

## PUBLIC HEALTH REPORTS.

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### UNITED STATES.

[Reports to the Surgeon-General Public Health and Marine-Hospital Service.]

#### *Experiments in the use of Culicide for mosquito destruction.*

Passed Assistant Surgeon Berry, at Tampa Bay Quarantine, reports as follows, under date of January 20, on experimental work in mosquito destruction with the vapor produced by the heating of the mixture of carbolic acid and camphor, known in New Orleans as "Mims' Culicide," so named because Professor Mims of that city first suggested its use:

Some experiments, conducted during the progress of the epidemic in New Orleans, by generating "Mims' Culicide" under pressure in a retort, proved, I believe, rather unsatisfactory. Shortly afterwards I was ordered to Gulfport, Miss., for special duty under Surgeon Wasdin, and while awaiting orders at that point I witnessed the practical use of this culicide, which had already been widely and successfully used by Surgeon Wasdin.

I observed two methods of evaporation of the liquid which I shall call for brevity "Culicide." One was evaporation over a kerosene stove. I was not favorably impressed with this method, since during the demonstration, kindly given by Doctor Scheele at his own home, the stove did not work properly. The flame leaped over the pan of Culicide and the liquid, blazing up, filled the room with dense smoke which settled down as a soot.

The other method of evaporation of Culicide, used by the postmaster of Gulfport, Mr. Braxelton, struck me at once as being simple, inexpensive, and safe. Mr. Braxelton used the apparatus for periodical fumigations of his own home, and invited me to attend one of the fumigations. His apparatus consisted of three small alcohol lamps, the familiar "Bolide" vapor lamp being used. These were set on the floor in different parts of the house. Over each was placed vertically an 18-inch length of ordinary stovepipe of about 6-inch diameter. On the top of the stovepipe was placed a pan containing several ounces of Culicide. After placing everything in position and lighting the lamps, he closed the doors of the house, leaving the house with no one to watch it. At the end of an hour and a half we returned and found that the Culicide had evaporated, and that the results were successful.

I returned to New Orleans shortly afterwards, determined to use Culicide if opportunity was given me. This soon took place when

I was given charge of the lower ninth ward. I at once requisitioned for stovepipe, alcohol lamps, and 5 gallons of Culicide. I was supplied with a carboy containing  $4\frac{1}{2}$  gallons, which had been obtained from the mixture of 20 pounds each of camphor and carbolic acid crystals. With regard to the cost of the ingredients, the carbolic acid, at practically wholesale prices, cost 22 cents per pound, and the camphor 80 cents per pound. The total cost of the  $4\frac{1}{2}$  gallons was therefore \$20.40, and including the cost of labor to mix it about \$22. The cost of 1 ounce of this  $4\frac{1}{2}$  gallons is less than 4 cents. I have been told that because of the recent Russo-Japanese war the price of camphor is unduly high, in fact is quadruple the value it held prior to the war. In case camphor should fall in price to 40 cents per pound, the cost of the mixture would be only 2 cents per ounce. The cost of the carboy of Culicide was less than that of a 100-pound barrel of pyrethrum, then quoted at 25 cents per pound. It is stated that a large part of the pyrethrum on the American market has been heavily adulterated with camel's dung.

I used Culicide experimentally in one of the back rooms of my ward headquarters before giving it out for use in houses and learned several important facts:

- (1) That it was necessary to perforate the stovepipe with airholes above and below for the free burning of the lamp.

- (2) That the confined heat in the bottom of the stovepipe is too great for alcohol lamps, one of them having its legs melted off. Accordingly large sections were cut out of the bottom of the pipe, so that only enough of the pipe was left to form legs in shape of a tripod. The sections were cut out to a height opposite the burner.

A further improvement would have been to attach by brads 3 or 4 small legs of iron rod similar to those forming the legs of a tripod for a pharmacist's water bath. In that case there would have been no confined or reflected heat, all the heat not going up the natural chimney formed being harmlessly dissipated in the air. For practical purposes the mere cutting out of sections, leaving only a width of 1 inch or less for the sections left in as legs, proved sufficient.

- (3) The lengths of stovepipe were successively shortened from 18 inches to 8. When a shorter length than this was used the heat was too great and the mixture caught fire.

- (4) As a further safeguard the alcohol lamp was placed in a tin dairy pan containing a half inch of water. Then in case of any leak of the alcohol lamp it would burn out harmlessly. The water came up just to cover the lower soldered portions of the lamp, and thus prevented it from becoming overheated. The stovepipe used was of galvanized iron. The air holes, numbering half a dozen, were about one-fourth inch in diameter and placed about one-half inch from the top. Without these air holes the flame would be sucked up into the pipe and burn irregularly. With the pipe fixed as described the flame burned steadily and strongly, practically all the heat going up the natural chimney formed, and evaporation took place rapidly when the pan containing Culicide was placed over the top.

- (5) Several shapes of pan were tried, but an ordinary granite wash basin proved to be the best adapted to the purpose. It was substantial, did not scale or crack from the heat, there was no chemical action with the liquid, and the outside rim at the bottom just fitted the stovepipe, insuring steadiness and also evaporation of every drop of the

Culicide. This total evaporation did not occur when other pans, such as baking pans, were used, but some of the liquid ran to the edges of the pan, beyond the action of the heat from the stovepipe. For this reason the style of pan used is of importance.

Culicide was used in quite a number of houses in the lower ninth ward, and was used at first only as a substitute for pyrethrum; that is, in the homes where there were many articles of fabric or furnishings liable to be damaged by sulphur. It was also used for preliminary fumigation where there were sick in the house and the leaky condition of the building precluded the use of sulphur. For preliminary fumigation Culicide has advantages over either sulphur or pyrethrum.

Culicide, for instance, can be evaporated in a room in 20 minutes, and at the end of the time the room can be entered, the Culicide apparatus removed, and the mosquitoes and other insects swept up and destroyed. In such cases the expedient was used of placing sheets under one window left light, while other windows were darkened by shades or blinds. In this way the majority of the mosquitoes were on the sheet, not dead, but entirely stunned or incapable of flying.

Had pyrethrum been used it would have had to burn two hours in order to bring down all the mosquitoes, and had the house been one of loose construction the fumes would have reached the sick.

Sulphur can be depended upon to bring down the mosquitoes in as short a time but it is not subject to as easy control; the room can be entered with difficulty, or not at all, to remove apparatus. For this rapidity alone, to say nothing of its less disagreeable effects on the sick and of its harmlessness to fabrics and furnishings, I regard Culicide as the most desirable agent for preliminary fumigation.

After working experience had shown that Culicide in the proportion of 3 ounces to the 1,000 kills *Stegomyia*, it was used as a substitute for sulphur in certain houses selected for experiment. A room (cubic capacity 4,000 feet) in a house in the upper ninth ward was fumigated by my men at the request of Passed Assistant Surgeon Amessee. Because of the lateness of the afternoon, the room was opened in one hour and fifty minutes by Doctor Amessee's men and all mosquitoes and flies were collected from sheets on the floor and saved for examination the next day. I was informed by Doctor Amessee that none of the mosquitoes or flies revived.

The close of the fever campaign in the latter part of October ended the practical house-to-house work under my supervision. However, my Culicide gang was turned over to Passed Assistant Surgeon Blue in the upper part of the city, where it did satisfactory work for him.

I had performed experiments and made demonstrations with Culicide in one of the rear rooms of the lower ninth ward, but it was highly desirable that exact knowledge of the precise quantities of Culicide for effective work be known. For this reason I requested Passed Assistant Surgeon Goldberger of the Service to take charge of and conduct the more careful experiments which I wished made.

A large room at the marine hospital was placed at our disposal by Surgeon Smith, and thereafter all experiments were conducted in that room. A plentiful supply of the pupæ of *Culex pungens* were obtained from a drain leading from an abattoir, and after these had been hatched and fed several days on syrup to increase their resistance the experiments were begun November 2, 1905. The room used, which was one with quite a high ceiling (15 feet 8 inches), and with projec-

tions and offsets, contained 4,029 cubic feet. The room was furnished with a stove, cot, washstand, and chairs. The detailed experiments are as follows:

*Experiment No. 1—November 2, 1905.*

Temperature, 70° F. Quantity of Culicide used, 16 ounces, i. e., 4 ounces per 1,000 cubic feet, in two basins. Length of stovepipe, 8 and 8½ inches, respectively. *Culex pungens* previously mentioned fed on syrup for 24 hours distributed in three cages—one on the ceiling, one on the floor, and one midway between. Several other mosquitoes were liberated beneath the mosquito bar on the cot and others liberated in room. The three windows of the room were nearly closed and strips of gummed paper were used on cracks of doors, which were rather large. Lamps were lighted at 3.20 p. m., evaporation started at 3.25 p. m. Loose insects in the room ceased their efforts to escape at the window at 3.35 p. m. All of the liquid was vaporized at 3.47 p. m. The room was fairly filled with fumes at the expiration of vaporization. These gradually became less dense after the cessation of vaporization. At 4.20 p. m. the room was quite clear, the fumes having been dissipated. At the end of 2 hours the room was clear of visible fumes, but the air of the room was very irritating to the eyes. The tops of the cages were moist with precipitated Culicide. In the top cage, containing 10 insects, and in the floor and middle cages with 6 insects each, there was no life. All insects on the window sills, on the floor underneath, and on bed beneath the bar were dead. The cages used were of very close mesh copper bronze wire, about 24 meshes to the inch, with metallic tops and bottoms. None of the insects in the cages revived after keeping 16 hours in the cages in a room warmed to 82° F.

*Experiment No. 2—November 3, 1905.*

2.50 p. m.; temperature, 78° F. Two basins used, 4 ounces to each basin, and 2 ounces to each 1,000 cubic feet. One lamp burned high and vaporization ceased in 8 minutes. There was the same cloudiness of air as in the other experiment. Vaporization ceased in second pan at 3.08 p. m. At 3.12 p. m., or 4 minutes after completion, the cloudiness was distinctly less dense, and the air practically clear at 3.19 p. m., or 29 minutes after the process had started. The room was opened at 4.50 p. m. with this result: Ceiling cage, 12 insects, no life; mid-air cage, 12 insects, no life; floor cage, 12 insects, no life.

Behind the bar there were 6 insects, 1 or 2 showing signs of life. One tried to fly, but failed after several minutes' exposure to fresh air. Free insects inside the bar over the bed were all motionless on the bed. The air of the room was irritating to the eyes as before. The floor was slightly sticky but there was no visible moisture.

*Experiment No. 3—November 4, 1905.*

2.14 p. m., temperature 74° F. *Culex pungens*, 12 in each cage; common house fly, 4 in each cage. Culicide in strength of 3 ounces per 1,000 cubic feet, cages as before. Vaporization ceased in one pan at 2.26 p. m.; in the second pan at about 2.29 p. m., the time of exact stoppage not being discernible because of the dense fumes generated. At the end of 2 hours none of the mosquitoes in the cages gave signs of life.

