

PUBLIC HEALTH REPORTS.

THE PROPHYLAXIS OF PELLAGRA.

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The prophylaxis of any disease must necessarily depend upon its cause, and with equal necessity the efficiency of prophylactic measures must be in ratio to the definiteness of our knowledge regarding such cause.

First, then, what do we know of the cause of pellagra? Do we possess any knowledge of its cause so definite and accurate that it may be applied efficiently in the institution of general prophylactic measures?

Broadly speaking, we may divide the theories as to the etiology of pellagra into two large groups, viz, those of the Zeists, who think there is some definite etiologic relation between Indian corn and pellagra, and those of the Antizeists, who oppose this view.

In the latter group there is really but one body of students, and that is composed largely of the French school, who deny that pellagra is a morbid entity and regard it only as a symptom complex occurring in alcoholics, insane persons, and in persons in other depressed states. This idea, for our present purposes, may be disregarded.

The Zeists include nearly all students of the disease, but their views are by no means harmonious. Putting it in a general way, their various ideas as to the etiology may be placed in three general divisions: (1) That it is an intoxication (toxico-chemical); (2) that it is an autointoxication (toxico-infective); (3) that it is a specific infection either by bacteria, moulds, or protozoa. All these variations, however, it must be noted, take into more or less essential consideration the relation of the disease to corn; the intoxication, the autointoxication, or the infection being in some more or less definite way regarded as usually connected with or derived from that grain.

It must be added, however, that while in most of these theories corn is regarded as an essential factor in the etiology of the disease, in others this cereal is not regarded as an absolute necessity, although much importance may be attributed to it. (Ceni).

Taking this general view of the etiology of the malady, what shall be said concerning the communicability of pellagra? This is a very natural and a very important question, and to some minds in this country has become indeed a very acute inquiry. In attempting to answer this question to our satisfaction we should not forget, as we are very likely to do, that while pellagra is a new disease to us it is an old problem to many other countries and has attracted the attention and occupied the minds of many able men. This question has,

of course, arisen among them, too. What is their answer? It has been given many times in the negative. And, what is more, their conviction has been carried into practice for, so far as I am aware, quarantine, and measures of isolation have not been put into practice in the prophylaxis of pellagra in those countries which have suffered most from its ravages.

Holland,^a after a trip through Italy observing pellagra, states that the question of the communicability of the disease can be answered decidedly in the negative.

Roussel,^b the great French student of pellagra, says, speaking of contagion in this disease:

Although the hypothesis of a pellagrous virus has had a place in the discussions of the last century, and has even appeared in divers authors of our own time, it has seemed to me useless to try to refute it. It can be said of the contagion of pellagra that it is a question fully determined * * * pellagra is not contagious.

Procopius^c says:

The disease is not contagious and the sick may associate intimately and freely with the well; and if spoiled maize is not eaten, the disease does not occur.

Cutting (unpublished consular report), while not a medical man, made an extensive report on pellagra, after personal observation and study in Italy, and his opinion may be taken to represent, to some extent at least, the Italian belief on this point. He says:

Pellagra is neither infectious nor contagious. It is transmissible, like insanity, in the form of a previous disposition.

Arnould,^d in discussing contagion and infection in pellagra, says that there are a great many facts connected with the disease which might incline one to consider it to be infectious, but not necessarily transmissible from man to man. He further says that spoiled maize seems to him to play a rôle so real and so large that any other supposition at present would involve questions and open up perspectives at which he hesitates. He also adds, in speaking of hereditary transmission, that this is the only means of conveyance from man to man, and that besides this, up to the present, the pellagra "germ" is only a metaphor.

Statements on this point are wanting in many writers. The reason is evident. The general conception of the nature of the disease at once forbids any idea of its communicability. Obviously it would be foolish for those who entertain the intoxication or autointoxication idea of the disease to consider its communicability, and as for those who regard it as a specific infection, an analysis of their complete views would likewise render quarantine or isolation unnecessary. The one possible exception would be the suggestion that the disease may be due to an insect-borne, protozoal parasite, and in this case the absence of any definite knowledge as to the nature of the insect would in all likelihood render quarantine and isolation ineffective.

There are several very good reasons just now why this question of communicability should have arisen to much importance in this country; but I do not think they will stand the test of careful examination. In the first place, the disease has arisen and grown to large

^a Medico-Chirurgical Transactions, London, 1820.

^b Traité de la pellagre, Paris, 1866.

^c La Pellagre, Paris, 1903.

^d Dict. Encyc. des Sc. Med., Pellagre, p. 360-362.

proportions, apparently like the proverbial mushroom, almost in a single night. It is something new, a malady with which we are not familiar, and in some of its manifestations is repulsive, if not actually loathsome; indeed, some of the older writers, evidently struck with this fact, applied to it the name leprosy, a term which, since the days of Moses, has been a synonym to mankind of all that is repulsive and loathsome in human disease. Then, too, it has been associated in our minds very frequently with mental alienation, a state naturally abhorrent to all; and its reported death rate has been very large indeed. Furthermore, the indefinite and pervasive character of its etiology, with the lack, not only of any specific treatment, but the apparent inefficacy of all treatment, has added further color to an already vivid picture.

All these features have given to the disease an air of strangeness, not to say of actual mystery, which has made a strong appeal to the public mind and which has probably, to a certain extent, reacted upon the professional mind. The result in certain communities has been to produce a very uneasy state of feeling, almost an hysterical condition, at times actually bordering on panic.

