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FURTHER OBSERVATIONS ON THE DISPOSAL OF EXCRETA (SECOND PAPER).^a

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THE SURFACE PRIVY.

(1) If night soil containing live fly larvæ^b is taken from a surface privy and buried in 6½ inches of sterilized sand, the burial of the material does not insure the death of the insects; on the contrary, the latter are able to penetrate the sand and to issue as adult flies. This observation (experiment 15) emphasizes the point that all fecal material should be rendered harmless and it raises still further misgivings in regard to the popular faith in the dry system. Unless a dry privy is rigidly fly proof, exposed or partially exposed feces give flies an opportunity to oviposit and as the resulting fly larvæ are not killed by shallow burial, so often practiced, the possibility of the dissemination of filth and disease germs still remains.

(2) Burial in 6½ inches of sand does not prevent hookworm (*Necator americanus*) larvæ from coming to the surface (experiment 15).

CARBOLIC METHOD.

(3) When feces containing hookworm eggs were placed in a 2 per cent mixture of crude carbolic acid with water live hookworm eggs were found after 24 hours, but live eggs were not found on date of next observation, twenty-third day (experiments 14, 14b, 14c). The carbolic mixture in question killed hookworm embryos and larvæ in a few moments under the microscope, so that the indications are that this method would be a safe one so far as hookworm disease is concerned. It is also safe so far as flies are concerned, as fly larvæ died promptly and flies did not oviposit or feed on the floating fecal material. Despite the advantages, we warn against its possible dangers, and on account of such dangers we do not recommend it.

^a See Public Health Reports, vol. 24 (27), 1910, July 8, pp. 947-950.

^b Mr. Coquilett has kindly determined the flies as *Ophyra leucostoma* Wild.

WATER METHOD.

(4) If a pail system is used, and only water placed in the bucket, the development of hookworm (*Necator americanus*) eggs is inhibited and some of the eggs die; live eggs may, however, be found even at the end of 24 days. Further, mosquitoes will oviposit in the water, despite its character, and live mosquito larvæ^a may be found (experiment 17). This indicates that some safeguarding material must be added to the water.

WATER AND KEROSENE METHOD.

Feces containing eggs of *Ascaris lumbricoides* and *Necator americanus* were taken from surface privies and placed in jars of water with a film of kerosene.

(5) As the fecal material breaks up some of the eggs float to or near the surface of the water (experiment 13). This observation strongly indicates the necessity of examining for eggs of parasites the material used on sewer fields.

(6) Even 2 inches of water, with a film of kerosene, is exceedingly inhibitory to the development of the eggs, both of *Ascaris lumbricoides* and *Necator americanus* (experiment 5).

(7) Under about 9 inches of water, with a film of kerosene, hookworm eggs begin to die after 4 days; live eggs were found on the fifth, seventh, ninth, twenty-eighth, twenty-ninth, and thirty-third days, but no egg was found which had developed to the "tadpole" stage. On the twenty-eighth day 65 per cent of 20 eggs examined, on the twenty-ninth day 90 per cent of 20 eggs examined, and on the thirty-third day 75 per cent of 20 eggs examined were dead (experiment 4).

(8) Thus, if the water and kerosene method is used, it is unsafe (from the standpoint of hookworm disease) to throw the excreta on the ground, even if they have fermented for 33 days (experiment 4).

(9) The water and kerosene method reduces the odor almost to a negligible degree.

(10) If water and kerosene are added to a pail containing fly-blown feces, some of the fly larvæ succeed in crawling through the oil and escaping from the pail.

(11) But if the water and kerosene are placed in the tub before use, or before the feces become fly-blown, the feeding and breeding of flies, mosquitoes, and other insects in the night soil seem to be eliminated, and thus the danger of the spread of filth and bacterial infection from the privy tub to the food, by means of insects, appears to be excluded, unless, of course, the tub is permitted to become so full that it runs over and unless it is filled with paper to a degree that the feces are not affected by the water and oil.

(12) Thus far the chief objections we have been able to develop to the water-kerosene method are:

(a) If the water is too deep, splashing occurs; plans to prevent this splashing are now under experiment.

^a Kindly determined by Mr. Knab as probably belonging to *Culex quinquefasciatus* Say.

(b) A tendency to economize may result in the use of too small a receptacle; a wet system clearly calls for a larger receptacle than a dry system.

(13) The question naturally arises whether it would be feasible to apply the water-kerosene method to manure piles, in order further to prevent the breeding of flies.

(14) Newspaper is not disintegrated at the end of 33 days.

THE PRESENT STATUS OF THE PRIVY PROBLEM.

The privy is the great sanitary problem of the open country and the nonsewered villages. As it is not known which persons in a given community are carriers of typhoid, amœbæ, hookworms, Cochlin-China diarrhea, *Ascaris*, etc., it is necessary from the public health point of view to impress upon the public the thought that all fresh human feces should be accepted as dangerous and should be treated as if they were actually a virulent poison. To adopt any other course is to run a risk of unnecessary sickness and death, especially among children. To bury the night soil without first safeguarding it may result in disease; to permit a continuation of the use of fresh night soil as fertilizer, in view of present day knowledge, is to permit a custom endangering life. Burning or boiling the human excreta is at present the most ideal plan, but while feasible in many instances it is not of universal feasibility. Still, we must not close our eyes to the fact that in the present absence of definite knowledge regarding the viability of certain infections (as amœbæ, for instance), every other plan (disinfectants included) must for the present be accepted as a compromise.

The best known compromise (the sewer) is not applicable to the open country; even as this system is used (and abused) in cities, we should recall that our knowledge regarding the possible distribution of zooparasitic diseases by the sewer system is very rudimentary. The surface privy is a distinct improvement over none at all, but is unwarranted in view of present-day knowledge. The so-called "pail system" (including any water-tight receptacle, as a can, tub, or barrel) is the least that can possibly be demanded. Some safeguarding material should be used in this pail. If dry earth, ashes, or lime is used, the entire privy should be made rigidly fly proof; if a fluid system is used, the screening is not quite as necessary, and thus a less expensive privy can be built. It remains to find a system of safeguarding which will be practical as well as theoretically not too inefficient. All systems have their advantages and their disadvantages; none is perfect.

The great practical disadvantage of the "dry" systems is that they call for cooperation from persons (children and many adult persons) whose cooperation can not be relied upon; given the lack of cooperation, even in a relatively small percentage of the population, and the advantages of the system are far less than popularly supposed, for flies and worms can develop and come to the surface, and thus continue to spread infection. If the dry system is adopted, the night soil should be subjected to heat in order to kill infection. The great practical advantage of the "dry" system lies in the fact that so many people already know about it. It is a great advance over the surface privy.

In dealing with rural localities and many towns, one of the greatest obstacles to be considered is the widespread desire to use the night soil as fertilizer. Whatever our views on this subject may be, we must face the fact that it is a deeply rooted custom among our people which it may take a generation to eradicate. One great advantage of the "wet" system is that it seems to offer a promise that a means may be found whereby we may still retain whatever value there may be in night soil as fertilizer and at the same time do away with the risk involved in this custom. Thus, making an economic concession to farmers, we may still avoid the risk of estranging a large number of them from necessary sanitary improvements. To make it economically worth while to be sanitary in one's habits is one of the keynotes of sanitary advance.

An advantage of the water-kerosene method is that it can be installed with so little trouble and with so little change in the present privies. The only really necessary additions to the present surface privy are a platform under the seat, a receptacle such as a tub or barrel, under the seat, and the necessary barrels for fermentation, or an iron pail for boiling.

Further studies on this system are still necessary (especially in connection with the splashing and the minimum time for fermentation), but it seems to promise more at less trouble and less expense than does the "dry" system, and it has the great advantage that it requires cooperation of a much smaller proportion of the population.

UNITED STATES.

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

PLAGUE-PREVENTION WORK.

Passed Assistant Surgeon McCoy reports:

ANIMALS EXAMINED FOR PLAGUE INFECTION.

During the week ended July 30, 1910, there were examined for possible plague infection at the Federal laboratory at San Francisco and the branch laboratories at Oakland and Los Angeles, Cal., animals as follows: Squirrels 3,538, gophers 5, rabbits 46, and rats 2,318. The rats were identified as follows: *Mus norvegicus* 1,973, *Mus rattus* 79, *Mus musculus* 194, *Mus alexandrinus* 72.

DISTRIBUTION OF POISON.

In connection with the making of a squirrel free zone around the cities on San Francisco Bay 725 acres of land in Alameda County were covered with poison during the week ended July 30, 1910.

SEATTLE, WASH.

Assistant Surgeon Chapin reports:

During the week ended July 30, 1910, 1,194 rats were collected, of which 913 were necropsied and examined for plague infection. No plague-infected rats were found.

During the month of July 4,215 rats were received and 3,421 necropsied and examined. None was found plague infected.

Record of Plague Infection.

Place.	Date of last case of human plague.	Date of last case of rodent plague.	Total number of rodents found infected since May, 1907.
California:			
Cities—			
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	398 rats.
Oakland.....	Oct. 26, 1909	Dec. 1, 1908	126 rats.
Berkeley.....	Aug. 28, 1907	None recorded.	
Los Angeles.....	Aug. 11, 1908	Aug. 21, 1908	1 squirrel.
Counties—			
Alameda (exclusive of the city of Oakland).....	Sept. 26, 1909	May 30, 1910	81 squirrels, 1 wood rat.
Contra Costa.....	July 21, 1908	June 1, 1910	243 squirrels.
Merced.....	None recorded.	June 6, 1910	2 squirrels.
Monterey.....	do.	do.	4 squirrels.
San Benito.....	June 5, 1910	July 11, 1910	20 squirrels.
San Joaquin.....	None recorded.	June 29, 1910	5 squirrels.
San Louis Obispo.....	do.	Jan. 29, 1910	1 squirrel.
Santa Clara.....	do.	June 22, 1910	22 squirrels.
Santa Cruz.....	do.	May 17, 1910	3 squirrels.
Stanislaus.....	do.	May 21, 1910	5 squirrels.
Washington:			
Seattle.....	Oct. 30, 1907	Feb. 8, 1910	22 rats.

Rats Collected and Examined for Plague Infection.

Place.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
San Francisco.....	July 30, 1910	31	a 2,221	1,556	None.
Oakland.....	do.....	39	b 742	625	Do.
Berkeley.....	do.....		c 174	136	Do.
San Luis Obispo County.....	do.....		1	1	Do.
Washington:					
Seattle.....	do.....		1,194	913	Do.

a Identified, *Mus norvegicus* 1,619, *Mus rattus* 128, *Mus musculus* 389, *Mus alexandrinus* 85.

b Identified, *Mus norvegicus* 625, *Mus musculus* 117.

c Identified, *Mus norvegicus* 128, *Mus rattus* 1, *Mus musculus* 38, *Mus alexandrinus* 7.

Squirrels Collected and Examined for Plague Infection.

Place.	Week ended—	Trapped and shot.	Found dead.	Examined.	Found infected.
California:					
Cities—					
San Francisco.....	July 30, 1910	10		10	None.
Counties—					
Alameda.....	do.....	186	169	250	Do.
Contra Costa.....	do.....	49		49	Do.
Fresno.....	do.....	168		161	Do.
Los Angeles.....	do.....	588	1	586	Do.
Madera.....	do.....	30		30	Do.
Merced.....	do.....	325	30	345	Do.
Monterey.....	do.....	611		603	Do.
Orange.....	do.....	137		137	Do.
Riverside.....	do.....	109		109	Do.
San Benito.....	do.....	221	2	218	Do.
San Bernardino.....	do.....	52		52	Do.
San Joaquin.....	do.....	432		425	Do.
San Luis Obispo.....	do.....	441	2	437	Do.
Santa Cruz.....	do.....	58		58	Do.
Solano.....	do.....	68		68	Do.

