

# PUBLIC HEALTH REPORTS.

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## FREQUENCY OF HOOKWORM DISEASE OR GROUND ITCH ANEMIA AMONG PUBLIC SCHOOL CHILDREN IN SOUTHERN FLORIDA.

By CH. WARDELL STILES, Ph. D., Chief, Division of Zoology, Hygienic Laboratory, Public Health and Marine-Hospital Service.

In February, 1910, the opportunity of examining a number of school children in Southern Florida for hookworm disease presented itself. In company with Dr. Ed. E. Lindeman, of the state board of health laboratory, at Tampa, and Dr. John S. Helms, one of Florida's pioneer students of hookworm disease, I visited 8 schools located in 3 counties and saw 1,306 school children. The pupils were classified as "suspects," "doubtfuls," and "not suspects," on the basis of external appearance, supplemented occasionally by more careful physical examination, but in no case by microscopic examination. Experience has shown that in a classification of this kind there are a number of hookworm cases which escape attention and that in connection with the number selected as "suspects" there is a theoretical error, due chiefly to the difficulty of determining (without microscopic examination) whether the person has lost all the parasites, but still shows the effects of former infection.

The results of the examination are shown in the following tables:

### PLANT CITY, HILLSBORO COUNTY.

	Number seen.	Number of suspects.	Per cent of suspects.
<b>Graded School:</b>			
Boys.....	129	97	75.1
Girls.....	144	80	55.5
Total.....	273	177	64.8
<b>High School:</b>			
Boys.....	26	16	61.5
Girls.....	41	8	19.5
Total.....	67	24	35.8

### LAKE LAND, POLK COUNTY.

Boys.....	211	103	48.8
Girls.....	278	70	25.1
Total.....	489	173	35.3

MANATEE, MANATEE COUNTY.

	Number seen.	Number of suspects.	Per cent of suspects.
Boys.....	36	28	77.7
Girls.....	38	23	60.5
Total.....	74	51	68.9

ELLENTON, MANATEE COUNTY.

Boys.....	14	13	92.8
Girls.....	20	18	90.0
Total.....	34	31	91.1

PALMETTO, MANATEE COUNTY.

Boys.....	40	38	95.0
Girls.....	50	38	76.0
Total.....	90	76	84.4

BRAIDENTOWN, MANATEE COUNTY.

<b>High and grammar school:</b>			
Boys.....	64	55	85.9
Girls.....	75	55	73.3
Total.....	139	110	79.1
<b>Primary (first to fourth grades) school:</b>			
Boys.....	76	59	77.6
Girls.....	64	30	46.8
Total.....	140	89	63.5

SUMMARY OF 1,366 PUPILS IN 8 SCHOOLS IN 6 TOWNS IN 3 COUNTIES.

Boys.....	596	409	68.6
Girls.....	710	322	45.3
Total.....	1,306	731	55.9

In the large majority of pupils classified as "suspects," the infection was so evident that a microscopic examination would be unnecessary from a practical point of view, although interesting from an academic viewpoint. Admitting that some errors may have been made, the point may be mentioned that a number of the "doubtfuls" would unquestionably have shown infection had they been examined microscopically. The number classified as "suspects" may, as experience shows, be taken as an ultraconservative estimate of the number of these children who had hookworm infection. In fact, according to experience, on basis of 55.9 per cent "suspects," it may be concluded that the infection is probably not less than 80 per cent—which was the estimate made by Doctor Helms before we began to examine the children.

The percentages for Braidentown and Palmetto were reduced by the presence of a number of northern children who had recently gone to these towns, either for the winter or for a longer period. The difference in condition between these northern children and the Florida children was striking.

Attention may be invited to the fact that the pupils in these schools represented not only some very poor children from the farms, but also children of very well-to-do families from farms and towns.

These statistics of school children are exceedingly significant, from various points of view:

First. These children are growing up under a severe physical handicap. If they do not undergo medical treatment, not only will this handicap be appreciable in deaths due directly to hookworm infection, but this infection will so reduce their vitality that they will more readily fall a prey to other diseases, such as tuberculosis, pneumonia, malaria, etc.

Second. Their physical development is of necessity inhibited, and many of them may reach maturity stunted in their growth.

Third. Children in this condition can not possibly be expected fully to assimilate the education which is being given to them, and as a result the money being spent on education is not giving to these towns full returns. As we picked out the hookworm suspects, the teachers told us that other children of similar appearance were absent. This fact is in harmony with my general experience that hookworm pupils show a high degree of absenteeism from school. The teachers called attention to the fact that several of the pupils, in whom we recognized severe infection, had failed to pass their examinations (so-called "repeaters"); this also is in harmony with my experience elsewhere.

Fourth. Not only these 3 counties but all other parts of the South visited by winter tourists should awaken promptly to the self-evident fact that the danger is present that such tourists will soon avoid those rural portions of the South in which the soil pollution is so extensive as to lead to 55.9 per cent hookworm infection among the school children.

*Hookworm disease in teachers.*—At least 5 of the teachers in the schools visited showed clear and pronounced effects of hookworm infection. It is physiologically impossible for these teachers to give their best efforts to the children in the matter of instruction. The teachers in the various schools showed us every possible courtesy and exhibited the greatest amount of interest in the examinations we were conducting.

We had but little opportunity of discussing the hookworm problem with others than teachers and physicians, but the number of privies which we noticed were provided with the "pail system" testified to the activity of the Florida state board of health.

*The vernacular term "hookworm disease."*—The scientific worker has occasion to notice that many people who are not ashamed to admit that they have had "ground itch" and that they are "anemic" are extremely indignant at the suggestion that they have "hookworm disease." If they are told that they have "uncinariasis," they may be enthusiastic to undergo treatment; but if told that they have "hookworm disease," they may indignantly refuse to consider treatment.

Absurd as the situation is, a serious practical problem is facing us in some localities, because of the odium which has become attached to "worms" in the popular mind, and as human life is involved, it seems wise to find for uncinariasis some more acceptable vernacular name which can be used in announcing the nature of the infection to the less philosophical of the patients.

As anemia is one of the most common symptoms, and as ground itch is the most common method of infection and a condition which is well known, I would suggest the use of the term "ground itch anemia" as a vernacular term for uncinariasis to be used with persons who are too proud or too sensitive to be treated for "hookworms."

The term "ground itch anemia" seems of more general applicability than do the terms "brickmaker's anemia," "tunnel anemia," "cotton mill anemia," "sand hill malaria," etc., which are occasionally used for this infection.

### HOOKWORM DISEASE IN THREE COTTON MILLS IN NORTH CAROLINA.

By CH. WARDELL STILES, Ph. D., Chief, Division of Zoology, Hygienic Laboratory, Public Health and Marine-Hospital Service.

During a recent visit to Rockingham, N. C., upon invitation of the mayor, the officers of the 10 cotton mills, and a number of the residents, to deliver a popular lecture on hookworm disease, the occasion was utilized to visit 3 of the cotton mills, in order to estimate the percentage of hookworm infection. Going through the mills I divided the people into "suspects," "doubtfuls," and "not suspects," and classified them by sex and by age (estimated) as under 16 years, from 16 to 20 years, and over 20 years old. The results are shown in the following tables:

	Under 16.		16 to 20.		Over 20.		Total.	
	Suspects.	Number.	Suspects.	Number.	Suspects.	Number.	Suspects.	Number.
<i>Mill A.</i>								
Males.....	13	17	4	4	20	33	37	54
Females.....	6	11	5	11	6	21	17	43
Total.....	19	28	9	15	26	54	54	97
<i>Mill B.</i>								
Males.....	12	12	8	8	14	16	34	36
Females.....	10	15	6	12	9	17	25	44
Total.....	22	27	14	20	23	33	59	80
<i>Mill C.</i>								
Males.....	5	6	5	6	12	19	22	31
Females.....	5	7	7	9	10	19	22	35
Total.....	10	13	12	15	22	38	44	66
<i>Summary of 3 mills.</i>								
Males.....	30	35	17	17	46	68	93	120
Females.....	21	33	18	32	25	57	64	122
Total.....	51	68	35	49	71	125	157	242

#### PERCENTAGES OF SUSPECTS.

	Under 16.	16 to 20.	Over 20.	Total.
Males.....	87.5	100.0	67.6	77.5
Females.....	63.6	56.2	43.8	52.4
Total.....	75.0	71.4	56.8	64.8

The statistics are about what was anticipated, in view of the fact that these mills draw their labor chiefly from the sand areas. In order to avoid misinterpretation it may be well to refer to the fact that the hookworm infection found among mill operatives has its chief origin in the soil pollution which exists on the farms from which these people come. Some soil pollution exists in mill villages and hence some hookworm infection originates there, but this is slight when compared with the soil pollution and hookworm dissemination on the farms.

The percentages found in Rockingham are of significance from various points of view.

First. Sixty-four and eight-tenths per cent of these people are living under a more or less severe medical handicap. This is most severe for (75 per cent) persons under 16, next for (71.4 per cent) persons 16 to 20, least severe for (56.8 per cent) persons over 20 years old.

Second. This handicap involves not only the infected persons, but the next generation also; for 43.8 per cent to 56.2 per cent of these females of child-bearing and babe-nursing age are suffering from a disease which inhibits proper nourishment for their babes, both born and unborn.

Third. This condition involves an economic loss to the mill hands (who are working on piecework), for they are unable to put forward their best potential efforts.

Fourth. It also involves an economic loss to the mills, for a greater amount of "waste" will occur because of the decreased efficiency of the mill hands; a greater amount of absenteeism will occur, and this, combined with decreased efficiency, makes it necessary to have an undue amount of capital tied up in the extra number of mill houses thus required in order to have on hand a sufficient number of employees to run the machinery.

The sanitary conditions of the mill villages in question are about the average as found in the southern mill settlements, namely, far from perfect, but infinitely superior to those of the average tenant farms in the same State.

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## THE "READER" AS A POSSIBLE PUBLIC HEALTH AGENCY IN CIGAR FACTORIES.

By CH. WARDELL STILES, Ph. D., Chief, Division of Zoology, Hygienic Laboratory, Public Health, and Marine-Hospital Service.

In a recent visit to Tampa the opportunity was utilized to visit several cigar factories and to observe the sanitary conditions under which some of the cigar makers were living.

As the people in question belonged to nationalities (Cuban, Spanish, Italian) with whom I am not very familiar, no trustworthy conclusions (in the absence of microscopic examination) could be drawn in regard to the percentage of hookworm infection among them, but from an inspection of the surroundings under which they are living it is clear that the privy facilities of those not provided with a sewer are favorable to a spread of this disease. The importance of this fact is the more evident when it is recalled that Italians harbor the Old World hookworm (*Ancylostoma duodenale*). Accordingly, unless the sanitary conditions on the outskirts of Tampa are improved, the

possibility is not excluded that Florida may have two forms of hook-worm disease (instead of one) to eradicate.

An exceedingly interesting feature of the cigar factories is the "reader." The cigar makers are very quiet in the workrooms, and from a favorable position a man termed the "reader" reads aloud to them from the newspapers or from some novel while they are at work.

To a person on the outlook for public-health agencies, the thought immediately occurs that in this "reader" may be found a person who can be of considerable service for good. If he were supplied with printed public-health material, written in popular style, he could, by reading this to the cigar makers, disseminate a great deal of useful information to a large number of people who, themselves, do comparatively little reading.

While the homes of some of these factory hands are excellent, the homes and surroundings of some others could be greatly improved.

One point which might be emphasized in pamphlets of the kind suggested, is the desirability of using some method other than spittle in fastening the bands on the cigars, and a suppression of the habit of biting and mouthing the end of the cigar. Despite the assurances that these filthy habits are no longer permitted, I saw them in the factories which I visited.

This custom of having a "reader," it is understood, is of Cuban or Spanish origin. It is an excellent one, which might well be introduced into any factory using hand labor and engaged in purely mechanical work

# UNITED STATES.

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

## PLAGUE-PREVENTION WORK.

### Infected Ground Squirrels.

An infected ground squirrel was found March 4, 1910, in Oakland township.

Passed Assistant Surgeon McCoy reports:

#### SAN FRANCISCO, CAL.

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

Week ended March 5, 1910. Premises inspected, 1,340. Houses destroyed, 8. Buildings condemned, 6. Nuisances abated, 302. Poisons placed, 7,810. Rats trapped, 2,045. Rats found dead, 24. Rats identified, 2,069, as follows: *Mus norvegicus*, 1,502; *Mus rattus*, 140; *Mus musculus*, 338; *Mus alexandrinus*, 89. Rats examined bacteriologically, 1,731. No plague-infected rats found.

#### BERKELEY, CAL.

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

Week ended February 26, 1910. One rat was trapped and examined bacteriologically. No plague infection found.

#### OAKLAND, CAL.

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

Week ended March 5, 1910. Rats found dead, 26. Rats trapped 500. Gophers trapped, 1. Rats identified, 526, as follows: *Mus norvegicus*, 458; *Mus rattus*, 3; *Mus musculus*, 65. Examined bacteriologically, 452 rats and 1 gopher. No plague infection found.

#### ALAMEDA COUNTY, CAL. (Exclusive of Oakland).

Last case of human plague sickened 2 miles southwest of Sunol, September 26, 1909. Last plague-infected rodent was found March 4, 1910. To the present time 65 ground squirrels and 1 wood rat have been found infected.

Week ended February 26. Ranches inspected, 5. Ground squirrels shot, 17. Acres covered with poison, 65. Ground squirrels examined bacteriologically, 17. No plague-infected squirrels found.

Week ended March 5. Ranches inspected, 7. Ground squirrels shot, 117. Acres covered with poison, 121. Ground squirrels examined bacteriologically, 117. One plague-infected squirrel found.

The plague-infected squirrel was found March 4, in Oakland township.

**FRESNO COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 32. Ground squirrels shot, 603. Ground squirrels examined bacteriologically, 599. No plague-infected squirrels found.

**MADERA COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 2. Ground squirrels shot, 100. Ground squirrels examined bacteriologically, 100. No plague-infected squirrels found.

**MERCED COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 6. Ground squirrels shot, 284. Rabbits shot, 23. Examined bacteriologically, 281 squirrels and 21 rabbits. No plague infection found.

**MONTEREY COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 31. Ground squirrels shot, 445; found dead, 2. Ground squirrels examined bacteriologically, 442. No plague-infected squirrels found.