This seems very natural, but it is very unfortunate, for an analysis of the situation will not bear out the appearances. Its seeming rapid origin and growth among us is only apparent, not real. While there is evidence of the increasing prevalence of pellagra, there is also undoubted evidence that the disease has existed here for 30 or 40 years, and perhaps much longer. During this time many cases have developed, and the present reports of numbers of patients from various sections of the country very probably mean to a great extent the discovery of already existing cases as knowledge widens and skill in diagnosis develops among a profession hitherto largely unfamiliar with the subject. This may seem strange, but is in all likelihood a repetition of what has occurred at other times and in other places where the disease has been recognized for the first time.

Then the disease, in the vast majority of cases, does not present the horrible and revolting aspect so evident in a few; and mental alienation occurs only in a rather small percentage of cases. The mortality, too, is not so large as it would seem to us. We should not forget that our experience is brief and is largely based on asylum cases—the last stage of the most hopeless type of this disease.

Treatment likewise is not so hopeless by any means as it would seem to be, and the absence of any specific treatment for the disease is too common a fact among all diseases to occasion even comment when we must deal with one more in the same class; and, so far as etiology is concerned, the same remark might be made. Our knowledge on this point is just as definite and just as satisfactory as that for scores of other well-known diseases.

Of course the definite question, "Is pellagra contagious or infectious, or even communicable?" can not receive a categorical negative. To such a question one must of necessity answer, "I do not absolutely know." In considering such a question as quarantine in connection with the disease, while we can not give such a decided opinion, we can at least say that, from the accumulated observations of other able men with very extensive experience, we regard quarantine as unnecessary and probably unjustifiable.

There are scores and hundreds of observations all going to show that apparently the disease is not a communicable one; and the Italian authorities, who have had such wide experience and have made so long a struggle with the malady, have not yet, in all their fight for its limitation and eradication, adopted quarantine or isolation measures. Surely if they entertained even the slightest suspicion of its transmissibility from man to man they would not have neglected so important a matter.

I have perhaps said more on this point than it really warrants, but being myself a public health officer I am too keenly sensible of the hardships induced by quarantine measures willingly to see such procedures adopted when they seem unnecessary.

Quarantine of such cases in one way may do no harm and may be, it can be argued, nothing more than a precautionary means on the side of extreme safety. But surely this is poor reasoning for the adoption of such radical measures. There are in the whole United States how many cases of pellagra? The highest figure would place them at about 5,000. Estimating on the basis that 10 per cent of pellagra patients finally show sufficient mental involvement to enter asylums, this would give us a grand total of some 10,000 to 12,000 cases, the mortality of which we can not as yet even guess.

When one comes to consider the statistics of other well-known communicable diseases in which quarantine measures are not adopted, the force of this fact can be appreciated. Take typhoid fever, for example: There are probably each year not less than 35,000 deaths in the United States from this affection which, with the accepted mortality rate of 10 per cent, would mean an annual total of 350,000 cases of this readily communicable disease. Yet such cases are not only not quarantined, but, as one can readily imagine, efficient methods for prevention of this disease are not at all generally applied.

Hookworm disease is another striking example. Doctor Stiles states that there are about 2,000,000 of the southern rural population infected with this parasite, among whom there is probably, either directly or indirectly, a very high mortality. This is another communicable disease. These cases are not quarantined, and again no efficient general measures of prophylaxis are in existence.

It is almost a platitude to add tuberculosis, another communicable disease, with its enormous morbidity and mortality. Here again we do not adopt quarantine measures, though we do to some extent adopt isolation.

The real point of all this is, Why should we wish to adopt harsh measures in a disease which, according to all opinion, is not a communicable one when so many other important and communicable diseases are accepted as a matter of course?

Before leaving this point it is desired to be thoroughly understood. I am speaking of pellagra only with regard to its communicability, and what I have said does not minimize in the slightest degree the great importance of pellagra either as a clinical difficulty or as a public health problem. In all likelihood the disease will, according to its nature, steadily increase both in the number of cases affected and in the extent of territory involved. But such considerations as have been noted should not be forgotten lest we lose our sense of due proportion and distort our mental perspective.

Leaving aside this phase of the subject, however, there is another very important question which has a most practical bearing on the prophylaxis of pellagra and which appeals to us all. This question is, What advice shall be given and what measures adopted with regard to the use of corn as an article of diet?

In attempting to answer such a question to our satisfaction we must of course at the outset admit, it seems to me, that our own practical experience with the disease is too brief and too limited to permit our personal observations to have great weight. We are, to a large extent, forced to depend upon the conclusions of others. Moreover, pellagra is not an acute condition, but a very chronic one; and it would seem evident, as many have stated, that it takes not months but years of feeding on spoiled corn before a community begins to develop the disease.

Then, too, while theoretically a sharp distinction is drawn between spoiled corn and good corn, yet practically we are confronted with a very real difficulty in trying to determine which is spoiled and which is good corn. Such a distinction, while extremely important, is by no means easy, and the tests for such differentiation are not entirely satisfactory. Good corn is a very valuable cereal, and to advise that the use of all corn be totally suspended is not only impracticable but would seem unnecessary.

These are very practical facts, the full solution of which awaits further efforts; but even now the general distinction between good and spoiled corn may, for most purposes, be very fairly determined.

Bearing in mind these considerations, it seems to me that the accumulated work and observations of scores of able men who have had long and extensive experience with pellagra, both as a clinical and a public health problem, should have much weight with us.

