIL—Inspection of Vessels—Plague on Steamship.

Passed Assistant Surgeon Parker reports, May 29 and June 5:

Week ended May 28. Bills of health issued, 1. Vessels fumigated, 1. Members of crews inspected, 53. Passengers inspected, 36 (cabin 18, steerage 18). Pieces of baggage fumigated, 36; inspected and passed, 27. Certificates for hides issued, 2. Certificate for removal of body of person dead of nonquarantinable disease, 1.

Week ended June 4. Bills of health issued, 2. Vessels fumigated, 2. Members of crews inspected, 120. Passengers inspected, 25 (cabin 14, steerage 11). Pieces of baggage fumigated, 37; inspected and passed, 18.

The 2 vessels fumigated were the steamships *Ecuador*, sailing May 29 for the Canal Zone, and *Nicarie*, sailing June 2 for San Francisco via Central American ports. The *Nicarie* had a history of a case of plague in a sailor shipped from shore at Iquique, Chile, May 12. Symptoms of plague developed May 19. The vessel returned to Callao, Peru, for disinfection and removal of case. On arrival at Guayaquil the vessel was again disinfected. Before departure partial disinfection was performed and inspection made of crew and passengers before sailing.

#### GUATEMALA.

Acting Assistant Surgeon Ames reports:

#### LIVINGSTON, Fruit Port.

Week ended June 11. No bills of health were issued. No quarantinable disease exists.

#### PUERTO BARRIOS, Fruit Port—Inspection of Vessels.

Bills of health issued as follows:

#### WEEK ENDED JUNE 11.

Date.	Vessel.	Destination.	Crew.	Passengers from this port.	Passengers in transit.
1910.					
June 4	Esparta.....	Boston.....	44	8	.....
6	Prinz Joachim.....	New York via Colon.....	105	111	30
6	Lobelia.....	Habana.....	23	.....	.....
7	Montivedeo.....	Porto Rico via Colon.....	85	44	60
8	Corinto.....	New Orleans.....	20	1	.....
9	Hippolyte Dumois.....	Mobile.....	25	.....	.....
10	Cartago.....	New Orleans via Barrios and Belize.	84	38	41

#### HAWAII.

The last case of human plague at Honolulu occurred July 17, 1907. The last plague-infected rat was found at Aiea, 9 miles from Honolulu, April 13, 1910.

At Hilo the last case of human plague occurred March 23, 1910. The last plague-infected rat was found at Piihuona, 4 miles from Hilo, April 9, 1910.

Passed Assistant Surgeon Ramus reports, June 6:

#### HONOLULU.

#### Week ended June 4, 1910.

Total rats taken.....	661
Trapped.....	659
Found dead ( <i>Mus rattus</i> ).....	2
Examined bacteriologically.....	543
Plague rats.....	0
Classification of rats trapped:	
<i>Mus alexandrinus</i> .....	70
<i>Mus musculus</i> .....	279
<i>Mus norvegicus</i> .....	62
<i>Mus rattus</i> .....	248
Average number of traps set daily.....	1, 738

**Further relative to plague cases on steamship *Nippon Maru*.<sup>a</sup>**

Doctor Ramus reports, June 7:

The plague cases reported as occurring among Russians on steamship *Nippon Maru* developed after the arrival of the vessel at Honolulu, June 3. The patients were a Russian and his two daughters, the latter aged respectively 8 and 15 years. They came from Kobe, a plague-infected port, and the bill of health showed that they had been detained there in quarantine 7 days and that their clothing had been disinfected. The vessel was 14 days from Kobe and 10 days from Yokohama. The first case claims to have been taken sick 1 day before arrival at Honolulu. The bubo in his case was not demonstrable until 3 days after landing. The second and third cases developed on June 6, 1 in the morning and 1 in the evening of that date. It would seem that the infection was contracted at sea from plague-infected rats or from infected fleas.

The quarantine officer at Angel Island, Cal., was notified by telegram of the development of these 3 cases of plague among immigrants from the *Nippon Maru*, which is due to arrive at San Francisco June 11.