In the floor cage 3 of the 4 flies showed signs of life; their legs moved feebly. All other flies seemed lifeless. The floor of the room was somewhat sticky. In the cage against the ceiling the insects adhered to the bottom of the cage; the surface of the cage showed slight moisture. After 16 hours' exposure all the insects were dead, including the 3 flies previously mentioned.

*Experiment No. 4—November 5, 1905.*

10.34 a. m., temperature 80° F. Quantity used, 3 ounces per 1,000 cubic feet. Cages contained *Culex pungens* and house flies, as in previous experiment. Vaporization ceased at 10.47 a. m. in one pan and at 10.50 in the second pan. Exposure 1 hour, until 11.34 a. m., with results as follows: In the floor cage, containing a great number of *Culex pungens*, the mosquitoes were all dead; the flies showed faint signs of life. In the cage behind the mosquito bar the *Culex pungens* were lifeless, the flies very feeble. There was the same result in the mid-air cage. In the ceiling cage all were dead.

*Experiment No. 5—November 6, 1905.*

1.45 p. m., temperature 70° F.; a rainy day. No cages were used, but a number of *Culex pungens* and *Anopheles* were liberated in the room. After exposure for 1 hour with 3 ounces to 1,000, there were no insects on the wing, and most of the insects on the floor were on a sheet spread under the windows left open to the light. A few insects made feeble attempts to move their limbs, particularly the *Anopheles*, which essayed short flight, after which they would tumble on their back.

*Experiment No. 6—November 7, 1905.*

2.12 p. m., temperature 70° F. Culicide 3 ounces to 1,000 cubic feet. Exposure 2 hours; vaporization completed in 15 minutes. Results as in previous experiment. A few of the *Anopheles* showed feeble signs of life; some of them picked up from the white cloth near the window, and kept for 17 hours, showed slightly increased animation, one still being able to fly.

*Experiment No. 7—November 13, 1905.*

1.34 p. m., temperature 66° F. Culicide, 4 ounces to 1,000 cubic feet; 16 ounces placed in one basin over one lamp and pipe. *Culex pungens*, *Anopheles*, and *Stegomyia* mosquitoes employed, as well as a few house flies. After 2 hours all the liberated insects on the floor were apparently lifeless. Those in the cages were in the same condition. After 17 hours all the insects were dead except 2 flies on the floor, which made feeble attempts at flight.

The experiments were not carried further because of the continued cool weather and the need of the room for hospital purposes. It is regretted that a large number of *Stegomyia* mosquitoes could not have been obtained for the experiments, but the work of their destruction had been so complete in the city that a search for them would have been prolonged or possibly fruitless. Experiments at my ninth ward headquarters showed that *Stegomyia* succumb as easily as *Culex pungens*.

The action of Culicide on the insects is somewhat different from that of sulphur and has its own advantages. Insects when driven out of their hiding place by sulphur will intelligently try to get out of the room. They search for cracks and fresh air, flying especially for crevices where the light shines through. With Culicide there is no such effort to escape from room. The vapors intoxicate the insects and they buzz around the room until they fall suddenly. It is true that in a general way they fly toward the light, but this action is not as pronounced as when sulphur is used. Flies particularly show this intoxication. After being brought down they buzz around on their backs and sides, often getting up for short flights to fall again when they get into a higher stratum of air. Cockroaches do not show a tendency to intoxication as do mosquitoes and flies, but try to get out of the room through cracks. I have killed them in rooms, using 3 ounces to 1,000 cubic feet.

On man the effects are not as toxic as one would expect, considering that one of the ingredients is a lethal agent like phenol. During the demonstration given me at his home in Gulfport Doctor Scheele remained in his room during the whole process. I have experienced ill effects only once, and that was after being all day long in and out of rooms in the ninth ward which were being fumigated with Culicide. I experienced a feeling of nausea with free flow of saliva lasting half an hour. There is a feeling of numbness about the lips and pharynx after breathing the vapors for a short time. The Culicide liquid had no appreciable caustic action on the skin.

Referring again to the toxic action upon insects, I believe that it is not necessary to paste as much of the room as when using sulphur. Not only is this method a saver of time but it will arouse less opposition among householders.

As a result of the experiments Passed Assistant Surgeon Goldberger arrived at the following conclusions, with which I concur:

1. Culicide in the proportion of 4 ounces per 1,000 cubic feet used for 2 hours with apparatus similar to that used by us kills *Culex pungens*, *Stegomyia*, and *Anopheles maculipennis* and temporarily stuns the house fly.

2. In the proportion of 3 ounces to 1,000 cubic feet it does not always kill the *Anopheles maculipennis*.

3. Culicide takes fire spontaneously if heated sufficiently. It is therefore necessary to keep the liquid at a certain distance from the flame; it is also better to have more than one basin in a large space, and about 8 ounces is the maximum quantity to use in one pan. All large cracks must be pasted up—the doors and windows if loose fitting. Gummed paper spread under a window left light would be of great benefit. (I concur with Passed Assistant Surgeon Goldberger as to the closing up of large cracks, but more for preventing weakening of the strength of the gas in the room by diffusion than from any belief that insects might escape from the room.)

4. In the hands of intelligent operators, and used according to the methods employed by us, it ranks next to sulphur as an insecticide in practical fumigation.

5. Culicide vaporizes and later cools, condensing on exposed surfaces again as it cools. Whether in this way it injures articles of gilt and the like was not investigated. In practical work the only articles removed from rooms were food stuffs and animal pets and no complaint

of injury was received. It gradually evaporates, leaving a persistent, though not disagreeable, odor.

As to the cost with the present high prices of the ingredients of Culicide, the cost of fumigating a room with 4 ounces to 1,000 cubic feet is 16 cents per 1,000 cubic feet, as compared with sulphur of 7 cents, and pyrethrum of 50 cents, using 2 pounds of each of the latter per 1,000 cubic feet. The estimate does not take into consideration the alcohol used to evaporate the Culicide, but this is not much more, if any, than that used to ignite pyrethrum or sulphur pots. A further saving in favor of Culicide is that the apparatus can be easily carried in the hands from place to place. Had sulphur been used in the instances cited a wagon would have been necessary to transport the materials, which were, in the case of Culicide, conveyed in street cars. The gang would have had to be larger to move the many articles from a house necessary to be removed in sulphur fumigation, to say nothing of the larger amount of pasting to be done. Likewise at the end of the fumigation the time required to remove apparatus from the room is much less. For this and other reasons, if the cost of the labor is counted, I do not believe Culicide is much more expensive than sulphur, and if the cost of the articles damaged by sulphur is considered, the difference would be in favor of Culicide.

*Yellow fever case at Kenner, La.*

Passed Assistant Surgeon Corput, at New Orleans, reports, January 29, as follows:

One yellow fever case reported at Kenner yesterday.

*Report from Vanceboro, Me.—Increase of smallpox on Canadian border—Precautions taken to prevent importation.*

Acting Assistant Surgeon Young reports, January 22, as follows:

During the week ended January 21, 1906, 18 passenger and 14 freight trains, carrying a total of 739 passengers, were inspected at this port.

Of this number 26 were vaccinated; 1 was refused admission on his arrival at the nearest Canadian point. Owing to the difficulty of obtaining admission through this port from the infected districts along the line of the Canadian Pacific Railway very few persons attempt to come without previously opening correspondence with this office to ascertain if permission to cross the border will be granted.

After a temporary improvement in Sunbury and Queens counties the smallpox situation has again become worse. At Waterboro, Queens County, where the disease was supposed to be stamped out, several new cases were discovered on the 18th instant, and conditions indicate a further outbreak.

A personal letter this morning advises me of the recently discovered existence at Hoyt Station, on the direct Canadian Pacific Railway line to this port, of a severe type of this disease.

At Tracey, on the same line, there were discovered a few days ago 6 concealed cases in one house. Yesterday I was advised that this number had increased to 8.

No real effort has yet been made to stamp out the epidemic at Tracey. In its early stages the disease was mild, and its real nature unrecognized; churches and schools were attended by persons in all stages of

eruption, and in one instance the school-teacher was absent from her work only four days, returning as soon as the invasion fever was over.

Later an attempt to quarantine was made, but as the health officer lives 20 miles from Tracey, and as 2 local physicians still continued to call the disease chicken pox, the quarantine was in name only. To such an extent was it disregarded that persons with large crusts on face and hands, supposedly under quarantine, have been seen mingling freely with the public. What the quarantine is in other infected sections I have no positive means of knowing, but think it is satisfactory.

After being closed for a time, the schools and churches at Tracey and Frederickton Junction, another infected section, were reopened a short time ago, the school buildings being disinfected, but the churches not. As the church service was largely attended, I see no good reason why there should not be another extended outbreak about the latter part of the present week, especially as, owing to antivaccination sentiment, not more than 20 people have been vaccinated since the beginning of the epidemic.

Of more than 100 cases that have occurred in the 2 villages last named only a very small percentage have received either personal or domiciliary disinfection after recovery, a fact which strongly indicates the danger to any intercommunicating section.

Of those who have received disinfection I know personally of none, excepting in the case of those wishing to cross the border, in which case it has been done under my supervision.

To learn the mode of procedure I have spent a part of several days in and about Tracey, as I can board the trains there. The local physicians have disinfected some houses in a thorough manner.

Some occupants have disinfected their homes, but the majority have not made even a pretense of disinfection.

The inefficient quarantine, or lack of quarantine, antivaccination sentiment, inattention to disinfection, antagonistic public sentiment which persists in attributing deaths or severe cases to some other factor, together with the new foci of infection, make this epidemic, at the present time, in my opinion, more dangerous to us than any for the past 20 years.

STATISTICAL REPORTS OF STATES AND CITIES OF THE UNITED STATES,  
YEARLY AND MONTHLY.

CALIFORNIA—*Sacramento*.—Month of December, 1905. Estimated population, 35,000. Total number of deaths, 56, including 7 from phthisis pulmonalis.

ILLINOIS—*Rockford*.—Month of December, 1905. Estimated population, 40,000. Total number of deaths, 49, including diphtheria 1, enteric fever 1, and 3 from tuberculosis.

INDIANA—*Evansville*.—Month of December, 1905. Estimated population, 75,000. Total number of deaths, 77, including enteric fever 3, and 22 from tuberculosis.

MASSACHUSETTS—*Worcester*.—Month of November, 1905. Estimated population, 128,286. Total number of deaths, 162, including diphtheria 2, whooping cough 3, and 16 from tuberculosis.



Month of December, 1905. Total number of deaths, 159, including diphtheria 2, enteric fever 2, measles 2, and 18 from tuberculosis.

MICHIGAN—*Grand Rapids*.—Month of December, 1905. Estimated population, 95,000. Total number of deaths, 89, including diphtheria 5, enteric fever 2, scarlet fever 1, and 5 from tuberculosis.