Admitting that much of the evidence may seem evasive, unsatisfactory, or inconclusive, nevertheless when we take into consideration the generally accepted statements that pellagra was unknown in Europe before the introduction of Indian corn; that it is an endemic disease confined largely at least, if not exclusively, to populations which grow and eat corn and more especially to those who, through force of circumstances, eat poor grades of corn; that by far the great majority of all thinkers and students believe the disease is, in some definite if at present rather ill-defined way, connected with the use of corn as a foodstuff; that the Italian and other authorities, in all their attempts to limit and eradicate the disease, base their prophylactic measures almost wholly upon this theory, and that as an outcome of such measures good results are claimed—when all these things are given just and due consideration, it seems to me that we must, for the present at least, recognize some relationship between corn and pellagra; and in dealing with a disease of such gravity we must make use of such relationship in our prophylactic measures.

In other words, under such circumstances and conditions, the burden of proof for the present must, it seems to me, rest upon those who deny the influence of corn. Notwithstanding the fact that in the history of medicine the profession has been led into many serious errors through deductions made from false observations, we are in no position now totally to disregard such evidence as is submitted for an etiological relation between corn and pellagra; and in my opinion

we must take full cognizance of it in our prophylactic measures, as well as in our curative ones.

Adopting this conclusion, then we might, for our profit, inquire very briefly into the prophylactic measures adopted by other countries, notably Italy, a country which has suffered much from pellagra and has made and is making a determined fight against the disease.

Passing over earlier efforts, the Italian struggle against pellagra has culminated in the law of 1902 for "The prevention and cure of pellagra."^a The dispositions of this act are of two kinds—curative and preventive. The former includes such measures as free distribution of salt (a government monopoly in Italy), administration of food either at the homes of the patients or through sanitary stations (*locande sanitarie*), treatment of severe cases in hospitals for pellagrins (*pellagrosari*) and in insane asylums, etc. With this feature of the bill we are not now concerned.

The prophylactic measures are more numerous, and they are all directed against the use of spoiled corn as an article of food. As Mr. Cutting aptly says: "The cause of pellagra, while scientifically uncertain, is practically, and for Italy, ascertained." The measures comprise, besides a census of the disease and a report of all cases, the testing of corn and meal brought in at the frontiers or offered for sale or brought to the mill, and the prohibition of its sale for food if found spoiled; the exchange of good corn for spoiled corn; desiccating plants; cheap cooperative kitchens; the improvement of agriculture; and the education of the people.

By the provisions of the law all corn is inspected by experts and is submitted to certain tests; if found spoiled, its sale for food is prohibited. The tests are not entirely satisfactory from a scientific standpoint perhaps, but seem sufficient for practical purposes. They include such things as the determination of the proportion of ashes after burning, Gosio's phenolic reaction with ferric chloride, the germination test, and the general physical properties of the grain, such as appearance, smell, and taste.

The weak point in the inspection of corn seems to be in dealing with home-grown corn, especially the meal, either at the mill or on the markets. There seems to be no solution of this difficulty except governmental ownership of the mills, and this proposal is supported by many.

The *cattedre ambulante* (moving chairs), or "farmers' institutes," are of much importance in educating the farmers in agricultural methods, and these institutions have contributed a great deal to agricultural progress in Italy in the last few years. In regard to corn they teach the use of better varieties, proper methods of culture, etc., or how to supplant corn entirely with a more profitable crop.

The desiccating plants for the artificial drying of corn is considered a very important prophylactic measure, as it prevents the spoiling of the grain. These desiccators are of two types, fixed and portable, and there are a large number of public desiccators throughout Italy. There is also a provision in the law for public storehouses, properly

^a For information regarding this law and its application I am very much indebted to an official unpublished report on pellagra by W. Bayard Cutting, jr., at one time American vice-consul at Milan, Italy. I have made very free use of this excellent report.

constructed, where the grain may be stored under the best conditions to prevent spoiling.

Rural bakeries (*forni rurali*) and economic kitchens (*cucine economiche*) are establishments where an effort is made to eliminate from the peasants' diet any bread made of corn, by supplying good wheat bread and other food at a low cost.

The corn exchanges are devoted to the exchange, under certain conditions, of good meal for poor corn, to prevent the peasants eating the spoiled grain.

There are many other agencies used in the fight against pellagra, but these will give an idea of the general scope of such a struggle.

Above all such work as this, however, stands the education of the people to the dangers of spoiled corn and the healthfulness of a varied diet and better living conditions. A great deal has been done in this way; popular pamphlets are distributed, popular lectures are held everywhere, the school children are taught the dangers of spoiled corn, and the pellagrologic and the agricultural commissions of the different provinces are indefatigable in their propaganda against the spoiled grain.

The results of such work, only a brief sketch of which has been given, seem on the whole very encouraging, but their interpretation is difficult by reason of other contemporaneous developments. They coincide with a marked rise in general prosperity. The laborers and peasants now can eat better food than ever before; numbers of the rural population are employed in industrial institutions, where they receive a varied diet; temporary emigration has reflexly widened the view of the peasant class, and they demand and get better food and living conditions; the consumption of meat is increasing, and wages are higher. Such things must, of course, in a disease like pellagra, have a very profound effect.

Statistics, as may be seen from the following figures,^a undoubtedly show a decrease in pellagra:

Total number of pellagrins in Italy, by census.

1879.....	97, 855
1881.....	104, 067
1899.....	72, 603
1905.....	55, 029

Total deaths from pellagra in Italy.