Other Animals Collected and Examined.

Place.	Week ended—	Animals collected.	Examined.	Found infected.
California:				
Cities—				
San Francisco.....	July 30, 1910	8 gophers.....	5	None.
Counties—				
Alameda.....	do.....	43 rabbits.....	43	Do.
San Luis Obispo.....	do.....	3 rabbits.....	3	Do.

SMALLPOX IN THE UNITED STATES.

Reports Received During Week Ended August 19, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Alabama:				
Birmingham.....	July 31-Aug. 6....	1		
Colorado:				
San Miguel County.....	June 1-30.....		1	
Connecticut:				
District of Columbia.....	July 1-31.....			
Florida:				
Gadsden County.....	July 31-Aug. 6....	1		
Hillsboro County.....	July 31-Aug. 6....	1		
Jackson County.....	July 31-Aug. 6....	1		
Jefferson County.....	July 31-Aug. 6....	2		
Santa Rosa County.....	July 31-Aug. 6....	2		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended August 19, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Iowa:				
Benton County.....	July 1-31.....	2		
Cedar County.....	July 1-31.....	1		
Linn County.....	July 1-31.....	11		
Polk County.....	July 1-31.....	6		
Pottawattamie County.....	July 1-31.....	1		
Scott County.....	July 1-31.....	1		
Webster County.....	July 1-31.....	1		
Kansas:				
Allen County.....	June 1-30.....	31		
Barton County.....	June 1-30.....	6		
Butler County.....	June 1-30.....	2		
Cherokee County.....	June 1-30.....	4		
Cowley County.....	June 1-30.....	1		
Crawford County.....	June 1-30.....	4	1	
Decatur County.....	June 1-30.....	29		
Dickinson County.....	June 1-30.....	4		
Edwards County.....	June 1-30.....	1		
Elk County.....	June 1-30.....	2		
Ford County.....	June 1-30.....	1		
Greenwood County.....	June 1-30.....	10		
Harper County.....	June 1-30.....	2		
Harvey County.....	June 1-30.....	17		
Jewell County.....	June 1-30.....	6		
Kingman County.....	June 1-30.....	1		
Labette County— Parsons.....	June 1-30.....	2		
Leavenworth County— Leavenworth.....	June 1-30.....	1		
Lyon County.....	June 1-30.....	11		
McPherson County.....	June 1-30.....	4		
Montgomery County Coffeyville.....	June 1-30.....	20	1	
Neosho County.....	June 1-30.....	3		
Norton County.....	June 1-30.....	12		
Norton County.....	June 1-30.....	10		
Osborne County.....	June 1-30.....	6		
Pratt County.....	June 1-30.....	1		
Rawlins County.....	June 1-30.....	1		
Reno County.....	June 1-30.....	8	3	
Saline County.....	June 1-30.....	5		
Sedgwick County— Wichita.....	June 1-30.....	14		
Shawnee County.....	June 1-30.....	1		
Stafford County.....	June 1-30.....	2		
Trego County.....	June 1-30.....	1		
Wallace County.....	June 1-30.....	1		
Wyandotte County— Kansas City.....	June 1-30.....	23		
Louisiana:				
New Orleans.....	July 31-Aug. 6.....	6		
Maryland:				
Cumberland County.....	July 1-31.....	1		
Michigan:				
Bay County.....	July 1-31.....	2	1	
Berrien County.....	July 1-31.....	1		
Cheboygan County.....	July 1-31.....	12		
Clare County.....	July 1-31.....	1		
Genesee County.....	July 1-31.....	11		
Grand Traverse County.....	July 1-31.....	2		
Gratiot County.....	July 1-31.....	5		
Huron County.....	July 1-31.....	1		
Ingham County.....	July 1-31.....	6		
Ionia County.....	July 1-31.....	1		
Isabella County.....	July 1-31.....	2		
Kalamazoo County.....	July 1-31.....	4		
Keweenaw County.....	July 1-31.....	1		
Lapeer County.....	July 1-31.....	4		
Manistee County.....	July 1-31.....	1	1	
Mason County.....	July 1-31.....	1		
Midland County.....	July 1-31.....	2		
Missaukee County.....	July 1-31.....	2		
Montcalm County.....	July 1-31.....	1		
Saginaw County.....	July 1-31.....	2		
St. Clair County.....	July 1-31.....	17		
Salina County.....	July 1-31.....	1		
Shiawassee County.....	July 1-31.....	11		
Tuscola County.....	July 1-31.....	6		
Wayne County.....	July 1-31.....	7		
Minnesota:				
Pope County.....	Apr. 1-30.....		1	
St. Louis County.....	June 1-30.....		1	

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received—During Week Ended August 19, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
New York: Entire State.....	June 1-30.....	44	2	
North Dakota:				
Cass County.....	July 1-31.....	1		
Morton County.....	July 1-31.....	4		
Stark County.....	July 1-31.....	1		
Ohio:				
Athens County.....	July 1-31.....	1		
Butler County.....	July 1-31.....	3		
Cuyahoga County.....	July 1-31.....	7	1	
Clarke County.....	July 1-31.....	3		
Columbiana County.....	July 1-31.....	3		
Franklin County.....	July 1-31.....	5		
Hancock County.....	July 1-31.....	4		
Hocking County.....	July 1-31.....	1		
Jefferson County.....	July 1-31.....	1		
Lucas County.....	July 1-31.....	3		
Mahoning County.....	July 1-31.....	1		
Marion County.....	July 1-31.....	1		
Ross County.....	July 1-31.....	6		
Seneca County.....	July 1-31.....	1		
Summit County.....	July 1-31.....	5		
Stark County.....	July 1-31.....	1		