PENNSYLVANIA—*Titusville*.—Year ended December 31, 1905. Census population, 8,244. Total number of deaths, 110, including 1 from phthisis pulmonalis.

RHODE ISLAND—*Newport*.—Month of November, 1905. Estimated population, 25,000. Total number of deaths, 27, including 1 from scarlet fever.

Month of December, 1905. Total number of deaths, 38, including diphtheria 1, enteric fever 2, whooping cough 1, and 2 from tuberculosis.

TENNESSEE—*Memphis*.—Month of October, 1905.—Estimated population, 140,000; white, 76,000; colored, 64,000. Total number of deaths, 165; white, 81; colored, 84, including enteric fever 5, whooping cough 1, and 20 from tuberculosis.

Month of November, 1905. Total number of deaths, 169; white, 85; colored, 84, including diphtheria 5, and 22 from tuberculosis.

Month of December, 1905. Total number of deaths, 169; white, 92, colored, 77, including enteric fever 2 and 21 from tuberculosis.

UTAH—*Salt Lake City*.—Month of December, 1905. Estimated population, 75,000. Total number of deaths, 69, including diphtheria 3, enteric fever 3, scarlet fever 1, and 3 from tuberculosis.

*Smallpox in the United States as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 30, 1905, to February 2, 1906.*

For reports received from June 30, 1905, to December 29, 1905, see PUBLIC HEALTH REPORTS for December 29, 1905.

[NOTE.—In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

Place.	Date.	Cases.	Deaths.	Remarks.
<b>California:</b>				
Imperial .....	Jan. 13.....	1	.....	
Los Angeles.....	Jan. 7-13.....	1	.....	
San Francisco.....	Dec. 17-Jan. 20..	28	.....	
Total for State .....	.....	30	.....	
Total for State, same period, 1905.	.....	.....	.....	
<b>Colorado:</b>				
Boulder County.....	Oct. 1-Dec. 31...	1	.....	
Eagle County .....	Oct. 1-Dec. 31...	2	.....	
Mesa County .....	Oct. 1-Dec. 31...	1	.....	
Montezuma County .....	Oct. 1-Dec. 31...	10	.....	
Teller County, Cripple Creek included.	Oct. 1-Dec. 31...	11	.....	
Total for State .....	.....	25	.....	
Total for State, same period, 1905.	.....	43	.....	
<b>Delaware:</b>				
Wilmington .....	Jan. 7-27.....	5	.....	
Total for State .....	.....	5	.....	
Total for State, same period, 1905.	.....	.....	.....	
<b>District of Columbia:</b>				
Washington.....	Dec. 17-Jan. 13..	17	1	
Total for District.....	.....	17	1	
Total for District, same period, 1905.	.....	8	.....	
<b>Florida:</b>				
Alachua County (La Crosse and Newberry included).	Dec. 31-Jan. 20..	3	.....	
Columbia County (Lake City) ..	Nov. 14-20 .....	4	.....	
Dade County (West Palm Beach included).	Jan. 7-13.....	1	.....	
Duval County (Jacksonville included).	Dec. 17-Jan. 13..	32	.....	
Hillsboro County (Clearwater and St. Petersburg included).	Jan. 7-20.....	19	.....	
Lafayette County (Mayo included).	Dec. 31-Jan. 20..	9	.....	
Lake County (Mascotte included).	Jan. 7-13.....	1	.....	
Orange County (Oviedo included).	Jan. 7-13.....	1	.....	
Total for State .....	.....	70	.....	
Total for State, same period, 1905.	.....	2	.....	
<b>Illinois:</b>				
Chicago.....	Jan. 7-13.....	1	.....	
Galesburg.....	Dec. 17-23.....	1	.....	
Total for State .....	.....	2	.....	
Total for State, same period, 1905.	.....	104	7	
<b>Indiana:</b>				
Allen County .....	Nov. 1-30.....	61	.....	
Clark County.....	Nov. 1-30.....	1	.....	
Dearborn County.....	Sept. 1-30.....	6	.....	
Dubois County .....	Sept. 1-30.....	2	.....	
Gibson County .....	Sept. 1-30.....	1	.....	
Jasper County .....	Sept. 1-30.....	1	.....	
Madison County.....	Sept. 1-30.....	3	.....	
Marion County .....	Sept. 1-30.....	4	.....	
Noble County .....	Sept. 1-30.....	1	.....	

*Smallpox in the United States, etc.—Continued.*

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Indiana—Continued.</b>				
Randolph County .....	Nov. 1-30 .....	1		
Tippecanoe County (Lafayette). .....	Nov. 1-Jan. 8 .....	2		
Washington County .....	Sept. 1-30 .....	21		
Total for State .....		104		
Total for State, same period, 1905. ....				
<b>Kansas:</b>				
Atchison County .....	Oct. 1-Nov. 30 .....	14		
Barton County .....	Oct. 1-Nov. 30 .....	14		
Brown County .....	Oct. 1-Nov. 30 .....	3		
Chautauqua County .....	Oct. 1-Nov. 30 .....	24		
Cherokee County .....	Oct. 1-Nov. 30 .....	8	1	
Clay County .....	Oct. 1-Nov. 30 .....	1		
Cloud County .....	Oct. 1-Nov. 30 .....	6		
Edwards County .....	Oct. 1-Nov. 30 .....	1		
Jewell County .....	Oct. 1-Nov. 30 .....	10		
Lyon County .....	Oct. 1-Nov. 30 .....	6		
Marion County .....	Oct. 1-Nov. 30 .....	1		
McPherson County .....	Oct. 1-Nov. 30 .....	1		
Mitchell County .....	Oct. 1-Nov. 30 .....	98		
Montgomery County .....	Oct. 1-Nov. 30 .....	3		
Osborne County .....	Oct. 1-Nov. 30 .....	1		
Republic County .....	Oct. 1-Nov. 30 .....	39		
Saline County .....	Oct. 1-Nov. 30 .....	3		
Sedgwick County (Wichita included). .....	Oct. 1-Nov. 30 .....	26		
Shawnee County (Topeka included). .....	Oct. 1-Nov. 30 .....	5		
Smith County .....	Oct. 1-Nov. 30 .....	1		
Sumner County .....	Oct. 1-Nov. 30 .....	5		
Wyandotte County .....	Oct. 1-Nov. 30 .....	5		
Total for State .....		275	1	
Total for State, same period, 1905. ....		427	1	
<b>Kentucky:</b>				
Covington .....	Dec. 17-Jan. 27 ..	11		
Total for State .....		11		
Total for State, same period, 1905. ....				
<b>Louisiana:</b>				
New Orleans .....	Dec. 17-Jan. 20 ..	24		
Shreveport .....	Dec. 24-Jan. 20 ..	4		
Total for State .....		28		
Total for State, same period, 1905. ....		40		
<b>Maryland:</b>				
Baltimore .....	Dec. 24-Jan. 27 ..	27		
Total for State .....		27		
Total for State, same period, 1905. ....				
<b>Michigan:</b>				
Grand Rapids .....	Dec. 17-23 .....	1		
Total for State .....		1		
Total for State, same period, 1905. ....		6	2	
<b>Minnesota:</b>				
Benton County .....	Dec. 27-Jan. 1. ...	1		
Chisago County .....	Oct. 3-9 .....	3		
Clay County .....	Dec. 12-18 .....	3		
Crow Wing County .....	Dec. 27-Jan. 1. ...	1		
Dodge County .....	Oct. 31-Nov. 6 .....	1		
Hennepin County .....	Sept. 19-Nov. 27 ..	19		
Hubbard County .....	Nov. 14-Dec. 25 ..	3		
Itasca County .....	Dec. 27-Jan. 1. ...	1		
Lesueur County .....	Nov. 21-Nov. 27 ..	1		
Marshall County .....	Sept. 12-Dec. 11 ..	7		
Morrison County .....	Jan. 9-15 .....	1		
Nobles County .....	Jan. 2-8 .....	1		

*Smallpox in the United States, etc.—Continued.*

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Minnesota—Continued.</b>				
Otter Tail County.....	Nov. 14-Jan. 15...	20	1	
Pipe Stone County.....	Dec. 19-25.....	1		
Polk County.....	Jan. 2-8.....	2		
Ramsey County.....	Oct. 8-9.....	5		
Red Lake County.....	Nov. 14-20.....	1		
Renville County.....	Jan. 2-8.....	2		
Rice County.....	Nov. 7-13.....	1		
Roseau County.....	Nov. 21-Dec. 11.....	5		
Stearns County.....	Sept. 12-Dec. 4.....	19		
Wilkin County.....	Sept. 19-Jan. 8.....	4		
Wright County.....	Jan. 2-8.....	4		
Total for State.....		106	1	
Total for State, same period, 1905.....		168	1	
<b>Missouri:</b>				
St. Louis.....	Dec. 17-Jan. 22.....	7		
Total for State.....		7		
Total for State, same period, 1905.....		104	8	
<b>Montana:</b>				
Flathead County.....	Dec. 1-31.....	1		
Total for State.....		1		
Total for State, 1905.....		193	17	
<b>Nebraska:</b>				
South Omaha.....	Jan. 14-20.....	5		
Total for State.....		5		
Total for State, same period, 1905.....				
<b>New York:</b>				
Buffalo.....	Jan. 7-13.....	1		
New York City.....	Jan. 7-13.....	2		
Niagara Falls.....	Dec. 24-30.....	1		
Total for State.....		4		
Total for State, same period, 1905.....		4		
<b>North Carolina:</b>				
Chowan County.....	Nov. 1-30.....	3		
Clay County.....	Nov. 1-30.....	5		
Columbus County.....	Nov. 1-30.....	4		
Craven County.....	Nov. 1-30.....	1		
Cumberland County.....	Nov. 1-30.....	17		
Durham County.....	Nov. 1-30.....	2		
Gates County.....	Nov. 1-30.....	1		
Hyde County.....	Nov. 1-30.....	100		
New Hanover County.....	Nov. 1-30.....	10		
Pasquotank County.....	Nov. 1-30.....	8		
Person County.....	Nov. 1-30.....	1		
Stanly County.....	Nov. 1-30.....	2		
Union County.....	Nov. 1-30.....			Epidemic.
Washington County.....	Nov. 1-30.....	60		
Watauga County.....	Nov. 1-30.....	6		
Total for State.....		219		
Total for State, same period, 1905.....		482		
<b>Ohio:</b>				
Clark County.....	Sept. 23-Dec. 16.....	8		
Gallia County.....	Sept. 23-Dec. 16.....	1		
Hamilton County (Cincinnati).....	Sept. 23-Jan. 26.....	44		
Madison County.....	Sept. 23-Dec. 16.....	1		
Marion County.....	Sept. 23-Dec. 16.....	2		
Montgomery County (Dayton).....	Sept. 23-Jan. 27.....	4		
Ottawa County.....	Sept. 23-Dec. 16.....	1		
Trumbull County.....	Sept. 23-Dec. 16.....	2		
Total for State.....		63		
Total for State, same period, 1905.....		443	2	