1898.....	3, 987
1900.....	3, 788
1904.....	2, 363
1906.....	439
1907.....	376

For many reasons, statistics are not entirely satisfactory and do not serve to show the actual state of the case. The opinions of those actively engaged in the work and in close touch with the situation, however, are in general that pellagra in Italy is notably decreasing both in numbers and in intensity. Strange as it may seem, however, the disease is increasing its area, and parts of Italy previously free from pellagra are now developing the disease. The cause of this is not apparent.

^a Cutting, loc. cit., and Wollenberg, Public Health Reports, July 23, 1909.

In conclusion, it seems to me we may say that there is no evidence that pellagra is a communicable disease, and quarantine measures, in the present state of our knowledge, would appear unnecessary; that, unless we can disprove it, we must for the time at least accept the existence of some connection between corn and pellagra, and in our efforts at prophylaxis we must take cognizance of the alleged effect of the use of this grain as human food; that our own experience is too limited and too brief for us to base on our own observations as yet any new theories as to etiology; and that we can not afford, either with regard to etiology or to prophylaxis, to reject the observations and deductions of those who have had a far wider and fuller experience than ourselves.

UNITED STATES.

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

PELLAGRA.

LOUISIANA.

The board of health of the city of New Orleans reports 4 deaths from pellagra for the month of September.

MARYLAND.

The state board of health reports that a death from pellagra, the first recorded in the State of Maryland, occurred at the Baltimore City (now Mercy) Hospital August 20. The patient was a white woman who had been a lifelong resident of Charles County.

NORTH CAROLINA.

The state board of health reports that during the month of August cases of pellagra were reported in the following counties: Bladen 2, Caswell 1, Guilford 2, Lenoir 4, Robeson 4; Warren, number of cases not given.

Reports from San Francisco—Plague-prevention work at San Francisco, Oakland, and Point Richmond, Cal.

Surgeon Blue reports:

SAN FRANCISCO, CAL.

Last case of human plague: Sickened, January 30, 1908.

Last case of rodent plague: October 23, 1908.

Week ended October 9, 1909.

Dead inspected.....	120
Plague.....	0
Premises inspected.....	2,046
Houses disinfected.....	7
Buildings condemned.....	18
Nuisances abated.....	267
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Rats found dead.....	26
Rats trapped.....	2,045
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Total rats taken.....	2,071
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Rats identified:	
Mus norvegicus.....	1,611
Mus rattus.....	52
Mus musculus.....	374
Mus alexandrinus.....	18
Total.....	2,055
Rats identified as to sex:	
Male.....	709
Female.....	1,066
Total.....	1,775
Rats examined bacteriologically.....	1,334
Plague rats.....	0
Poisons placed.....	24,666
Total number of rats infected to date.....	398

OAKLAND, CAL.

Last case of human plague: Sickened, July 17, 1908.
 Last case of rodent plague: Trapped, December 1, 1908.

Week ended October 9, 1909.

Dead inspected.....	24
Plague.....	0
Rats found dead.....	27
Rats trapped.....	574
Rats identified:	
Mus norvegicus.....	550
Mus rattus.....	1
Mus musculus.....	49
Mus alexandrinus.....	1
Total.....	601
Rats examined bacteriologically.....	552
Plague rats.....	0
Necropsies held.....	3

POINT RICHMOND, CAL.

Week ended October 9, 1909.

Sick inspected.....	1
Plague.....	0
Dead inspected.....	6
Plague.....	0

STATISTICAL REPORTS OF MORBIDITY AND MORTALITY, STATES AND
CITIES OF THE UNITED STATES—UNTABULATED.

CALIFORNIA.—Month of August, 1909. Estimated population, 2,037,929. Total number of deaths reported to the state board of health 2,339, corresponding to an annual death rate of 13.5 per 1,000 of population, including enteric fever 49, measles 3, scarlet fever 1, whooping cough 23, smallpox 2, plague 1, diphtheria 15, and 308 from tuberculosis.

Los Angeles.—Month of September, 1909. Estimated population, 300,000. Total number of deaths 300, corresponding to an annual death rate of 12 per 1,000 of population, including enteric fever 6,

measles 3, whooping cough 1, diphtheria 2, and 49 from tuberculosis. Cases: Diphtheria 25, scarlet fever 16, enteric fever 34, measles 29, and tuberculosis 48.

San Francisco.—Month of August, 1909. Estimated population, 475,000. Total number of deaths 450, corresponding to an annual death rate of 9.33 per 1,000 of population, including enteric fever 8, scarlet fever 1, whooping cough 4, diphtheria 1, and 41 from tuberculosis. Cases: Diphtheria 27, scarlet fever 22, measles 11, whooping cough 26, enteric fever 38, and tuberculosis 90.

CONNECTICUT.—Month of August, 1909. Reports to the state board of health from 165 towns having an aggregate population of 1,049,283 show as follows: Total number of deaths from all causes 1,283, corresponding to an annual death rate of 14.6 per 1,000 of population, including measles 2, scarlet fever 5, diphtheria 16, whooping cough 2, enteric fever 4, and 95 from pulmonary tuberculosis. Cases: Measles, 35 in 16 towns; scarlet fever, 127 in 32 towns; diphtheria, 128 in 18 towns; whooping cough, 66 in 11 towns; enteric fever, 185 in 53 towns; and tuberculosis, 97 in 28 towns.