**SAN LUIS OBISPO COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 21. Ground squirrels shot, 194. Ground squirrels examined bacteriologically, 194. No plague-infected squirrels found.

**SANTA BARBARA COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 32. Ground squirrels shot, 261. Ground squirrels examined bacteriologically, 258. No plague-infected squirrels found.

**SANTA CLARA COUNTY, CAL.**

There is no record of human plague in Santa Clara County. The last plague-infected rodent was found November 3, 1909. Total number of ground squirrels found infected to date, 9.

Week ended March 5. Ranches inspected, 12. Ground squirrels shot, 160. Rats trapped, 4. Mice trapped, 4. Examined bacteriologically, 160 ground squirrels, 4 rats, and 4 mice. No plague infection found.

**TULARE COUNTY, CAL.**

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

Week ended March 5. Ranches inspected, 116. Ground squirrels shot, 511; found dead, 2. Rabbits shot, 2. Weasels shot, 2. Examined bacteriologically, 512 squirrels, 2 rabbits, and 2 weasels. No plague infection found.



## VENTURA COUNTY, CAL.

There is no record of human or rodent plague in Ventura County. Week ended March 5. Ranches inspected, 8. Ground squirrels shot, 134. Ground squirrels examined bacteriologically, 132. No plague-infected squirrels found.

## SEATTLE, WASH.

Assistant Surgeon Chapin reports, March 4, through Passed Assistant Surgeon Glover:

During the month of February, 1910, 3,637 rats were received at the laboratory and 2,928 were necropsied. Of the necropsied rats 1,163 were females, of which 406 were pregnant.

A rat picked up on February 8, 1910, by a city trapper was verified and reported as plague infected on February 19.

This rat was found in the back yard of a building, the ground floor of which was occupied by two restaurants, a fruit store, saloon, and drug store. The yard also adjoins a building on the other street occupied by a restaurant. These buildings are of wooden construction resting on piles. The yard was occupied by a wooden platform and woodpile, etc., and the ground was burrowed by rats. The platform and woodpile were moved and the ground covered with gravel by order of the municipal department of health and the floors of the buildings were also ordered concreted. Special attention has been given to the sanitary conditions of that and surrounding blocks.

Since the finding of this infected rat an area of 9 blocks has been trapped and the territory for 2 blocks farther on each side has been poisoned. From the infected premises there have been received 10 rats, from the block 19 rats, and from the district 126 rats, none of which have shown any evidence of plague infection.

## PHYSICAL CONDITION OF NATIVES OF UNALASKA, ALASKA.

Surgeon Stimpson, on the revenue cutter *Manning*, reports, October 12, 1909:

There are 360 natives at Unalaska, 93 on St. George Island, and 198 on St. Paul Island. The physicians on the island state that fully 60 per cent of the natives under their care are suffering from tuberculosis and at least that number at Unalaska are afflicted with the disease. Tuberculosis exists in all forms, and there are few children who do not show swollen glands or some other evidence of the disease. Many of them improved during the summer of 1909 under treatment. They have gained in weight, their skins are clearer, and their sores have healed. An effort is being made to instruct the natives in the precautions to be taken to avoid contracting tuberculosis, such as forbidding indiscriminate spitting, requiring the burning of sputum, and sleeping with the windows open. There is no wood on the islands and coal is expensive, so that there is a tendency to keep the houses closed to save fuel.

The natives suffer from decayed teeth. If a dentist could visit the islands in the summer much pain could be prevented and many teeth saved.

There is a shortage of water at St. Paul village. The supply is now obtained by hauling water in wagons and wheelbarrows from wells situated at some distance from the village. The natives could keep their houses cleaner if they had an abundance of water and the danger of the spread of infection would be greatly lessened.

## SMALLPOX IN THE UNITED STATES.

Reports Received During Week Ended March 25, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Alabama:</b>				
Mobile.....	Feb. 27-Mar. 12....	1		
Montgomery.....	Mar. 6-12.....	26		
<b>Arkansas:</b>				
Little Rock.....	Mar. 6-12.....	10		
<b>California:</b>				
San Francisco.....	Jan. 27-Mar. 5....	1		
<b>Florida:</b>				
Duval County.....	Mar. 6-12.....	3		
Volusia County.....	Mar. 6-12.....	1		
<b>Illinois:</b>				
Cass County.....	Feb. 1-28.....	1		
Cook County— Chicago.....	Feb. 1-28.....	1		Present.
Dupage County.....	Feb. 1-28.....			
Edwards County.....	Feb. 1-28.....	10		
Effingham County.....	Feb. 1-28.....	1		
Fayette County.....	Feb. 1-28.....	1		
Gallatin County.....	Feb. 1-28.....	2		
Iroquois County.....	Feb. 1-28.....	1		
Jackson County.....	Feb. 1-28.....	1		
Jasper County.....	Feb. 1-28.....			Do.
Livingston County.....	Feb. 1-28.....	3		
Madison County.....	Feb. 1-28.....	1		
Marion County.....	Feb. 1-28.....	2		
Montgomery County.....	Feb. 1-28.....	3		
Pike County.....	Feb. 1-28.....	2		
Shelby County.....	Feb. 1-28.....	1		
Williamson County.....	Feb. 1-28.....	2		
<b>Louisiana:</b>				
New Orleans.....	Mar. 6-12.....	10		
<b>Mississippi:</b>				
Gulfport.....	Mar. 3-9.....	1		
<b>Missouri:</b>				
St. Louis.....	Mar. 6-12.....	1		
<b>Montana:</b>				
Beaverhead County.....	Feb. 1-28.....	3		
Broadwater County.....	Feb. 1-28.....	2		
Custer County.....	Feb. 1-28.....	1		
Deerlodge County.....	Feb. 1-28.....	1		
Gallatin County.....	Feb. 1-28.....	1		
Lewis and Clark County.....	Feb. 1-28.....	25		
Madison County.....	Feb. 1-28.....	1		
Meagher County.....	Feb. 1-28.....	2		
Missoula County.....	Feb. 1-28.....	3		
Powell County.....	Feb. 1-28.....	1		
Ravalli County.....	Feb. 1-28.....	2		
Sanders County.....	Feb. 1-28.....	1		
Silver Bow County.....	Feb. 1-28.....	55		
<b>Nebraska:</b>				
Lincoln.....	Feb. 1-28.....	1		
<b>New Hampshire, general</b> .....	Feb. 1-28.....	3		
<b>North Carolina:</b>				
Alamance County.....	Feb. 1-28.....	24		
Beaufort County.....	Feb. 1-28.....	4		
Burke County.....	Feb. 1-28.....			A few.
Cabarrus County.....	Feb. 1-28.....		2	
Caldwell County.....	Feb. 1-28.....	22		
Carteret County.....	Feb. 1-28.....	2		
Catawba County.....	Feb. 1-28.....	27		
Chowan County.....	Feb. 1-28.....	3		
Cleveland County.....	Feb. 1-28.....	3		
Craven County.....	Feb. 1-28.....	4		
Currituck County.....	Feb. 1-28.....	1		
Davidson County.....	Feb. 1-28.....	20		
Davie County.....	Feb. 1-28.....	11		
Duplin County.....	Feb. 1-28.....	20		
Durham County.....	Feb. 1-28.....			Several.
Edgecombe County.....	Feb. 1-28.....	1		
Forsyth County.....	Feb. 1-28.....	12		
Franklin County.....	Feb. 1-28.....	150		
Gaston County.....	Feb. 1-28.....	22		
Greene County.....	Feb. 1-28.....	10		
Gulford County.....	Feb. 1-28.....	41		
Iredell County.....	Feb. 1-28.....	1		
Johnston County.....	Feb. 1-28.....			Do.
Lee County.....	Feb. 1-28.....	3		
Lenoir County.....	Feb. 1-28.....	6		
Lincoln County.....	Feb. 1-28.....	7		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended March 25, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.	
North Carolina—Continued.					
McDowell County.....	Feb. 1-28.....	8		Many.	
Mecklenburg County.....	Feb. 1-28.....	29			
Mitchell County.....	Feb. 1-28.....				
Nash County.....	Feb. 1-28.....	35			
New Hanover County.....	Feb. 1-28.....	1			
Onslow County.....	Feb. 1-28.....	2			
Orange County.....	Feb. 1-28.....	2			
Pamlico County.....	Feb. 1-28.....	40			Or more.
Pitt County.....	Feb. 1-28.....	8			
Richmond County.....	Feb. 1-28.....	1			
Robeson County.....	Feb. 1-28.....	12			
Rockingham County.....	Feb. 1-28.....	24			
Rowan County.....	Feb. 1-28.....	14			
Rutherford County.....	Feb. 1-28.....	23			
Sampson County.....	Feb. 1-28.....	2			
Stokes County.....	Feb. 1-28.....	20			
Surry County.....	Feb. 1-28.....	7			
Union County.....	Feb. 1-28.....	4			
Wake County.....	Feb. 1-28.....	28			
Washington County.....	Feb. 1-28.....	2			
Wayne County.....	Feb. 1-28.....	20			
Wilkes County.....	Feb. 1-28.....	30			
Wilson County.....	Feb. 1-28.....	25			
Yadkin County.....	Feb. 1-28.....	4			
Yancey County.....	Feb. 1-28.....	21			
Pennsylvania, general.....	Feb. 1-28.....	41			
Tennessee:					
Chattanooga.....	Mar. 6-12.....	6			
Knoxville.....	Jan. 27-Mar. 5.....	5			
Memphis.....	Mar. 6-12.....	12			
Texas:					
Taylor.....	Feb. 27-Mar. 5.....	1			
Willis Point.....	Feb. 1-28.....	3	1		
Virginia:					
Lynchburg.....	Mar. 6-12.....	3			

## Smallpox in Norfolk, Va., and Vicinity During the Year 1909.

Surgeon Wertenbaker reports, March 9:

	Cases.	Deaths.
January.....	6	
February.....	7	
March.....	2	
April.....	26	6
May.....	24	10
June.....	16	1
July.....	1	
November.....	2	
Total.....	84	17

Distributed as follows:

	Cases.	Deaths.
Norfolk city.....	57	8
Norfolk County.....	16	5
Portsmouth.....	5	3
United States naval hospital.....	3	1
Public Health and Marine-Hospital Service.....	3	
Total.....	84	17

The cases developing in January, February, and March, 1909, were all of the usual mild type of smallpox that has prevailed in the United States during the past 12 years, and during those months there were no deaths. In the latter part of March a child came from Frederick, Md., to St. Mary's Orphan Asylum school and on April 12, 1909, developed a case of smallpox from which it recovered. This case was nursed by a sister of the orphan asylum staff who contracted the disease from this case. The sister died from the disease at the Craney Island Hospital. About the early part of April, 1909, 3 cases of smallpox were received at the United States naval hospital, Portsmouth, the patients being members of the Atlantic Fleet that had recently returned to the United States. The type of the disease from which these patients suffered was much more severe than the usual mild type that had prevailed in this section for some years. It is also noted that in April and May the type of the disease in many of the cases was more severe than usual. It will be noted that there were 26 cases and 6 deaths in April and 24 cases and 10 deaths in May, while in June there were 16 cases and only 1 death. In July, 1 case, no deaths. There were no other cases until November, when there were 2.