Reports Received from June 25 to August 12, 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.
Alabama:				
Birmingham.....	June 12-July 30...	10		
Mobile.....	June 12-July 30...	13		
Montgomery.....	June 12-25.....	6		
Total for State.....		29		
Arkansas:				
Fort Smith.....	June 19-25.....	1		
California, general.....	May 1-June 30.....	27		
Total for State.....		27		
Colorado:				
Alamosa County.....	Apr. 1-30.....		1	
Las Animas County.....	Mar. 1-Apr. 30.....		2	
Logan County.....	May 1-31.....		1	
Montrose County.....	Apr. 1-30.....		1	
Archuleta County.....	June 1-30.....	7		
Conejos County.....	June 1-30.....	2		
Delta County.....	June 1-30.....	2		
Denver County.....	June 1-30.....	9		
Huerfano County.....	June 1-30.....	10		
Kit Carson County.....	June 1-30.....	4		
Larimer County.....	June 1-30.....	1		
Las Animas County.....	June 1-30.....	3		
Logan County.....	June 1-30.....	1		
Mesa County.....	June 1-30.....	1		
Montrose County.....	June 1-30.....	5		
Otero County.....	June 1-30.....	4		
Prowers County.....	June 1-30.....	7		
Rio Grande County.....	June 1-30.....	4		
Saguache County.....	June 1-30.....	1		
San Miguel County.....	June 1-30.....	1		
Teller County.....	June 1-30.....	1		
Weld County.....	June 1-30.....	5		
Total for State.....		68	5	
District of Columbia.....	July 3-23.....	2		
Total for District.....		2		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Florida:				
Duval County.....	June 19-25.....	2		
Gadsden County.....	July 3-30.....	6		
Hillsboro County.....	July 17-23.....	1		
Jackson County.....	June 19-25.....	2		
Jefferson County.....	July 10-16.....	2		
Leon County.....	Mar. 1-31.....		1	
Liberty County.....	July 17-23.....	14		
Taylor County.....	July 3-9.....	1		
Walton County.....	June 12-18.....	1		
Total for State.....		29	1	
Georgia:				
Columbus.....	July 3-9.....	6		
Macon.....	Apr. 1-June 30.....	8		
Total for State.....		14		
Illinois:				
Adams County.....	June 1-30.....	2		
Clay County.....	June 1-30.....	1		
Coles County.....	June 1-30.....	22		
Cook County.....	June 1-30.....	1		
Chicago.....	June 1-30.....	1		
Edgar County.....	June 1-30.....	2		
Franklin County.....	June 1-30.....	1		
Iroquois County.....	June 1-30.....	1		
Jo Daviess County.....	June 1-30.....	5		
Kendall County.....	June 1-30.....	1		
Knox County.....	June 1-30.....	5		
Madison County.....	June 1-30.....	17		
Marion County.....	June 1-30.....	3		
Montgomery County.....	June 1-30.....	6		
Peoria County.....	June 1-30.....	4		
Perry County.....	June 1-30.....	1		
Pulsaski County.....	June 1-30.....	1		
Randolph County.....	June 1-30.....	1		
Richland County.....	June 1-30.....	2		
Rock Island County.....	June 1-30.....	2		
St. Clair County.....	June 1-30.....	1		
Sangamon County.....	June 1-30.....	1		
Tazewell County.....	June 1-30.....	2		
Union County.....	June 1-30.....	4		
Wayne County.....	June 1-30.....	3		
Williamson County.....	June 1-30.....	2		
Total for State.....		92		
Indiana:				
Allen County.....	May 1-31.....	6		
Clinton County.....	May 1-31.....	1		
Delaware County.....	May 1-31.....	4		
Elkhart County.....	May 1-31.....	1		
Gibson County.....	May 1-31.....	1		
Grant County.....	May 1-31.....	5		
Greene County.....	May 1-31.....	9		
Howard County.....	May 1-31.....	18		
Marion County.....	May 1-31.....	5		
Orange County.....	May 1-31.....	18		
Owen County.....	May 1-31.....	20		
St. Joseph County.....	May 1-31.....	3		
Tipton County.....	May 1-31.....	1		
Vigo County.....	May 1-31.....	6		
Total for State.....		98		
Iowa:				
Benton County.....	June 1-30.....	2		
Buchanan County.....	June 1-30.....	2		
Clayton County.....	June 1-30.....	1		
Dallas County.....	June 1-30.....	1		
Delaware County.....	June 1-30.....	10		
Dubuque County.....	June 1-30.....	1		
Linn County.....	June 1-30.....	25		
Polk County.....	June 1-30.....	13		
Pottawattamie County.....	June 1-30.....	16		
Scott County.....	June 1-30.....	3		
Winneshek County.....	June 1-30.....	1		
Woodbury County.....	June 1-30.....	1		
Total for State.....		76		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Kansas:				
Allen County.....	May 1-31.....	7		
Atchison County—				
Atchison.....	Apr. 1-May 31.....	7		
Butler County.....	Apr. 1-May 31.....	6		
Cowley County.....	Apr. 1-May 31.....	10		
Decatur County.....	Apr. 1-May 31.....	4		
Dickinson County.....	May 1-31.....	6		
Doniphan County.....	Apr. 1-30.....	10		
Edwards County.....	Apr. 1-May 31.....	3		
Elk County.....	May 1-31.....	2		
Ellsworth County.....	Apr. 1-30.....	1		
Finney County.....	Apr. 1-30.....	2		
Graham County.....	Apr. 1-May 31.....	6		
Greenwood County.....	Apr. 1-May 31.....	46		
Harper County.....	May 1-31.....	1		
Harvey County.....	Apr. 1-May 31.....	5		
Jewell County.....	May 1-31.....	15		
Kearny County.....	Apr. 1-May 31.....	5		
Kingman County.....	Apr. 1-May 31.....	3		
Labette County—				
Parsons.....	Apr. 1-May 31.....	9		
Lane County.....	May 1-31.....	2		
Leavenworth County.....	Apr. 1-May 31.....	8		
Leavenworth.....	May 1-31.....	1		
McPherson County.....	May 1-31.....	10		
Miami County.....	Apr. 1-May 31.....	2		
Montgomery County.....	Apr. 1-May 31.....	41	1	
Coffeyville.....	Apr. 1-May 31.....	9		
Neosho County.....	May 1-31.....	15		
Norton County.....	Apr. 1-May 31.....	40		
Osage County.....	Apr. 1-May 31.....	6		
Osborne County.....	Apr. 1-May 31.....	27		
Pawnee County.....	Apr. 1-30.....	3		
Phillips County.....	May 1-31.....	6		
Reno County.....	Apr. 1-30.....	15		
Riley County.....	Apr. 1-May 31.....	5		
Rush County.....	Apr. 1-30.....	3		
Saline County.....	Apr. 1-May 31.....	16		
Scott County.....	Apr. 1-May 31.....	5		
Sedgwick County.....	Apr. 1-May 31.....	7		
Wichita.....	Apr. 1-May 31.....	35		
Seward County.....	May 1-31.....	2		
Sheridan County.....	Apr. 1-30.....	1		
Sherman County.....	May 1-31.....	1		
Sumner County.....	May 1-31.....	4		
Thomas County.....	Apr. 1-May 31.....	2	1	
Wyandotte County.....	Apr. 1-30.....	4		
Kansas City.....	Apr. 1-May 31.....	34		
Total for State.....		452	2	
Kentucky:				
Covington.....	June 26-July 2.....	1		
Total for State.....		1		
Louisiana:				
Avoyelles Parish.....	June 1-30.....	12		
Calcasieu Parish.....	June 1-30.....	2		
Iberia Parish.....	June 1-30.....	19		
Orleans Parish.....	June 1-30.....			
New Orleans.....	June 12-July 30.....	65		
St. John Parish.....	June 1-30.....	10		
St. Tammany Parish.....	June 1-30.....	2		
Tangipahoa Parish.....	June 1-30.....	25		
Vermilion Parish.....	June 1-30.....	30		
Total for State.....		165		
Maine:				
Biddeford.....	May 1-31.....	1		
Total for State.....		1		
Maryland:				
Allegany County—				
Cumberland.....	May 1-31.....	1		
Total for State.....		1		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Massachusetts:				
Middlesex County.....	July 1-31.....	1		
Suffolk County.....	June 1-July 31.....	8		
Total for State.....		9		
Michigan:				
Alcona County.....	June 1-30.....	1		
Arenac County.....	June 1-30.....	2		
Bay County.....	June 1-30.....	5	1	
Cheboygan County.....	June 1-30.....	15		
Clare County.....	June 1-30.....	11		
Eaton County.....	June 1-30.....	7		
Genesee County.....	June 1-30.....	21		
Gratiot County.....	June 1-30.....	2		
Houghton County.....	June 1-30.....	3		
Huron County.....	June 1-30.....	11		
Ingham County.....	June 1-30.....	2		
Ionia County.....	June 1-30.....	5		
Isabella County.....	June 1-30.....	2		
Kalamazoo County.....	June 1-30.....	4		
Kent County.....	June 1-30.....	17		
Lapeer County.....	June 1-30.....	12		
Livingston County.....	June 1-30.....	17		
Manistee County.....	June 1-30.....	8		
Marquette County.....	June 1-30.....	1		
Mason County.....	June 1-30.....	9		
Mecosta County.....	June 1-30.....	6		
Midland County.....	June 1-30.....	9		
Missaukee County.....	June 1-30.....	10		
Monroe County.....	June 1-30.....	2		
Muskegon County.....	June 1-30.....	2		
Newaygo County.....	June 1-30.....	2		
Oceola County.....	June 1-30.....	1		
Ottawa County.....	June 1-30.....	1		
Rosecommon County.....	June 1-30.....	4		
Saginaw County.....	June 1-30.....	30		
St. Clair County.....	June 1-30.....	28		
Sanilac County.....	June 1-30.....	2		
Shiawassee County.....	June 1-30.....	42		
Tuscola County.....	June 1-30.....	8		
Wayne County.....	June 1-30.....	10		
Total for State.....		312	1	
Minnesota:				
Rice County.....	Mar. 1-31.....		1	
Beltrami County.....	May 26-June 5.....	4		
Blue County.....	June 6-12.....	1		
Carver County.....	June 13-19.....	1		
Faribault County.....	May 26-June 5.....	1		
Hennepin County.....	May 26-June 26.....	52		
Kittson County.....	June 6-19.....	2		
Koochiking County.....	May 26-June 5.....	6		
Lesueur County.....	June 13-19.....	32		
Meeke County.....	June 6-12.....	1		
Ramsay County.....	June 13-26.....	14		
Renville County.....	June 6-12.....	1		
Rice County.....	May 26-June 5.....	1		
St. Louis County.....	do.....	10		
Stearns County.....	June 20-26.....	1		
Steele County.....	June 6-19.....	2		
Wabasha County.....	June 13-26.....	2		
Total for State.....		131	1	
Mississippi:				
Natchez.....	July 24-30.....	5		
Total for State.....		5		
Missouri:				
Kansas City.....	May 15-June 30.....	32		
St. Louis.....	June 12-July 16.....	9		
Savannah.....	June 26-July 2.....	5		
Total for State.....		46		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Montana:				
Custer County.....	Apr. 1-30.....		1	
Beaverhead County.....	June 1-30.....	1		
Cascade County.....	June 1-30.....	1		
Dawson County.....	June 1-30.....	4		
Fergus County.....	June 1-30.....	2		
Flathead County.....	June 1-30.....	1		
Meagher County.....	June 1-30.....	1		
Park County.....	June 1-30.....	2		
Rosebud County.....	June 1-30.....	2		
Silver Bow County.....	June 1-30.....	9		
Butte County.....	June 1-30.....	27		
Yellowstone County.....	June 1-30.....	2		
Total for State.....		52	1	
Nebraska:				
Lincoln.....	Apr. 1-June 30.....	30		
South Omaha.....	June 1-30.....	3		
Total for State.....		33		
New Jersey:				
Cumberland County.....	June 1-July 31.....	4		
Total for State.....		4		
New York:				
Erle 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		
North Carolina:				
Forsyth County.....	Feb. 1-28.....		1	
Rowan County.....	Feb. 1-28.....		1	
Alamance County.....	Mar. 1-May 31.....	36		
Alexander County.....	Mar. 1-May 31.....	48		
Anson County.....	Apr. 1-May 31.....	2		
Ashe County.....	Mar. 1-31.....	12		
Beaufort County.....	Mar. 1-31.....	4		
Bladen County.....	Apr. 1-May 31.....	16		
Cabarrus County.....	Mar. 1-May 31.....	12		
Caldwell County.....	Mar. 1-May 31.....	9	1	
Catawba County.....	Mar. 1-May 31.....	38		
Chatham County.....	Mar. 1-Apr. 30.....	3		
Chowan County.....	Mar. 1-31.....	3		
Columbus County.....	Apr. 1-May 31.....	23		
Craven County.....	Mar. 1-31.....	1		
Currituck County.....	Mar. 1-May 31.....	17		
Davidson County.....	Mar. 1-31.....	2		
Davie County.....	Mar. 1-31.....	8		
Durham County.....	Mar. 1-May 31.....	18		
Forsyth County.....	Mar. 1-May 31.....	17		
Franklin County.....	Mar. 1-31.....	5		
Gaston County.....	Mar. 1-May 31.....	12	2	
Graham County.....	Mar. 1-Apr. 30.....	8		
Greene County.....	Mar. 1-Apr. 30.....	19		
Guilford County.....	Mar. 1-May 31.....	44		
Halifax County.....	Mar. 1-31.....	40		
Henderson County.....	May 1-31.....	4		
Hertford County.....	Mar. 1-31.....	1		
Iredell County.....	May 1-31.....			Several.
Johnston County.....	Apr. 1-May 31.....	4		Several in March.
Jones County.....	Mar. 1-31.....	1		
Lee County.....	Mar. 1-31.....	5		
Lenoir County.....	Mar. 1-May 31.....	11		
Lincoln County.....	Mar. 1-May 31.....	2		
Madison County.....	Apr. 1-30.....	5		
Martin County.....	Apr. 1-May 31.....	4		
Mecklenburg County.....	Mar. 1-May 31.....	15		
Montgomery County.....	Mar. 1-May 31.....	47		
Nash County.....	Mar. 1-May 31.....	50		
New Hanover County.....	Mar. 1-May 31.....	12		
Onslow County.....	Mar. 1-May 31.....	5		
Orange County.....	Mar. 1-May 31.....	32		
Pamlico County.....	Mar. 1-31.....	2		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
North Carolina—Continued.				
Perquimans County	May 1-31	1		
Person County	May 1-31	1		
Pitt County	Mar. 1-May 31	23		
Polk County	Mar. 1-31	7		
Richmond County	Apr. 1-30	2		
Robeson County	Apr. 1-May 31	3		
Rockingham County	Mar. 1-31	48		
Rowan County	Mar. 1-May 31	32	1	
Sampson County	May 1-31	2		
Scotland County	May 1-31	5		
Stanly County	Apr. 1-May 31	20		
Stokes County	Mar. 1-31	64		
Surry County	Mar. 1-31	4		
Union County	Mar. 1-May 31	25		
Vance County	Apr. 1-30	4		
Wake County	Apr. 1-May 31	22		
Warren County	Apr. 1-30	20		
Washington County	Mar. 1-Apr. 30	4		
Watauga County	Apr. 1-May 31	20		
Wayne County	Apr. 1-May 31	6		
Wilkes County	Mar. 1-May 31	35		
Wilson County	Mar. 1-May 31	24	1	
Yancey County	Mar. 1-31	26		
Total for State		995	7	
North Dakota:				
Cass County	June 1-30	2		
Cavaller County	June 1-30	1		
Grand Forks County	June 1-10	4		
Logan County	June 1-30	1		
McKensie County	June 1-30	1		
Pierce County	June 1-30	1		
Trall County	June 1-30	6		
Ward County	June 1-30	4		
Total for State		20		
Oklahoma, general.				
Canadian County	Jan. 1-31		1	Reported out of date.
Canadian County	Apr. 1-30		1	
Comanche County	Apr. 1-30		3	
Oklahoma County	Apr. 1-30		4	
Pottawatomie County	Apr. 1-30		2	
Atoka County	May 1-31	20		
Beckham County	May 1-31	2		
Blaine County	May 1-31	8		
Caddo County	May 1-31	1		
Canadian County	May 1-31	17		
Choctaw County	May 1-31	1		
Coal County	May 1-31	5		
Comanche County	May 1-31	4	1	
Custer County	May 1-31	9		
Garvin County	May 1-31	1		
Grady County	Apr. 1-30		1	
Grady County	May 1-31	6	6	
Haskell County	May 1-31	7		
Hughes County	May 1-31	42		
Jefferson County	May 1-31	3		
Kiowa County	May 1-31	1		
Lincoln County	May 1-31	4		
McLain County	May 1-31	9		
McIntosh County	May 1-31	11		
Murray County	May 1-31	1		
Muskogee County	May 1-31	5		
Noble County	May 1-31	8		
Nowata County	May 1-31	3		
Okfuskee County	May 1-31	1		
Oklahoma County	May 1-31	1	1	
Okmulgee County	May 1-31	2		
Pawnee County	May 1-31	4		
Payne County	May 1-31	10		
Pittsburg County	May 1-31	6	1	
Pontotoc County	May 1-31	12		
Seminole County	May 1-31	2		
Texas County	May 1-31	4		
Tillman County	May 1-31	2		
Tulsa County	May 1-31	1	1	
Washita County	May 1-31	1		
Total for State		214	22	