Passed Assistant Surgeon Trotter, at Angel Island, Cal., reports, June 18:

The steamship *Nippon Maru* arrived June 10. The entire personnel were disembarked from the steamship upon arrival, taken to the station, bathed, and assigned to quarters and their effects were disinfected. On the following day the vessel was fumigated throughout. As a result of this fumigation 35 rats were collected and sent to the laboratory for examination. One rat was found to be affected with buboes. Acting on the result of this examination the cargo was ordered to be discharged into lighters only during the day and fumigation of the holds at night was done. This was continued until the vessel was empty, when it was fumigated throughout and given pratique. The personnel were detained at the station until the morning of June 18, and as no sickness had occurred amongst them they were released.

**HONDURAS.****TELA, Fruit Port—Inspection of Vessel.**

Acting Assistant Surgeon Roe reports:

Week ended June 11. Bill of health issued to steamship *Harald*, for Mobile, crew 18; no passengers.

**INDIA.****CALCUTTA—Cholera, Plague, and Smallpox.**

Acting Assistant Surgeon Allan reports, May 25:

Week ended May 7. At Calcutta there were 63 deaths from cholera, 75 from plague, and 1 death from smallpox; in all Bengal, 358 cases of plague, with 317 deaths; in all India, 14,471 cases of plague, with 13,076 deaths.

Week ended May 21. Bill of health issued to the steamship *Karonga*, bound for Boston and New York, with a crew of 65 members. The usual precautions were taken, holds fumigated, rat guards placed on wharf lines, and effects of Asiatics disinfected.

---

<sup>a</sup> See Public Health Reports, June 17, 1910, page 859.

## ITALY.

## NAPLES—Examination of Emigrants—Smallpox.

Surgeon Geddings reports, June 8:

*Vessels inspected at Naples and Palermo week ended June 4.*

## NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
May 29	Oceania.....	New York.....	729	110	920
30	Lazio.....	do.....	410	70	430
31	Roma.....	do.....	779	150	850
June 1	Hamburg.....	do.....	633	90	780
3	Luisiana.....	do.....	498	55	520
4	König Albert.....	do.....	501	50	620
	Total.....		3,550	525	4,120

## PALERMO.

May 31	Lazio.....	New York.....	261	200	100
--------	------------	---------------	-----	-----	-----

*Rejections recommended.*

## NAPLES.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Other causes.	Total.
May 29	Oceania.....	37	3	12	9	61
30	Lazio.....	15	2	14	6	37
31	Roma.....	27	3	10	7	47
June 1	Hamburg.....	16	1	8	9	34
3	Luisiana.....	20	1	10	2	33
4	König Albert.....	10	2	8	3	23
	Total.....	125	12	62	36	235

## PALERMO.

May 31	Lazio.....	10		10	6	26
--------	------------	----	--	----	---	----

*Smallpox in Naples.*—During the week ended June 5, 18 cases of smallpox with 1 death were reported at the health office of the city of Naples.

## JAPAN.

## YOKOHAMA—Inspection of Vessels—Typhoid Fever.

Surgeon Irwin reports, May 30:

Week ended May 28. Bills of health issued as follows: Steamships *Minnesota*, *Sado Maru*, and *Oanfa* for Seattle, *Dakotah* and *Nippon Maru* and bark *Calcutta* for San Francisco, steamships *Kumeric* and *Kumano Maru* for Manila, and *African Prince* for New York. These vessels carried an aggregate of 924 in crews and 341 cabin and 1,088 steerage passengers.

Typhoid fever has appeared in epidemic form among the soldiers quartered at Himeji, 30 miles from Kobe. One hundred and forty

cases are reported. An infected water supply is believed to be the source of the infection.

A report of sanitary conditions in Kanagawa-ken shows, from January 1 to May 27, 6 cases of dysentery, 139 of typhoid fever, and 1 case of smallpox. Of the typhoid fever cases 56 occurred in Yokohama. (Population of Yokohama, 326,035; population of Kanagawa-ken, 776,685.)

#### MEXICO.

##### Report from the Superior Board of Health of Mexico.

In compliance with articles 1 and 2 of the International Sanitary Convention held at Washington October 9-14, 1905, the president of the Superior Board of Health of Mexico reports, June 20, that no case of yellow fever and no death from the said disease were registered in the Mexican Republic during the week ended June 18, and that the prophylactic measures reported under date of September 28, 1908, continue to be carried out.