*Smallpox in the United States, etc.—Continued.*

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Pennsylvania:</b>				
Lancaster.....	Dec. 8-9 .....	1 .....	.....	
Total for State .....		1 .....	.....	
Total for State, same period, 1905. ....		2 .....	.....	
<b>South Carolina:</b>				
Camden.....	Jan. 7-13.....	1 .....	.....	
Total for State .....		1 .....	.....	
Total for State, same period, 1905. ....		49 .....	3 .....	
<b>Utah:</b>				
Cache County.....	Oct. 1-Nov. 30 ..	1 .....	.....	
Salt Lake County .....	Oct. 1-Nov. 30 ..	37 .....	.....	
Sanpete County.....	Oct. 1-Nov. 30 ..	6 .....	.....	
Sevier County.....	Oct. 1-Nov. 30 ..	7 .....	.....	
Summit County.....	Oct. 1-Nov. 30 ..	11 .....	.....	
Weber County.....	Oct. 1-Nov. 30 ..	5 .....	.....	
Total for State .....		67 .....	.....	
Total for State, same period, 1905. ....		89 .....	.....	
<b>Virginia:</b>				
Norfolk .....	Dec. 28-Jan. 15...	5 .....	.....	68 cases at Crany Island; 1 case from str. Hampton Roads.
Total for State.....		73 .....	.....	
Total for State, same period, 1905. ....		.....	.....	
<b>Washington:</b>				
Cowlitz County .....	Dec. 1-31 .....	7 .....	.....	
Spokane County (Spokane).....	Dec. 1-31 .....	2 .....	.....	
Whatcom County (Bellingham).....	Dec. 1-31 .....	8 .....	.....	
Whitman County .....	Dec. 1-31 .....	1 .....	.....	
Total for State.....		18 .....	.....	
Total for State, same period, 1905. ....		5 .....	.....	
<b>Wisconsin:</b>				
Appleton .....	Nov. 30-Jan. 20 ..	10 .....	.....	
La Crosse.....	Dec. 17-Jan. 13 ..	2 .....	.....	
Milwaukee.....	Dec. 3-20 .....	3 .....	.....	
Total for State .....		15 .....	.....	
Total for State, same period, 1905. ....		55 .....	.....	
Grand total .....		1,175 .....	3 .....	
Grand total, same period, 1905 .....		2,094 .....	25 .....	

*Yellow fever in the United States as reported to the Surgeon-General Public Health and Marine-Hospital Service, December 29, 1905, to February 2, 1906.*

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Louisiana:</b>				
Jefferson Parish (Kenner) .....	Jan. 28.....	1 .....	0 .....	

Cities.	Week ended—	Population, United States census of 1900.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Yellow fever.	Smallpox.	Varicoid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Altoona, Pa.	Jan. 27	38,973	19											
Anderson, Ind.	Jan. 20	20,178	9	2										1
Do	Jan. 27	20,178	7	1								1		
Ann Arbor, Mich.	Jan. 20	14,509	3	1										
Appleton, Wis.	do	15,085	7						1			1		
Auburn, N. Y.	do	30,345	14	2										
Augusta, Ga.	Jan. 15	39,441	19	2										
Do	Jan. 22	39,441	13	1										
Boston, Mass.	Jan. 27	560,892	212	21						4	1	1	3	
Braddock, Pa.	Jan. 13	15,654	8							1	1	1		
Do	Jan. 20	15,654	8											
Do	Jan. 27	15,654	9						1					
Brockton, Mass.	Jan. 20	40,063	11	1										
Cambridge, Mass.	do	91,886	34	6										
Camden, N. J.	Jan. 27	75,985	28											
Carbondale, Pa.	Jan. 20	13,536	3									1		
Chelsea, Mass.	do	34,072	9	2										
Chicago, Ill.	Jan. 27	1,698,575	504	61					7	4	15	2		
Chicopee, Mass.	do	19,167	7											
Cleveland, Ohio	Jan. 26	381,766	181	14						2	4	1		
Clinton, Mass.	Jan. 27	13,667	4											
Danville, Ill.	Jan. 23	16,354		2										
Dayton, Ohio	Jan. 30	85,333	24	4										
Dunkirk, N. Y.	Jan. 20	11,616	3						2	1				
Elkhart, Ind.	do	15,184	2											
Everett, Mass.	do	24,336	3											
Fall River, Mass.	Jan. 27	104,863	40	2										
Findlay, Ohio.	do	17,613	1											
Fort Smith, Ark.	Jan. 13	11,587	5	1							1			
Do	Jan. 20	11,587		2										
Galesburg, Ill.	do	18,607	8											
Grand Rapids, Mich.	do	87,565	27								2			
Greenville, S. C.	Jan. 13	11,860	2											
Hyde Park, Mass.	Jan. 20	13,244	4											
Indianapolis, Ind.	Jan. 21	169,164	72	10							2			
Jacksonville, Fla.	Jan. 20	28,429	17	2						1				
Jersey City, N. J.	Dec. 24	203,433	88	12							1			1
Do	Dec. 31	206,433	94	12					1	1	1			
Do	Jan. 7	206,433	69	9					1	1	1			
Do	Jan. 14	206,433	85	11					1	1	1			
Do	Jan. 21	206,433	84	10					1	1	1			
Johnstown, Pa.	Jan. 27	35,936	20	1										
Kalamazoo, Mich.	Jan. 21	24,404	12	2										
Kingston, N. Y.	Jan. 20	24,535	11	2										
La Crosse, Wis.	do	28,896	10											

Cities.	Week ended—	Population, United States census of 1900.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cerebro-spinal meningitis.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Pittsburg, Pa.	Jan. 20	321,616	148	9	...	...	...	...	...	11	4	4	5	...
Plainfield, N. J.	do	15,369	10	...	...	...	...	...	...	...	...	...	...	...
Portland, Me.	Jan. 13	50,145	19	...	...	...	...	...	...	...	...	1	...	...
Do	Jan. 20	50,145	16	1	1	...	...	...	...	...	...	...	...	...
Quincy, Mass.	do	23,699	7	1	...	...	...	...	...	...	...	...	...	...
Reading, Pa.	Jan. 22	78,961	28	3	...	...	...	...	...	...	...	...	...	...
St. Louis, Mo.	do	575,238	197	21	...	...	...	...	...	...	...	4	...	2
San Francisco, Cal.	Jan. 13	342,782	201	23	...	...	...	...	...	4	...	3	...	2
Seattle, Wash.	Jan. 20	80,671	20	2	...	...	...	...	...	1	...	...	...	...
Shreveport, La.	do	16,013	14	...	...	...	...	...	...	...	...	...	...	...
Sioux Falls, S. Dak.	do	10,266	2	...	...	...	...	...	...	1	...	...	...	...
Somerville, Mass.	Jan. 27	61,643	19	1	...	...	...	...	...	...	...	...	...	...
South Bend, Ind.	Jan. 20	35,999	10	3	...	...	...	...	...	...	...	...	...	...
Springfield, Ohio	Jan. 19	38,253	12	3	...	...	...	...	...	...	...	...	...	...
Steelton, Pa.	Jan. 27	12,068	5	1	...	...	...	...	...	...	...	...	...	...
Tacoma, Wash.	Jan. 20	37,714	9	2	...	...	...	...	...	...	...	...	...	...
Taunton, Mass.	do	31,086	13	3	...	...	...	...	...	...	...	...	...	...
Terre Haute, Ind.	do	36,673	14	1	...	...	...	...	...	...	...	...	...	...
Titusville, Pa.	do	8,244	5	...	...	...	...	...	...	...	...	...	...	...
Do	Jan. 27	8,244	1	...	...	...	...	...	...	...	...	...	...	...
Toledo, Ohio	Jan. 20	131,822	42	5	...	...	...	...	...	1	...	...	...	...
Trenton, N. J.	Jan. 27	73,307	...	...	...	...	...	...	...	...	1	...	...	...
Waltham, Mass.	do	23,481	5	...	...	...	...	...	...	...	...	...	...	...
Wheeling, W. Va.	do	38,878	10	...	...	...	...	...	...	...	...	...	...	...
Wilkesbarre, Pa.	Jan. 13	51,721	12	1	...	...	...	...	...	...	...	...	...	...
Do	Jan. 20	51,721	14	...	...	...	...	...	...	...	...	...	...	...
Williamsport, Pa.	Jan. 6	28,757	9	...	...	...	...	...	...	...	...	...	1	...
Do	Jan. 13	28,757	6	...	...	...	...	...	...	...	...	...	...	...
Do	Jan. 20	28,757	5	...	...	...	...	...	...	...	...	...	...	...
Winona, Minn.	do	19,714	...	...	...	...	...	...	...	...	...	...	...	...
Worcester, Mass.	do	118,421	46	4	...	...	...	...	...	1	...	...	...	...
Yonkers, N. Y.	Jan. 13	47,931	15	1	...	...	...	...	...	...	...	...	...	...
Do	Jan. 20	47,931	22	2	...	...	...	...	...	...	1	...	...	...
Do	Jan. 27	47,931	15	...	...	...	...	...	...	1	...	...	...	...

## FOREIGN AND INSULAR.

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### *Current quarantine measures.*

[From the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, January 17, 1906.]

#### PLAGUE.

*Belgium.*—Ministerial order, December 29, 1905. Measures against arrivals from the Nile delta removed from January 1, 1906.

*Norway.*—Royal decree, January 6, 1906. City of Zanzibar and Government of Astrakhan declared free from plague.

*Portugal.*—Ministerial order, January 2, 1906. Port of Chinde declared free from plague since December 9, 1905.

*British East Indies.*—Advices of December 6, 1905. Quarantine measures at port of Orissa against arrivals from Porbander suspended.

*China.*—Measures ordered at Tientsin by the provincial government in accord with the consular corps, October 20, 1905, against vessels leaving Niuchwang and passengers leaving the said city by rail, suspended November 21, 1905.

#### CHOLERA.

*Austria.*—Circular letter of the maritime authorities at Trieste, January 3, 1906. Arrivals from Calcutta subject to measures prescribed August 12, 1904.

*Belgium.*—Ministerial order, January 9, 1905. Measures against arrivals from the coast of Palestine from the Egyptian frontier to Beirut revoked.

*Spain.*—Advices of December 30, 1905. The general sanitary inspector in Madrid gives notice that cholera is extinct in Madrid.