Bridgeport.—Month of September, 1909. Estimated population, 100,000. Total number of deaths 124, including scarlet fever 2, tuberculosis 14, diphtheria 2, and 1 from enteric fever. Cases: Diphtheria 9, enteric fever 10, scarlet fever 18, measles 1, and pulmonary tuberculosis 10.

ILLINOIS.—Report for the year 1908. Estimated population, 5,608,304. Total number of deaths 60,445, corresponding to a death rate of 10.8 per 1,000 of population. Deaths from contagious diseases were: Tuberculosis 6,944, enteric fever 944, scarlet fever 533, measles 336, diphtheria 979, whooping cough 491, and small-pox 1.

INDIANA.—Month of August, 1909. Total number of deaths, 3,164, corresponding to an annual death rate of 13.6 per 1,000 of the population, which is estimated at 2,732,549. Deaths from contagious diseases were: Tuberculosis 327, enteric fever 106, diphtheria 17, scarlet fever 7, measles 6, and 39 from whooping cough. Cases: Small-pox, 29 in 2 counties; enteric fever, 464 in 69 counties; diphtheria, 130 in 30 counties.

IOWA—*Ottumwa*.—Month of September, 1909. Estimated population, 25,000. Total number of deaths, 31, including diphtheria 1 and 6 from tuberculosis. Cases: Diphtheria 4, enteric fever 1, scarlet fever 1, and pulmonary tuberculosis 6.

KANSAS.—Month of July, 1909. Estimated population, 1,470,495. Total number of deaths from contagious and infectious diseases, 77. Causes of death: Tuberculosis 48, enteric fever 22, diphtheria 4,

scarlet fever 4, and 1 from measles. Cases: Tuberculosis 56, enteric fever 137, diphtheria 22, scarlet fever 30, smallpox 61, and measles 9.

LOUISIANA—*New Orleans*.—Month of September, 1909. Estimated population, 362,000 (white, 265,000; colored, 97,000). Total number of deaths, 493 (white 305; colored, 188), including enteric fever 8, scarlet fever 1, whooping cough 3, diphtheria 4, pellagra 4, and 53 from tuberculosis. Annual death rate per 1,000 for the month: White, 13.81; colored 23.25. Total white and colored, 16.32.

MARYLAND—*Hagerstown*.—Month of September, 1909. Estimated population, 50,000. Total number of deaths, 58, including enteric fever 5. Cases: Enteric fever 24, scarlet fever 5, and diphtheria 1.

MASSACHUSETTS.—Reports from the state board of health for the four weeks ended August 28, 1909. Fifty-three cities and towns reporting, having an aggregate estimated population of 2,379,468, report 3,124 deaths, including diphtheria 29, enteric fever 22, measles 6, and 230 from phthisis pulmonalis. Cases: Diphtheria 363, enteric fever 274, measles 209, scarlet fever 295, whooping cough 87, and phthisis pulmonalis 582.

MONTANA.—Month of August, 1909. Estimated population, 280,000. Reports to the state board of health show as follows: Total number of deaths, 378, corresponding to an annual death rate of 16.2 per 1,000 of population, including diphtheria 6, enteric fever 7, whooping cough 7, scarlet fever 5, and 31 from tuberculosis. Cases: Diphtheria 38, enteric fever 78, measles 7, scarlet fever 66, and smallpox 31.

NEW JERSEY.—Reports to the state board of health for the month of September, 1909, show a total of 3,153 deaths, including diphtheria 31, enteric fever 23, measles 7, scarlet fever 11, whooping cough 33, and 302 from tuberculosis.

NEW YORK—*Auburn*.—Month of August, 1909. Estimated population, 40,000. Total number of deaths 52, including 5 from tuberculosis. Cases of contagious diseases reported: Diphtheria 1, measles 1, and phthisis pulmonalis 3.

Month of September, 1909. Total number of deaths 34, including 3 from tuberculosis. Cases: Enteric fever 4, and pulmonary tuberculosis 1.

New York State.—Month of August, 1909. Estimated population, 8,699,643. Total number of deaths 11,605, corresponding to an annual death rate of 15.7 per 1,000 of population. Deaths include enteric fever 129, measles 63, scarlet fever 32, whooping cough 89, diphtheria 103, and 1,199 from tuberculosis. Cases: Tuberculosis 2,529, diphtheria 916, scarlet fever 608, measles 1,031, enteric fever 851, and smallpox 12.

NORTH CAROLINA.—Month of August, 1909. Estimated population, 1,893,810. Reports of state board of health from 84 counties

show as follows: Pellagra in 6 counties, measles in 7 counties, whooping cough in 27 counties, scarlet fever in 34 counties, diphtheria in 45 counties, enteric fever in 76 counties, malarial fever in 15 counties, pernicious malarial fever in 8 counties, hemorrhagic malarial fever in 8 counties, and smallpox in 10 counties, viz: Camden, Craven 2, Cumberland 1, Davie 1, Duplin 10, Jones 8, Lenoir 4, Wake 1, Watauga 8, Yancey 2.

OHIO—*Columbus*.—Month of September, 1909. Estimated population, 190,000. Total number of deaths, 155, including enteric fever 3, diphtheria 2, and 26 from tuberculosis. Cases: Diphtheria 18, scarlet fever 19, whooping cough 1, measles 41, enteric fever 32, smallpox 1, and tuberculosis 22.