##### PROGRESO—Inspection and Fumigation of Vessels.

Acting Assistant Surgeon Harrison reports:

Week ended June 11. Four vessels were inspected and 1 vessel was fumigated. They carried an aggregate of 248 in crews and 22 passengers.

There has been a marked increase in the number of mosquitoes following the frequent rains.

#### NICARAGUA.

##### BLUEFIELDS, Fruit Port—Inspection of Vessels—Sanitary Work.

Acting Assistant Surgeon Jumel reports:

Bills of health issued as follows:

*Week ended June 7.*

Date.	Vessel.	Destination.	Crew.	Passengers from this port.	Passengers in transit.
June 1	Marietta di Giorgio.....	.....	19	.....	.....
2	Utstein.....	.....	16	.....	.....
5	Imperator.....	.....	22	13	.....
5	U. S. S. Paducah.....	.....	154	.....	.....

*Stegomyia calopus* are abundant. On June 4 the United States marine and naval forces on shore began the work of local sanitary improvement in order to safeguard the health of their respective commands and prevent an outbreak of infectious disease. Streets are being graded and drained and the usual precautionary measures carried out.

##### Sanitary Conditions.

Doctor Jumel further reports, June 8:

Bluefields is situated along the water front of an almost land-locked lagoon 7 miles from the Caribbean Sea and is built upon an undulating plateau. It has an estimated population of 3,000, the majority

of the inhabitants being of mixed races. The foreign population is large. Communication with the neighboring coastal towns and points in the interior is frequent under ordinary conditions and is carried on by means of small sailing vessels through large rivers and their tributaries. Travel is possible by mule train to various points in the interior and offers very little danger of infection from quarantinable diseases.

The dwellings are of light construction, are of wood for the most part, and are supplied with openings which are not screened.

The streets are well laid out, but not substantially built. Some are irregularly paved with cobblestones, while others are merely dirt roads, with surface drains on each side. These drains have been more or less neglected and allowed to become filled in places, which serves to embarrass the natural drainage, which is more than ordinarily good. Several combined sewers and drains exist, but are not important adjuncts to the general sanitary scheme.

Empty bottles, old tin cans, and other débris are commonly observed beneath houses, in back yards, and on some streets. These receptacles become filled with rain water and in time serve as excellent breeding places for mosquitoes. Numerous old-fashioned water-closets are scattered about town and are rarely, if ever, cleaned. Many surface wells exist, which are neither covered nor in any manner protected from becoming places for the larval development of millions of mosquitoes. The water supply from this source is used for washing purposes only. Garbage is irregularly carted from city limits by the municipal authorities, and is sometimes burned.

The common mosquito is the *Stegomyia calopus*. *Culices* exist, but not in abundance. *Anopheles* are present, but are not commonly observed, the reason for which is attributable to the fact that there are no fresh-water swamps in the immediate vicinity and not much pool formation in the town limits. This is due to soil porosity and conformation of the town site. Daily northeast trade winds destroy many mosquitoes and exercise a favorable cooling influence upon the local climate, while a considerable rainfall does much in the same direction.

The prevailing diseases are malarial fevers and tuberculosis, the former, as a rule, being introduced from interior points and from the various banana plantations in the lowlands. Mosquito nets are not in general use. Shortly after the hour of sunset it is the common practice among the natives to close tightly all the openings in their premises, which explains in a measure why tuberculosis is so commonly observed. The most frequently observed type of malaria is the estivo-autumnal, or tropical malaria type. Two cases of beriberi, mixed type, have been reported, the one in a native, the other in an alien Chinaman. Both are now convalescent. Through reliable sources it has been ascertained that beriberi is frequently observed in the mining districts in the interior. Amebic dysentery exists sporadically, while the simple form of this disease is quite common. Filarial diseases are infrequent. One case has been reported, but the diagnosis could not be confirmed by microscopical examination. Uncinariasis is very common among the younger natives. Various gastro-enteric disorders sum up the list of diseases prevailing in the port.

## RUSSIA.

**Cholera, smallpox, and typhus fever—Cholera bacilli in river water.**

Acting Assistant Surgeon De Forest at Libau reports, June 11:

During the week ended June 5, 18 cases of smallpox with 1 death and a total of 32 cases present were reported at Libau. At Riga 23 cases of typhus fever and a total of 89 cases present were reported during the same week.