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Ohio:				
Allen County.....	June 1-30.....	3		
Butler County.....	June 1-30.....	1		
Clinton County.....	June 1-30.....	10		
Columbiana County.....	June 1-30.....	3		
Cuyahoga County.....	June 1-30.....	9		
Fairfield County.....	June 1-30.....	1		
Franklin County.....	June 1-30.....	4		
Hamilton County.....	June 1-30.....	1		
Hocking County.....	June 1-30.....	25		
Lucas County.....	June 1-30.....	2		
Perry County.....	June 1-30.....	1		
Pickaway County.....	June 1-30.....	1		
Portage County.....	June 1-30.....	7		
Ross County.....	June 1-30.....	66		
Scioto County.....	June 1-30.....	2		
Stark County.....	June 1-30.....	28		
Wayne County.....	June 1-30.....	2		
Wood County.....	June 1-30.....	2		
Total for State.....		168		
Pennsylvania, general.....				
	Apr. 1-30.....		2	
	May 1-June 30.....	29	3	
Total for State.....		29	5	
South Carolina:				
Charleston.....	June 1-July 31.....	28		
Total for State.....		28		
Tennessee:				
Benton County—				
Camden.....	July 1-7.....	2		
Davidson County—				
Nashville.....	June 12-July 9.....	2		
Hamilton County—				
Chattanooga.....	June 12-July 16.....	4		
Knox County—				
Knoxville.....	June 12-July 16.....	8		
Shelby County.....	May 1-June 30.....	39		
Memphis.....	June 12-July 19.....	8		
Total for State.....		63		
Texas, general.....				
	Apr. 1-May 31.....	593	13	
Total for State.....		593	13	
Utah, general.....				
Boxelder County.....	Mar. 1-31.....	112		
Cache County.....	May 1-31.....	1		
Davis County.....	May 1-31.....	6		
Davis County.....	May 1-June 30.....	34		
Juab County.....	June 1-30.....	2		
Salt Lake County.....	May 1-June 30.....	28	1	
Utah County.....	May 1-June 30.....	2		
Weber County.....	May 1-31.....	18		
Total for State.....		203	1	
Virginia:				
Lynchburg.....	June 12-18.....	1		
Total for State.....		1		
Washington, general.....				
	Feb. 1-Mar. 31.....		4	
Wisconsin:				
Ashland County.....	June 1-July 31.....	16		
Barron County.....	June 1-30.....	1		
Brown County.....	July 1-31.....	5		
Douglas County.....	June 1-July 31.....	3		
Dunn County.....	July 1-31.....	1		
Eau Claire County.....	June 1-July 31.....	4		
Florence County.....	June 1-30.....	4		
Fond du Lac County.....	July 1-31.....	1		
Kenosha County.....	July 1-31.....	1		
Lafayette County.....	June 1-30.....	1		
La Crosse County.....	June 1-30.....	2		
Milwaukee County.....	July 1-31.....	7		

Report received out of date.

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Wisconsin—Continued.				
Pierce County.....	July 1-31.....	1		
Polk County.....	July 1-31.....	5		
Rusk County.....	June 1-30.....	1		
St. Croix County.....	July 1-31.....	5		
Sawyer County.....	June 1-30.....	8		
Waupaca County.....	June 1-30.....	2		
Winnebago County.....	July 1-31.....	1		
Total for State.....		69		
Grand total for the United States.....		4,057	63	

PLAGUE IN THE UNITED STATES.

Reports Received from June 25 to August 12, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
California:				
San Benito County— Hollister.....	June 5-11.....	1	1	

MORBIDITY AND MORTALITY.

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

[For smallpox and plague 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.....	July 30	48,111	27	3	1	2	1	1	1	1	3	2	2	....
Aurora, Ill.....	Aug. 6	.....	13	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Altoona, Pa.....	do.	51,782	12	.....	.....	6	2	1	.....	1	.....	.....	.....	.....
Auburn, N. Y.....	July 30	34,709	18	1	1	.....	1	1	.....	.....	3	.....	.....	.....
Baltimore, Md.....	Aug. 6	583,475	211	37	26	77	4	10	.....	8	.....	4	.....	3
Bayonne, N. J.....	do.	51,802	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Biddeford, Me.....	do.	17,847	5	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Binghamton, N. Y.....	do.	46,545	13	5	3	1	.....	.....	.....	.....	3	.....	.....	.....
Boston, Mass.....	do.	629,868	195	55	18	24	.....	19	1	48	1	23	1	20
Boulder, Colo.....	do.	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bradford, Pa.....	do.	21,504	12	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....
Bridgeport, Conn.....	do.	93,126	26	3	3	.....	.....	.....	.....	2	.....	.....	.....	.....
Brockton, Mass.....	do.	55,525	7	6	.....	3	1	2	.....	.....	2	.....	.....	.....
Cambridge, Mass.....	do.	102,982	35	4	7	.....	.....	.....	.....	3	.....	4	1	.....
Cambridge, Ohio.....	do.	12,121	1	1	.....	2	.....	1	.....	.....	.....	.....	.....	.....
Camden, N. J.....	do.	90,791	.....	.....	.....	4	1	.....	.....	4	.....	.....	.....	.....
Carbondale, Pa.....	do.	15,989	7	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Charlotte, N. C.....	do.	36,320	13	.....	2	9	1	.....	.....	1	.....	.....	.....	1
Chattanooga, Tenn.....	do.	34,773	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chelsea, Mass.....	do.	40,506	14	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Ill.....	do.	2,282,927	605	110	78	76	5	61	5	86	11	67	1	62	
Chicopee, Mass.....	do.	21,225	13	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Ohio.....	do.	353,108	.....	21	17	9	2	12	2	2	.....	3	.....	2
Cleveland, Ohio.....	Aug. 5	522,475	186	21	14	14	2	7	2	23	2	1	.....	31
Clinton, Mass.....	Aug. 6	12,543	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbus, Ga.....	do.	17,925	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbus, Ohio.....	do.	158,649	68	2	10	8	.....	3	.....	.....	.....	.....	.....	2
Concord, N. H.....	do.	22,260	10	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Covington, Ky.....	do.	52,325	21	1	3	16	.....	1	.....	.....	.....	.....	.....	5

MORBIDITY AND MORTALITY—Continued.

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

Cities.	Week ended—	Esti- mated popula- tion, 1909.	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.
Portsmouth, N. H.	Aug. 6				1					1					
Portsmouth, Va.	do.	28,225	11		12					1					
Pottstown, Pa.	do.	14,065	10		1	3									
Providence, R. I.	do.	221,673	67	14	6	3	1	2		1		2	1		
Racine, Wis.	do.		3												
Rock Island, Ill.	do.	25,352	6							1					
Reading, Pa.	Aug. 8		30	3	2	5		2	1	3		3		12	
Sacramento, Cal.	July 30	32,178	12		1									3	
St. Louis, Mo.	Aug. 6	696,706	213	28	19	14	1	5	1	15	1	23	1	34	3
Salt Lake City, Utah	do.	65,464	0		5	5		4				1			
San Antonio, Tex.	July 30	68,969	7		6	4	1								
Saratoga Springs, N. Y.	Aug. 6		8	2	1	1									
Schenectady, N. Y.	July 29	76,744	25	3	1	1		1				3			
Somerville, Mass.	Aug. 6	76,901	17		2	1		1		1	1				
South Bend, Ind.	do.	50,741	14		2	2		3							
Spokane, Wash.	July 30		31		1	9	1	7	1	1		5		1	
Springfield, Mass.	Aug. 6	47,199	32	2		3				2		4		4	
Steelton, Pa.	do.	15,055	8	6						6	1			1	
Superior, Wis.	do.	42,011	3							1					
Taunton, Mass.	do.	30,896	23	2		1	1					2			
Toledo, Ohio.	do.	178,753	36		4	5	1	2		2	1	4			
Trenton, N. J.	do.	95,053	7	7	7	3		2							
Waltham, Mass.	do.	29,083	8		1	5									
Warren, Ohio.	do.	11,425	1												
Washington, D. C.	do.	237,044	119	26	7	45	3	2		7		1		28	2
Wilkes-Barre, Pa.	do.	65,724	21	3		22	1			1		1		7	
Wichita, Kans.	do.	52,313	16		1	1	1								
Wilmington, Del.	do.	90,260	32		3										
Woburn, Mass.	do.	14,550	4	1				1	1			1			
Yonkers, N. Y.	do.	74,897	26	3	4	3				1		2			
York, Pa.	do.	42,805			1					13		1		1	
Zanesville, Ohio.	do.	26,042	10							4		1			

FOREIGN AND INSULAR.

CHINA.

AMOY—Plague—Inspection of Vessels.

Acting Assistant Surgeon Morehead reports July 5:
 Week ended July 2. The plague epidemic continues. Pneumonic cases seem to be on the decrease and bubonic cases on the increase.

Bill of health was issued to the British steamship *Taisang* on July 2. There were 61 cabin and 107 steerage passengers for Manila. All on board were examined immediately prior to sailing. The crew and steerage passengers were bathed and their clothing was disinfected by steam. The ship anchored in midstream.

HONGKONG—Plague.

Passed Assistant Surgeon Foster reports, June 21 and 29 and July 7:
 Week ended June 18. Quarantine restrictions enforced by and against Hongkong remain as reported June 11, 1910.

Two cases of plague, with 2 deaths, were reported during the week.

INSPECTION AND DISINFECTION OF VESSELS.

Vessels granted bills of health.....	11
Total members of crews.....	910
Total cabin passengers.....	149
Total steerage passengers.....	745
Members of crews bathed.....	726
Passengers bathed.....	748
Pieces of baggage disinfected.....	1,465
Vessels disinfected to kill rats.....	3
Crews' quarters disinfected:	
By formaldehyde.....	8
By sulphur.....	3

Week ended June 25. No change in quarantine restrictions enforced by or against Hongkong.

During the week 2 cases of plague with 2 deaths and 2 cases of smallpox with 1 death were reported.

INSPECTION AND DISINFECTION OF VESSELS.

Vessels granted bills of health.....	7
Total members of crews.....	570
Total cabin passengers.....	163
Total steerage passengers.....	320
Members of crews bathed.....	465
Passengers bathed.....	236
Pieces of baggage disinfected.....	809
Vessels disinfected to kill rats.....	1
Crews' quarters disinfected:	
By sulphur.....	1
By formaldehyde.....	6

Week ended July 2: No change in quarantine restrictions enforced by or against Hongkong.

During the week 2 cases of plague with 2 deaths were reported.

INSPECTION AND DISINFECTION OF VESSELS.

Vessels granted bills of health.....	4
Total members of crews.....	273
Total cabin passengers.....	48
Total steerage passengers.....	10
Members of crews bathed.....	230
Passengers bathed.....	8
Pieces of baggage disinfected.....	238
Vessels disinfected to kill rats.....	1
Crews' quarters disinfected:	
By formaldehyde.....	3
By sulphur.....	1

SHANGHAI.—Inspection of Vessels.

Acting Assistant Surgeon Ransom reports, July 6, 15, and 20:

Inspection of vessels week ended July 2.