Toledo.—Month of August, 1909. Estimated population, 195,888. Total number of deaths 205, corresponding to an annual death rate of 12.56 per 1,000 of population, including enteric fever 3, measles 2, whooping cough 1, diphtheria 5, and 17 from tuberculosis. Cases: Diphtheria 12, scarlet fever 5, measles 22, and smallpox 1.

PENNSYLVANIA—*Pittsburg*.—Month of June, 1909. Estimated population, 572,000. Total number of deaths 637, corresponding to an annual death rate of 13.36 per 1,000 of population, including diphtheria 2, scarlet fever 1, measles 2, whooping cough 11, enteric fever 6, and 54 from tuberculosis. Cases: Diphtheria 25, scarlet fever 60, enteric fever 52, tuberculosis 214, whooping cough 145, and measles 68.

TENNESSEE—*Nashville*.—Month of September, 1909. Total number of deaths 131, corresponding to an annual death rate of 12.3 per 1,000 of population, which is estimated at 106,476, including enteric fever 6, scarlet fever 2, diphtheria 4, and 16 from tuberculosis. Cases: Scarlet fever 34, diphtheria 26, enteric fever 44, and pulmonary tuberculosis 19.

TEXAS—*El Paso*.—Month of September, 1909. Estimated population, 22,911. Total number of deaths 109, corresponding to an annual death rate of 20.6 per 1,000 of population, including tuberculosis 28, and 4 from enteric fever. Cases: Enteric fever 14.

WASHINGTON—*Seattle*.—Month of August, 1909. Estimated population, 276,000. Total number of deaths 214, including enteric fever 2, scarlet fever 4, diphtheria 5, and 24 from tuberculosis. Cases quarantined: Diphtheria 45, smallpox 6, scarlet fever 25, measles 14, enteric fever 30, and tuberculosis 6.

Tacoma.—Month of September, 1909. Estimated population, 120,000. Total number of deaths 90, including scarlet fever 2, diphtheria 1, enteric fever 4, and 8 from tuberculosis. Cases: Pulmonary tuberculosis 13, scarlet fever 40, enteric fever 30, and diphtheria 7.

Smallpox in the United States as reported to the Surgeon-General, Public Health and Marine-Hospital Service, June 26 to October 29, 1909.

[For reports received from December 25, 1908, to June 25, 1909, see PUBLIC HEALTH REPORTS for June 25, 1909.]