Examination of water taken from the Dnieper River at Alexandrovsk and Kief shows cholera bacilli.

The steamship *Lituania*, which sailed from Libau May 24, ran on a reef on the north coast of Scotland and put in at New Castle. The steamship *Russia* will take the passengers of the *Lituania* to New York. For the steamship *Estonia*, sailing June 7, 1,261 passengers have been examined.

## ST. LUCIA ISLAND.

**CASTRIES—Inspection and Fumigation of Vessels.**

Acting Assistant Surgeon Maylie reports, May 30:

Week ended May 28. Vessels inspected, 11; fumigated, 7. Sanitary condition of port and vicinity good. No quarantinable diseases exist.

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

**Reports Received during Week Ended July 1, 1910.**

[These tables include cases and deaths recorded in reports received by the Surgeon-General, Public Health and Marine-Hospital Service, from American consuls through the Department of State and from other sources. For reports received from January 1, 1910, to June 24, 1910, see PUBLIC HEALTH REPORTS for June 24, 1910. In accordance with custom, the tables of epidemic diseases are terminated semi-annually and new tables begun.]

## CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India:</b>				
Calcutta.....	May 1-7.....		63	
Rangoon.....	May 8-14.....		1	
<b>Java:</b>				
Batavia.....	May 8-14.....	5	4	
Samarang.....	May 8-14.....	50	40	
Soerabaya.....	May 8-14.....	15	6	

## YELLOW FEVER.

<b>Brazil:</b>				
Manaos.....	May 30-June 4.....		1	
Para.....	May 30-June 11.....	11	7	
<b>Ecuador:</b>				
Guayaquil.....	May 16-31.....	21	8	
<b>Gold Coast:</b>				
Sekondi.....	May 1-27.....	8	8	
<b>Sierra Leone:</b>				
Freetown.....	May 1-31.....	3	3	

## PLAGUE.

<b>Chile:</b>				
Iquique.....	May 8-21.....	9	4	
<b>China:</b>				
Hongkong.....	May 8-14.....	2		
<b>Ecuador:</b>				
Guayaquil.....	May 16-31.....	2		
<b>India:</b>				
Bombay.....	May 18-24.....		162	
Calcutta.....	May 1-7.....		75	
Kurrachee.....	May 15-21.....	60	60	
Rangoon.....	May 8-14.....		17	
Bombay Presidency and Sind.....	May 1-14.....	985	868	
Madras Presidency.....	May 1-14.....	38	15	

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

Reports Received During Week Ended July 1, 1910.

## PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India—Continued.</b>				
Bengal.....	May 1-14.....	626	567	
United provinces.....	May 1-14.....	3,660	3,445	
Punjab.....	May 1-14.....	16,810	14,654	
Burma.....	May 1-14.....	348	340	
Central provinces, including Berar.....	May 1-14.....	118	82	
Mysore State.....	May 1-14.....	18	12	
Hyderabad State.....	May 1-14.....	5	2	
Central India.....	May 1-14.....	9	7	
Rajputana and Ajmer-Merwara.....	May 1-14.....	4,650	4,286	
Baluchistan.....	May 1-14.....	54	46	
Grand total.....		27,321	24,324	
<b>Peru:</b>				
Callao, department—				
Callao.....	May 19.....	1		From s. s. Nicarie.
<b>Trinidad:</b>				
Port of Spain.....	May 15-21.....	1	1	