#### BRAZIL.

*Report from Rio de Janeiro—Inspection of vessels—Mortality—Plague, smallpox, and yellow fever.*

Acting Assistant Surgeon Stewart reports, January 1, as follows:

During the two weeks ended December 24, 1905, the following vessels received bills of health from this consulate-general: On the 13th ultimo the Portuguese bark *J. Soares Costa*, for Brunswick, Ga., in stone and sand ballast, no change in the crew personnel, and with no passengers; on the same date the British steamship *Merchant Prince*, for New York, with a cargo of coffee, no passengers, and no change in the crew personnel; on the following day the British steamship *Homer*, for New York, with a cargo of coffee, no passengers, and no change in the personnel of the crew; on the 18th ultimo the British steamship *Ardendearg*, for New Orleans, with a cargo of coffee, no passen-



gers, and no change in the personnel; on the 21st ultimo the British steamship *Crathorne*, with a cargo of manganese, for Baltimore, no passengers, and no change in the crew personnel; on the same date the British steamship *Persiana*, for Baltimore, with no passengers, no change in the personnel of the ship, and in water ballast; on the following day the British steamship *Birmingham*, for Baltimore, with no passengers, no change in the crew personnel, and in water ballast; on the same date the British steamship *Skerrymore*, for New York, with a cargo of coffee, no passengers, and no change in the crew personnel; and also on the same date the Belgian steamship *Calderon*, for New York, with a cargo of coffee, 1 new member of the crew signed on here, 10 first-class passengers, and 20 steerage passengers for the United States.

No other vessels left this port for ports in the United States or its dependencies, Cuba, or ports in the Canal Zone.

Of these vessels leaving here, all were inspected by me before departure, except the *Ardendearg* and the *Skerrymore*.

*Mortality in Rio de Janeiro, two weeks ended December 24, 1905.*

Population, estimated, 905,000; last census (official), 1890, 429,848.

Week ended December 17, 1905: Total deaths, 330, including 3 from yellow fever, with 14 reported new cases; of this number, however, only 3 were confirmed, and the remainder placed under observation.

Plague caused 6 deaths, with 14 new cases reported, and variola caused no deaths, although 2 new cases were reported. At the close of the week there were in the infectious department of the São Sebastião Hospital 1 case of yellow fever, 34 cases of variola, and 15 cases of plague, with 22 suspected cases under observation.

Week ended December 24: Total deaths, 230, including 6 deaths from yellow fever, of which disease there were 15 new cases reported, but of this number only 6 were confirmed as being true yellow fever, and the remainder were placed under observation. Plague caused 1 death, with 2 new cases, and variola caused 1 death, with 1 new case.

At the close of the week there were in the hospital of São Sebastião, 1 case of yellow fever, 19 cases of variola, and 8 cases of plague, with 15 cases under observation.

CHINA.

*Report from Shanghai—Inspection of vessels—Mortality—Smallpox*

Acting Assistant Surgeon Ransom reports, December 21, as follows:

During the week ended December 16, 1905, 1 supplemental bill of health was issued to 1 steamship. There were inspected 1 steamship, 197 crew, 53 steerage passengers, and 23 pieces of personal baggage; 1 piece of baggage was disinfected.

The weekly report of the municipal health officer shows 3 new cases of enteric fever among foreigners, 2 deaths from diphtheria, and 23 deaths from tuberculosis among natives. The total reported mortality was 2 foreigners and 77 natives.

Smallpox, while not officially reported, is present here among the natives. I have learned of no case among foreigners so far this year.

No quarantinable diseases were reported from outports.

## CUBA.

*Reports from Cienfuegos—Inspection of vessels.*

Consul Baehr reports, January 16 and 22, as follows:

Week ended January 6, 1906: Two bills of health issued for vessels bound for the United States; crew, 56.

Week ended January 13, 1906: Four bills of health issued for vessels bound for the United States; crew, 112. No passengers.

The sanitary conditions of these vessels were reported good; no sickness. No quarantinable diseases reported at this port during the past two weeks.

Week ended January 20, 1906: Six bills of health issued for vessels bound for the United States with 252 crew. No passengers for the United States, but 6 in transit for Manzanillo, Cuba, and 1 for Habana, Cuba.

The sanitary conditions of these vessels were reported good; no sickness.

No quarantinable diseases reported at this port during the week.

*Report from Habana—Inspection of vessels—Yellow fever—Dengue fever.*

Passed Assistant Surgeon von Ezdorf reports, January 22, and February 1, as follows:

*Week ended January 20, 1906.*

Vessels inspected and bills of health issued.....	28
Crew of outgoing vessels inspected.....	1, 213
Passengers of outgoing vessels inspected.....	553
Vessels fumigated prior to sailing.....	6
Health certificates issued for New Orleans, Mobile, and Florida .....	413

During the week 2 fatal cases of yellow fever were reported.

The statistics of prevailing infectious diseases for the first ten days of January show that 80 cases of dengue remain under treatment.

Total number of cases reported in Habana from October, 1905, inclusive, 159; deaths, 7.

## FEBRUARY 1.

Two new cases yellow fever reported. One confirmed January 30; one January 31.

*Report from Mantanzas—Inspection of vessels.*

Acting Assistant Surgeon Nuñez reports, January 23, as follows:

Week ended January 20, 1906: Bills of health granted to 5 vessels leaving this port for the United States, all in good sanitary condition.

*Report from Santiago—Inspection of vessels—Fumigation of vessel to destroy mosquitoes.*

Acting Assistant Surgeon Wilson reports, January 7, as follows:

Week ended January 13, 1906: Bills of health issued to 5 vessels bound for the United States. No quarantinable disease has been re-

ported. At the request of the vessel's agents, the Cuban steamship *Julia*, bound from Habana to San Juan, P. R., was fumigated to kill mosquitoes. This was noted in detail on the bill of health.

#### ECUADOR.

##### *Reports from Guayaquil—Inspection of vessels—Yellow fever.*

Temporary Acting Assistant Surgeon Gomez reports, December 25, 1905, and January 1, 1906, as follows: .

Week ended December 24, 1905:

Present officially estimated population 60,000.

Mortality from all causes 52, including yellow fever 8, and 2 from smallpox.

Two bills of health were issued during the week. December 19 the Chilean steamship *Tucapel* from Chilean and Peruvian ports was dispatched for Ancon with 13 passengers from here; 4 passengers from ports south were placed in quarantine. The passengers were all examined; also 34 pieces of baggage. One certificate of immunity was issued. Vessel fumigated. December 23 the German steamship *Luzor* cleared for San Francisco with 2 passengers from here for that port. Vessel fumigated.

During the last week there have been several new cases of yellow fever in this port, for which reason the superior board of health declared on the 19th ultimo that yellow fever exists here in epidemic form. The board of health has taken all the precautions necessary to combat the epidemic.

The steamships for Ancon anchor at about 1,000 meters from the center of this city to avoid being invaded by infected *Stegomyia*.

Week ended December 31, 1905:

Mortality from all causes 63, including yellow fever 7, and 7 from smallpox.

Three bills of health were issued during the week. December 26 the British yacht *Cavalier* from ports south cleared for Ancon with 8 passengers from here. Passengers were examined; also 40 pieces of baggage. Vessel fumigated. December 29 the British steamship *Guatemala* from ports south cleared for Ancon with 11 passengers from here; 18 passengers from ports south were placed in quarantine. Passengers were all examined; also 46 pieces of baggage. Vessel fumigated, and 5 certificates of immunity were issued. December 30 the British steamship *Manavi* was dispatched for Ancon. No passengers from here for that port. Vessel not fumigated.

The epidemic of yellow fever continues here without any noticeable increase. The proportion of mortality is 19 per cent. At the present time there are in the pesthouse 20 cases.

#### GERMANY.

##### *Reports from Berlin—Status of cholera in Russia.*

Passed Assistant Surgeon McLaughlin reports, January 11 and 17, as follows:

*Russia*.—During the week ended December 30 there were registered in the government district of Lomza 5 fresh cases of cholera (with 2

deaths), of which 4 cases and 1 death occurred in the city limits of Lomza and 1 case (1 death) in Ostrow. In the government district of Siedlec, between November 23 and December 26, 22 cases of cholera occurred, of which 10 ended in death. A suspicious case occurred in Sokolow, the bacteriological investigation of which was not concluded on January 2.

In the government district of Plock, during the period from December 4 to 17, 50 persons were stated to be suffering with cholera in the city of Prasnys, 20 of whom succumbed to the disease. Finally, 1 case of cholera was registered in the city of Mlawa.

In the government of Lomza, from December 31 to January 3, there were reported officially 5 cases and 2 deaths of cholera. Of these 3 cases and 1 death occurred in the district of Ostrow, 1 case and 1 death in the district of Makow, and 1 case in the district of Lomza.

In the city of Warsaw there were 9 cases of cholera and 5 deaths to December 18.

#### HONDURAS.

*Report from Puerto Cortes—Port declared free from yellow fever—Quarantine raised.*

Consul Johnson reports, January 23, as follows:

A proclamation has been promulgated by the President of Honduras declaring Puerto Cortes free from yellow fever. The quarantine placed against Puerto Cortes by other ports in Honduras has been raised.

#### INDIA.

*Report from Calcutta—Transactions of Service—Cholera and plague mortality.*

Acting Assistant Surgeon Eakins reports, December 28, as follows:

Week ended December 23, 1905. Bill of health issued to the steamship *Amatonga*, bound for Boston and New York, with a total crew of 37, and to the steamship *Dragoman*, bound to Boston and New York, with a total crew of 54.

Week ended December 30, 1905, steamship *Moltkefels* bound for Boston and New York with a total crew of 56; steamship *Saint Egbert* bound for Philadelphia and New York with a total crew of 37. The usual precautions were taken in the case of all the vessels named, viz: Holds fumigated, rat guards placed on wharf lines, and Lascars' effects disinfected.

Week ended December 16, 1905; 61 deaths from cholera, and 21 deaths from plague in Calcutta.

In Bengal, during the same week, 810 cases and 612 deaths from plague.

## ITALY.

*Report from Naples—Inspection of vessels—Rejection of emigrants recommended—Smallpox in Italy.*

Assistant Surgeon Foster reports, January 8, as follows:

During the week ended January 6, 1906, the following ships were inspected at Naples and Palermo:

## NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of large baggage inspected and passed.	Pieces of baggage disinfected.
Dec. 31	Massilia .....	New York .....	414	60	650
31	Brasile .....	do .....	889	150	1,470
Jan. 3	Brooklyn .....	do .....			
6	Republic .....	do .....	561	110	850
6	Sicilia .....	do .....	258	45	420

## PALERMO.

Jan. 4	Vincenzo Florio.....	New Orleans.....	806	340	681
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*Rejections recommended.*

## NAPLES.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Suspected favus.	Other causes.	Total.
Dec. 31	Massilia .....	9		8		1	18
31	Brasile .....	27	2	9		2	40
Jan. 3	Brooklyn .....						
6	Republic .....	10	2	15		2	29
6	Sicilia .....	7	2	1		2	12
	Total .....	53	6	33		7	99

## PALERMO.

Jan. 4	Vincenzo Florio.....	68		35		8	111
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*Smallpox.*—Week ended January 11, 1906, 6 cases at Caltanissetta, 9 cases at Terranova (Caltanissetta), 2 cases at Anguillara (Rome), 2 cases at Genoa, 3 cases in the Province of Brescia.