**Reports Received from January 1 to March 18, 1910.**

[For reports received from June 25, 1909, to December 31, 1909, see PUBLIC HEALTH REPORTS for December 31, 1909. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Alabama:</b>				
Birmingham.....	Jan. 9-Feb. 12.....	19		
Mobile.....	Jan. 16-Mar. 5.....	7		
Montgomery.....	Dec. 19-Mar. 5.....	374		
Total for State.....		400		
<b>Arkansas:</b>				
Argenta.....	Jan. 22-Feb. 12....	11		
Little Rock.....	Jan. 1-Mar. 10....	82		
Lonoke.....	Jan. 6-20.....	2		
Total for State.....		95		
<b>California:</b>				
Berkeley.....	Dec. 26-Jan. 1....	1		
Los Angeles.....	Jan. 12-Feb. 12....	4		
Oakland.....	Dec. 26-Jan. 1....	1		
Sacramento County.....	Jan. 1-31.....		1	
Sacramento.....	Dec. 12-Jan. 31....	50		
San Francisco.....	Dec. 19-Feb. 26....	17		
Total for State.....		73	1	
<b>Colorado:</b>				
Bent County.....	Feb. 1-28.....	10		
Boulder County— Boulder.....	Dec. 19-25.....	1		
Chaffee County.....	Jan. 1-31.....	6		
Conejos County.....	Jan. 1-Feb. 28....	29		
Denver County.....	Jan. 1-Feb. 28....	18		
Fremont County.....	Feb. 1-28.....	14		
Garfield County.....	Jan. 1-31.....	1		
Huerfano County.....	Jan. 1-Feb. 28....	12		
Jefferson County.....	Feb. 1-28.....	1		
La Plata County.....	Feb. 1-28.....	4		
Larimer County.....	Jan. 1-31.....	4		
Las Animas County.....	Jan. 1-Feb. 28....	14		
Logan County.....	Jan. 1-Feb. 28....	17		
Mesa County.....	Jan. 1-31.....	4		
Fruita district.....	Dec. 26-Jan. 1....	3		
Montrose County.....	Jan. 1-Feb. 28....	19		
Morgan County.....	Jan. 1-Feb. 28....	16		
Otero County.....	Jan. 1-31.....	1		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Colorado—Continued.</b>				
Ouray County .....	Jan. 1-Feb. 28.....	13		
Pitkin County .....	Feb. 1-28.....	5		
Pueblo County .....	Feb. 1-28.....	2		
Rio Grande County .....	Feb. 1-28.....	1		
San Miguel County .....	Jan. 1-31.....	1		
Summit County .....	Jan. 1-31.....	1		
Weld County .....	Jan. 1-Feb. 28.....	21		
Total for State .....		218		
<b>District of Columbia</b>				
District of Columbia .....	Dec. 19-Mar. 5.....	21		
Total for District .....		21		
<b>Florida:</b>				
Alachua County .....	Jan. 1-Feb. 26.....	3		
Columbia County .....	Feb. 13-19.....	2		
Duval County .....	Jan. 1-31.....	1		
Jacksonville .....	Jan. 30-Feb. 5.....	1		
Escambia County .....	Feb. 6-Mar. 5.....	31		
Pensacola .....	Feb. 20-26.....	1		
Gadsden County .....	Jan. 1-31.....	2		
Hillsboro County .....	Jan. 1-31.....	1		
Leon County .....	Feb. 20-26.....	1		
Liberty County .....	Jan. 1-31.....	1		
Walton County .....	Jan. 1-31.....	3		
Total for State .....		47		
<b>Georgia:</b>				
Macon .....	Jan. 1-31.....	51		
Total for State .....		51		
<b>Illinois:</b>				
Alexander County .....	Jan. 1-31.....	6		
Coles County .....	Jan. 1-31.....	4		
Cook County—				
Chicago .....	Dec. 19-25.....	2		
Edwards County .....	Jan. 1-31.....	19		
Effingham County .....	Jan. 1-31.....	81		
Fayette County .....	Jan. 1-31.....	1		
Franklin County .....	Jan. 1-31.....	6		
Jackson County .....	Jan. 1-31.....	2		
Kane County .....	Jan. 1-31.....	1		
Macon County .....	Jan. 1-31.....	1		
McLean County .....	Jan. 1-31.....	1		
Montgomery County .....	Jan. 1-31.....	7		
Pulaski County .....	Jan. 1-31.....	2		
Sangamon County .....	Jan. 1-31.....	4		
Shelby County .....	Jan. 1-31.....	9		Present.
Wabash County .....	Jan. 1-31.....			
Wayne County .....	Jan. 1-31.....	5		
Williamson County .....	Jan. 1-31.....	21		
Total for State .....		172		
<b>Indiana:</b>				
Adams County .....	Oct. 1-31.....	4		
Allen County .....	Oct. 1-Jan. 31.....	180	1	
Carroll County .....	Nov. 1-Jan. 21.....	2		
Clark County .....	Dec. 1-Jan. 31.....	20		
Clinton County .....	Dec. 1-Jan. 31.....	28		
Crawford County .....	Jan. 1-31.....	1		
Daviess County .....	Nov. 1-Jan. 31.....	28		
Decatur County .....	Jan. 1-31.....	3		
Dekalb County .....	Dec. 1-Jan. 31.....	3		
Delaware County .....	Oct. 1-Nov. 30.....	20		
Fountain County .....	Jan. 1-31.....	1		
Fulton County .....	Jan. 1-31.....	4		
Grant County .....	Oct. 1-Jan. 31.....	35		
Greene County .....	Oct. 1-31.....	6		
Hamilton County .....	Jan. 1-31.....	4		
Henry County .....	Jan. 1-31.....	2		
Huntington County .....	Jan. 1-31.....	1		
Jefferson County .....	Nov. 1-30.....	1		
Jennings County .....	Jan. 1-31.....	6		
Knox County .....	Oct. 1-31.....	7		
Laporte County .....	Dec. 1-31.....	1		
Madison County .....	Jan. 1-31.....	3		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Indiana—Continued.</b>				
Marion County.....	Dec. 1-Jan. 31.....	3		
Marshall County.....	Oct. 1-Jan. 31.....	80		
Martin County.....	Jan. 1-31.....	1		
Miami County.....	Jan. 1-31.....	3		
Montgomery County.....	Jan. 1-31.....	2		
Noble County.....	Nov. 1-Jan. 31.....	2		
Randolph County.....	Oct. 1-31.....	1		
St. Joseph County.....	Oct. 1-Jan. 31.....	21		
Shelby County.....	Dec. 1-Jan. 31.....	33		
Steuben County.....	Nov. 1-30.....	3		
Tippecanoe County.....	Dec. 1-Jan. 31.....	3		
Vanderburg County.....	Oct. 1-31.....	8		
Warren County.....	Nov. 1-30.....	1		
Washington County.....	Jan. 1-31.....	1		
Wayne County.....	Nov. 1-Jan. 31.....	1		
Total for State.....		523	1	
<b>Iowa, general.</b>				
Buchanan County.....	Jan. 1-31.....	19		
Buena Vista County.....	Feb. 1-28.....	8		
Calhoun County.....	Jan. 1-31.....	1		
Cass County.....	Jan. 1-31.....	10		
Cedar County.....	Jan. 1-31.....	1		
Cherokee County.....	Jan. 1-31.....	3		
Clayton County.....	Jan. 1-31.....	24		
Dallas County.....	Jan. 1-31.....	1		
Delaware County.....	Feb. 1-28.....	4		
Dubuque County.....	Jan. 1-Feb. 28.....	40		
Floyd County.....	Feb. 1-28.....	2		
Grundy County.....	Feb. 1-Feb. 28.....	4		
Jones County.....	Jan. 1-Feb. 28.....	3		
Linn County.....	Jan. 1-31.....	7		
Cedar Rapids.....	Dec. 1-31.....	7		
Madison County.....	Jan. 1-31.....	1		
Marion County.....	Jan. 1-31.....	2		
Marshall County.....	Jan. 1-Feb. 28.....	5		
Mitchell County.....	Feb. 1-28.....	1		
Monroe County.....	Jan. 1-Feb. 28.....	3		
Polk County.....	Jan. 1-Feb. 28.....	41		
Pottawattamie County.....	Jan. 1-31.....	1		
Poweshiek County.....	Jan. 1-31.....	6		
Scott County.....	Feb. 1-28.....	2		
Sioux County.....	Jan. 1-Feb. 28.....	17		
Story County.....	Feb. 1-28.....	17		
Winnebago County.....	Feb. 1-28.....	5		
Woodbury County.....	Feb. 1-28.....	1		
Sioux City.....	Dec. 1-31.....	2		
Wright County.....	Feb. 1-28.....	1		
Total for State.....		240		
<b>Kansas:</b>				
Allen County.....	Jan. 1-31.....	1		
Barton County.....	Jan. 1-31.....	1		
Bourbon County.....	Jan. 1-31.....	3		
Cherokee County.....	Jan. 1-31.....	8		
Clay County.....	Nov. 1-30.....	1		
Cloud County.....	Nov. 1-30.....	1		
Cowley County.....	Nov. 1-30.....	3		
Crawford County.....	Dec. 1-Jan. 31.....	4		
Pittsburg.....	Jan. 1-31.....	1		
Decatur County.....	Nov. 1-Jan. 31.....	21		
Dickinson County.....	Jan. 1-31.....	4		
Douglas County.....	Dec. 1-31.....	1		
Ellsworth County.....	Jan. 1-31.....	14		
Finney County.....	Jan. 1-31.....	1		
Ford County.....	Jan. 1-31.....	6		
Gove County.....	Dec. 1-31.....	3		
Graham County.....	Nov. 1-Jan. 31.....	40		
Gray County.....	Jan. 1-31.....	18		
Hamilton County.....	Jan. 1-31.....	2		
Jackson County.....	Dec. 1-31.....	5		
Jewell County.....	Nov. 1-Jan. 31.....	44		
Kearny County.....	Jan. 1-31.....	1		
Kiowa County.....	Jan. 1-31.....	2		
Labette County.....	Jan. 1-31.....	5		
Lane County.....	Nov. 1-30.....	1		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Kansas—Continued.</b>				
Leavenworth County	Dec. 1-31	1		
Logan County	Jan. 1-31	2		
Lyon County	Dec. 1-31	1		
McPherson County	Dec. 1-Jan. 31	3		
Marshall County	Dec. 1-31	20		
Miami County	Jan. 1-31	3		
Montgomery County	Nov. 1-Jan. 31	109		
Coffeyville	Jan. 1-31	11		
Nemaha County	Jan. 1-31	1		
Neosha County	Jan. 1-31	1		
Ness County	Dec. 1-Jan. 31	8		
Norton County	Nov. 1-Jan. 31	38		
Osage County	Jan. 1-31	11		
Phillips County	Jan. 1-31	3		
Pottawatomie County	Nov. 1-Dec. 31	6		
Rawlins County	Jan. 1-31	5		
Reno County	Nov. 1-Jan. 31	123		
Rice County	Jan. 1-31	1		
Riley County	Jan. 1-31	17		
Rush County	Jan. 1-31	5		
Russell County	Jan. 1-31	1		
Saline County	Dec. 1-31	1		
Scott County	Nov. 1-Dec. 31	11		
Sedgewick County	Dec. 1-31	2	1	
Wichita	Jan. 1-31	1		
Shawnee County	Dec. 1-31	12		
Topeka	Nov. 1-Jan. 31	9		
Sheridan County	Nov. 1-Jan. 31	8		
Smith County	Jan. 1-31	2		
Sumner County	Nov. 1-Jan. 31	11		
Thomas County	Jan. 1-31	1		
Wabaunsee County	Nov. 1-30	3		
Wilson County	Nov. 1-Jan. 31	3		
Woodson County	Jan. 1-31	25		
Wyandotte County	Dec. 1-Jan. 31	91		
Kansas City	Jan. 1-31	39		
Total for State		780	1	
<b>Kentucky:</b>				
Hartford	Dec. 12-18	2		
Lexington	Dec. 12-Jan. 29	4		
Paducah	Jan. 5-11	1		
Total for State		7		
<b>Louisiana:</b>				
Caddo Parish—				
Shreveport	Jan. 23-Feb. 28	5	2	
Iberia Parish	Feb. 1-28	1		
Natchitoches Parish	Feb. 1-28	6		
Orleans Parish—				
New Orleans	Dec. 26-Mar. 5	66		
Morehouse Parish	Feb. 1-28	2		
St. John Parish	Feb. 1-28	6		
Tensas Parish	Feb. 1-28	13		
Total for State		99	2	
<b>Maryland:</b>				
Baltimore	Dec. 26-Jan. 1	1		
Dorchester County	Dec. 3-31	4		
Garrett County	Jan. 8-31	1		
Total for State		6		
<b>Massachusetts:</b>				
Bristol County	Feb. 1-28	6		
Essex County	Jan. 1-31	1		
Middlesex County	Jan. 1-Feb. 28	76		
Lynn County	Jan. 1-31	4		
Plymouth County	Feb. 1-28	4		
Suffolk County	Jan. 1-Feb. 28	3		
Worcester County	Jan. 1-Feb. 28	22		
Total for State		116		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Michigan:</b>				
Alcona County	Nov. 1-Jan. 31	26		
Antrim County	Nov. 1-Feb. 28	33		
Arenac County	Nov. 1-Feb. 28	136		
Bay County	Nov. 1-Feb. 28	83		
Berrien County	Jan. 1-Feb. 28	21		
Calhoun County	Feb. 1-28	1		
Cass County	Feb. 1-28	1		
Clare County	Feb. 1-28	1		
Delta County	Dec. 1-31	1		
Eaton County	Feb. 1-28	1		
Emmet County	Nov. 1-Feb. 28	4		
Genesee County	Nov. 1-Feb. 28	264		
Gladwin County	Nov. 1-Jan. 31	8		
Gratiot County	Nov. 1-30	1		
Houghton County	Nov. 1-Feb. 28	54		
Huron County	Feb. 1-28	6		
Ingham County	Dec. 1-Feb. 28	11		
Ionia County	Nov. 1-Feb. 28	40		
Iosco County	Dec. 1-Feb. 28	3	1	
Kent County	Dec. 1-Feb. 28	5		
Keweenaw County	Jan. 1-Feb. 28	3		
Lapeer County	Nov. 1-Feb. 28	7		
Livingston County	Nov. 1-Jan. 31	18		
Manistee County	Feb. 1-28	8		
Marquette County	Nov. 1-30	1		
Mason County	Nov. 1-30	1		
Mecosta County	Jan. 1-Feb. 28	11		
Midland County	Dec. 1-Feb. 28	11		
Missaukee County	Jan. 1-Feb. 28	33		
Montcalm County	Nov. 1-Feb. 28	5		
Montmorency County	Dec. 1-Feb. 28	36		
Oakland County	Jan. 1-31	1		
Oceana County	Jan. 1-31	1		
Ogemaw County	Jan. 1-Feb. 28	6		
Ontonagon County	Nov. 1-Feb. 28	12		
Osceola County	Dec. 1-Feb. 28	14		
Oscoda County	Jan. 1-Feb. 28	7		
Otsego County	Dec. 1-31	1		
Presque Isle County	Dec. 1-Jan. 31	2		
Roscommon County	Jan. 1-31	6		
Saginaw County	Dec. 1-Feb. 28	53		
St. Clair County	Jan. 1-Feb. 28	16		
Sanilac County	Nov. 1-Feb. 28	3		
Shiawassee County	Dec. 1-Feb. 28	8		
Tuscola County	Feb. 1-28	3		
Wayne County	Dec. 1-Feb. 28	8		
Total for State		975	1	
<b>Minnesota:</b>				
Anoka County	Feb. 1-28	5		
Becker County	Jan. 4-10	3		
Beltrami County	Dec. 21-Feb. 14	3		
Benton County	Dec. 14-20	7		
Blue Earth County	Dec. 21-27	1		
Carver County	Dec. 7-Jan. 3	4		
Chippewa County	Jan. 11-17	1		
Chisago County	Feb. 15-21	2		
Cook County	Jan. 25-31	2		
Dakota County	Feb. 1-28	4		
Dodge County	Jan. 25-31	1		
Faribault County	Feb. 8-14	1		
Freeborn County	Jan. 18-Feb. 28	18		
Goodhue County	Dec. 28-Jan. 31	1		
Hennepin County	Dec. 28-Feb. 28	38		
Houston County	Feb. 8-14	4		
Isanti County	Feb. 21-28	1		
Itasca County	Dec. 14-Feb. 28	2		
Kandiyohi County	Dec. 7-13	1		
Koochiching County	Feb. 1-7	1		
Lake County	Jan. 18-Feb. 28	8		
Mower County	Dec. 28-Feb. 28	26		
Nicollet County	Feb. 15-21	1		
Nobles County	Jan. 18-25	1		
Norman County	Jan. 18-25	2		
Olmsted County	Feb. 8-14	1		
Ottertail County	Dec. 21-Feb. 28	24		
Pine County	Feb. 22-28	1		
Polk County	Dec. 7-13	1		



## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Minnesota—Continued.</b>				
Ramsey County	Jan. 11-Feb. 28	6		
Red Lake County	Dec. 7-Feb. 14	4		
Renville County	Dec. 7-13	1		
Rice County	Jan. 11-17	1		
Rock County	Dec. 7-Feb. 21	22		
Roseau County	Dec. 7-Feb. 28	32		
St. Louis County	Dec. 7-Feb. 28	21		
Sherburne County	Jan. 11-17	1		
Sibley County	Dec. 28-Feb. 28	9		
Stearns County	Feb. 1-21	4		
Swift County	Feb. 8-21	3		
Todd County	Dec. 28-Jan. 31	1		
Wabasha County	Dec. 13-Feb. 21	29		
Wadena County	Feb. 1-21	15		
Wilkin County	Feb. 15-21	1		
Watonwan County	Dec. 28-Jan. 31	1		
Wright County	Dec. 7-Feb. 28	41		
Yellow Medicine County	Feb. 22-28	9		
Total for State		366		
<b>Mississippi:</b>				
Biloxi	Jan. 2-Feb. 3	5		
Gulfport	Jan. 26-Feb. 3	8		
Holly Springs	Jan. 2-29	6		
Marshall County	Jan. 30-Mar. 5	4	1	
Natchez	Dec. 26-Feb. 26	90	2	
Clalborne County— Port Gibson	Dec. 19-25	1		
Woodville	Feb. 27-Mar. 5	25	1	
Total for State		139	4	
<b>Missouri:</b>				
Andrew County	Jan. 23-Feb. 26	5		
Joplin	Jan. 16-22	1		
Kansas City	Jan. 2-Feb. 19	16	1	
St. Joseph	Jan. 2-Feb. 5	7		
St. Louis	Dec. 26-Mar. 5	22		
Springfield	Jan. 1-31	4		
Total for State		55	1	
<b>Montana:</b>				
Beaverhead County	Dec. 1-Jan. 31	2		
Carbon County	Jan. 1-31	1		
Chouteau County	Jan. 1-31	6		
Dawson County	Nov. 1-Jan. 31	6		
Flathead County	Oct. 1-Nov. 30	6		
Gallatin County	Dec. 1-Jan. 31	2		
Jefferson County	Nov. 1-30	1		
Lewis and Clark County	Oct. 1-Jan. 31	6		
Madison County	Jan. 1-31	1		
Missoula County	Oct. 1-Jan. 31	70		
Park County	Nov. 1-Jan. 31	14		
Powell County	Nov. 1-30	1		
Ravalli County	Nov. 1-Dec. 31	3		
Sanders County	Jan. 1-31	3		
Silverbow County	Oct. 1-Jan. 31	135		
Butte	Dec. 19-31	14		
Yellowstone County	Jan. 1-31	2		
Total for State		273		
<b>Nebraska:</b>				
Lincoln	Jan. 1-31	4		
South Omaha	Dec. 5-11	3		
Total for State		7		
<b>New Hampshire (entire State)</b>	Jan. 1-Feb. 16	4		
<b>New Jersey:</b>				
Bergen County	Feb. 1-28	1		
Passaic County	Jan. 1-31	1		
Trenton	Jan. 30-Feb. 5	1		
Total for State		3		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
New York (entire State).....	Sept. 1–Nov. 30 ...	33	1	
Cattaraugus County.....	Dec. 1–31.....	1		
Cayuga County.....	Dec. 1–31.....	1		
Erie County.....	Dec. 1–31.....	17		
Jefferson County.....	Dec. 1–31.....	1		
Lewis County.....	Dec. 1–Jan. 31.....	2		
Niagara County.....	Dec. 1–Jan. 31.....	40		
Oneida County.....	Dec. 1–Jan. 31.....	2		
St. Lawrence County.....	Jan. 1–31.....	9		
Ulster County.....	Jan. 1–31.....	2		
Westchester County.....	Jan. 1–31.....	1		
Total for State.....		109	1	
North Carolina:				
Alamance County.....	Jan. 1–31.....	62		
Beaufort County.....	Jan. 1–31.....	7		
Bertie County.....	Jan. 1–31.....	6		
Bladen County.....	Nov. 1–Jan. 31.....	21		
Burke County.....	Jan. 1–31.....	20		
Cabarrus County.....	Jan. 1–31.....	13		
Caldwell County.....	Jan. 1–31.....	9		
Carteret County.....	Jan. 1–31.....	1		
Catawba County.....	Oct. 1–Jan. 31.....	35		
Chatham County.....	Jan. 1–31.....	2		
Chowan County.....	Oct. 1–Jan. 31.....	14		
Cleveland County.....	Oct. 1–Jan. 31.....	1		
Craven County.....	Nov. 1–Jan. 31.....	6		
Currity County.....	Oct. 1–Nov. 30.....	4		
Davidson County.....	Oct. 1–Jan. 31.....	30		
Davie County.....	Jan. 1–31.....	18		
Duplin County.....	Nov. 1–Jan. 31.....	4		
Durham County.....	Jan. 1–31.....	3		
Edgecombe County.....	Jan. 1–31.....	23		
Forsyth County.....	Oct. 1–Jan. 31.....	89		
Franklin County.....	Oct. 1–31.....	35		
Gaston County.....	Nov. 1–30.....	4		
Greene County.....	Nov. 1–30.....	40		
Guilford County.....	Nov. 1–Jan. 31.....	71		
Iredell County.....	Jan. 1–31.....	4		
Johnston County.....	Nov. 1–Jan. 31.....	23		
Jones County.....	Oct. 1–Nov. 30.....	12		
Lenoir County.....	Jan. 1–31.....	31		
Lincoln County.....	Jan. 1–31.....	1		
McDowell County.....	Nov. 1–Jan. 31.....	67		
Mecklenburg County.....	Nov. 1–31.....	73	1	Nov. 1–30, many cases.
Nash County.....	Jan. 1–31.....	90		
Onslow County.....	Jan. 1–31.....	5		
Pamlico County.....	Jan. 1–31.....	5		Several.
Perquimans County.....	Jan. 1–31.....	4		
Pitt County.....	Jan. 1–31.....	62		
Randolph County.....	Jan. 1–31.....	2		
Robeson County.....	Oct. 1–31.....	7		
Rockingham County.....	Nov. 1–30.....	26		
Rowan County.....	Nov. 1–Jan. 31.....	7		
Rutherford County.....	Nov. 1–Jan. 31.....	38		
Sampson County.....	Jan. 1–31.....	1		
Stokes County.....	Jan. 1–31.....	140		
Surry County.....	Oct. 1–Nov. 30.....	9		
Union County.....	Oct. 1–Jan. 31.....	62		
Wake County.....	Nov. 1–Jan. 31.....	33		
Wayne County.....	Nov. 1–30.....	8		
Wilkes County.....	Jan. 1–31.....	9		
Wilson County.....	Nov. 1–Jan. 31.....	199		
Yadkin County.....	Oct. 1–Jan. 31.....	7		
Yancey County.....	Oct. 1–Jan. 31.....	14		
Total for State.....		1,452	1	
North Dakota:				
Billings County.....	Jan. 1–Feb. 28.....	11		
Bottineau County.....	Oct. 1–31.....	1		
Cass County.....	Dec. 1–31.....	1		
Grand Forks County.....	Jan. 1–Feb. 28.....	2		
McLean County.....	Dec. 1–Jan. 31.....	4		
Nelson County.....	Feb. 1–28.....	12		
Steele County.....	Feb. 1–28.....	6		
Williams County.....	Feb. 1–28.....	6		
Walsh County.....	Jan. 1–31.....	39		
Total for State.....		82		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Ohio:</b>				
Allen County.....	Jan. 1-Feb. 28.....	26		
Adams County.....	Jan. 1-31.....	1		
Auglaize County.....	Feb. 1-28.....	8		
Belmont County.....	Jan. 1-Feb. 28.....	7		
Brown County.....	Jan. 1-Feb. 28.....	19		
Clermont County.....	Jan. 1-31.....	1		
Cuyahoga County— Cleveland.....	Dec. 19-26.....	1		
Darke County.....	Jan. 1-31.....	3		
Franklin County.....	Jan. 1-Feb. 28.....	7		
Hamilton County.....	Jan. 1-Feb. 28.....	2		
Jackson County.....	Jan. 1-Feb. 28.....	36		
Knox County.....	Feb. 1-28.....	1		
Miami County.....	Jan. 1-Feb. 28.....	2		
Montgomery County.....	Jan. 1-Feb. 28.....	3		
Portage County.....	Feb. 1-28.....	10		
Ross County.....	Jan. 1-31.....	16		
Scioto County.....	Feb. 1-28.....	3		
Seneca County.....	Feb. 1-28.....	3		
Shelby County.....	Jan. 1-Feb. 28.....	7		
Van Wert County.....	Jan. 1-Feb. 28.....	27		
Wayne County.....	Jan. 1-31.....	1		
Williams County— Stryker.....	Dec. 19-25.....	1		
Wyandot County.....	Feb. 1-28.....	4		
<b>Total for State.....</b>		<b>189</b>		
<b>Oklahoma:</b>				
Beckham County.....	Nov. 1-30.....	1		
Blaine County.....	Dec. 1-31.....	7		
Coal County.....	Aug. 1-Sept. 30.....	10		
Comanche County.....	Nov. 1-30.....	1		
Creek County.....	Oct. 1-Nov. 30.....	3		
Garfield County.....	Nov. 1-30.....	1		
Grant County.....	Aug. 1-31.....	1		
Harmon County.....	Aug. 1-31.....	2		
Hughes County.....	Aug. 1-31.....	3		
Jackson County.....	Aug. 1-Nov. 30.....	19		
Kingfisher County.....	Oct. 1-31.....	2		
Le Flore County.....	Oct. 1-31.....	1		
Lincoln County.....	Aug. 1-31.....	3		
McIntosh County.....	Sept. 1-30.....	2		
Marshall County.....	Oct. 1-31.....	1		
Muskogee County.....	Oct. 1-31.....	1		
Okfuskee County.....	Oct. 1-31.....	1		
Oklahoma County.....	Aug., Sept., and Nov.....	14	1	
Osage County.....	Sept. 1-Oct. 31.....	9		
Pawnee County.....	Aug. 1-31.....	1		
Pottawatomie County.....	Sept. 1-Nov. 30.....	41		
Pushmataha County.....	Sept. 1-30.....	1		
Seminole County.....	Oct. 1-Nov. 30.....	7		
Sequoyah County.....	Aug. 1-Sept. 30.....	2		
Tulsa County.....	Nov. 1-30.....	3		
Washington County.....	Nov. 1-30.....	1		
Woodward County.....	Nov. 1-30.....	1		
<b>Total for State.....</b>		<b>139</b>	<b>1</b>	
<b>Oregon (entire State):</b>				
Portland.....	Dec. 1-31.....	28		
	Nov. 1-30.....	2		
<b>Total for State.....</b>		<b>30</b>		
<b>Pennsylvania (entire State):</b>				
	Dec. 1-Jan. 31.....	16		
<b>South Carolina:</b>				
Clover.....	Jan. 23-29.....	3		
<b>Total for State.....</b>		<b>3</b>		
<b>Tennessee:</b>				
Davidson County— Nashville.....	Feb. 20-26.....	1		
Dekalb County.....	Dec. 12-Jan. 1.....	9		
Hamilton County— Chattanooga.....	Dec. 26-Mar. 5.....	45		
Knox County— Knoxville.....	Jan. 2-Mar. 5.....	44		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Tennessee—Continued.</b>				
Shelby County.....	Nov. 1-Jan. 31.....	28		
Memphis.....	Nov. 1-Mar. 5.....	149		
Washington County.....	Dec. 26-Feb. 5.....	11		
Total for State.....		287		
<b>Texas:</b>				
Amarillo.....	Jan. 16-22.....	16		
Atascosa County.....	Jan. 31-Feb. 19.....	6		
Denton County.....	Dec. 26-Feb. 27.....	106	15	
El Paso.....	Nov. 1-Jan. 22.....	5	1	
Fort Worth.....	Nov. 1-Feb. 28.....	52	4	
Galveston.....	Feb. 6-26.....	3		
Hale County.....	Jan. 9-15.....	7		
Normanna.....	Jan. 1-31.....	12	5	
Rockdale.....	Feb. 13-19.....	3		
San Antonio.....	Dec. 5-Feb. 12.....	16	1	
Waco.....	Jan. 1-Feb. 28.....	3		
Walnut Springs.....	Jan. 12-18.....	2		
Wills Point.....	Jan. 1-31.....	2	1	
Total for State.....		233	27	
<b>Utah:</b>				
Boxelder County.....	Dec. 1-Jan. 31.....	46		
Cache County.....	Dec. 1-Jan. 31.....	21		
Carbon County.....	Dec. 1-Jan. 31.....	6		
Davis County.....	Dec. 1-Jan. 31.....	28		
Juab County.....	Jan. 1-31.....	16		
Plute County.....	Dec. 1-31.....	1		
Rich County.....	Jan. 1-31.....	1		
Salt Lake County.....	Dec. 1-Jan. 31.....	68		
Sanpete County.....	Dec. 1-Jan. 31.....	9		
Sevier County.....	Dec. 1-Jan. 31.....	3		
Summit County.....	Jan. 1-31.....	12		
Tooele County.....	Dec. 1-31.....	1		
Uintah County.....	Dec. 1-Jan. 31.....	21		
Utah County.....	Dec. 1-Jan. 31.....	69		
Wasatch County.....	Dec. 1-Jan. 31.....	7	1	
Weber County.....	Dec. 1-Jan. 31.....	28		
Total for State.....		337	1	
<b>Virginia:</b>				
Lynchburg.....	Jan. 30-Mar. 5.....	29	1	
Petersburg.....	Dec. 26-Jan. 26.....	2		
Portsmouth.....	Jan. 16-29.....	2		
Richmond.....	Dec. 1-31.....	1		
Total for State.....		34	1	
<b>Washington:</b>				
Kitsap County.....	Jan. 1-31.....	1		
Seattle.....	Jan. 2-22.....	6		
Spokane.....	Dec. 19-Jan. 29.....	22		
Tacoma.....	Jan. 2-31.....	2		
Wahkiakum County.....	Dec. 1-31.....	8		
Total for State.....		39		
<b>West Virginia:</b>				
Berkeley Springs.....	Dec. 27-Feb. 17.....	6		
Wheeling.....	Jan. 30-Feb. 5.....	1		
Total for State.....		7		
<b>Wisconsin:</b>				
Buffalo County.....	Feb. 1-28.....	3		
Chippewa County.....	Jan. 1-31.....	3		
Clark County.....	Jan. 1-Feb. 28.....	14		
Crawford County.....	Feb. 1-28.....	7		
Dane County.....	Feb. 1-28.....	1		
Douglas County.....	Jan. 1-Feb. 28.....	13		
Superior.....	Dec. 19-Jan. 1.....	6		
Grant County.....	Feb. 1-28.....	1		
Jefferson County.....	Jan. 1-Feb. 28.....	19		
Juneau County.....	Jan. 1-31.....	1		
La Crosse County.....	Jan. 1-Feb. 28.....	14		
La Crosse.....	Dec. 19-Jan. 1.....	2		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from January 1 to March 18, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Wisconsin—Continued.				
Langlade County.....	Jan. 1-Feb. 28.....	3		
Milwaukee County.....	Jan. 1-Feb. 28.....	19		
Milwaukee.....	Dec. 19-Jan. 1.....	2		
Price County.....	Feb. 1-28.....	1		
Walworth County.....	Feb. 1-28.....	1		
Winnebago County.....	Jan. 1-31.....	2		
Total for State.....		112		
Grand total for the United States.....		7,739	43	

MORBIDITY AND MORTALITY.