## SMALLPOX.

<b>Algeria:</b>				
Bona.....	May 1-31.....	1	1	
<b>Australia:</b>				
Victoria, general.....	Apr. 3-19.....	1	1	
<b>Austria:</b>				
Galicia.....	May 29-June 4.....	3		
<b>Brazil:</b>				
Para.....	May 29-June 11.....	8	1	
<b>Canada:</b>				
British Columbia—				
Fernie.....	June 12-18.....	1		
Nova Scotia—				
Halifax.....	June 14-20.....	2		
Pictou.....	June 12-18.....	2	1	
Ontario—				
Toronto.....	June 5-11.....	1		
<b>China:</b>				
Canton.....	May 8-21.....	4		
Hongkong.....	May 8-14.....	1		
Nanking.....	May 7.....			
<b>Egypt, general.....</b>	Apr. 30-May 6.....	50	15	Present.
Cairo, general.....	May 21-27.....	4	2	
<b>France:</b>				
Paris.....	May 29-June 4.....	6		
<b>Germany, general.....</b>	May 29-June 11.....	9		
<b>Great Britain:</b>				
South Shields.....	May 22-June 4.....	4	1	
<b>India:</b>				
Bombay.....	May 18-24.....		28	
Kurrachee.....	May 15-21.....	5		
Madras.....	May 14-20.....		2	
Rangoon.....	May 8-14.....		12	
<b>Italy, general.....</b>	May 30-June 5.....	8		
Naples.....	May 30-June 5.....	18	1	
<b>Korea:</b>				
Pusan.....	May 1-7.....	1		
<b>Malta.....</b>	May 22-28.....	1		
<b>Mexico:</b>				
Agualcalientes.....	June 5-11.....		7	
Mexico.....	May 15-21.....		1	
San Luis Potosi.....	May 29-June 4.....	2	1	
<b>Portugal:</b>				
Lisbon.....	May 29-June 4.....	34		
<b>Russia:</b>				
Lifau.....	May 30-June 5.....	32	1	
Moscow.....	May 22-28.....	7	5	
Odessa.....	May 22-June 4.....	28	3	
Riga.....	May 29-June 4.....	5		
St. Petersburg.....	May 8-28.....	146	36	
<b>Spain:</b>				
Barcelona.....	May 31-June 6.....		3	
Cadiz.....	May 1-31.....		1	

## MORTALITY.

## WEEKLY MORTALITY TABLE, FOREIGN AND INSULAR CITIES.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Typhoid fever.	Scarlet fever.	Diphtheria.	Measles.
Aguascalientes.....	June 11	40,000	57	1				7	1		2		1
Amsterdam.....do.	June 11	570,149	153	24								1	1
Athens.....	June 4	250,010	76										
Barcelona.....	June 6	591,272	285	25				3		1		2	12
Batavia.....	May 14	217,630				4							
Belfast.....	June 4	391,167	166	29							1		38
Birmingham.....	June 11	570,113	106									2	
Bombay.....	May 24	977,822	707	45	162			28		2			
Bordeaux.....	May 21	253,000	103	14						1		1	
Do.....	May 28		110	23						1	1	2	
Do.....	June 4		90	12									3
Bradford.....do.	June 4	295,865	70	6						1			8
Bremen.....	June 11	235,648	67	7									4
Brussels.....	May 28	720,030	140	11								1	1
Budapest.....	May 29	950,610								10		10	4
Cairo.....	May 27	677,663	606	24					13	8		2	30
Calcutta.....	May 7	847,796	526	42	75	63		1				3	
Canton.....	May 14	1,000,000	150	15	2					2		1	3
Do.....	May 21		140	15	1					2			
Chemnitz.....do.	June 4	283,350	94	8									
Do.....	May 28		89	4							1	1	1
Do.....	June 4		79	8						2			
Chihuahua.....	June 12	37,000	65	2						1			9
Christiana.....	May 29	236,000	39	6									2
Coburg.....	June 4	23,689									1		
Cologne.....do.	June 4	512,896	158	23								4	6
Colombo.....	May 14	187,564	104	13						6			
Constantinople.....	June 5	1,000,000	208	38						4	4	2	2
Copenhagen.....	May 28	455,000	135	14						2	2	2	1
Dublin.....do.	June 4	394,525	160	25						1			
Do.....	June 4		135	32							2		2
Dundee.....	June 11	170,206	61	5							1	9	3
Edinburgh.....	June 4	360,276	79	5								2	
Frankfort-on-the-Main.....	do.	406,000	96									4	1
Fusan.....	May 7	38,884								2			
Do.....	May 14									2			
Georgetown.....	May 28	56,000	53	8						2			
Glasgow.....	June 10	872,021	259							1		2	4
Do.....	June 17		255								5	4	5
Hull.....	June 11	280,006	81							1			1
Hamburg.....	June 4	895,804	234	23							1	9	7
Hongkong.....	May 14	336,488								1			
Iquique.....do.	June 4	38,382	6	2									
Do.....	May 21		4	2									
Kingston, Canada.....	June 18	19,193	13							1			
Kobe.....	May 28	387,915	127							1			
Königsberg.....	June 4	244,200	77	6						1	2	1	1
Kurrachee.....	May 21	130,000	95	60									
Leeds.....	June 11	490,895	12									6	8
Leipzig.....	June 4	590,329	131	22						2	2	1	2
Leith.....do.	June 4	86,767	24	5				1	1				
Libau.....	June 5	90,000						1					
Liege.....	May 28	177,234	41	3						1			
Do.....	June 4		42	5								1	
Liverpool.....	June 11	767,606	262	24						2		2	18
London.....	June 4	7,537,196	1,491							1	11	8	61
Madras.....	May 20	550,000	349					2				4	1
Magdeburg.....	May 28	278,321	75	15							2		
Manaos.....	June 4	52,000	40	4			1						1
Manchester.....do.	June 4	631,533	185	32							1	2	7
Mannheim.....	May 28	194,902	42	11									10
Mexico.....	May 21	500,000	432	30				1	13		1	3	
Monterey.....	June 12	100,000	103	10						1	2		6
Do.....	June 19		77	5						2	1		7
Moscow.....	May 28	1,500,000	800	86				5	2	2	18	25	8
Munich.....do.	June 4	576,000	206	36					1			3	1
Do.....	June 4		152	15						1	1	1	2
Naples.....do.	June 4	593,729	273					1					
Do.....	June 11		293					5					