## JAPAN.

*Report from Yokohama—Inspection of vessels—Plague in Kobe, Osaka, and Shimonoseki—Measures to prevent spread of infection.*

Passed Assistant Surgeon Moore reports, December 23, as follows:

During the week ended December 16, 1905, bills of health were issued, after inspection, to 4 vessels, having an aggregate personnel of 374 crew and 751 passengers; 216 steerage passengers were bathed and their clothing was disinfected; 576 aliens, would-be steerage passengers to the United States and its possessions, were examined with special

reference to their freedom from any loathsome or dangerous contagious disease barred by the United States immigration laws.

*Plague.*—This disease continues to prevail in both Osaka and Kobe. Up to date, since the beginning of the present outbreak, 121 cases with 76 deaths have been notified in Osaka; in Kobe 82 cases have occurred with 50 deaths. Including cases previously reported, 5 cases of plague confirmed bacteriologically have occurred in Shimonoseki. Doubtful cases of the same disease have been reported elsewhere in Japan, including Fukuoka Ken and Kagawa Ken. Vigorous measures to prevent the spread of the infection are being enforced by both central and local government authorities. In this prefecture, in the case of arrival of either freight or passengers from the infected districts, the facts must be notified to the authorities.

#### MEXICO.

##### *Report from Mazatlan—Mortality—Sanitary conditions—Hospital buildings.*

Consul Kaiser reports, January 9, as follows:

During the year 1905 there were 1,345 deaths, of which number 9 were of foreigners. The population, according to official estimates, is 20,000.

Sanitary conditions are good. Since the occurrence of bubonic plague there has been a marked advance in the cleanliness of the city. The municipality owns a number of well-ventilated hospital buildings, which are situated on an island in the bay opposite the city, and are to be used for contagious diseases. They are kept scrupulously clean.

There are no contagious diseases at the present time in Mazatlan, and there were none during the past year.

##### *Report from Tampico—Inspection of vessels—Mosquitoes.*

Acting Assistant Surgeon Frick reports, January 22, as follows:  
Week ended January 20, 1906.

January 15: Inspected and passed the Norwegian steamship *Shuld*, bound for a port in the United States, via Morro Castle, for orders, with 25 in the crew; vessel sails in ballast.

January 16: Inspected and passed the Cuban steamship *Bayamo*, bound for Morro Castle, for orders, with 41 in the crew; vessel sails in a partial general cargo.

January 17, 1906: Norwegian steamship *Sif*, bound for a port north of Hatteras, via Santiago; vessel sails in ballast. British steamship *Louisianian*, bound for New Orleans, with 45 in the crew and 4 first-class passengers; vessel sails in a partial cargo, consisting of cotton-seed oil cake, for Liverpool.

January 18: Inspected and passed Norwegian steamship *Tancred*, bound for a point north of Hatteras, via Daiquiri, with 28 in the crew; vessel sails in ballast. The Norwegian steamship *Norheim*, bound for Galveston, via Port Arthur, with 19 in the crew; vessel sails in ballast. American steamship *Niagara*, bound for New York, via Morro Castle, for orders, with 53 in the crew, 5 first-class and 3 third-class passengers; vessel sails in a partial general cargo. Norwegian steamship *Leander*, bound for a port north of Hatteras, via Sagua la Grande, with 25 in the crew; vessel sails in ballast.

January 19, 1906: Inspected and passed the Danish steamship *Brattingborg*, bound for Galveston, with 26 in the crew; vessel sails in ballast. The British steamship *Wathfield*, bound for New Orleans, via Vera Cruz and Coatzacoalcas, with 25 in the crew; vessel sails in a general cargo.

January 20: Inspected and passed the Austrian steamship *Anna*, bound for Colon, via Mexican ports, with 24 in the crew and 2 first-class and 2 third-class passengers. A bill of health was issued the British steamship *Straits of Dover*, but, not sailing, will be included in next week's report.

The sanitary conditions appear unchanged. Mosquitoes are increasing and no precautions to prevent their increase appear to be taken. As reported last week, the present increase of mosquitoes is confined mostly to the *Culex* genus. A few *Anopheles* are seen, but the *Stegomyia* is very scarce at present.

#### NORWAY.

##### *Quarantine proclamation.*

The following is received from Consul-General Bordewich, at Christiania, under date of January 10.

A royal proclamation was made on the 6th instant as follows:

It is hereby ordered, in compliance with section 2 in law of July 12, 1848, relating to quarantine, that the city of Zanzibar and the province of Astrachan in Russia, which by proclamations of October 11 and December 12 were to be considered infected with the oriental plague, shall not any longer be considered so infected.

With which all concerned respectfully have to comply.

Arabia, Persia, India, China, Yokohama in Japan, Manila, Formosa, Siam and Tonkin, Egypt, Madagascar, Reunion Islands and Mauritius, the cities of Durban, Port Elizabeth and East London in South Africa, Callao, Lima and Paita in Peru, the ports in Brazil and Chile, also Brisbane and Maryborough in Queensland, shall until further notice be considered infected with the oriental plague.

Christiania, January 9, 1906.

E. HAGERUP BULL.  
GEORG JOHANNESSEN.

#### PERU.

##### *Report from Callao—Plague.*

Assistant Surgeon Lloyd reports, January 2, as follows:  
Plague, December 11 to 20, 1905:

	New cases.	Recovered.	Died.	Remaining.
Lima .....	1	0	0	8
Callao .....	1	0	1	0
Paita .....	0	0	0	2
Trujillo .....	0	5	0	3
Guadalupe .....	0	1	0	1
Mollendo .....	1	0	0	1
San Pedro .....	4	0	1	3
Total .....	7	6	2	18

I am indebted to the *director de salubridad* for the information contained in this report.

## PHILIPPINE ISLANDS.

*Leprosy in the islands.*

[From report of the board of health.]

*Report for the month of September, 1905, of lepers living in the various provinces of the Philippine Island.*

Province.	Race.	Number of males.	Number of females.	Children.		Single.		Married.		Total.
				M.	F.	M.	F.	M.	F.	
Abra.....	Filipino..	6	5	1	.....	4	3	1	2	11
Albay.....	.....do	38	26	4	4	25	14	7	5	64
Ambos Camarines.....	.....do	58	15	6	.....	23	7	20	7	68
Antique.....	.....do	61	47	17	14	18	15	20	14	108
Bataan.....	.....do	16	5	1	1	10	.....	4	2	21
Batangas.....	.....do	18	10	.....	.....	14	4	3	2	28
Benguet.....	.....do	32	11	1	1	1	.....	21	10	43
Bohol.....	.....do	78	55	5	3	34	39	35	12	183
Bulacan.....	.....do	28	16	.....	1	11	9	15	5	44
Cagayan.....	.....do	53	45	1	.....	25	16	25	19	98
Capiz.....	.....do	38	13	.....	.....	15	6	19	4	51
Cavite.....	.....do	50	24	4	3	30	13	13	4	74
Cebu.....	.....do	431	254	93	38	224	173	105	29	685
Ilocos Norte.....	.....do	70	35	2	2	22	17	42	13	105
Ilocos Sur.....	.....do	146	82	12	2	74	45	44	22	228
Iloilo.....	.....do	78	29	6	.....	51	19	17	6	107
Isabela.....	.....do	15	6	.....	.....	5	.....	9	3	21
La Laguna.....	.....do	16	12	1	2	7	5	8	3	28
Lepanto-Bontoc <sup>a</sup> .....	.....do	15	4	1	.....	5	1	8	.....	19
Leyte.....	.....do	64	45	6	6	23	11	32	17	109
Masbate.....	.....do	13	11	.....	.....	7	4	3	4	24
Misamis.....	.....do	42	11	4	.....	18	5	16	3	53
Moro <sup>a</sup> .....	Moro.....	143	77	3	3	86	44	45	18	220
Negros Occidental.....	Filipino..	24	8	2	2	9	6	12	.....	32
Negros Oriental.....	.....do	67	53	7	10	46	21	14	16	120
Nueva Ecija.....	.....do	35	17	1	.....	15	7	15	6	52
Nueva Vizcaya <sup>a</sup> .....	.....do	2	4	.....	.....	1	.....	1	2	6
Pampanga.....	.....do	8	7	.....	.....	4	5	3	2	15
Pangasinan.....	.....do	44	31	.....	1	16	7	17	17	75
Rizal.....	.....do	68	36	2	4	33	9	33	20	104
Romblon.....	.....do	4	10	.....	.....	1	3	3	6	14
Samar.....	.....do	143	115	.....	1	43	50	74	43	258
Sorsogon.....	.....do	80	37	.....	2	39	16	33	13	117
Surigao <sup>a</sup> .....	.....do	2	1	.....	.....	.....	.....	.....	.....	3
Tarlac.....	.....do	22	11	.....	1	5	4	15	6	33
Tayabas.....	.....do	19	6	1	.....	9	3	8	2	25
Union.....	.....do	30	16	1	.....	10	7	16	4	46
Zambales.....	.....do	25	27	.....	.....	13	14	12	9	52
San Lazaro Hospital, Manila.....	(b)	143	83	20	12	75	42	35	16	226
Total.....	.....	2,220	1,300	202	113	1,051	644	808	366	3,520

<sup>a</sup> Revised reports not received.<sup>b</sup> European, 1; Filipinos, 224; Chinese, 1.

## PORTO RICO.

*Report from San Juan—Inspection of vessels—Mortality—Smallpox and measles.*

Acting Assistant Surgeon del Valle Atilas reports, January 15, through Chief Quarantine Officer King, as follows:

Transactions at San Juan and the 6 subports of the island for the month of December, 1905:

## San Juan:

Bills of health issued.....	29
Vessels inspected.....	30
Vessels held in quarantine.....	5
Persons detained at the quarantine station at Miraflores Island.....	73

The vessels held in quarantine, but permitted to transact necessary business under guard, were the steamers *Philadelphia* and *Caracas*, which arrived on December 13 and 27, respectively, from ports of Ven-



ezuela and Curaçao, the German steamer *Schaumburg*, also from South American ports, and which arrived on December 17, and the Spanish mail steamship *Manuel Calvo*, from Habana, Central and South American ports, which arrived on December 22. The Cuban steamship *Julia*, from Habana, other Cuban ports, and Santo Domingo arrived here on December 20. She had been fumigated at Santiago by the Cuban authorities, and at the time of her arrival here was more than five days out from that port. As no sickness had developed en route, all of her passengers were released, but the ship was held in strict quarantine and no one but immune stevedores were allowed alongside. It was the purpose of this office to fumigate the ship again and give her pratique, but the captain refused to be fumigated, stating that he did not desire any communication with shore except to receive some cargo in lighters. The ship lay well out in the stream and remained in port only about forty hours. Previously this vessel's stay in port was about four to five days. Strict inspection of all vessels from New Orleans is still kept up, although they are not fumigated nor quarantined.