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

[For smallpox see special tables.]

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.
				Altoona, Pa.....	Mar. 12	50,814	13			1			1		
Ann Arbor, Mich.....	do	14,711	9									1			
Ashtabula, Ohio.....	Mar. 15	16,648	13	1											
Baltimore, Md.....	Mar. 12	576,023	188	199	22	7	1	27	1	10		20	1	29	3
Bayonne, N. J.....	do	49,894		1		1		5		2	1	4		5	
Berkeley, Cal.....	Mar. 5		11					1				12		3	
Biddeford, Me.....	Mar. 12	17,676		2	2										
Boston, Mass.....	do	622,970	248	67	24	4		37	1	57	4	92	2	10	
Braddock, Pa.....	Feb. 26	21,000	12		1	1						1			
Bridgeport, Conn.....	Mar. 12	90,913	38	7	3			23		4	1			1	
Brockton, Mass.....	do	53,978	14	2				9				2			
Butler, Pa.....	Mar. 5	12,760	7	3				3							
Butte, Mont.....	Mar. 12	49,892	12		2			4	1	3					
Cambridge, Mass.....	do	101,872	29	5	8			4		5		3		1	
Cambridge, Ohio.....	do	11,733	4									61			
Camden, N. J.....	do	89,305	35		2			6	1	4	1				
Canton, Ohio.....	do	40,037	13					6		3					1
Cardanole, Pa.....	do	15,698	6					1				1			
Chattanooga, Tenn.....	Mar. 5	34,654		1						1					
Do.....	Mar. 12			1											
Chelsea, Mass.....	do	39,862	11	1				#4		3		3			
Chicago, Ill.....	do	2,224,491	754	98	104	10	6	152	10	118	17	367	3	84	2
Chicopee, Mass.....	do	20,010	9					1				3			
Cincinnati, Ohio.....	do	351,212		51	21	1		12		9		87	2	6	1
Cleveland, Ohio.....	Mar. 11	506,938	183	25	26	2		10	2	23	3	229	4	12	
Clinton, Mass.....	Mar. 12	12,656	3									2			
Coffeyville, Kans.....	do	4	2	2		1		#3		2		10			
Columbus, Ga.....	Mar. 12	17,893	13												
Concord, N. H.....	Mar. 5	21,997	10									3			
Covington, Ky.....	Mar. 12	51,715	32	2	1	1				1				3	
Danville, Ill.....	do	27,387	4	2	2							58			
Dayton, Ohio.....	do	108,688	37		6			5		2	1	1			
Detroit, Mich.....	Mar. 5	384,855	166		2		2	36	2	22	3				
Do.....	Mar. 12		145				1	45	2	15	1				
Dunkirk, N. Y.....	do	18,061	7	1	1	1						15			
Elmira, N. Y.....	do	35,765	12	8				7				1		4	
El Paso, Tex.....	do	22,911	38	3	15	1						28	1	4	1
Elyria, Ohio.....	Mar. 5	11,653	5									1		3	
Erie, Pa.....	do	63,652	13	8	1	7		13				12			
Do.....	Mar. 12		25	8	3	8		2		3		6			
Evansville, Ind.....	do	66,948	22	2	3	1		1		1		4			
Everett, Mass.....	Mar. 14	32,931	11	1	2			2	2						
Fall River, Mass.....	Mar. 12	106,481	33	9		3		2		1				1	
Fort Scott, Kans.....	Feb. 28	18,375	12									23		1	
Fort Wayne, Ind.....	Feb. 5		21	1	1							103			

MORBIDITY AND MORTALITY—Continued.

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

Cities.	Week ended—	Estimated population, 1909,	Total deaths from all causes.	Tuberculosis.		Typhoid fever.		Scarlet fever.		Diphtheria.		Measles.		Whooping cough	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Freeport, Ill.	Mar. 12	19,200	2					1		1					
Do.	Mar. 5		0	2											
Do.	Mar. 12		0	2											
Galesburg, Ill.	do.	21,615	8					2							
Galveston, Tex.	do.	36,964	1	3	1	1				1					
Gloucester, Mass.	Mar. 11	25,923	8		1										
Grand Rapids, Mich.	Mar. 12	105,909	32	5		6	1	31	1	2		18		2	
Harrison, N. J.	do.	14,604	3					1		1					
Hartford, Conn.	do.	103,808	24	2	1			6		6		5			
Haverhill, Mass.	do.	38,354	27	2	2			7		4		10		5	1
Hyde Park, Mass.	Mar. 12	15,522	5	1		1		4		4	1				
Indianapolis, Ind.	Feb. 26	241,826	80	5	18	4	1	14		7		373	1	10	7
Do.	Mar. 5		106	2	11	3		14		6		343		10	
Do.	Mar. 12		99	8	15		1	9	2	9		391	2	10	1
Jacksonville, Fla.	do.	40,798	21			5	1								
Jersey City, N. J.	Mar. 13	253,711	93		11	2	1	23		16	1	25			
Johnstown, Pa.	Mar. 12	46,520	25	4	2		1	1		4	2	44		3	
Kalamazoo, Mich.	Mar. 5	36,504	15					10				1			
Do.	Mar. 12		24	1	2			11	1	3		2			
Kansas City, Kans.	do.	85,742	37		4	2	1	14		10	1	42			
Kearny, N. J.	do.	15,765	10	2	2										
Kingston, N. Y.	do.	20,110	15		3			2	1						
Knoxville, Tenn.	Mar. 5	37,758	10							2		2			
Lackawanna, N. Y.	do.		12			4	1			5	3				
Do.	Mar. 12		5			1		6		49					
La Crosse, Wis.	do.	29,224	11		1			1				4			
La Fayette, Ind.	do.	19,801	2				1					2			
Lawrence, Mass.	do.	76,042	29	3	2	3	1	6	2	3	1	39	1		
Lancaster, Pa.	do.	49,962	8	3				9		4	1	35			
Lebanon, Pa.	do.	20,295	6					8				4			
Lexington, Ky.	do.	30,690	14		4										
Los Angeles, Cal.	Mar. 5	103,000	100	17	19	4		17		4	1	529	1		1
Lowell, Mass.	Mar. 12	95,125	45	2	2			7	2	2	2	98	1		
Lynchburg, Va.	Mar. 5	29,457		2				1		1		1		2	
Do.	Mar. 12							1							
Lynn, Mass.	do.	83,865	25	6	2	15	1	7	1	7	1				
Madison, Ind.	do.		2												
Manchester, N. H.	do.	68,561	27					1		2		4			
Manistee, Mich.	Mar. 12	10,788										5			
Mantowoc, Wis.	Mar. 5	13,490						2							
Do.	Mar. 12		6		1					2					
Mansfield, Ohio.	do.	21,390										15			
Marinette, Wis.	do.	14,682	2					1							
Marlboro, Mass.	do.	14,444	3		1	1						32			
Massillon, Ohio.	do.	13,610	6					3		3		110	2		
Malden, Mass.	do.	41,535	14					5	2	4		2			
Medford, Mass.	do.	20,839	4					1		1		12			
Melrose, Mass.	Mar. 5	15,361	2					2		2					
Memphis, Tenn.	do.	136,363	75	5	7			3		1					
Do.	Mar. 12		57	7	4		1	8		5					
Milwaukee, Wis.	Mar. 5	332,495	128			49	9	52	1	13	2	63		15	1
Montclair, N. J.	Mar. 12	18,296	5	1				3						1	
Moline, Ill.	do.	23,081	7			1		1		4	1				
Montgomery, Ala.	Mar. 5	43,927	14	2	1										
Do.	Mar. 12		20	2	2					1					
Morristown, N. J.	do.	12,849	4												
Mount Vernon, N. Y.	do.	27,891	1	2				3		2		2			
Muskegon, Mich.	do.	20,995	1	2				1				2			
Nanticoke, Pa.	do.	13,980	2					1				3			
Nashville, Tenn.	do.	106,476	26	5	3	1		2		1		3			
Natchez, Miss.	Feb. 26	14,108	14	3	3			1						1	
Nebraska City, Nebr.	Mar. 12		4			3						4			
Newark, N. J.	do.	308,669	109			3		59		50	6		2		1
New Bedford, Mass.	do.		28	1	2	1		7				50	1		
Newburyport, Mass.	do.	14,832	5		1							94			
New Orleans, La.	Mar. 5	327,662	20	37	18	3	2	25		12		121			
Do.	Mar. 12		130	33	11	5		27		21	1	79	2		
Newport, Ky.	do.	31,345	13		2					1					
New York, N. Y.	do.	4,450,963	1,477	881	166	28	6	673	30	400	44	1,547	33	38	2
Niagara Falls, N. Y.	do.	32,012	15	5	1	6	1	2		2	1	70			

α Population 1900. No estimate 1909.

## MORBIDITY AND MORTALITY—Continued.

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

Cities.	Week ended—	Estimated population, 1909.	Total deaths from all causes.	Tuberculosis.		Typhoid fever.		Scarlet fever.		Diphtheria.		Measles.		Whooping cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
North Adams, Mass.	Mar. 12	20,510	2	1											
Northampton, Mass.	do.	21,008	6					1						1	
North Weymouth, Mass.	do.	11,793						1							
Oklahoma City, Okla.	Jan. 22	45,380		3	2			2		1		10			
Do.	Jan. 29		12	5	3			3		1		3			
Do.	Feb. 6		22	2		2		3		1		10			
Do.	Feb. 13		19	2	3			1		1		8			
Do.	Feb. 20		23	1		2		2	1	2		12			
Do.	Feb. 27		33	1	4	1	1	2	2			8			
Orange, N. J.	Mar. 12	27,669		2	1			4		1		15			
Peekskill, N. Y.	do.	15,473	3	2				1							
Pittsburg, Pa.	do.	558,123	243	35	16	16	1	22	3	11	3	183	4	18	3
Pittsfield, Mass.	do.	27,589	10	1	2					2		1			
Plainfield, N. J.	do.	20,947	8	2											
Pontiac, Mich.	Feb. 5	12,819	13	18	1	1		4		4					
Do.	Feb. 12		13	17		1		4		4					
Do.	Feb. 19		12	17		1		3		5					
Do.	Feb. 26		4	17				3		5					
Portland, Me.	Feb. 12	57,675	20		1	3		3		2		8			
Do.	Feb. 26		18		1			3		3		4			
Do.	Mar. 5		20		1	1		4		5		19			
Do.	Feb. 19		17		2			2		1		1			
Do.	Mar. 12							1		1		3			
Portsmouth, Va.	do.	19,225	17		1	1									
Pottstown, Pa.	do.	14,065	15							25					
Providence, R. I.	do.	217,065	86	12	11	7	2	12		10	1	20	1		1
Racine, Wis.	do.	34,840	10		1		1								
Rock Island, Ill.	do.	24,766	5		2		1								
San Jose, Cal.	Feb. 26	24,596	11												
Do.	Mar. 5		11		1					2		19			
Seattle, Wash.	do.	104,169	26	2	7	3		2						2	
Sacramento, Cal.	do.	31,889	9	1	1	1	1			1		13			
Saratoga Springs, N. Y.	do.		2							1		1			
Do.	Mar. 12	13,471	6									6			
Seattle, Wash.	do.	104,169	54	8	8	5		13		3		16	1		
St. Louis, Mo.	Mar. 5	686,369	269	42	31	8	2	75	6	26	1	49		34	
Do.	Mar. 12		241	40	23	5	2	60	4	38	5	31		44	1
Sandusky, Ohio.	do.		5									1			
San Francisco, Cal.	Feb. 19	342,782	151	33	19	3		21		30	1	31	1	4	1
Do.	Feb. 26		113	36	9	5		11		18		21	1	4	1
Schenectady, N. Y.	Mar. 5	73,037	28	4	1	1		8				55		2	
Do.	Mar. 12		24	6	2			2		5		42	1		1
Somerville, Mass.	do.	75,375	25	2	1			2		1		3			
South Bend, Ind.	do.	49,321	15		5			2		1					
South Bethlehem, Pa.	do.	15,886	8			1		1				12			
South Omaha, Nebr.	Mar. 5	134,972	0							1					
Do.	Mar. 12		0												
Spokane, Wash.	Feb. 26	47,006	18		2			9	1	1		23			
Do.	Mar. 5		30		3			3		4		16			
Springfield, Mass.	Mar. 12	82,724	26	5	1			8		5		35		2	
Springfield, Ohio.	Mar. 12	43,975	10	4	1							15			
Steelton, Pa.	do.	14,769	6	5	1			3		5	2	3		1	
Superior, Wis.	do.	40,919	17					3		2					
Tacoma, Wash.	Feb. 19	37,714	21	1	2	1		2	1	1	1	1			1
Do.	Mar. 5		24		3	1	1			1	1	2			
Taunton, Mass.	Mar. 12	30,926	16					3				5			
Terre Haute, Ind.	do.	55,509	18		3	1				1		28			
Titusville, Pa.	do.	8,397	3		1										
Topeka, Kans.	do.		0	2								1			
Trenton, N. J.	do.	92,878	7	8	6	4	1	12		5					
Utica, N. Y.	do.	69,458	34	2	4			1		2		14			
Waltham, Mass.	do.	28,522	5	4	1					1		1			
Warren, Pa.	Feb. 28	11,838	2	1	1			3		1		25		5	
Do.	Mar. 7		3									21	1		
Washington, D. C.	Mar. 5	322,212	151	24	15	6	3	41		9	1	8		15	2
West Newton, Mass.	Mar. 12	39,419	11					3				5			
Wheeling, W. Va.	Mar. 5		18	3	3	2		4		3					
Do.	Mar. 12	42,799	14	1	2	3		2		2		2			

α Estimated population 1906. No estimate 1909.