## MORTALITY—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Typhoid fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Newcastle-on-Tyne.....	May 28	285,891	69	...	...	...	...	...	...	...	...	...	...	1
Do.....	June 4	...	74	14	...	...	...	...	...	...	1	1	...	2
Nottingham.....	Do.....	260,000	57	...	...	...	...	...	...	...	1	...	2	...
Nuremberg.....	May 21	323,500	110	15	...	...	...	...	...	...	...	1	...	6
Do.....	May 28	...	112	6	...	...	...	...	...	...	...	1	7	...
Odessa.....	Do.....	520,000	202	29	...	...	...	...	1	...	4	4	9	2
Do.....	June 4	...	163	18	...	...	...	3	...	...	6	3	2	...
Palermo.....	May 7	340,000	167	6	...	...	...	...	...	...	...	...	6	...
Do.....	May 14	...	173	6	...	...	...	...	...	...	1	...	8	...
Do.....	May 21	...	182	5	...	...	...	...	1	...	1	...	3	...
Do.....	May 28	...	171	2	...	...	...	...	...	...	3	1	1	...
Para.....	June 4	185,000	113	8	...	...	5	...	...	...	...	...	2	...
Do.....	June 11	...	103	4	...	...	2	1	...	1	...	...	...	...
Paris.....	June 4	2,776,394	859	173	...	...	...	...	...	3	1	7	32	9
Pictou.....	June 18	3,300	...	...	...	...	...	1	...	...	...	...	...	...
Port of Spain.....	May 21	60,000	33	9	1	...	...	1	...	...	...	...	...	...
Do.....	May 28	...	27	...	...	...	...	...	...	...	...	...	...	...
Port Said.....	May 27	53,711	39	1	...	...	...	...	...	...	...	4	...	...
Prague.....	May 21	233,344	69	74	...	...	...	...	...	...	...	...	1	...
Do.....	May 28	...	80	21	...	...	...	...	...	...	...	1	...	...
Do.....	June 4	...	96	19	...	...	...	...	...	1	...	...	3	...
Quebec.....	June 18	...	...	...	...	...	...	...	...	...	...	1	...	...
Rangoon.....	May 14	252,155	185	9	17	1	...	12	...	2	...	...	...	...
Rotterdam.....	June 11	421,388	116	...	...	...	...	...	...	...	...	...	...	...
St. Petersburg.....	May 14	1,678,000	908	126	...	...	...	5	2	10	21	10	75	12
Do.....	May 21	...	919	131	...	...	...	22	1	13	10	23	80	10
Do.....	May 28	...	923	124	...	...	...	9	...	13	12	15	85	6
Salaverry.....	May 24	1,800	3	1	...	...	...	...	...	...	...	...	...	1
San Luis Potosi.....	June 4	82,479	82	6	...	...	...	1	1	...	4	...	...	...
Santa Cruz de Tenerife.....	Do.....	46,000	26	3	...	...	...	...	...	1	3	1	...	...
Shanghai.....	May 22	565,000	147	10	...	...	...	2	...	...	...	1	...	...
South Shields.....	May 28	119,737	38	3	...	...	...	...	...	...	1	...	3	2
Do.....	June 4	...	38	12	...	...	...	1	...	...	...	...	2	3
Stettin.....	Do.....	239,000	70	8	...	...	...	...	...	1	...	...	...	...
Stockholm.....	May 28	341,816	120	20	...	...	...	...	...	...	12	2	2	3
Talcahuana.....	May 21	28,000	17	5	...	...	...	...	...	3	2	...	3	2
Tientsin.....	May 7	70,000	20	1	...	...	...	...	1	1	...	...	...	...
Trieste.....	June 4	221,124	94	...	...	...	...	...	...	...	...	1	...	...
Turin.....	May 26	391,968	137	18	...	...	...	...	...	2	2	3	1	3
Valencia.....	June 4	240,000	94	4	...	...	...	...	...	...	...	...	...	...
Vienna.....	Do.....	2,107,981	700	112	...	...	...	...	...	6	6	8	30	5
Vigo.....	Do.....	40,000	14	3	...	...	...	...	...	2	...	...	...	...
Winnipeg.....	June 18	122,000	52	1	...	...	...	...	...	...	1	1	...	...