The health of this port continues fair, but some isolated cases of varioloid as well as many cases of measles are reported.

The reports from the subports show the following transactions during the month:

Mayaguez, 11 vessels inspected and 19 bills of health issued.

Arecibo, 3 vessels inspected and 5 bills of health issued.

Humacao, no vessels inspected and 4 bills of health issued.

Aguadilla, 3 vessels inspected and 9 bills of health issued.

Arroyo, 1 vessel inspected and 9 bills of health issued.

Fajardo, 3 vessels inspected and 4 bills of health issued.

The mortality reports received from the subports show the following:

Mayaguez, 115 deaths, 14 of which were due to uncinariasis, 5 to anemia, 2 to bronchitis, 4 to broncho-pneumonia, 16 to tuberculosis, 4 to typhoid fever, 1 to pernicious malarial fever, 5 to intestinal tuberculosis, and 1 to dysentery.

Arecibo, 88 deaths, 21 due to uncinariasis, 8 to anemia, 5 to infantile tetanus, 9 to tuberculosis, 7 to bronchitis, 3 to malarial fever, and 1 to paludism.

Humacao, 61 deaths, 11 due to anemia, 1 to bronchitis, 2 to broncho-pneumonia, 1 to dysentery, 3 to pneumonia, 2 to paludism, 1 to measles, and 1 to tuberculosis.

Aguadilla, 37 deaths, 4 due to uncinariasis, 5 to infantile tetanus, 1 to paludic fever, 1 to pernicious fever, 4 to tuberculosis, 1 to cerebro-spinal meningitis, and 1 to pneumonia.

Arroyo, 16 deaths, 3 due to uncinariasis, 2 to infantile tetanus, 2 to paludic fever, 1 to bronchitis, and 1 to broncho-pneumonia.

Fajardo, no report received.

No quarantinable diseases were reported from any of the subports during the month.

*Mortality statistics of San Juan, P. R., for month of December, 1905.*

Entero-colitis .....	9	Anemia .....	3
Rickets .....	7	Pneumonia .....	1
Gastro-enteritis .....	4	Tetanus, infantile .....	3
Tuberculosis .....	21	All other causes .....	45
Bronchitis .....	2		
Broncho-pneumonia .....	1	Total .....	104
Meningitis .....	8		

FOREIGN AND INSULAR STATISTICAL REPORTS OF COUNTRIES AND  
CITIES—UNTABULATED.

AFRICA—*Lourenço Marquez*.—Month of November, 1905. Estimated population, 10,000. Total number of deaths 46, including 8 from tuberculosis.

AUSTRIA-HUNGARY.—*Brünn*.—Month of November, 1905. Estimated population, 95,342. Total number of deaths, 189, including diphtheria 3, enteric fever 2, and 28 from tuberculosis.

BAHAMAS—*Dunmore Town*.—Two weeks ended January 13, 1906. Estimated population, 1,232. One death. No contagious diseases.

*Governors Harbor*.—Week ended January 13, 1906. Estimated population, 1,500. No deaths and no contagious diseases.

*Green Turtle Cay*.—Two weeks ended January 11, 1906. Estimated population, 3,314. No deaths and no contagious diseases reported.

*Nassau*.—Two weeks ended January 13, 1906. Estimated population, 12,650. Number of deaths not reported. No contagious diseases reported.

CANADA—*British Columbia, Victoria*.—Month of December, 1905. Estimated population, 21,000. Total number of deaths, 25, including 2 from tuberculosis.

CHILE—*Antofagasta*.—Month of October, 1905. Estimated population, 24,000. Total number of deaths, 145, including enteric fever 3, plague 7, smallpox 51, and 18 from phthisis pulmonalis.

Month of November, 1905. Total number of deaths, 138, including typhus fever 1, plague 8, smallpox 27, and 13 from phthisis pulmonalis.

FRANCE—*Marseille*.—Month of December, 1905. Estimated population, 491,161. Total number of deaths, 906, including diphtheria 5, enteric fever 15, scarlet fever 1, whooping cough 1, and 101 from tuberculosis.

GERMANY—*Strasburg*.—Month of November, 1905. Estimated population, 165,187. Total number of deaths, 221, including diphtheria 4, measles 4, scarlet fever 1, and 30 from tuberculosis.

GIBRALTAR.—Two weeks ended January 7, 1906. Estimated population, 27,460. Total number of deaths, 10, including 2 from smallpox.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 76 great towns in England and Wales during the week ended January 6, 1906, correspond to an annual rate of 18.3 per 1,000 of the aggregate population, which is estimated at 15,818,360.

*London*.—One thousand seven hundred and fifty-six deaths were registered during the week, including measles 64, scarlet fever 9, diphtheria 13, whooping cough 33, enteric fever 6, and 10 from diarrhea. The deaths from all causes correspond to an annual rate of 19.4 per 1,000. In Greater London 2,438 deaths were registered. In

the "outer ring" the deaths included 2 from diphtheria, 5 from measles, and 4 from whooping cough.

*Ireland.*—The average annual death rate represented by the deaths registered during the week ended January 6, 1906, in the 21 principal town districts of Ireland, was 20.6 per 1,000 of the population, which is estimated at 1,093,959. The lowest rate was recorded in Portadown, viz, 5.2, and the highest in Lisburn, viz, 45.5 per 1,000. In Dublin and suburbs 168 deaths were registered, including diphtheria 2, enteric fever 3, whooping cough 2, and 33 from tuberculosis.

*Scotland.*—The deaths registered in 8 principal towns during the week ended January 6, 1906, correspond to an annual rate of 19.8 per 1,000 of the population, which is estimated at 1,787,788. The lowest rate of mortality was recorded in Paisley, viz, 13.2, and the highest in Dundee, viz, 26.2 per 1,000. The aggregate number of deaths registered from all causes was 680, including measles 33, diphtheria 13, enteric fever 1, scarlet fever 2, and 11 from whooping cough.

*ITALY—Naples.*—Month of November, 1905. Estimated population, 578,371. Total number of deaths, 929, including diphtheria 5, enteric fever 9, measles 1, whooping cough 2, smallpox 1, and 54 from tuberculosis.

*JAMAICA—Kingston.*—Month of December, 1905. Estimated population, 52,475. Total number of deaths, 139, including 8 from phthisis pulmonalis.

*MALTA.*—Two weeks ended December 30, 1905. Estimated population, 202,134. Total number of deaths, 197, including diphtheria 5, and 1 from enteric fever.

*NICARAGUA—San Juan del Norte.*—Three months ended September 30, 1905. Estimated population, 600. Total number of deaths, 5. No deaths from contagious diseases.

*SPAIN—Cadiz.*—Month of December, 1905. Estimated population, 69,382. Total number of deaths, 180, including diphtheria 2, enteric fever 1, measles 3, whooping cough 1, smallpox 1, and 19 from tuberculosis.

*Cholera, yellow fever, plague, and smallpox, from December 30, 1905, to February 2, 1906.*

[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 June 30, 1905, to December 29, 1905, see PUBLIC HEALTH REPORTS for December 29, 1905.]

[NOTE.—In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

## CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India:</b>				
Bombay .....	Dec. 6-12 .....		1	
Burma (Rangoon) .....	Dec. 17-23 .....		13	
Calcutta .....	Nov. 12-Dec. 16 .....		323	
Madras .....	Nov. 25-Dec. 29 .....		32	
<b>Philippine Islands:</b>				
Manila .....	Aug. 23-Dec. 9 .....	248	219	
<b>Russia:</b>				
General .....	Dec. 7-17 .....	36	16	
Government of Lomza .....	Nov. 23-Jan. 3 .....	28	9	
Government of Ploek .....	Dec. 4-17 .....	51	20	
Government of Siedlec .....	Nov. 20-Dec. 26 .....	29	12	
Government of Warsaw (Warsaw included) .....	Dec. 12-18 .....	9	5	

## YELLOW FEVER.

<b>Brazil:</b>				
Rio de Janeiro .....	Nov. 20-Dec. 24 .....	20	13	
Sao Paulo .....	Dec. 6-12 .....		1	
<b>Colombia:</b>				
Barranquilla .....	Nov. 28-Dec. 4 .....	6	4	
Cartagena .....	Dec. 17-23 .....	1	1	
<b>Cuba:</b>				
Habana .....	Dec. 25-Jan. 31 .....	7	6	
<b>Ecuador:</b>				
Guayaquil .....	Dec. 4-31 .....	20	13	
<b>Mexico:</b>				
Veracruz—				
Cordoba .....	Dec. 10-16 .....	1	3	
Orizaba .....	Dec. 10-Jan. 13 .....	1	1	
Veracruz .....	Dec. 24-30 .....	1	1	
Yucatan—				
Merida .....	Dec. 17-30 .....	3	1	
<b>Nicaragua:</b>				
Managua .....	Dec. 10-16 .....		1	
<b>Panama:</b>				
Colon .....	Dec. 8-14 .....	1		

## PLAGUE.

<b>Africa:</b>				
Cape Colony—				
Port Elizabeth .....	Nov. 12-18 .....	1		
Portuguese East Africa—				
Chinde .....	Sept. 18-Oct. 28 .....	51		
<b>Argentina:</b>				
Santa Fe Province .....	Dec. 11 .....			Present.
<b>Brazil:</b>				
Bahia .....	Nov. 26-Dec. 9 .....	1	1	
Pernambuco .....	Dec. 2-15 .....		2	
Rio de Janeiro .....	Nov. 20-Dec. 24 .....	66	31	
<b>Chile:</b>				
Antofagasta .....	Oct. 1-Nov. 30 .....		15	
<b>China:</b>				
Hongkong .....	Nov. 1-Dec. 9 .....	6	5	
<b>Egypt:</b>				
Alexandria .....	Nov. 30-Dec. 6 .....	1		
<b>Formosa:</b>				
Tamsui .....	Nov. 24-30 .....	2	2	
<b>India:</b>				
Bombay Presidency and Sind. .....	Oct. 29-Dec. 9 .....	11,006	7,906	
Madras Presidency .....	Oct. 29-Dec. 9 .....	521	362	
Bengal .....	Oct. 29-Dec. 9 .....	2,463	1,843	
United Provinces .....	Oct. 29-Dec. 9 .....	2,652	2,231	