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

Place.	Date.	Cases.	Deaths.	Remarks.
California, general	Aug. 1-31.....	.....	2	
Berkeley.....	July 25-31.....	1	.....
Hobart Mills.....	Apr. 1-30.....	1	.....
Sacramento.....	June 6-12.....	1	.....
San Francisco.....	June 6-July 3.....	2	.....
Truckee.....	Mar. 23.....	3	.....
Total for State.....		8	2	
Colorado:				
Adams County.....	Apr. 1-June 30....	5	.....
Boulder County.....	Apr. 1-June 30....	8	.....
Clear Creek County.....	Apr. 1-June 30....	1	.....
Denver County—				
Denver.....	Apr. 1-June 30....	10	.....
El Paso County.....	Apr. 1-June 30....	3	.....
Fremont County.....	Apr. 1-June 30....	13	.....
Grand County.....	Apr. 1-June 30....	1	.....
Huerfano County.....	Apr. 1-June 30....	24	.....
Larimer County.....	Apr. 1-June 30....	4	.....
Las Animas County.....	Apr. 1-June 30....	1	.....
Mesa County.....	Apr. 1-June 30....	20	.....
Montrose County.....	Apr. 1-June 30....	2	.....
Morgan County.....	Apr. 1-June 30....	17	.....
Otero County.....	Apr. 1-June 30....	1	.....
Pueblo County.....	Apr. 1-June 30....	8	.....
Rio Grande County.....	Apr. 1-June 30....	1	.....
San Miguel County.....	Apr. 1-June 30....	4	.....
Weld County.....	Apr. 1-June 30....	1	.....
Total for State.....		124		
Connecticut:				
Bridgeport.....	Oct. 2.....	1	.....
New Haven.....	May 1-31.....	1	.....
Total for State.....		2		
District of Columbia:				
Washington.....	Aug. 8-Oct. 9....	8	.....
Total for District.....		8		
Georgia:				
Macon.....	June 14-Oct. 8....	12	.....
Total for State.....		12		
Illinois:				
Alexander County—				
Calro.....	May 1-June 30....	25	.....
Bureau County.....	Aug. 1-31.....	1	.....
Champaign County.....	Apr. 1-May 31....	25	.....
Christian County.....	Apr. 1-May 31....	35	.....
Clay County.....	Apr. 1-30.....	1	.....
Clinton County.....	Apr. 1-June 30....	7	.....
Cook County—				
Chicago.....	June 20-Oct. 16....	6	.....
Dewitt County.....	May 1-31.....	7	.....
Edwards County.....	Apr. 1-May 31....	3	.....
Effingham County.....	Apr. 1-30.....	2	.....
Fayette County.....	May 1-31.....	2	.....
Franklin County.....	Apr. 1-May 31....	2	.....
Fulton County.....	Apr. 1-June 30....	.....	.....	Present.
Gallatin County.....	Apr. 1-May 31....	16	.....
Iroquois County.....	May 1-31.....	1	.....
Jackson County.....	Apr. 1-May 31....	14	.....
Murphysboro.....	Apr. 1-May 31....	40	.....
Knox County.....	Apr. 1-30.....	8	.....
Lake County.....	Apr. 1-July 31....	14	.....
Lasalle County.....	Apr. 1-30.....	3	.....
McDonough County.....	Apr. 1-30.....	25	.....
McHenry County—				
Marengo.....	May 1-June 30....	97	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Illinois—Continued.				
Macoupin County.....	Apr. 1-May 31.....	6		
McLean County.....	June 1-30.....	1		
Madison County.....	May 1-June 30.....	2		
Marion County.....	Apr. 1-June 30.....	14		
Menard County.....	Aug. 1-31.....	5		
Massac County—				
Metropolis.....	Apr. 1-May 31.....	29		
Montgomery County.....	May 1-June 30.....	2		
Peoria County.....	Apr. 1-June 30.....	13		
Peoria.....	June 1-Sept. 31.....	54		
Perry County.....	Apr. 1-Aug. 31.....	18		
Pulaski County.....	May 1-31.....	5		
Rock Island County—				
Moline.....	June 1-July 31.....	2		
St. Clair County—				
East St. Louis.....	May 1-June 30.....	11		
Saline County.....	May 1-31.....	30		
Sangamon County.....	Apr. 1-30.....	1		
Springfield.....	May 29-July 9.....	3		
Schuyler County.....	May 1-31.....	1		
Shelby County.....	Apr. 1-July 31.....	3		
Stephenson County.....	May 1-31.....	4		
Tazewell County.....	May 1-31.....	5		
Pekin.....	Apr. 1-Aug. 31.....	78		
Union County.....	Apr. 1-May 31.....	5		
Vermillion County.....	Apr. 1-May 31.....	2		
Danville.....	June 14-Sept. 25.....	13		
Warren County.....	June 1-July 31.....	3		
Will County—				
Joliet.....	July 1-31.....	1		
Williamson County.....	Apr. 1-Aug. 31.....	17		
Winnebago County.....	June 1-30.....	1		
Woodford County.....	Apr. 1-July 31.....	25		
Total for State.....		688		
Indiana:				
Allen County.....	May 1-Aug. 31.....	17		
Fort Wayne.....	June 6-Oct. 2.....	103		
Carroll County.....	June 1-30.....	1		
Clay County.....	June 1-30.....	4		
Dearborn County.....	May 1-31.....	4		
DeKalb County.....	June 1-30.....	1		
Delaware County.....	May 1-31.....	1		
Muncie.....	June 20-July 10.....	4		
Fayette County.....	June 1-30.....	1		
Fountain County.....	July 1-31.....	1	1	
Gibson County.....	May 1-31.....	5		
Grant County.....	May 1-July 31.....	4		
Greene County.....	June 1-July 31.....	4	1	
Marion County—				
Indianapolis.....	June 14-20.....	1		
Montgomery County.....	May 1-June 30.....	9		
Parke County.....	May 1-31.....	1		
Pulaski County.....	May 1-31.....	2		
St. Joseph County.....	June 1-30.....	4		
South Bend.....	June 13-Aug. 14.....	5		
Tipton County.....	July 1-31.....	1		
Vanderburg County.....	May 1-June 30.....	26		
Vermillion County.....	May 1-July 31.....	43		
Vigo County.....	June 1-30.....	4		
Wayne County.....	May 1-July 31.....	15	1	
White County.....	May 1-31.....	2		
Total for State.....		263	3	
Iowa:				
Cedar Rapids.....	July 1-Aug. 31.....	2		
Keokuk.....	May 1-31.....	3		
Ottumwa.....	June 1-30.....	1		
Total for State.....		6		
Kansas:				
Allen County.....	May 1-31.....	5		
Atchison County.....	June 1-July 31.....	8		
Brown County.....	June 1-30.....	1		
Chautauqua County.....	May 1-31.....	3		
Cherokee County.....	May 1-31.....	1		
Coffey County.....	May 1-31.....	1		
Comanche County.....	June 1-30.....	3		
Cowley County.....	May 1-31.....	14		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Kansas—Continued				