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.
Wichita, Kans.....	Mar. 12	39,612	18	1	1	2	2	2	2	22	2	2	2	2	2
Wilkes-Barre, Pa.....	Mar. 5	64,323	20	3	1	4	4	1	1	10	1	1	1	7	8
Do.....	Mar. 12		28	7	1	7	7	1	1	10	1	1	1	8	7
Wilkesburg, Pa.....	do	19,999	5	2	1	1	1	1	1	1	1	1	1	1	1
Williamsport, Pa.....	do	30,220	9	1	1	7	7	3	3	9	1	1	1	1	1
Wilmington, Del.....	do	88,980	37	5	1	1	1	1	1	1	1	1	1	1	1
Woburn, Mass.....	do	14,520	1	1	1	1	1	1	1	1	1	1	1	1	1
Worcester, Mass.....	Mar. 5	135,906	46	13	7	3	3	10	1	16	3	1	1	1	1
Do.....	Mar. 12		53	8	2	1	5	7	1	13	1	1	1	1	1
Yonkers, N. Y.....	Mar. 5	72,200	21	1	1	4	2	14	2	1	1	1	1	1	1
Do.....	Mar. 12		21	9	2	3	11	1	9	1	2	2	2	2	2
York, Pa.....	do	41,895	2	2	2	2	2	2	2	3	3	3	3	3	3
Zanesville, Ohio.....	do	25,614	14	1	1	1	1	1	1	1	1	1	1	1	1

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

CALIFORNIA—*San Diego*.—Month of February, 1910. Population, 45,000. Total number of deaths from all causes, 53, including diphtheria 1, tuberculosis 9. Cases reported: Typhoid fever 1, measles 29.

FLORIDA.—Reports to the state board of health for the week ended March 12, 1910, show typhoid fever present at 2 localities with 3 cases, smallpox in 2 counties (Duval and Volusia) with 4 cases, diphtheria at 2 localities with 3 cases, tuberculosis at 6 localities with 9 cases.

*Pensacola*.—Month of February, 1910. Population, 35,000. Total number of deaths from all causes 41, including typhoid fever 1, diphtheria 1.

ILLINOIS—*Alton*.—Month of February, 1910. Population, 22,000. Total number of deaths from all causes 24, including tuberculosis 2.

KANSAS.—Month of January, 1910. Population, 1,703,002. Total number of deaths not reported. Deaths from contagious diseases: Typhoid fever 20, measles 4, scarlet fever 20, diphtheria 23, tuberculosis 60. Cases reported: Typhoid fever 122, smallpox 441, measles 577, scarlet fever 291, diphtheria 182, tuberculosis 283.

KENTUCKY—*Louisville*.—Month of February, 1910. Population, 269,749. Total number of deaths from all causes 323, including typhoid fever 2, scarlet fever 1, diphtheria 3, tuberculosis 56. Cases reported: Typhoid fever 3, scarlet fever 17, diphtheria 14.

LOUISIANA—*Shreveport*.—Month of February, 1910. Population, 30,000. Total number of deaths from all causes 61 (residents 39, nonresidents 22), including typhoid fever 1, smallpox 2, tuberculosis 11 (residents 5, nonresidents 6).



MASSACHUSETTS.—Week ended December 4, 1909. Population of reporting towns, 2,379,468. Total number of deaths from all causes 643, including typhoid fever 9, measles 1, diphtheria 20, tuberculosis 64.

Week ended December 11, 1909. Total number of deaths from all causes 674, including typhoid fever 8, scarlet fever 3, diphtheria 21, tuberculosis 59.

Week ended December 18, 1909. Total number of deaths from all causes 714, including typhoid fever 7, measles 2, diphtheria 16, tuberculosis 86.

Week ended December 25, 1909. Population 2,351,545. Total number of deaths from all causes 711, including typhoid fever 3, measles 6, scarlet fever 4, diphtheria 21, tuberculosis 65.

NEBRASKA—*Lincoln*.—Month of February, 1910. Population 65,000. Total number of deaths from all causes 38, including tuberculosis (pulmonary 1). Cases reported: Smallpox 1, scarlet fever 7, diphtheria 1.

NORTH CAROLINA—*Charlotte*.—Month of February, 1910. Population 45,455. Total number of deaths from all causes 39, including typhoid fever 1, measles 1, tuberculosis 3, pellagra 2.

OREGON.—Month of September, 1909. Population, 505,339. Total number of deaths from all causes 492, including typhoid fever 16, scarlet fever 3, diphtheria 7, tuberculosis 38. Cases reported: Typhoid fever 148, smallpox 13, measles 18, scarlet fever 29, diphtheria 40, tuberculosis 28.

Month of October, 1909. Total number of deaths from all causes 478, including typhoid fever 18, scarlet fever 1, diphtheria 8, tuberculosis 45. Cases reported: Typhoid fever 171, smallpox 21, measles 19, scarlet fever 69, diphtheria 64, tuberculosis 21.

Month of November, 1909. Total number of deaths from all causes 481, including typhoid fever 25, scarlet fever 1, diphtheria 6, tuberculosis 42. Cases reported: Typhoid fever 192, smallpox 29, measles 25, scarlet fever 68, diphtheria 57, tuberculosis 17.

Month of December, 1909. Total number of deaths from all causes 433, including typhoid fever 20, scarlet fever 1, diphtheria 5, tuberculosis 34. Cases reported: Typhoid fever 219, smallpox 28, measles 25, diphtheria 58, tuberculosis 14.

PENNSYLVANIA.—Reports to the state department of health for the month of February, 1910, show 15,637 cases of contagious diseases distributed as follows: Typhoid fever 580, smallpox 41, measles 7,108, scarlet fever 1,384, diphtheria 985, tuberculosis 1,068.

RHODE ISLAND.—Months of September and October, 1909. Population, 521,302. Number of deaths not reported. Cases of contagious diseases reported: Typhoid fever 129, measles 51, scarlet fever 148, diphtheria 127.

TEXAS.—Month of January, 1910. Population, 3,048,710. Total number of deaths from all causes 1,700, including typhoid fever 37, smallpox 4, measles 2, scarlet fever 5, diphtheria 30, tuberculosis 204.

*Fort Worth.*—Month of February, 1910. Population, 60,000. Total number of deaths from all causes 91 (residents 70, nonresidents 21), including typhoid fever 2, smallpox 2, diphtheria 1, tuberculosis 7. Cases reported: Typhoid fever 9, smallpox 20, measles 72, scarlet fever 1, diphtheria 4, tuberculosis 7.

UTAH—*Salt Lake City.*—Month of February, 1910. Population, 85,000. Total number of deaths from all causes 85, including scarlet fever 2, tuberculosis 11. Cases reported: Smallpox 19, measles 9, scarlet fever 78, tuberculosis 1 (incomplete).

# FOREIGN AND INSULAR.

## CHINA.

### Hongkong—Smallpox—Inspection of Vessels.

Passed Assistant Surgeon Foster reports, February 9 and 14:  
 Weeks ended February 5 and 12. Restrictions enforced by and  
 against Hongkong remain as reported January 2.  
 Week ended February 5. One case of smallpox reported.

#### INSPECTION AND DISINFECTION OF VESSELS.

##### *Week ended February 5.*

Vessels granted bills of health.....	8
Total members of crews.....	878
Total cabin passengers.....	156
Total steerage passengers.....	178
Members of crew bathed.....	779
Steerage passengers bathed.....	170
Pieces of baggage disinfected.....	949
Vessels disinfected to kill rats.....	1
Crews' quarters disinfected:	
With formaldehyde.....	7
With sulphur.....	1

##### *Week ended February 12.*

Vessels granted bills of health.....	5
Total members of crews.....	266
Total cabin passengers.....	31
Total steerage passengers.....	1
Members of crew bathed.....	188
Steerage passengers bathed.....	2
Pieces of baggage disinfected.....	190
Vessels disinfected to kill rats.....	0
Crews' quarters disinfected:	
With formaldehyde.....	4
With sulphur.....	0

### Shanghai—Inspection of Vessels—Smallpox.

Acting Assistant Surgeon Ransom reports, February 8:  
 Week ended February 5. Supplemental bills of health issued to  
 4 steamships, having an aggregate personnel of 1,682. Vessels  
 inspected, 3; members of crews and steerage passengers inspected,  
 376 and 413, respectively; steerage passengers bathed, 83; pieces of  
 baggage disinfected with steam, 194.

The weekly report of the municipal health officer shows 2 deaths  
 from smallpox among natives. A high mortality from scarlet fever  
 is reported.

## CUBA.

### Cienfuegos—Inspection of Vessels.

Acting Assistant Surgeon Suarez reports, March 9:  
 Week ended March 5. Vessels inspected 5, bills of health issued  
 5, members of crews of outgoing vessels inspected 193, passengers  
 landed 49, passengers in transit 87.  
 No quarantinable disease reported.

**Habana—Inspection of Vessels.**

Acting Assistant Surgeon Villoldo reports, March 15:  
 Week ended March 12. Bills of health issued 29, vessels inspected 24, members of crews of outgoing vessels inspected 1,223, passengers of outgoing vessels inspected 1,250.  
 The department of sanitation reports 24,641 houses inspected and 13,382 water deposits petrolized or suppressed during the period from March 1 to 10.  
 No quarantinable disease was reported during the week.

**Matanzas—Inspection of Vessels.**

Acting Assistant Surgeon Nuñez reports, March 14:  
 Week ended March 12. Bills of health issued to 6 vessels bound for United States ports.  
 No quarantinable disease reported.

**ECUADOR.**

**Guayaquil—Inspection of Vessels.**

Passed Assistant Surgeon Parker reports, February 21:  
 Week ended February 19. Bills of health issued 3, vessels fumigated 3, members of crews inspected 223, cabin passengers inspected 58, steerage passengers inspected 34, baggage inspected 76 pieces, certificates of inspection of hides issued 1, and for cotton 1.

**HAWAII.**

**Honolulu—Plague-prevention Work.**

Passed Assistant Surgeon Ramus reports, February 21 and 28:  
 The last case of human plague occurred at Honolulu July 17, 1907.  
 The last plague-infected rat was found at Aiea, 9 miles from Honolulu, August 22, 1907.

*Week ended February 19, 1910.*

Total rats taken.....	501
Trapped.....	501
Found dead.....	0
Examined bacteriologically.....	394
Plague rats.....	0
Classification of rats trapped:	
Mus alexandrinus.....	102
Mus musculus.....	174
Mus norvegicus.....	39
Mus rattus.....	185
Average number of traps set daily.....	1,338

*Week ended February 26, 1910.*

Total rats taken.....	488
Trapped.....	443
Found dead.....	0
Shot from trees.....	4
Killed by sulphur dioxide.....	41
Examined bacteriologically.....	362
Plague rats.....	0

Classification of rats trapped:	
Mus alexandrinus.....	48
Mus musculus.....	191
Mus norvegicus.....	26
Mus rattus.....	178
Classification of rats from trees:	
Mus rattus.....	3
Classification of rats killed by sulphur dioxide:	
Mus alexandrinus.....	3
Mus rattus.....	38
Average number of traps set daily.....	1,338

**Plague at Hilo and Honokaa.**

Doctor Ramus reports:

March 19. One death from pneumonic plague occurred to-day at Hilo. Total deaths since date of outbreak, at Hilo 3, at Honokaa 2.

March 22. One plague death to-day at Hilo.

**INDIA.**

**Calcutta—Cholera, Plague, and Smallpox—Fumigation of Vessels.**

Acting Assistant Surgeon Allan reports, February 17:

Week ended February 5. At Calcutta there were 66 deaths from cholera, 13 from plague, and 2 from smallpox; in all Bengal, 1,956 cases of plague with 1,601 deaths; in all India, 16,278 cases of plague with 11,144 deaths.

Week ended February 12. Bills of health issued to steamships *Scharzfels*, bound for Philadelphia and New York, and *Wildenfels*, bound for Boston and New York. The holds of these vessels were fumigated, rats guards placed on wharf lines, and effects of Asiatics disinfected.

**ITALY.**

**Naples—Examination of Emigrants—Smallpox.**

Surgeon Geddings reports, February 28:

*Vessels inspected at Naples and Palermo week ended February 26.*

**NAPLES.**

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
Feb. 22	Re d'Italia.....	New York.....	471	42	750
23	Cretic.....	Boston.....	862	90	1,150
24	Europa.....	New York.....	1,236	80	1,650
26	Sicania.....	do.....			
26	Celtic.....	do.....	1,780	160	2,850
26	Florida.....	do.....	861	50	1,100
	Total.....		5,210	422	7,500

**PALERMO.**

Feb. 23	Re d'Italia.....	New York.....	379	650	20
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Rejections recommended.

NAPLES.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Other causes.	Total.
Feb. 22	Re d'Italia.....	9	1	4	2	16
23	Cretic.....	11	.....	6	6	23
24	Europa.....	15	2	9	9	35
26	Sicania.....	.....	.....	.....	.....	.....
26	Celtic.....	17	3	9	10	39
26	Florida.....	11	4	2	4	21
	Total.....	63	10	30	31	134

PALERMO.

Feb. 23	Re d'Italia.....	17	.....	26	1	44
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*Smallpox in Naples.*—During the week ended February 27, 21 cases of smallpox were reported at the health office of the city of Naples.

JAPAN.

Yokohama—Inspection of Vessels.

Surgeon Irwin reports, February 21:

Week ended February 19. Vessels inspected: Steamships *Siberia* for Manila, crew 282, cabin passengers 86, steerage passengers 248; *Welsh Prince* for New York, crew 39, cabin passengers 5; *Prinz Waldemar* for Manila, crew 104, cabin passengers 1; *Inaba Maru* for Seattle, crew 97, cabin passengers 18, steerage 44; *Tenyo Maru* for San Francisco, crew 259, cabin passengers 75, steerage passengers 212; *Tacoma Maru* for Manila, crew 69, cabin passengers 2, steerage passengers 8; *St. Patrick* for New York, crew 46; *Minnesota* for Seattle, crew 269, cabin passengers 43, steerage passengers 24; *Amiral Exelman* for San Francisco, crew 46, cabin passengers 1.

According to press reports 3 cases of plague have occurred in Kobe since January 1 and more than 200 plague-infected rats have been found.

Smallpox is reported at Tie-ling, Manchuria.