*Cholera, yellow fever, plague, and smallpox, etc.—Continued.*

## PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India—Continued.</b>				
Punjab .....	Oct. 29-Dec. 9....	2,009	1,618	
Burma .....	Oct. 29-Dec. 9....	456	418	
Central Provinces (including Berar).....	Oct. 29-Dec. 9....	1,635	1,245	
Mysore State .....	Oct. 29-Dec. 9....	872	655	
Hyderabad State .....	Oct. 29-Dec. 9....	606	448	
Central India .....	Oct. 29-Dec. 9....	680	640	
Rajputana .....	Oct. 29-Dec. 9....	100	88	
Kashmir .....	Oct. 29-Dec. 9....	36	23	
Grand total .....		23,036	17,477	
<b>Japan:</b>				
Shimonoseki .....	Dec. 7-16.....	5	2	
Kobe .....	Nov. 8-Dec. 16....	82	50	
Osaka .....	Nov. 2-Dec. 16....	121	76	
Mauritius .....	Nov. 17-23 .....	8	6	
<b>Peru:</b>				
Callao .....	Dec. 11-20.....	1	1	
Gnadeloupe .....	Nov. 20-Dec. 10..	2		
Lima .....	Nov. 11-Dec. 20..	13	2	
Mollendo .....	Dec. 11-20.....	1		
San Pedro .....	Dec. 11-20.....	4	1	
Trujillo .....	Nov. 11-Dec. 10..	12	5	
<b>Philippines:</b>				
Manila .....	Jan. 1-Nov. 28...	43	41	
<b>Russia:</b>				
Government of Astrakhan.	Nov. 19-Dec. 3...	680	651	
Zanzibar .....	To Nov. 17.....	151	120	

## SMALLPOX.

<b>Africa:</b>				
Cape Colony—				
Cape Town .....	Nov. 12-Dec. 9...	4		
<b>Argentina:</b>				
Buenos Ayres .....	Sept. 1-Oct. 31..		104	
<b>Brazil:</b>				
Bahia .....	Nov. 26-Dec. 11..	39	1	
Pernambuco .....	Nov. 17-Dec. 15..		81	
Rio de Janeiro .....	Nov. 20-Dec. 24..	18	13	
<b>Canada:</b>				
Toronto .....	Dec. 17-Jan. 13..	6		
<b>Chile:</b>				
Antofagasta .....	Oct. 1-Nov. 30....		78	
Coquimbo .....	Nov. 10-23 .....	15	4	
Iquique .....	Nov. 12-Dec. 9...	51	19	
Valparaiso .....	Nov. 9-22 .....	100	25	
<b>China:</b>				
Hongkong .....	Dec. 3-9 .....	1	1	
Shanghai .....	Dec. 10-16 .....			Present.
<b>Ecuador:</b>				
Guayaquil .....	Dec. 4-31 .....		11	
<b>France:</b>				
Paris .....	Dec. 3-Jan. 6....	74	6	
Gibraltar .....	Dec. 11-Jan. 6....	20	4	
<b>Great Britain and Ireland:</b>				
Cardiff .....	Dec. 24-30 .....	1		
Drogheda .....	Dec. 3-9 .....		1	
Hull .....	Dec. 3-9 .....	3		
<b>India:</b>				
Bombay .....	Nov. 29-Jan. 2....		16	
Calcutta .....	Nov. 12-Dec. 16..		31	
Karachi .....	Nov. 27-Dec. 31..	10	1	
Madras .....	Nov. 25-Dec. 29..		30	
<b>Italy:</b>				
General .....	Nov. 30-Jan. 11..	117	7	
Catania .....	Dec. 1-Jan. 11..		4	
Messina .....	Dec. 10-16 .....		1	
Naples .....	Nov. 22-Dec. 22..		1	
Palermo .....	Dec. 17-23 .....	2		
<b>Mexico:</b>				
City of Mexico .....	Dec. 10-16 .....	4	2	
Tuxpam .....	Dec. 20-Jan. 16..	20	4	
<b>New Brunswick:</b>				
Queen's Co .....	Jan. 9-18 .....			Present.
Sunbury Co. (Fredericton Junction, Little Lake, and Tracey included).	Jan. 9-22 .....	106		

*Cholera, yellow fever, plague, and smallpox, etc.—Continued.*

## SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippines:				
Manila .....	Jan. 1-Nov. 28...	27	2	Present.
Porto Rico:				
San Juan .....	Nov. 1-Dec. 31...			
Russia:				
Moscow .....	Nov. 12-Dec. 23...	10	3	
Odesa .....	Nov. 12-Dec. 30...	53	5	
St. Petersburg .....	Dec. 6-23 .....	32	3	
Spain:				
Barcelona .....	Jan. 1-10 .....		22	
Cadiz .....	Nov. 24-31 .....		2	
Santander .....	Dec. 11-17 .....	4		
Seville .....	Nov. 24-30 .....		1	
Turkey:				
Constantinople.....	Nov. 27-Dec. 31...		14	

*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.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Whooping cough.													
Acapulco .....	Jan. 13	6,000	4										
Alexandretta .....	Dec. 30	10,000	6										
Do .....	Jan. 6	10,000	9										
Amherstburg .....	Jan. 13	2,250											
Do .....	Jan. 20	2,250	1										
Amsterdam .....	Jan. 13	536,882	181	24						2	1	3	4
Athens .....	Dec. 31	200,000	12								1		
Beirut .....	Jan. 6	80,000	13										
Belfast .....	do	358,680	147						2			1	1
Belize .....	Jan. 18	9,100	8										
Belleville .....	Jan. 15	8,642	2										
Bergen .....	Jan. 7	80,000	22	8									2
Berlin .....	Dec. 23	2,039,997	559	92							8	3	5
Do .....	Dec. 30	2,039,997	578	80							4	2	14
Birmingham .....	Jan. 6	542,959	189						1			2	7
Bombay .....	Dec. 26	776,006	688	55	9			6					
Brunswick .....	Jan. 13	136,162											
Brussels .....	Jan. 6	598,467	193	13					1	1	3	1	6
Cartagena .....	Dec. 30	30,000	11	2									
Do .....	Jan. 6	30,000	10										
Catania .....	Jan. 11	160,000	93					3	10				
Christiania .....	Jan. 6	224,000	62							1	3		
Coatzacoalcas .....	Dec. 30	3,000	4										
Do .....	Jan. 6	3,000	3										
Do .....	Jan. 13	3,000	8	1									
Colon .....	Jan. 4	9,000	16										
Do .....	Jan. 11	9,000	15										
Copenhagen .....	Jan. 6	500,000	113										
Corunna .....	do	50,000	18	3					2				
Dublin .....	do	378,994	168	23					3				2
Edinburgh .....	do	341,035	112								1	1	1
Flushing .....	do	19,719	5										
Funchal .....	Jan. 7	44,049	14	3									
Geneva .....	Dec. 31	115,600	52							1			
Girgenti .....	Jan. 6	25,069	20										
Glasgow .....	Jan. 12	809,986	335								6	18	2
Gothenburg .....	Jan. 6	151,600	50	12									1
Halifax .....	Jan. 20	40,787	15										
Hamburg .....	Jan. 6	772,852	289	36							1	1	7
Hamilton, Bermuda .....	Jan. 9	20,206	5										
Do .....	Jan. 16	20,206	7										
Havre .....	Jan. 6	130,196	69	14								1	2
Hull .....	do	262,426	84							1	5		1
Karachi .....	Dec. 24	108,644	113		13							2	
Kingston, Jamaica .....	Jan. 6	52,065							1				

## 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.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Las Palmas	Dec. 16	49,500	14											
Do	Dec. 23	49,500	19											
Do	Dec. 30	49,500	17											
Lausanne	Dec. 31	52,000	11											
Leeds	Jan. 6	463,495	194	10								1	15	8
Leith	do	82,660	36	3							2			
Licata	do	26,000	11	1						1		1		
Livingston, Guatemala.	Jan. 10	3,500	1											
Do	do	3,500	1											
Do	Jan. 17	3,500	2											
London	Jan. 6	7,113,561	2,438							7	13	23	78	44
Mainz	do	92,210	23	3										
Do	Jan. 13	92,210	33	5							1			
Manchester	Jan. 6	631,933	212	27						2	2	1	5	4
Mannheim	Dec. 30	162,607	34									1	3	
Do	Jan. 6	162,607	47									1		
Mazatlan	Jan. 13	20,000	22											
Messina	Jan. 6	107,000	38	1										
Moscow	Nov. 25	1,173,427	591	11					1	6	17	6	8	6
Do	Dec. 2	1,173,427	524	11				1	15	7	9	3	7	2
Do	Dec. 9	1,173,427	513	18				2	10	7	11	3	2	5
Do	Dec. 16	1,173,427	601	14					7	7	9	1	5	2
Do	Dec. 23	1,173,427	330	5					3	4	11	1	3	3
Newcastle on Tyne	Jan. 6	264,511										1	1	2
Odessa	Dec. 23	461,000	166	18				2	3		12	4	4	1
Do	Dec. 30	461,000	188	29				1	1	6	6	3		1
Palermo	Jan. 6	330,000	128	3										
Paris	Jan. 7	2,660,559	969	205				1	8			5	21	3
Prague	Jan. 6	225,463	99	19					1					
Puerto Cortez	do	4,000												
Rheims	Jan. 17	105,385	32	7										
Rio de Janeiro	Dec. 17	905,000	330	44	6		3		3				2	
Do	Dec. 24	905,000	230	47	1		6	1	3				1	4
Rotterdam	Jan. 6	377,273	131						1			1		
Rouen	Jan. 7	116,316		8										
St. John, N. B.	Jan. 20	40,709	19	3										
St. Stephen, N. B.	do	2,840												
Salford	Jan. 6	231,514	81	9							1		1	5
San Feliu de Guixols	Jan. 14	11,333	10	2										
Santa Cruz de Tenerife.	Dec. 30	40,000	11											
Do	Jan. 6	40,000	8	1										
Smyrna	Dec. 31	60,000	84	16										
Stockholm	Dec. 23	318,398	94	19								1		
Do	Dec. 30	318,398	98	14						3		2		
Tarragona	Jan. 13	19,600	11	1										
Trapani	Jan. 6	61,477	22											
Tuxpam	Jan. 16	13,000	13				1							
Utiilla	Dec. 30	800	0											
Do	Jan. 6	800	0											
Do	Jan. 13	800	0											
Veracruz.	Jan. 6	32,000	29	3										
Do	Jan. 13	32,000	36	4										
Vienna	Dec. 30	1,917,639	651	112					2	4	9	4	7	
Do	Jan. 6	1,917,639	616	67						6	14	2	8	
Windsor, N. S.	Jan. 20	3,000	1											
Winnipeg	Dec. 13	80,000	46						2			1		
Yokohama.	Nov. 26	313,695							1					
Do	Dec. 3	313,695							3			1		
Do	Dec. 10	313,695							3			1		
Do	Dec. 17	313,695							2					
Do	Dec. 24	313,695							1					

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service.