Vessels granted bills of health.....	4
Total number of crews.....	247
Total number of cabin passengers.....	46
Total number of steerage passengers.....	18
Bathed and effects disinfected, crew.....	16
Bathed and effects disinfected, steerage.....	0
Disinfected, pieces of baggage.....	46
Disinfected, pieces of freight.....	2
Disinfected, vessels.....	0
Viséed, packages of freight.....	402

The steamship *Awa Maru*, Hongkong to Seattle via Keelung, Shanghai, and Japan ports, was in this port for 25 hours anchored in the stream. Loading was carried on during the day and night, rat guards being used on the lines to lighters, etc. Liberty was allowed by the master to the officers and cabin passengers. Inspection was held on board at the hour of the ship's departure.

The steamship *General Weeks*, a seagoing tug, built here for the United States Army transport service, was inspected and her Asiatic crew bathed and their effects steamed at the hour of her departure for Manila.

The U. S. naval auxiliary steamer *Nanshan* applied for a bill of health to Manila and various Chinese ports at 10 a. m. on the 27th, the vessel having been in the stream at Woosung for forty-five hours without liberty to anyone, except the master. The vessel was to sail at 11 a. m., and the bill of health was made out without inspection, in view of the extended itinerary of the vessel, but the captain failed to take it up.

The steamship *Indrasamha*, Kobe to New York via this port, Hongkong, and Suez Canal, was in this port for three and one-half days anchored in the stream. Loading was carried on day and night, and liberty was allowed to the entire personnel. Inspection was held on board as late as possible the afternoon before the sailing of the vessel (she left at 4 a. m. on the 29th).

Morbidity.—The weekly report of the municipal health officer shows, among foreigners, no new cases of communicable disease. Among natives, deaths from smallpox 2, diphtheria 1, tuberculosis 14. Total deaths reported: Foreigners 2, natives 158.

Inspection of vessels week ended July 9.

Vessels granted bills of health.....	3
Total number of crew.....	393
Total number of steerage passengers.....	568
Total number of cabin passengers.....	157
Bathed and effects disinfected, crew.....	28
Bathed and effects disinfected, steerage.....	5
Disinfected, pieces of baggage.....	61
Disinfected, pieces of freight.....	131
Disinfected, vessels.....	0
Viséed packages of freight.....	35, 332

The steamship *Wyneric*, Yokohama to New York, was in this port for seven days anchored in the stream. Liberty was allowed to the entire personnel and a partial new crew was shipped at this port. Loading was done by daylight only. The Asiatic crew was bathed and inspected and their effects were disinfected by steam at the hour of sailing.

The steamship *Mongolia*, Manila to San Francisco, was in this port for twenty-two hours at Woosung. Loading was done by daylight entirely, and liberty was allowed to the officers and cabin passengers only. There was one case of pneumonia on board in the person of a cabin passenger. The steerage passengers from Shanghai were bathed and their effects were disinfected by steam immediately before departure, and inspection was held at the tender at the hour of sailing.

The steamship *Kumeric*, Manila to Seattle, was in this port for twenty-four hours anchored in the stream. Loading was carried on during both day and night and no rat guards were used on the lines. The officers and steerage passengers were allowed liberty by the master, which so far as the steerage is concerned is contrary to the rules of the service enforced at this port. The fact was noted on the bill of health. The sailing of the vessel was postponed to Sunday, the 10th instant, at 10 a. m., at which time inspection of the vessel and personnel was held on board.

Morbidity.—The weekly report of the municipal health department shows among natives deaths from smallpox, 2; scarlet fever, 5; tuberculosis, 11. Total deaths reported: Foreigners, 2; natives, 188.

Reports from Hankow up to the 9th instant show that typhus fever, relapsing fever, and tuberculosis are present to an unknown degree among the natives.

Inspection of vessels week ended July 16.

Vessels granted bills of health.....	3
Total number of crew.....	378
Total number of steerage passengers.....	202
Total number of cabin passengers.....	97
Bathed and effects disinfected:	
Crew.....	0
Steerage.....	1
Disinfected pieces of baggage.....	4
Disinfected pieces of freight.....	0
Disinfected vessels.....	0
Viséed pieces of freight.....	6, 031

The steamship *Tenyo Maru*, Hongkong to San Francisco, was in this port at Woosung for twenty-two hours. Liberty was allowed by the master to the officers and cabin passengers, and loading was carried on during daylight only. Inspection was held at the tender at the hour of departure.

The steamship *Ashtabula*, from this port to New York via Suez Canal and ports, was in this port for ten days at oil wharf. No rat guards were used, as the wharf is practically rat proof. Liberty was allowed to the entire crew. The whole fireman gang deserted the ship at the hour of sailing because two of their number were burned by a flareback from the oil burners. The crew was not bathed and disinfected here because of the probable change of crew and the many subsequent ports of call. Inspection was held on board at the hour of departure.

The steamship *Indradeo*, Yokohama to New York, was in this port for five days anchored in the stream. Liberty was allowed to the officers of the ship only and loading was done entirely by daylight. Inspection was held on board at the hour of departure.

Morbidity.—The weekly report of the Municipal Health Department shows: Among foreigners new cases of enteric fever 1, diphtheria 1. Among natives deaths from smallpox 6, diphtheria 1, tuberculosis 10. Total deaths reported, foreigners 5; natives, 190.

COSTA RICA.

LIMON, Fruit Port—Yellow Fever—Inspection of Vessels.

Acting Assistant Surgeon Mengis reports:

A death from yellow fever was reported at Siquires on July 31, 1910, by the local medical officer. The patient was a Costa Rican woman who had been in Siquires for at least 3 months.

Bills of health issued as follows:

WEEK ENDED JULY 30.

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
July 24	Limon.....	Boston.....	43		
25	Sarnia.....	New York.....	55	13	
26	Vera.....	Philadelphia.....	23		
26	Citta de Torino.....	Porto Rico.....	85	18	30
27	Greenbrier ^a	New Orleans.....	46		
27	Hippolyte Dumois.....	Boston.....	25		
28	Radley ^a	Santiago, Cuba.....	25		
28	Helen ^a	Mobile.....	23		
29	Parismina ^a	New Orleans, via Barrios and Belize.....	80	1	3
30	San Jose.....	do.....	43		

^a Fumigated.

^b Immune.

CUBA.

HABANA—Inspection of Vessels.

Passed Assistant Surgeon de Valin reports, August 1:

Week ended July 30. Bills of health issued 20, vessels inspected and passed 16, members of crew of outgoing vessels inspected 815, passengers of outgoing vessels inspected 702.

No quarantinable disease has been reported in the island during the week.

ECUADOR.

GUAYAQUIL—Plague and Yellow Fever.

Passed Assistant Surgeon Parker reports July 18: During the period July 1 to 15, 1910, there were reported 4 cases of bubonic plague with 2 deaths, and 9 cases of yellow fever with 3 deaths.

HAWAII.

Last case of human plague at Honolulu occurred July 12, 1910.
 The last plague-infected rat was found at Aiea, 9 miles from Honolulu, April 12, 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, July 25 and 29:

HONOLULU—Plague-prevention work.

It has been arranged, after consultation with the president of the territorial board of health, that all interisland vessels that have to lie alongside wharves at Honolulu and Hilo shall be fumigated to destroy rats once a month.

Week ended July 23, 1910.

Total rats and mongoose taken.....	701
Trapped.....	672
Found dead.....	2
Shot from trees.....	24
Examined bacteriologically.....	614
Plague rats.....	0
Classification of animals trapped:	
<i>Mus alexandrinus</i>	60
<i>Mus musculus</i>	294
<i>Mus norvegicus</i>	103
<i>Mus rattus</i>	207
Mongoose.....	8
Classification of rats shot from trees:	
<i>Mus alexandrinus</i>	4
<i>Mus rattus</i>	16
Average number of traps set daily.....	1,738

HONDURAS.

PUERTO CORTEZ, Fruit Port—Inspection of Vessels.

Acting Assistant Surgeon Stowe reports:
 Bills of health issued as follows:

WEEK ENDED AUGUST 2.

Date.	Vessel.	Crew.	Passengers from this port.	Passengers in transit.
July 28	Agnella.....	20	13	.....
29	Karen.....	22	.....	.....
31	Viator.....	17	1	.....
Aug. 1	Harald.....	18	4	.....
2	Bodo.....	19	.....	.....

INDIA.

CALCUTTA—Cholera and Plague.

Acting Assistant Surgeon Allan reports, July 14:
 Week ended June 25. In Calcutta there were 42 deaths from cholera and 25 from plague; in all Bengal there were 34 deaths from plague; in all India 1,037 cases and 979 deaths from plague.

ITALY.

NAPLES—Examination of Emigrants—Smallpox.

Passed Assistant Surgeon Foster reports, July 25:

Vessels inspected at Naples and Palermo week ended July 23.

NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
July 18	San Giorgio.....	New York.....	325	40	420
20	Romanic.....	Boston.....	874	250	1,100
20	Hamburg.....	New York.....	1,095	260	1,250
21	Dinnamare.....	do.....			
21	Oceania.....	do.....	700	120	760
22	Prinzess Irene.....	do.....	754	110	830
23	Luisiana.....	do.....	631	60	580
	Total.....		4,377	840	4,940

PALERMO.

July 19	San Giorgio.....	New York.....	445	350	150
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Rejections recommended.

NAPLES.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Measles.	Smallpox.	Other causes.	Total.
July 18	San Giorgio.....	10	2	2			3	17
20	Romanic.....	10		7	1		5	23
20	Hamburg.....	19	6	13			4	42
21	Dinnamare.....							
21	Oceania.....	16		7			9	32
22	Prinzess Irene.....	13		5			5	23
23	Luisiana.....	12	1	7		1	7	28
	Total.....	80	9	41	1	1	33	166

PALERMO.

July 19	San Giorgio.....	25		30			8	61
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Smallpox in Naples.—During the week ended July 24, 1910, 9 cases of smallpox with 3 deaths were reported at the health office of the city of Naples. A case of smallpox was discovered at the examination of steerage passengers for the steamship *Luisiana* July 23, 1910. The patient was sent to the Cotugno hospital for contagious diseases. Two contacts were revaccinated and placed under observation.

JAPAN.

KOBE—Inspection of Vessels.

Acting Assistant Surgeon Moore reports, July 14:

Week ended July 9: Supplemental bills of health were granted to 5 steamers. There were inspected 629 members of crew and 295 steerage passengers, and there were bathed, disinfected, and had

their effects disinfected by steam 120 members of crew and 28 steerage passengers. The number of pieces of baggage steamed was 297, and bedding 56. Manifests were viséed for 20,161 pieces of freight, amounting to 3,201 tons.

Emigrants were inspected and passed as follows: Steamship *Panama Maru* for Tacoma, 10 (2 Russians, 8 Japanese). The emigrants passed, together with 18 intending passengers to Peru, by the steamship *Hongkong Maru* via Honolulu, were inspected, bathed, disinfected, and their effects disinfected before embarkation. All the emigrants from Kobe to United States ports were seven days in Ono quarantine detention station.

During the week 40 cases of human hair and 4 cases of personal effects were disinfected with formalin.

MALTA.

VALLETTA—Plague on Vessel.

Vice-Consul Turnbull reports, under date of July 26, that a case of plague was landed on July 16 from the steamship *North Wales* and isolated at the quarantine station on Comino Island.

PANAMA.

BOCAS DEL TORO, Fruit Port—Inspection of Vessels.