Kobe—Inspection of Vessels.

Acting Assistant Surgeon Smith reports, February 23:

Week ended February 19. Supplemental bills of health granted to 7 steamships. Members of crews inspected, 923; steerage passengers inspected, 285; members of crews and steerage passengers bathed, 62 and 14, respectively (effects disinfected); pieces of baggage steamed 171 and bedding 28; manifests viséed for 58,245 pieces of freight amounting to 5,359 tons.

Emigrants per steamship *Inaba Maru* for Seattle, passed 9. The emigrants passed together with 5 intending passengers to Victoria inspected and bathed and their effects disinfected. All emigrants were held at Ono quarantine station seven days.

**Nagasaki—Examination of Emigrants.**

Sanitary Inspector Bowie reports, February 19:

Emigrants passed: Per steamship *Korea* for Manila, January 28, 6; per steamship *Nikko Maru*, February 10, 12; per steamship *Siberia*, February 16, 3.

Supplemental bills of health were issued to the vessels named. The vessels carried a total of 891 passengers and 656 members of crews. The steamships *Mongolia* and *Tenyo Maru* for San Francisco and *Minnesota* for Seattle, having a total of 601 passengers and 796 members of crews, also received bills of health.

**MEXICO.****Report from the Superior Board of Health of Mexico.**

In compliance with articles 1 and 2 of the International Sanitary Convention held at Washington, October 9-14, 1905, the president of the Superior Board of Health of Mexico reports, March 14, that no case of yellow fever and no death from the said disease were registered in the Mexican Republic during the week ended March 12, and that the prophylactic measures reported under date of September 28, 1908, continue to be carried out.

**Coatzacoalcos—Inspection of Vessels.**

Acting Assistant Surgeon Thompson reports, March 10:

Vessels inspected: March 4, steamship *Texan* with 46 in crew for Delaware Breakwater; March 5, steamships *Westphalia* with 35 in crew, for Norfolk, *Sokoto* with 53 in crew and 29 passengers, for Norfolk, *Senator* with 40 in crew, for a port in the United States via Mexican ports; March 6, steamship *Coroni* with 31 in crew, for Newport News.

**PANAMA.****Fatal Yellow Fever Cases from Steamships.**

In communications dated respectively March 5 and 8, Col. W. C. Gorgas, chief sanitary officer for the Canal Zone, gives the following information relative to two fatal cases of yellow fever occurring, but not originating on the Isthmus:

March 5.—A death from yellow fever occurred at Ancon hospital January 24. The history of the case shows that the patient was a nonimmune who arrived at Colon on the steamship *Barbadian* January 6, and proceeded to Panama on the same date. He was admitted to hospital January 19, having been sick since January 8. The *Barbadian* was from Liverpool via West Indian and Colombian ports and had been at Cartagena, Colombia, January 4 and 5. On both dates the patient went ashore.

March 8.—A death from yellow fever occurred at the quarantine station on Culebra Island March 8. The case was taken from the steamship *Huallago* on arrival at quarantine March 1. The patient had come direct from Guayaquil where he had been for the ten days preceding his embarkation for Panama.

No yellow fever has been reported at Cartagena since the week ended January 14, 1909, during which 1 fatal case occurred.

RUSSIA.

Plague, Smallpox, and Typhus Fever—Examination of Emigrants.

Acting Assistant Surgeon De Forest at Libau reports, February 28 and March 7:

Week ended February 27. *Smallpox*.—At Libau 1 case occurred and at St. Petersburg 55 deaths.

*Typhus fever*.—Dorpat 1 case, Kurland 5 cases, Libau 1 case, Riga 167 cases with 16 deaths. There are 343 cases present at Riga and the epidemic is spreading.

For the steamship *Birma*, sailing March 1, 847 emigrants were examined and 120 pieces of baggage disinfected with formaldehyde.

March 7. *Plague*.—Twenty deaths were reported from 3 localities in the government of Astrakhan. At one of the localities referred to (Bodai) 9 new cases were reported March 1.

The steamship *Birma* sailed for New York March 1 with 845 passengers and a crew of 100 members. All on board had been in Libau for 5 days under observation. Pieces of baggage disinfected, 100.

VENEZUELA.

La Guaira—Inspection of Vessels.

Acting Assistant Surgeon Kellogg reports, February 27:

Week ended February 26. Vessels inspected: February 22, steamship *Philadelphia* for San Juan, crew 63, passengers taken on at this port 14. February 23, steamship *Versailles* for Colon, crew 148, passengers in transit 49, passengers taken on at this port 7. Baggage inspected, 11 pieces.

No quarantinable disease was reported at La Guaira or Maiquetia.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended March 25, 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:				
Calcutta.....	Jan. 27-Feb. 5.....		66	
Java:				
Batavia.....	Jan. 27-Mar. 5.....	1		Among natives.
Siam:				
Bangkok.....	Dec. 26-Jan. 12....	6	6	

YELLOW FEVER.

Brazil:				
Manaos.....	Feb. 13-26.....		12	
Para.....	Feb. 19-26.....	8	6	
Pernambuco.....	Jan. 1-15.....		44	
Panama:				
Canal Zone—				
Ancon.....	Jan. 24.....		1	At Ancon hospital from s. s. Barbadian.
Culebra Island.....	Mar. 1-8.....	1	1	At Culebra quarantine station from s. s. Huallago.



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

Reports Received During Week Ended March 25, 1910.

## PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India:</b>				
Bombay.....	Feb. 9-15.....		63	
Calcutta.....	Jan. 27-Feb. 5.....		13	
Karachi.....	Feb. 6-12.....	55	53	
Rangoon.....	Jan. 27-Feb. 5.....		4	
<b>Hawaii:</b>				
Hilo.....	Mar. 19-22.....	2	2	
<b>Russia:</b>				
Astrakhan, government.....	Feb. 21-27.....		20	
Bodal.....	Mar. 1.....	9		
<b>Turkey in Asia:</b>				
Jiddah.....	Feb. 4-27.....	3	3	
Zanzibar.....	Nov. 9-17.....	2	2	

## SMALLPOX.

<b>Argentina:</b>				
Buenos Aires.....	Dec. 1-31.....		69	
<b>China:</b>				
Amoy.....	Jan. 27-Feb. 5.....		1	Present.
Hankow.....	Jan. 27-Feb. 5.....			
Hongkong.....	Feb. 5.....	1		
Shanghai.....	Feb. 2-8.....		2	
<b>Egypt:</b>				
Cairo.....	Feb. 12-18.....	1		
<b>France:</b>				
Paris.....	Feb. 27-Mar. 5.....	8		
Formosa.....	Feb. 6-12.....	3	2	
Germany, general.....	Feb. 13-Mar. 5.....	14		
<b>Great Britain:</b>				
London.....	Feb. 19-26.....	1		
Nottingham.....	Feb. 20-26.....	3	1	
<b>India:</b>				
Bombay.....	Feb. 9-15.....		38	
Calcutta.....	Feb. 6-12.....		2	
Karachi.....	Feb. 6-12.....	1		
Rangoon.....	Jan. 27-Feb. 5.....		17	
<b>Italy, general:</b>				
Genoa.....	Feb. 21-27.....	5		
Naples.....	Feb. 14-28.....	2		
<b>Java:</b>				
Batavia.....	Jan. 27-Feb. 5.....	1		
<b>Korea:</b>				
Fusan.....	Feb. 1-12.....	6	1	
<b>Manchuria:</b>				
Tieling.....	Feb. 19.....			Do.
<b>Mexico:</b>				
Aguascalientes.....	Jan. 27-Feb. 5.....		3	
Chihuahua.....	Mar. 8-14.....	3	1	
Mexico.....	Feb. 13-19.....		1	
<b>Portugal:</b>				
Lisbon.....	Feb. 20-26.....	33		
<b>Russia:</b>				
Moscow.....	Feb. 13-19.....	25	8	
Riga.....	Feb. 7-26.....	9		
St. Petersburg.....	Feb. 13-19.....	49	16	
Warsaw.....	Dec. 19-Jan. 8.....		50	
<b>Siam:</b>				
Bangkok.....	Jan. 16-22.....	4	3	
<b>Siberia:</b>				
Vladivostok.....	Jan. 22-28.....	1	1	
<b>Spain:</b>				
Barcelona.....	Feb. 22-28.....		1	
Tarragona.....	Feb. 20-26.....		1	
<b>Straits Settlements:</b>				
Singapore.....	Jan. 22-Feb. 5.....		3	

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

**Reports Received from January 1 to March 18, 1910.**

[For reports received from June 25, 1909, to December 31, 1909, see PUBLIC HEALTH REPORTS for December 31, 1909. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Germany:</b>				
Heydekrug.....	Nov. 19-Dec. 4.....	2		
Niedrung.....	Nov. 16-22.....	1		
<b>India:</b>				
Bombay.....	Nov. 24-Feb. 8.....		19	
Calcutta.....	Nov. 14-Jan. 29.....		344	
Madras.....	Jan. 1-Feb. 4.....		2	
Rangoon.....	Nov. 14-Jan. 22.....		41	
<b>Java:</b>				
Batavia.....	Nov. 14-Jan. 15.....	387	111	
<b>Norway:</b>				
Friedershalld.....	Dec. 31-Jan. 3.....	1	1	From a vessel from Riga.
<b>Persia:</b>				
Astara.....	Dec. 1-15.....	36	22	
<b>Philippine Islands:</b>				
Manila.....	Nov. 7-Jan. 22.....	95	81	Third quarter, 1909. Cases 82, deaths 61.
<b>Provinces.....</b>				Third quarter, 1909. Cases 3,946, deaths 2,609.
Albay.....	Nov. 7-20.....	6	6	
Bataan.....	Nov. 7-Jan. 22.....	155	106	
Bohol.....	Nov. 7-Jan. 22.....	35	20	
Bulacan.....	Nov. 7-Jan. 1.....	32	27	
Camarines.....	Nov. 7-20.....	5	5	
Capiz.....	Nov. 21-Dec. 18.....	3	2	
Cavite.....	Nov. 7-Jan. 22.....	105	76	
Cebu.....	Nov. 7-Jan. 22.....	288	226	Nov. 20, 1 case on s. s. Yaptico.
Laguna.....	Dec. 19-25.....	4	4	
Leyte.....	Nov. 21-Jan. 15.....	36	32	
Misamis.....	Jan. 16-22.....	11	11	
Oriental Negros.....	Nov. 7-20.....	10	5	
Pampanga.....	Nov. 7-Jan. 22.....	157	124	
Rizal.....	Nov. 7-Jan. 22.....	11	7	
Tarlac.....	Nov. 7-13.....	9	5	
<b>Russia, general.....</b>	Nov. 21-Jan. 29.....	440	203	
Baku, government.....	Nov. 21-Dec. 25.....	22	22	
Baku.....	Nov. 21-Jan. 15.....	27	17	
Don, territory.....	Nov. 28-Jan. 29.....	19	12	
Ekaterinslav, government.....	Nov. 21-Jan. 1.....	23	7	
Jaroslav, government.....	Nov. 21-27.....		1	
Kaluga.....	Dec. 26-Jan. 1.....	1		
Kostroma, government.....	Nov. 21-27.....	3	4	
Kovna, government.....	Nov. 21-27.....	8	3	
Kursk, government.....	Nov. 21-Dec. 11.....	6		
Moscow, government— Moscow.....	Nov. 29-Jan. 22.....	256	115	
Pskov, government.....	Nov. 21-27.....	10		
St. Petersburg, government.....	Nov. 21-Dec. 18.....	14	12	
St. Petersburg.....	Nov. 21-Jan. 1.....	53	12	
Taurida, government.....	Nov. 21-Dec. 25.....	66	28	
Vitebsk, government.....	Nov. 21-27.....	2		
<b>Siam:</b>				
Bangkok.....	Oct. 28-Dec. 25.....	6	6	
<b>Siberia:</b>				
Vladivostok.....	Nov. 16-21.....	1		
<b>Straits Settlements:</b>				
Singapore.....	Dec. 19-Jan. 15.....		4	
<b>Sumatra:</b>				
Palembang.....	Sept. 20-Oct. 20.....	936	675	
<b>Turkey in Asia:</b>				
Trebizond.....	Nov. 28.....	1		On a vessel from Batum.

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

Reports Received from January 1 to March 18, 1910.

## YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Brazil:</b>				
Manaos.....	Nov. 21-Feb. 12.....		36	
Para.....	Nov. 28-Feb. 19.....	58	46	
<b>Ecuador:</b>				
Babahoyo.....	Jan. 1-Feb. 15.....	4		
Guayaquil.....	Dec. 1-Feb. 15.....	107	31	
<b>Peru:</b>				
Callao.....	Nov. 2-Dec. 2.....	1	1	From s. s. Loa.
<b>Mexico:</b>				
Yucatan—				
Merida.....	Dec. 20-21.....	1	1	
Santa Cruz de Bravo.....	Dec. 20.....	1	1	
<b>Trinidad:</b>				
Port of Spain.....	Nov. 28-Dec. 4.....	1	1	

## PLAGUE.

<b>Arabia:</b>				
Aden.....	Jan. 21-23.....	1	1	From an Austrian mail steamer from Bombay.
<b>Brazil:</b>				
Bahia.....	Nov. 20-Feb. 28.....	49	25	
Para.....	Nov. 28-Feb. 19.....	12	9	
Pernambuco.....	Oct. 15-Dec. 31.....		21	
Rio de Janeiro.....	Nov. 2-Jan. 23.....	16	2	
Santos.....	Nov. 1-Dec. 29.....	5	3	One case from bark Amazone, Dec. 1.
<b>Chile:</b>				
Iquique.....	Feb. 12.....			Present in endemic form.
Taltal.....	Jan. 15.....	2	1	
<b>China:</b>				
Hankow.....	Nov. 27-Dec. 7.....	20	20	
Hongkong.....	Nov. 21-27.....	1	1	
<b>Ecuador:</b>				
Babahoyo.....	Dec. 16-Feb. 15.....	18	6	
Guayaquil.....	Dec. 1-Feb. 15.....	210	87	
Milagro.....	Jan. 1-Feb. 15.....	15	3	
<b>Egypt:</b>				
Alexandria.....	Nov. 19-Dec. 15.....	3	2	
Port Said.....	Nov. 30-Dec. 22.....	2	1	
<b>Provinces—</b>				
Assiout.....	Sept. 29-Feb. 17.....	30	11	
Behersch.....	Dec. 8-14.....	1		
Beni Souef.....	Dec. 16-Feb. 17.....	19	8	
Fayoum.....	Jan. 20-Feb. 12.....	4	3	
Galloobeh.....	Jan. 11-Feb. 3.....	3	1	
Garbieh.....	Feb. 2.....	1	1	
Girgeh.....	Dec. 19-26.....	2	1	
Ghizeh.....	Dec. 19-Jan. 2.....	2		
Kena.....	Feb. 3.....		1	
Manouf.....	Nov. 28-Dec. 15.....	17	6	
Minieh.....	Dec. 21-27.....	3	1	
<b>German East Africa:</b>				
Mpwapwa.....	Sept. 19-Oct. 5.....	7		
<b>Hawaii:</b>				
Hilo.....	Mar. 12-14.....	2	2	
Honokaa.....	Mar. 14-15.....	2	2	
<b>India:</b>				
Bombay Presidency and Sind.....	Nov. 7-Jan. 22.....	11,137	7,821	
Madras Presidency.....	Nov. 7-Jan. 22.....	1,011	705	
Bengal.....	Nov. 7-Jan. 22.....	8,109	6,509	
United provinces.....	Nov. 7-Jan. 22.....	36,037	33,019	
Punjab.....	Nov. 7-Jan. 22.....	14,277	11,704	
Burma.....	Nov. 7-Jan. 22.....	898	766	
Central provinces, including Berar.....	Nov. 7-Jan. 22.....	10,322	8,355	
Coorg.....	Nov. 14-27.....	5	1	
Mysore State.....	Nov. 7-Jan. 22.....	1,388	1,020	
Hyderabad State.....	Nov. 7-Jan. 22.....	155	126	
Central India.....	Nov. 7-Jan. 22.....	850	638	
Rajputana and Ajmer-Merwara.....	Nov. 7-Jan. 22.....	4,157	3,674	
Kashmir.....	Nov. 7-Jan. 22.....	165	110	
<b>Grand total.....</b>		<b>88,511</b>	<b>74,448</b>	

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

Reports Received from January 1 to March 18, 1910.

## PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China:				
Saigon.....	Nov. 7-Dec. 25....	5	4	
Japan:				
Kobe.....	Nov. 28-Feb. 12....	24	20	
Shikoku Island.....	Jan. 30-Feb. 5....	1		
Paraguay.....	Dec. 10.....		30	In the northern part.
Peru:				
Arequipa, department.....	Dec. 10-16.....	1		
Mollendo.....	Dec. 20-Jan. 1....			
Callao, department—				
Callao.....	Jan. 17-25....	3		
Lambayeque, department..	Oct. 1-Dec. 16....	39	13	
Libertad, department.....	Nov. 19-Dec. 16..	32	3	
Lima, department.....	Oct. 22-Dec. 16..	10	6	
Russia:				
Astrakan, government.....	Dec. 5-Feb. 20....	114	105	50 miles south of Beiskulak.
Naourzali-Tchagil.....	Jan. 17-Feb. 2....	26	26	
Beiskulak.....	Dec. 10-16.....	18	16	
Dshedda.....	Jan. 7.....			Present.
Libau.....	Dec. 3-9.....	1	1	
Uralsk, district.....	Nov. 25-Jan. 12..	208	202	
Siam:				
Bangkok.....	Oct. 28-Nov. 27..	5	5	
Straits Settlements:				
Singapore.....	Dec. 25-Jan. 1....	2	2	
Turkey in Asia:				
Beirut.....	Nov. 29-Dec. 14..	3		
Jiddah.....	Jan. 5-Feb. 3....	5	4	
Venezuela:				
Puerto Cabello.....	Feb. 24.....	2		

## SMALLPOX.

Algeria, general.....	Dec. 1-15.....	22		
Algiers.....	Nov. 1-Jan. 31..		3	
Bona.....	Dec. 1-Jan. 31..	11	9	
Argentina:				
Buenos Aires.....	Oct. 1-Nov. 30..		16	
Austria:				
Galicia.....	Jan. 1-29.....	3		
Vienna.....	Jan. 9-29.....	2		
Brazil:				
Bahia.....	Nov. 20-Jan. 28..	205	135	
Pernambuco.....	Oct. 16-Dec. 31..		161	
Rio de Janeiro.....	Nov. 2-Feb. 13..	23	1	
Sao Paulo.....	Nov. 1-21.....		2	
Canada:				
British Columbia—				
Vancouver.....	Jan. 1-31.....	3		
Nova Scotia—				
Halifax.....	Dec. 19-Mar. 5..	3		
Windsor.....	Dec. 1-Jan. 31..	40		
Chile:				
Antofagasta.....	Jan. 1.....			Present. Feb. 12, 8 cases in lazaretto.
Quillota.....	Nov. 28-Dec. 4..			Present.
Valparaiso.....	Nov. 20-Jan. 1..			Do.
China:				
Amoy.....	Nov. 28-Jan. 15..		6	
Canton.....	Dec. 12-Jan. 29..	50	3	
Chang Cheun.....	Dec. 11.....			Do.
Chio Be.....	Dec. 11.....			Do.
Hankow.....	Jan. 2-15.....	1	1	Dec. 19-Jan. 29, present among natives.
Shanghai.....	Nov. 1-Jan. 30..	1	7	Deaths among Chinese.
Cuba:				
Habana.....	Dec. 3-9.....	1		From s. s. La Navarre.
Ecuador:				
Guayaquil.....	Jan. 1-31.....	3		
Egypt, general.....	Nov. 5-Jan. 21..	562	150	
Alexandria.....	Nov. 5-Jan. 21..	20	19	
Calro.....	Nov. 26-Feb. 11..	12	3	
France:				
Nantes.....	Jan. 1-31.....	1		
Paris.....	Dec. 5-Feb. 12..	33	1	

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

Reports Received from January 1 to March 18, 1910.

## SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany, general	Dec. 5-Feb. 12	65		
Konigsberg	Dec. 12-Jan. 15	2	2	In vicinity.
Great Britain:				
Bristol	Feb. 6-12	1		
Greenock	Feb. 6-12	1		
Hull	Jan. 16-22	2		
Liverpool	Dec. 19-Feb. 5	9		
London	Nov. 28-Feb. 18	19		
Newcastle-on-Tyne	Feb. 13-19	3		
Nottingham	Jan. 16-22	1		
Plymouth	Nov. 12-18		1	
Southampton	Nov. 12-18	1		
South Shields	Feb. 13-19	1		
Greece:				
Athens	Nov. 22-Feb. 19	4	15	
Hawaii:				
Honolulu	Jan. 31-Feb. 4	3	1	2 cases Jan. 31 from U. S. S. Washington from Yokohama. 1 case Feb. 2 on s. s. Makura.
India:				
Bombay	Nov. 24-Feb. 8		135	
Calcutta	Nov. 14-Jan. 29		8	
Kurrachee	Jan. 2-15	5		
Madras	Dec. 18-Jan. 21		3	
Rangoon	Nov. 20-Jan. 29		38	
Indo-China:				
Saigon	Dec. 7-13	1		
Italy, general	Nov. 29-Feb. 20	219		
Genoa	Dec. 1-Feb. 15	17	1	
Milan	Jan. 1-16	1		
Naples	Dec. 6-Feb. 20	183	37	
Japan:				
Kobe	Dec. 12-25	1	1	
Java:				
Batavia	Dec. 12-Jan. 29	7	1	
Liberia:				
Monrovia	Nov. 28-Dec. 4	6		
Malta:				
Valetta	Dec. 12-Jan. 15	3	1	
Mexico:				
Aguascalientes	Dec. 12-Feb. 26		27	
Chihuahua	Dec. 13-Feb. 28	11	7	
Guadalajara	Jan. 29-Feb. 18		5	
Mexico	Nov. 14-Feb. 5		15	
Monterey	Nov. 13-Feb. 20		2	
Veracruz	Feb. 13-19	1		
Netherlands:				
Rotterdam	Dec. 5-11	7		
Persia:				
Arabistan	Dec. 6-31			Present.
Hamadan	Nov. 15-Dec. 31			Do.
Kurdistan	Dec. 6-31			Do.
Sultanaabad	Nov. 15			Do.
Teheran	Nov. 1-Dec. 2			Do.
Peru:				
Callao	Dec. 6-12			Do.
Philippine Islands:				
Manila	Nov. 14-Jan. 22	16		Third quarter, 1909—Cases, 5; deaths, 0.
Portugal:				
Lisbon	Dec. 5-Feb. 19	149		
Porto Rico, general	July 1-Dec. 31	72	12	
Russia:				
Batoum	Dec. 1-31	5		
Libau	Dec. 6-Feb. 13	28		
Moscow	Nov. 21-Feb. 12	135	45	
Odessa	Nov. 21-Feb. 19	230	60	
Riga	Dec. 5-Feb. 12	34		
St. Petersburg	Nov. 28-Feb. 16	504	152	Oct. 1-Nov. 30, 17 deaths.
Warsaw	Oct. 24-Dec. 11		100	
Siam:				
Bangkok	Nov. 28-Dec. 25	1	1	
Siberia:				
Vladivostok	Jan. 15-21	1	1	
Spain:				
Almeria	Nov. 1-Dec. 31		10	
Barcelona	Dec. 14-Feb. 21		31	
Cadiz	Jan. 1-31		1	





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.		
Rangoon.....	Feb. 5	252,155	168	6	4			17								
Rome.....	Oct. 23	559,715	152	24						4						1
Do.....	Oct. 30		180	19						4				1	2	
Rotterdam.....	Mar. 5	418,408	108							2						
St. John, N. B.....	Mar. 12	40,711		3												1
St. Petersburg.....	Feb. 19	1,678,000	895	153				16	4	20	18	18	45			12
Santa Cruz de Tenerife.....	Feb. 26	46,000	23	3								1				
Schiedam.....	do	31,568	10	1												
Sheffield.....	do	472,000	123	14									1			
Do.....	Mar. 5		109	14												3
Singapore.....	Jan. 28	271,060	213	22						1						
Do.....	Feb. 5		238	33												
Southampton.....	Mar. 8	127,157	31	4												1
Stettin.....	Feb. 26	239,000	86	6									1			
Tarragona.....	do	20,400	21					1								
Vienna.....	do	2,085,888	649	110						2	5	5	17			8
Vigo.....	do	40,000	16	4						1						
Vladivostok.....	Jan. 28	85,004	13	3				1			1					
Warsaw.....	Dec. 25	764,054	293	61				15	1	3	3	6	8			7
Do.....	Jan. 1		281	45				18	3	1	5	7	7			6
Do.....	Jan. 8		299	48				17		2	9	2	6			4
Yokkaichi.....	Feb. 2	70,000	12	3									1			
Yokohama.....	Feb. 21	392,870								1		2				

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

ARGENTINA—*Buenos Aires*.—Month of December, 1909. Population, 1,242,278. Total number of deaths from all causes 1,862 including typhoid fever 18, smallpox 69, measles 9, scarlet fever 3 diphtheria 14, tuberculosis 174.

BRAZIL—*Pernambuco*.—Two weeks ended January 15, 1910. Population, 210,000. Total number of deaths from all causes 336, including typhoid fever 2, smallpox 44, tuberculosis 44.

FORMOSA.—Three weeks ended January 29, 1910. Population, 3,108,723. Total number of deaths not reported. Two deaths from typhoid fever and 3 from diphtheria reported.

FRANCE—*Toulon*.—Month of February, 1910. Population, 101,602. Total number of deaths from all causes 133, including typhoid fever 1, scarlet fever 1, tuberculosis 12.

GREAT BRITAIN.—Week ended February 19, 1910:

*England and Wales*.—The deaths registered in 76 great towns correspond to an annual rate of 15.8 per 1,000 of the aggregate population, which is estimated at 16,713,617.

*Ireland*.—The deaths registered in 21 principal town districts correspond to an annual rate of 22.8 per 1,000 of the aggregate population, which is estimated at 1,151,790. The lowest rate was recorded in Galway, viz, 3.9, and the highest in Kilkenny, viz, 44.2 per 1,000.



*Scotland.*—The deaths registered in 8 principal towns, having an aggregate estimated population of 1,864,194, correspond to an annual rate of 17.7. The lowest rate was recorded in Paisley, viz, 10.6, and the highest in Greenock, viz. 34.7 per 1,000 of the population. The total number of deaths from all causes was 643, including typhoid fever 2, scarlet fever 5, measles 37, diphtheria 7, whooping cough 7.

*ITALY—Genoa.*—Two weeks ended February 28, 1910. Population, 279,163. Total number of deaths from all causes 227, including typhoid fever 1, scarlet fever 1, tuberculosis 24.

*JAMAICA—Kingston.*—Month of February, 1910. Population, 56,000. Total number of deaths from all causes 129, including tuberculosis (pulmonary) 16.

*MANCHESTER.*—Two weeks ended February 26, 1910. Population; 244,636. Total number of deaths from all causes, 123, including measles 2, scarlet fever 2, diphtheria 3.

*MALTA.*—Two weeks ended February 12, 1910. Population, 212,288. Total number of deaths from all causes, 196, including typhoid fever 13, tuberculosis 17.

*SIAM—Bangkok.*—Four weeks ended January 22, 1910. Population 600,000. Total number of deaths from all causes not reported. Cholera, 6 deaths, plague 5, smallpox 3.

*SOUTH AFRICA—Johannesburg.*—Two weeks ended February 5, 1910. Population, 180,687. Total number of deaths from all causes, 174, including typhoid fever 7, scarlet fever 1, diphtheria 1, tuberculosis 19.

*SPAIN—Huelva.*—Month of January, 1910. Population 24,000. Total number of deaths from all causes, 73, including diphtheria 1, tuberculosis 8.

*TURKEY—Saloniki.*—Month of January, 1910. Population, 170,000. Total number of deaths from all causes 70, including smallpox 3, tuberculosis (pulmonary) 1.

*TURKS ISLANDS.*—Two weeks ended March 5, 1910. Population, 1,800. Total number of deaths from all causes, 3. No deaths from contagious diseases.

*URUGUAY—Montevideo.*—Month of December, 1909. Population 321,224. Total number of deaths from all causes, 516, including typhoid fever 11, smallpox 24, measles 1, scarlet fever 1, tuberculosis 69.

By authority of the Secretary of the Treasury:

WALTER WYMAN,

*Surgeon-General,*

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