## MORTALITY—FOREIGN AND INSULAR—COUNTRIES AND CITIES (untabulated).

ARGENTINA—*Rosario de Santa Fe*.—Month of March, 1910. Population, 178,284. Total number of deaths from all causes 363, including typhoid fever 18, smallpox 1, scarlet fever 2, diphtheria 14, tuberculosis 44.

BRAZIL—*Ceara*.—Month of April, 1910. Population, 55,000. Total number of deaths from all causes 164, including typhoid fever 8, tuberculosis 12.

CANADA—*Hamilton*.—Month of May, 1910. Population, 70,000. Total number of deaths from all causes 106, including measles 1, diphtheria 1, tuberculosis 7.

FRANCE—*Toulon*.—Month of May, 1910. Population, 101,602. Total number of deaths from all causes not reported. Three deaths from typhoid fever and 14 from tuberculosis reported.

GREAT BRITAIN.—Week ended May 28, 1910.

*England and Wales*.—The deaths registered in 77 great towns correspond to an annual rate of 12.7 per 1,000 of the population, which is estimated at 16,940,895.

*Ireland*.—The deaths registered in 21 principal town districts correspond to an annual rate of 21.1 per 1,000 of the population, which is estimated at 1,151,790. The lowest rate was recorded at Lurgan, viz, 4.4, and the highest at Dundalk, viz, 29.5 per 1,000 of the population.

*Scotland*.—The deaths registered in 8 principal towns show an annual rate of 14 per 1,000 of the population, which is estimated at 1,865,571. The lowest rate was recorded at Perth, viz, 9.8, and the highest at Dundee, viz, 23 per 1,000. The total number of deaths from all causes was 506, including typhoid fever 1, measles 33, scarlet fever 4, diphtheria 4.

GREECE—*Patras*.—May 14 to 31, 1910. Population, 40,000. Total number of deaths from all causes 25, including tuberculosis 5.

JAMAICA—*Kingston*.—Month of May, 1910. Population, 48,500. Total number of deaths from all causes 105, including tuberculosis 18.

RUSSIA—*Riga*.—Month of March, 1910. Population, 355,000. Total number of deaths from all causes 681, including typhoid fever 1, typhus fever 50, smallpox 4, measles 4, scarlet fever 32, diphtheria 16. Three hundred and five cases of typhus fever and 16 of smallpox were reported.

SOUTH AFRICA—*Johannesburg*.—Two weeks ended May 14, 1910. Population, 180,687. Total number of deaths from all causes 162, including typhoid fever 5, measles 2, scarlet fever 2, diphtheria 1, tuberculosis 13.

By authority of the Secretary of Treasury:

WALTER WYMAN,

*Surgeon-General,*

*United States Public Health and Marine-Hospital Service.*