Acting Assistant Surgeon Osterhout reports:
Bills of health issued as follows:

WEEK ENDED AUGUST 3.

Date.	Vessel.	Destination.	Crew.	Passengers from this port.	Passengers in transit.
July 28	Belvernon.....	Mobile.....	20	.....	.....
28	Parismina.....	New Orleans via Limon, Barrios and Belize.	80	18	28
30	Bellaventure.....	New Orleans.....	28	.....	.....
30	Frutera.....	New York via Port Antonio, Jamaica.	26	.....	.....
31	Fort Morgan.....	Mobile.....	24	.....	.....
Aug. 3	Atenas.....	New Orleans via Colon.....	84	53	17

PHILIPPINE ISLANDS.

Cholera—Inspection of Vessels.

Chief Quarantine Officer Heiser reports June 23 and 30 and July 5:

Cholera in Manila.

Cholera again made its appearance in the city of Manila, 9 cases and 4 deaths being reported for the week ended June 18, 1910. The first case occurred in the person of a Greek peddler who came from Dagupan, a town which has been cholera infected for some weeks. Upon arrival at Manila he entered a boarding house, which had 40 or more inmates, and, soon after reaching there, developed a case of cholera. Before the existence of this case was known the other inmates of the boarding house became alarmed and scattered to many sections of the city. The cases which have occurred since then in Manila are all directly or indirectly traceable to the case in the Greek peddler.

During the week ended June 25, 1910, 11 cases of cholera with 9 deaths were reported in the city of Manila. There were 2 more cases of cholera reported than for the preceding week. In view of the fact that there has been no improvement in the situation, it has been deemed advisable to require vessels leaving Manila for other Philippine ports to secure a bill of health, and to require a signed statement from the masters of such vessels to proceed to the nearest quarantine station in the event that cholera makes its appearance on board. A circular letter was issued making these restrictions effective June 28, 1910, as follows:

[Circular letter.]

U. S. PUBLIC HEALTH AND MARINE-HOSPITAL SERVICE,
OFFICE OF THE CHIEF QUARANTINE OFFICER FOR THE PHILIPPINE ISLANDS,
Manila, P. I., June 28, 1910.

To the masters, owners, and agents of vessels and others concerned:

Until further notice all vessels leaving Manila for a port or ports in the Philippine Islands outside of Manila Bay, except Olongapo, will be required, prior to sailing, to obtain a bill of health at the quarantine office; and the masters of such vessels will be required to bind themselves to proceed at once to the nearest quarantine station, either Mariveles, Iloilo, or Cebu, in the event that any suspicious sickness occurs aboard their vessels at any time during the voyage.

Respectfully,

VICTOR G. HEISER,
Passed Assistant Surgeon,
Chief Quarantine Officer for the Philippine Islands.

During the week ended July 2, 1910, there were reported in the city of Manila 13 cases of cholera with 10 deaths.

Cholera in the Provinces.

WEEK ENDED JUNE 18.

Provinces.	Cases.	Deaths.
Bulacan.....	56	39
Cavite.....	1	.....
Pangasinan.....	195	149
Rizal.....	4	3
Union.....	1	1
Total.....	257	192

In addition to the provinces heretofore reported as being infected, there were also a few cases reported in the nearby provinces of Cavite and Rizal. The health officers in charge of these districts believe the infection to be due to the importation of a fruit known as mangoes from the province of Pangasinan.

There was also a sharp increase in the number of cases in Pangasinan, due to an infection which was present at a big wedding celebration and was carried far and wide by guests who had come to attend the wedding from many different towns.

WEEK ENDED JUNE 25.

Provinces.	Cases.	Deaths.
Bulacan.....	49	33
Pampanga.....	5	3
Pangasinan.....	774	604
Rizal.....	1	.....
Total.....	829	640

The infection is still confined to the same provinces, but the number of towns infected has increased. There has also been a decided increase in the number of cases, 829 new cases being reported, as against 257 for the preceding week. The largest increase took place in the province of Pangasinan, and it is probably more or less directly due to "fiestas," or celebrations, which were attended by large numbers of people not only from the town in which they were held, but also from the surrounding country. Despite the fact that urgent requests were made not to hold these celebrations until all danger from cholera had passed, the local authorities refused to comply, and the "fiestas" were held.

WEEK ENDED JULY 2.

Provinces.	Cases.	Deaths.
Bulacan.....	77	50
Mountain Province.....	1	.....
Nueva Ecija.....	13	6
Pampanga.....	3	3
Pangasinan.....	176	125
Tarlac.....	28	24
Total.....	298	208

Inspection of Vessels.

During the week ended June 18, consular bills of health were issued at the port of Manila as follows:

On June 12, the British steamer *Frankby*, with 38 crew, en route from Iloilo to New York, sailed from this port, a supplemental bill of health having been issued. Cargo investigated and passed during loading. Vessel sailed without inspection, partly owing to mutiny on board.

On June 12, the British steamer *Sungkiang*, with 64 crew, en route from Amoy to Cebu and Iloilo, was granted a supplemental bill of health.

On June 14, the U. S. army transport *Sheridan*, with 193 crew, 161 cabin and 271 steerage passengers, was granted a bill of health for San Francisco via Nagasaki and Honolulu. Crew and steerage passengers bathed, and their effects disinfected. Cargo inspected and either passed or disinfected, and so labeled. Vessel partially disinfected. Entire personnel inspected and passed at hour of sailing.

On June 18, the Japanese steamer *Panama Maru*, with 78 crew, 2 cabin and 1 steerage passengers, en route from Yokohama to Seattle, was granted a supplemental bill of health. Cargo loaded at this port inspected and passed before loaded. Personnel inspected and passed at hour of sailing.

On June 18, the British steamer *Cambyses*, with 32 crew, en route from New York to Iloilo and Cebu, was granted a supplemental bill of health.

During the week ended June 25 consular bills of health were issued at the port of Manila as follows:

On June 21, the British steamer *Kumeric*, with 71 crew, was granted a bill of health for Tacoma and Seattle via Hongkong, Shanghai, and Japan ports. Manifests signed for cargo loaded at this port, same being inspected and passed prior to loading. Crew inspected and passed at hour of sailing.

On June 22 the Norwegian steamer *Selja*, with 46 crew, was granted a bill of health for Portland via Hongkong. Cargo investigated and passed prior to loading. Crew inspected and passed at hour of sailing.

On June 23 the American steamer *Mongolia*, with 278 crew, 47 cabin, and 219 steerage passengers, was granted a bill of health for San Francisco via Hongkong. Crew and steerage passengers inspected and passed at hour of sailing. Cargo taken on at this port inspected and passed before loading, and manifests for same viséed.

During the week ended July 2 consular bills of health were issued at the port of Manila as follows:

On June 28 the British steamer *Taiyuan*, with 74 crew and 6 cabin passengers, en route from Hongkong to Zamboanga, was granted a supplemental bill of health.

On July 1, 1910, the Japanese steamer *Seattle Maru*, with 82 crew, was granted a bill of health for Tacoma via Hongkong and Japan ports. Cargo inspected and passed before loading. Manifests viséed. Entire personnel inspected and passed at hour of sailing.

On July 2, 1910, the British steamer *Shimosa*, with 58 crew, en route from Iloilo to Boston and New York, was granted a supplemental bill of health. Vessel was fumigated while in port. Manifests viséed. Cargo taken on at this port inspected and passed prior to loading. Personnel inspected and passed just prior to departure.

RUSSIA.

Measures against Cholera.

Pursuant to a request made through departmental channels, on July 14, 1910, that instructions be issued to United States consular officers at Hamburg, Bremen, Antwerp, and Rotterdam, and the continental and British ports, to detain steerage passengers from cholera-infected districts in Russia, reference to which was made in the Public Health Reports for the week ending August 12, it was considered necessary, on August 9, 1910, to request that the instructions above referred to be made to include steerage passengers from all ports of Russia. The reason for this additional precaution being the supposed difficulty, if not impossibility, of the consular officers being able to determine whether immigrants from Russia have come from districts not infected with cholera.

The service has had one of its representatives stationed in the office of the American consul at Libau, Russia, since September 26, 1908. Libau is the principal port of departure for emigrants from northern Russia.

The following precautions are taken by the service officer at Libau before certifying to ships destined to United States ports:

Emigrants are examined up until the evening of the sixth day preceding the sailing of the vessel, but none are examined after that time. They are held at Libau for five full days prior to their departure. Each single person or family is given a card by the representative of the service, containing the name and age of each member of the family, and the printed card states that they are free from evidence of quarantinable disease. This card is dated and stamped. Then upon the day of sailing all passengers are again examined and the card above mentioned is again stamped with a date stamp marked "Second

inspection." All cases having no quarantine card, those having cards which are not stamped, and all cases of illness and suspected cases are prevented from embarking and are held over until the next boat, two weeks later.

All passengers, cabin and steerage, are, as far as the time for quarantine is concerned, treated alike. No evidence except that of a personal examination of the passenger is accepted.

The officers and crew of every ship are examined every day for five days prior to sailing, and no new man for the crew is shipped at Libau unless he has been there for more than two weeks.

Personal inspection of the ship is made on the day of sailing.

Inspection of all baggage is made and all eatables, such as bread, herring, cucumbers, fruit, etc., and all drinkables are removed, and all the large baggage—not hand baggage—is thoroughly disinfected by the use of formaldehyde gas.

During the fiscal year ending June 30, 1910, the officer at Libau inspected 20,971 persons, and advised the holding back for sanitary reasons of 2,975 persons.

ODESSA—Cholera.

Consul Grout reports July 19:

From July 11 to 15, inclusive, 40 new cases of cholera with 25 deaths were reported in the city of Odessa. There were 42 cases remaining in the hospital July 15.

In Ekaterinoslav Province the disease is spreading rapidly in the mining district. At one mine 100 cases were reported. The workmen are leaving the mines where the disease has appeared.

The province of Astrakhan is declared to be infected.

SIERRA LEONE.

Fellow-Fever Present.

The information is received through the Department of State that the American consul reported from Sierra Leone in a cablegram dated August 1, 1910, the presence of yellow fever.

SWEDEN.

(STOCKHOLM—Quarantine against Russia.

Information is received from the Department of State that the consul-general at Stockholm, Sweden, reports, under date of July 19, 1910, that the Swedish authorities have declared St. Petersburg, Russia, and the surrounding territory to be infected with cholera and that all arrivals from there are subject to quarantine.

TURKEY.

TREBIZOND—Measures against Cholera.

Consul Jewett reports, under date of July 23, 1910, that more stringent orders have been given by the Superior Board of Health in regard to passengers, food, and water from Russia. A disinfection station is to be established at Surmeneh, about 20 miles east of Trebizond, for sailing vessels coming from Russian ports. The frontier guard has been strengthened.

VENEZUELA.

Plague at Caracas.

Acting Assistant Surgeon Kellogg reports:

A death from plague occurred in Caracas July 30, 1910, in a house used by an American missionary as a school near the center of the city.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended August 19, 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.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	June 6-12.....		4	
Calcutta.....	June 19-25.....		42	
Rangoon.....	June 26-July 2.....		2	
Java:				Present, the interior.
Batavia.....	June 26-July 2.....	60	50	Mainly among natives.
Samarang.....	July 2.....			Disappearing.
Soerabaya.....	July 2.....			Do.
Persia:				
Ardabil.....	July 2.....			Present.
Philippine Islands:				
Manila.....	June 12-July 2....	33	23	
Provinces—				
Bulacan.....	June 12-July 2....	182	122	
Cavite.....	June 12-18.....	1		
Mountain Province.....	June 26-July 2....	1		
Nueva Ecija.....	June 26-July 2....	13	6	
Pampanga.....	June 19-July 2....	8	6	
Pangasinan.....	June 12-July 2....	1,146	878	
Rizal.....	June 12-25.....	5	3	
Tarlac.....	June 12-18.....	1	1	
Russia:				
Odessa.....	July 10-23.....	132	69	
St. Petersburg.....	July 10-16.....	58	20	
Straits Settlements:				
Singapore.....	June 19-July 2....	17	24	

YELLOW FEVER.

Costa Rica:				
Siquires.....	July 31.....	1	1	
Ecuador:				
Guayaquil.....	July 1-15.....	9	3	
Sierra Leone.....	General Aug. 1.....			Present.

PLAGUE.

Argentina:				
Rosario.....	Feb. 1-28.....	1	1	
China:				
Amoy.....	July 3-9.....			Epidemic in the port.
Hongkong.....	June 19-July 2....	4	4	
Swatow.....	July 5-11.....			Still present in vicinity.
Ecuador:				
Guayaquil.....	July 1-15.....	4	2	
India:				
Bombay.....	June 6-12.....		53	
Calcutta.....	June 19-25.....		25	
Kurrachee.....	July 3-9.....	9	10	
Rangoon.....	June 26-July 2....		42	
Malta:				
Valletta.....	July 16.....	1		In quarantine station on Comino Island, from s. s. North Wales.
Mauritius:				
.....	Apr. 1-June 2....	10	7	
Persia:				
Bouchir.....	June 5-25.....	7	4	
Venezuela:				
Caracas.....	July 30.....	1	1	

SMALLPOX.

Argentina:				
Rosario.....	Feb. 1-28.....	1	1	
.....	May 1-31.....	2	2	
Brazil:				
Para.....	July 17-23.....	11	6	
Santos.....	June 12-18.....		1	
Sao Paulo.....	June 12-18.....		2	
Ceylon:				
Colombo.....	June 26-July 2....	1		
Chile:				
Antofagasta.....	July 3-9.....	4		
Valparaiso.....	July 10-16.....	20		

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

Reports Received During Week Ended August 19, 1910.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Hongkong.....	July 19-25.....	2	1	Present.
Nanking.....	May 8-July 16.....			
Shanghai.....	June 27-July 17.....		10	
Swatow.....	July 5-11.....			
Egypt:				Do.
Alexandria.....	June 1-30.....	2	3	
France:				
Paris.....	June 19-23.....	1		
India:				
Bombay.....	July 6-12.....		5	
Madras.....	July 2-8.....		1	
Rangoon.....	June 26-July 2.....	1		
Italy:				
Naples.....	July 18-24.....	9	5	
Malta.....	July 10-16.....	3		
Persia:				Present.
Kerman.....	July 2.....			
Portugal:				
Lisbon.....	July 19-23.....	65		
Russia:				
Moscow.....	July 9-16.....	16	9	May 1-31, deaths 26.
Odessa.....	July 2-8.....	4		
Riga.....	July 9-23.....	97		
Warsaw.....	May 8-14.....		5	
Spain:				
Valencia.....	June 17-23.....	1		
Vigo.....	June 17-23.....		1	
Straits Settlements:				
Singapore.....	June 19-July 2.....	25	6	

Reports Received from June 25 to August 19, 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.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	Aug. 8.....			Present. In vicinity from 3,000 to 4,000 deaths.
Swatow.....	May 10-June 6.....		254	
Germany:				
Ruhleben (near Berlin)....	June 23-27.....	2	2	Among Russian emigrants.
India:				
Bombay.....	June 8-21.....		2	
Calcutta.....	May 1-June 11.....		373	
Madras.....	May 21-June 2.....		2	
Moulmein.....	May 1-7.....	1	1	
Negapatnam.....	Apr. 16-May 20.....		63	
Rangoon.....	May 8-June 25.....		10	
Java.....				June 18, present in extreme eastern part. Mainly among natives. June 25, disappearing.
Batavia.....	May 8-June 25.....	105	75	
Samarang.....	May 8-June 4.....	187	152	
Soerabaya.....	May 8-21.....	27	11	
Philippine Islands:				
Manila.....	May 22-June 4.....	4	4	
Provinces—				
Batangas.....	May 1-7.....	1		
Bulacan.....	May 1-June 11.....	43	29	
Pampanga.....	Apr. 24-June 11.....	78	78	
Pangasinan.....	Apr. 24-June 11.....	614	421	
Tarlac.....	May 8-June 11.....	44	29	
Union.....	May 1-28.....	2	1	
Russia, general.....				June 25, present in districts of Igoumen, Maxir, Pinak, Betchitak, and Sloutak. May 8-July 9, cases 13,582, deaths 5,708.
Astrakhan, government....	July 3-9.....	3	3	
Astrakhan.....	June 26-July 2.....	1	1	
Baku, government.....	May 29-July 9.....	106	56	
Baku.....	July 3-9.....	3	4	

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

Reports Received from June 25 to August 12, 1910.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia, general—Continued.				
Bessarabia.....	June 5-July 9.....	18	6	
Black Sea, province.....	July 3-9.....	25	11	
Don, territory.....	May 29-July 9.....	2,900	1,156	
Rostov on the Don.....	June 19-July 9.....	1,418	440	
Kharkov, government.....	May 29-June 25.....	238	123	
Kharkov, government.....	June 26-July 3.....	320	168	
Khasan, government.....	June 26-July 9.....	9	3	
Kheson, government.....	May 29-July 3.....	651	193	
Odessa.....	May 29-July 9.....	60	29	June 18-20—Fatal case on steamship Colenzo.
Kief, government.....	May 29-July 9.....	503	206	
Kuban, government.....	May 29-July 9.....	1,994	1,005	
Kursk, government.....	June 26-July 9.....	11	5	
Minsk, government.....	May 29-June 25.....	61	16	
Mohilev, government.....	May 15-June 18.....	15	9	
Moscow, government—				
Nizhninovgorod, government.....	July 3-9.....	4	3	July 12-15, 2 cases.
Oral, government.....	May 30-June 18.....	2	1	
Orlov.....	July 3-9.....	22	8	
Padoien, government.....	July 3-9.....	3	1	
Poltava, government.....	May 29-July 9.....	722	258	
Rjasan, government.....	July 3-9.....	15	10	July 9, 1 case.
St. Petersburg, government—				
St. Petersburg.....	June 19-July 9.....	10	5	
Samara, government.....	June 19-July 9.....	80	35	
Saratov, government.....	June 19-July 9.....	153	62	
Sibirsk, government.....	June 19-July 9.....	5	2	
Stavropol, government.....	June 26-July 9.....	78	31	
Tambov, government.....	June 19-July 9.....	20	16	
Taurida, government.....	May 29-July 9.....	562	273	
Kertsch.....	May 29-July 9.....	69	31	
Sebastopol.....	June 19-July 9.....	10	4	
Theodosia.....	June 19-25.....			Present.
Terek, territory.....	June 19-July 9.....	76	28	
Tiflis, government—				
Tiflis.....	June 19-July 9.....	11	5	
Tschernigov.....	May 29-July 9.....	419	167	
Vitebsk, government.....	May 29-July 9.....	13		
Veronesch, government.....	May 29-July 9.....	19	13	
Volhynien, government.....	July 3-9.....	1		
Yekaterinslav, government.....	May 29-July 9.....	2,641	1,178	
Transcaspien, territory.....	July 3-9.....	5	4	
Transcaucasia—				
Tschernomorsk, district—				
Novorossysk.....	June 19-July 3.....	7	6	
Slam:				
Bangkok.....	May 4-June 18.....	596	589	
Straits Settlements:				
Singapore.....	May 8-June 18.....	36	35	

YELLOW FEVER.

Brazil:				
Bahia.....	Apr. 30-June 3.....	2	2	
Manaos.....	May 30-July 16.....		12	
Para.....	May 30-July 16.....	42	29	
Costa Rica:				
Limon.....	July 9-14.....	1	1	
San Jose.....	May 28-July 9.....	3	2	Fatal case May 28 from Barranquilla; case June 29 from Siquires; fatal case July 9 from Tivives.
Ecuador:				
Guayaquil.....	May 16-June 30.....	36	18	
Gold Coast:				
Sekondi.....	May 1-27.....	8	8	
Sierra Leone:				
Freetown.....	May 1-June 8.....	4	4	
Sherboro.....	May 20.....			Present.
Venezuela:				
La Guaira.....	June 16-30.....		1	

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

Reports Received from June 25 to August 12, 1910.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Brasil:				
Bahia.....	Apr. 30-July 17....	4	4	
Pernambuco.....	Apr. 1-15.....		1	
Chile:				
Iquique.....	May 8-July 2.....	31	11	
Plasgua.....	Apr. 1-May 31.....	14	4	
Taltal.....	Apr. 1-27.....	12		
China:				
Amoy.....	May 8-31.....			From 10 to 15 deaths daily.
	June 5-11.....			From 5 to 8 deaths daily.
Kulangsun, interna- tional city.	June 5-11.....		1	
Chao Yang district.....	May 5-19.....		3,000	Mainly at Ho Peng. Present also at Chelin, Feng-chow-so, Taipshien, and Tsai-tang-shi.
Chang-pu district.....	June 11.....			Epidemic.
Ching-chew district.....	June 11.....			Do.
Hankow.....	May 15-23.....	5	3	
Hongkong.....	May 8-June 18.....	4	4	
Swatow.....	June 1-6.....			Present in vicinity.
Ecuador:				
Guayaquil.....	May 16-June 30....	8	1	
Egypt:				
Alexandria.....	May 24-July 8....	11	6	
Ishmallia.....	June 19.....	1	1	
Port Said.....	June 14.....	2		
Provinces—				
Assiout.....	May 26-June 16....	11	7	
Assouan.....	Apr. 30-June 8....	2	1	
Beni Souef.....	May 27-June 29....	8	5	
Galloobeeh.....	May 21-July 3....	6		
Garbieh.....	May 14-July 4....	21	8	
Fayoum.....	May 23-July 11....	20	14	
Kena.....	May 27-June 18....	24	22	
Menouf.....	May 24-June 13....	83	13	
Minieh.....	May 31-July 2....	32	7	
Hawaii:—				
Honolulu.....	July 5-12.....	2	2	
India:—				
Bombay.....	May 18-June 28....		560	
Calcutta.....	May 1-June 11....		341	
Kurrachee.....	May 15-July 2....	237	228	
Madras.....	June 25-July 1....		1	
Rangoon.....	May 8-June 25....		196	
Bombay Presidency and Sind.....	May 1-June 11....	2,000	1,790	
Madras Presidency.....	May 1-June 11....	97	61	
Bengal.....	May 1-June 11....	1,030	915	
United provinces.....	May 1-June 11....	5,922	5,446	
Punjab.....	May 1-June 11....	40,642	35,226	
Burma.....	May 1-June 11....	810	785	
Central provinces, includ- ing Berar.....	May 1-June 11....	162	107	
Mysore State.....	May 1-June 11....	81	59	
Hyderabad State.....	May 1-June 11....	95	68	
Central India.....	May 1-June 11....	27	22	
Rajputana and Ajmer-Mer- wara.....	May 1-June 11....	7,437	6,584	
Kashmir.....	May 1-June 11....	58	49	
Grand total.....		58,361	51,112	
Japan:				
Formosa.....	May 8-June 18....	16	12	
Osaka.....	May 1-June 25....	9	9	
New Zealand:				
Auckland.....	May 23.....	1		
Persia:				
Bouchir.....	Apr. 29-June 4....	44	36	
Peru:				
Arequipa Department.....	Mar. 1-31.....	16	8	
Mollendo.....				May 16-June 19, 1 case, 1 death.
Callao Department.....	Mar. 1-31.....	2		
Callao.....	May 12-19.....	2		Case May 12 from s. a. Victoria; case May 19 from s. a. Nicarie.
Lambayeque Department..	Mar. 1-31.....	25	10	
Libertad Department.....	Mar. 1-31.....	32	20	
Lima Department.....	Mar. 1-31.....	15	9	
Piura Department.....	Mar. 1-31.....	6	3	

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

Reports Received from June 25 to August 12, 1910.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Rhodes:				
Aplakia.....	May 22-28.....			Present.
Russia:				
Odessa.....	July 30.....	5		
Siam:				
Bangkok.....	Apr. 25-June 18...	7	7	
Straits Settlements:				
Singapore.....	May 8-28.....	3	3	
Trinidad:				
Port of Spain.....	May 15-July 14...	2	2	
Turkey in Asia:				
Basra.....	June 12-18.....	1	1	
Lobeia.....	May 1-24.....	25	27	And vicinity.

SMALLPOX.

Abyssinia:				
Adis Ababa.....	May 16-June 28.....			Present.
Argentina:				
Buenos Aires.....	Feb. 1-Apr. 30.....		224	
Algeria:				
Bona.....	May 1-31.....	1	1	
Australia:				
Victoria, general.....	Apr. 3-19.....	1	1	
Austria:				
Bukowina.....	July 10-16.....	1		
Galicia.....	May 29-July 23.....	5		
Brazil:				
Bahia.....	Apr. 30-June 24...	187	141	
Para.....	May 29-July 16.....	22	7	
Pernambuco.....	Mar. 16-May 15.....		203	
Rio de Janeiro.....	Apr. 18-24.....	1		
Santos.....	May 22-June 5.....		7	
Canada:				
British Columbia—				
Fernie.....	June 12-25.....	4		
Vancouver.....	May 1-31.....	2		
Manitoba—				
Winnipeg.....	June 19-25.....	1		
Nova Scotia—				
Halifax.....	June 14-July 2.....	8		
Pictou.....	June 12-July 23.....	9	1	
Sydney.....	July 3-16.....	20		
Ontario—				
Toronto.....	June 5-July 2.....	2		
Chile:				
Chilean.....	May 14.....			Epidemic.
Santiago.....	June 19-25.....			Present.
Valparaiso.....	May 19-25.....	5		
Victoria.....	May 14.....			Do.
China:				
Canton.....	May 8-28.....	9		
Chefoo.....	June 18-July 2.....	1	1	June 5—Present. July 2—One case from a vessel.
Hongkong.....	May 8-June 11.....	3	1	
Nanking.....	May 7.....			Present.
Shanghai.....	May 22-June 26.....	4	27	Cases among foreigners, deaths among natives. June 9—Three cases from U. S. cruiser New Orleans from Nanking.
Swatow.....	June 6-20.....			Present.
Tsingtau.....	June 12-18.....	2		
Egypt, general.....	Apr. 30-June 3.....	291	60	
Alexandria.....	May 1-31.....	2	7	
Cairo.....	May 21-July 8.....	9	5	
Suez.....	May 21-27.....	1		
France:				
Paris.....	May 29-July 16.....	23		
Germany, general.....	May 29-July 16.....	15		
Hamburg.....	June 5-11.....	1		
Gibraltar.....	June 20-July 17.....	4	1	
Great Britain:				
Liverpool.....	July 17-23.....	1		
London.....	June 19-July 2.....	4		
South Shields.....	May 22-June 4.....	4	1	

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

Reports Received from June 25 to August 12, 1910.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	May 18-June 28		98	
Kurrachee	May 15-July 2	10	3	
Madras	May 14-July 2		8	
Rangoon	May 8-June 11		33	
Italy, general:	May 30-July 17	57		
Genoa	June 16-30	1		
Naples	May 30-July 17	56	12	June 26—One case from s. s. San Giovanni. One case, July 3, on s. s. Pannonia.
Japan:				
Formosa	May 22-July 2	2	3	
Java:				
Batavia	May 22-28	1		
Korea:				
Fusan	May 1-7	1		
Seoul	May 26-June 4	2	1	
Malta:	May 22-July 2	2		
Mexico:				
Aguascalientes	June 5-July 23		25	
Guadalajara	June 11-July 2		6	
Mexico	May 15-July 9		16	
San Luis Potosi	May 29-July 16	8	4	
Veracruz	July 3-9	1		
Portugal:				
Lisbon	May 29-July 16	269		
Russia:				
Libau	May 30-July 10	126	7	
Moscow	May 22-July 9	113	40	
Odesa	May 22-July 1	47	10	
Riga	May 29-July 9	136		
St. Petersburg	May 8-July 2	304	108	
Warsaw	Mar. 6-May 7		108	
Siam:				
Bangkok	Apr. 25-June 18	3	3	
Siberia:				
Vladivostok	Apr. 22-May 28	2		
Spain:				
Almeria	June 1-30		1	
Barcelona	May 31-July 11		8	
Cadiz	May 1-31		1	
Madrid	May 1-31		3	
Seville	May 1-31		2	
Valencia	June 19-July 9	5		
Vigo	June 12-July 9		2	
Straits Settlements:				
Singapore	May 8-June 18	46	16	
Penang	May 29-June 4	1		
Switzerland:				
Thurgau, Canton	July 10-16	1		
Zurich, Canton	June 19-July 16	7		
Tripoli:				
Tripoli	June 12-18	1		
Turkey in Asia:				
Basra	June 5-11			Present.
Uruguay:				
Montevideo	Apr. 1-May 31	438	168	
Zanzibar:				
Zanzibar	June 1-21		4	

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.	Whooping cough.						
Aberdeen.....	July 23	185,705	41								1	2								
Agua Calientes.....	July 30	40,000	81							1										3
Amsterdam.....	July 23	570,669	129	16							1									
Aix-la-Chapelle.....	July 16	162,215	38	2																1
Antwerp.....	July 23	326,351	75	7																1
Barcelona.....	do.	27,000	3								1									
Barcelona.....	July 25	591,272	290	20					1			1	1	6						1
Barmen.....	July 23	164,500	31	4										2						1
Batavia.....	July 2	217,630				50														
Barranquilla.....	July 23	40,000	23	2																
Belfast.....	do.	391,167	117	21							3			1	21					1
Berlin.....	July 16	2,127,119	544	70							2	6	12	13						3
Birmingham.....	July 30	570,113	105											1						1
Bremen.....	July 23	235,648	48	6										1	1					4
Bristol.....	July 30	382,550	88	10								1	1	1						4
Bombay.....	July 12	977,822	648	44	53	4		5			2	1	2	4						1
Brussels.....	July 23	562,895	170	13									2	2	6					1
Budapest.....	do.	950,810									13	3	2							
Calcutta.....	June 25	847,796	216		25	42														
Christiania.....	July 28	250,000	41	7								1								
Do.....	July 30		63	11																
Cologne.....	July 23	512,881	141	10									5	3						
Colombo.....	July 2	187,564	112	15							10									
Copenhagen.....	July 16	455,000	116	7								2								1
Dublin.....	July 16	394,525	118	27							1	1	1							1
Do.....	July 23	402,928	144	14								3		1	1					1
Dundee.....	July 30	170,206	44	7								1								
Durango.....	July 31	75,000	65	1										1	8					6
Do.....	Aug. 7	75,000	59	2						1				6						1
Edinburgh.....	July 23	360,276	84	9								2	1	1						1
Erlurt.....	do.	108,768	29	2							2		3							1
Glasgow.....	July 29	872,021	208	10							2	3	4	2						
Frankfort on the Main.....	do.	409,800	116								1		3							3
Hamburg.....	July 23	895,804	215	37									7							
Hilo.....	do.	3,500	1	4																
Hongkong.....	do.	336,455			2			1			2									
Do.....	July 2	336,445			2															
Hull.....	July 23	280,006	71										1	2						1
Kobe.....	July 10	387,915	157									2								
Konigsberg.....	July 23	244,200	92	9										1	1					
Kurrachee.....	July 9	130,000	64		10															
Leeds.....	July 23	490,985	122	11									1	3						3
Leipzig.....	do.	590,329	154	16							2	1		1						
Liege.....	July 16	177,159	36	5									1	1						1
Do.....	July 23	177,159	54	6																1
London.....	do.	7,537,196	1,357								3	8	12	39	38					
Lyons.....	July 9	500,000	116	18							2		2	2						1
Madras.....	July 8	550,000	322					1						1						
Magdeburg.....	July 2	278,044	81	9								3								1
Do.....	July 9	278,563	91	9										2						
Do.....	July 16	278,563	79	9							1			4						
Manchester.....	July 23	631,533	188	13								2	2	8	11					
Monterey.....	July 31	100,000	64									1		1						
Do.....	Aug. 7		62	4										3						
Moscow.....	July 16	1,500,000	1,034	56				9	1	7	13	22	15	2						
Munich.....	do.	576,000	179	29								1	1	5						1
Do.....	July 23		164	24								2		1						3
Nagasaki.....	July 3	176,970	47	7							1									
Naples.....	July 16	593,729	323					1												
Do.....	July 23		297					3												
Newcastle-on-Tyne.....	do.	285,891	79	6										1	3					
Nottingham.....	do.	260,000	49																	2
Odessa.....	July 8	520,000	281	24		20			1	3	7		3	3						3
Palermo.....	June 4	340,000	145	7							2	2		2						
Do.....	June 11		154	5								4		3						
Do.....	June 18		167	5								4		2						
Do.....	June 25		144	6								2		2						
Para.....	July 23	185,000	9	12				6						2						
Paris.....	do.	2,776,399	778	172							5		6	8						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.		
Penang.....	June 25	103,582	65	8							1					
Port Elizabeth.....	July 9	32,595	8	2							1					
Quebec.....	Aug. 6	85,000											1			
Rangoon.....	July 2	252,155	203	8	42	2		1								
Stettin.....	July 23	239,000	88	6						1				1		
Rome.....	Feb. 12	584,308	239	20						2		7		6		1
Do.....	Feb. 19		243	18						1		5		6	13	2
Do.....	Feb. 26		218	18						2		4		8		2
Rotterdam.....	July 23	422,132	91							1						
Salina Cruz.....	do.	4,500	6	1						2						
Do.....	July 30		4	1						1						
Santos.....	June 11	85,000	24	3									3			
Do.....	June 18		32	4												
Shanghai.....	July 3	165,000	158	14				2					1			
Do.....	July 10		188	11				2				5				
Do.....	July 17		190	10				6					1			
Singapore.....	June 25	271,060	227	19		10		2		2						
Do.....	July 2		242	21		14		4								
Stockholm.....	July 16	341,816	78	18								2	2			1
Sydney.....	Aug. 6	16,000	8	1							1					
Talcahuana.....	June 25	28,000	4									1		2		1
Do.....	July 2		7	1							2	1				1
Valencia.....	July 30	240,000	77	6									1			
Venice.....	July 16	183,294	59	6							3	11				
Vienna.....	July 23	2,107,981	597	102						2		1	3	13		10
Vigo.....	do.	40,000	12	1				1								
Warsaw.....	May 14	764,054	263	38				5			5	4			3	
Winnipeg.....	Aug. 6	135,000	33	1							1				1	
Yokohama.....	July 18	407,432									1					

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service.