Crawford County.....	May 1-31.....	20		
Pittsburg.....	May 1-June 30....	4		
Decatur County.....	June 1-30.....	12	1	
Dickinson County.....	May 1-July 31....	3		
Doniphan County.....	May 1-Aug. 31....	29		
Douglas County.....	May 1-31.....	1		
Elk County.....	May 1-31.....	1		
Ellsworth County.....	June 1-30.....	1		
Franklin County.....	May 1-31.....	5		
Geary County.....	May 1-July 31....	5		
Graham County.....	June 1-30.....	6		
Greenwood County.....	May 1-31.....	3		
Jackson County.....	May 1-June 30....	24		
Jefferson County.....	May 1-31.....	2		
Jewell County.....	May 1-31.....	6		
Kearny County.....	May 1-31.....	1		
Kingman County.....	July 1-31.....	2		
Labette County—				
Parsons.....	May 1-July 31....	10		
Lincoln County.....	July 1-31.....	4		
Lyon County.....	May 1-July 31....	28		
McPherson County.....	July 1-31.....	1		
Marion County.....	July 1-31.....	1		
Marshall County.....	May 1-Aug. 31....	230		
Montgomery County.....	May 1-July 31....	10		
Coffeyville.....	July 1-31.....	1		
Nemaha County.....	June 1-July 31....	11		
Osage County.....	May 1-June 30....	32		
Osborne County.....	May 1-June 30....	11		
Ottawa County.....	May 1-31.....	3		
Phillips County.....	May 1-31.....	1		
Pottawatomie County.....	May 1-July 31....	15		
Pratt County.....	May 1-July 31....	6		
Rawlins County.....	May 1-31.....	13		
Republic County.....	June 1-30.....	5		
Riley County.....	May 1-June 30....	8		
Rooks County.....	July 1-31.....	1		
Rush County.....	June 1-30.....	2		
Russell County.....	June 1-30.....	1		
Saline County.....	May 1-31.....	2		
Scott County.....	Aug. 1-31.....	1		
Sedgwick County.....	May 1-31.....	11		
Wichita.....	July 11-Aug. 7....	5		
Shawnee County.....	May 1-Aug. 31....	13		
Topeka.....	May 1-July 31....	45		
Smith County.....	May 1-31.....	11		
Sumner County.....	May 1-31.....	3		
Thomas County.....	May 1-31.....	1		
Wabaunsee County.....	May 1-31.....	6		
Wyandotte County.....	May 1-31.....	4		
Kansas City.....	June 13-July 17..	10		
Total for State.....		667	1	
Kentucky:				
Covington.....	June 13-July 3....	5		
Lexington.....	June 20-Aug. 21..	16		
Newport.....	June 14-July 25..	4		
Paducah.....	June 13-26.....	3		
Total for State.....		28		
Louisiana:				
New Orleans.....	June 13-Sept. 4...	13		
Total for State.....		13		
Maryland, general.....				
Mar. 1-Apr. 30....		9		
Total for State.....		9		
Massachusetts:				
Boston.....	Sept. 12-Oct. 16..	3		
Lawrence.....	June 27-July 3....	1		
Total for State.....		4		
Michigan:				
Bay County—				
Bay City.....	June 1-Aug. 31....	2		
Berrien County.....	July 1-Aug. 31....	9		
Branch County.....	July 1-Aug. 31....	5		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Michigan—Continued.				
Calhoun County.....	June 1-30.....	1		
Cass County.....	July 1-Aug. 31.....	8	1	
Cheboygan County.....	July 1-31.....	2		
Chippewa County.....	May 1-31.....	1		
Clinton County.....	Aug. 1-31.....	1		
Delta County.....	June 1-30.....	1		
Eaton County.....	May 1-Aug. 31.....	46		
Emmet County.....	June 1-July 31.....	2		
Genesee County.....	July 1-31.....	1		
Gogebic County.....	Aug. 1-31.....	1		
Houghton County.....	May 1-Aug. 31.....	7		
Huron County.....	June 1-30.....	1		
Ingham County.....	May 1-31.....	1		
Jackson County.....	May 1-31.....	1		
Kalamazoo County—				
Kalamazoo.....	July 4-24.....	2		
Kent County—				
Grand Rapids.....	June 6-26.....	2		
Lapeer County.....	June 1-30.....	1		
Livingston County.....	Aug. 1-31.....	16		
Marquette County.....	May 1-July 31.....	8		
Menominee County.....	July 1-31.....	4		
Muskegon County.....	May 1-Aug. 31.....	16		
Newaygo County.....	June 1-30.....	1		
Oceana County.....	May 1-31.....	1		
Ottawa County.....	May 1-July 31.....	8		
Saginaw County.....	May 1-July 31.....	20		
Saginaw.....	July 25-31.....	1		
St. Clair County.....	May 1-June 30.....	4		
Schoolcraft County.....	July 1-31.....	4		
Manistique.....	June 1-Aug. 31.....	41		
Tuscola County.....	May 1-31.....	4		
Wayne County—				
Detroit.....	May 1-July 31.....	2		
Total for State.....		225	1	
Minnesota, general.				
Becker County.....	June 15-21.....	5		
Bigstone County.....	June 8-14.....	1		
Carver County.....	July 6-Aug. 16.....	6		
Clay County.....	July 28-Aug. 2.....	1		
Cottonwood County.....	July 1-31.....	1		
Crawford County.....	Aug. 10-16.....	1		
Fairbault County.....	June 7-14.....	2		
Hennepin County—				
Minneapolis.....	May 1-June 30.....	39		
Hubbard County.....	May 25-31.....	1		
Itasca County.....	May 25-June 14.....	7		
Lesueur County.....	June 1-7.....	1		
McLeod County.....	May 25-July 19.....	2		
Marshall County.....	June 8-July 5.....	6		
Meeker County.....	May 25-31.....	5		
Morrison County.....	June 21-Aug. 16.....	2		
Nobles County.....	May 25-June 21.....	2		
Olmsted County.....	June 8-14.....	2		
Pine County.....	May 25-31.....	1		
Ramsey County—				
St. Paul.....	Apr. 1-May 31.....	10		
Redwood County.....	June 1-7.....	1		
Rock County.....	June 1-7.....	1		
St. Louis County.....	May 25-June 21.....	3		
Duluth.....	June 10-Sept. 24.....	21		
Sibley County.....	June 22-July 19.....	4		
Stearns County—				
St. Cloud.....	July 13-19.....	1		
Steele County.....	May 25-June 21.....	3		
Swift County.....	July 20-26.....	1		
Wabasha County.....	May 25-31.....	2		
Wadena County.....	May 25-July 19.....	11		
Waseca County.....	May 25-31.....	8		
Wright County.....	June 15-Aug. 16.....	10		
Total for State.....		161	3	
Missouri:				
Kansas City.....	June 13-26.....	2		
St. Joseph.....	May 30-July 24.....	19		
St. Louis.....	June 20-Oct. 2.....	9		
Total for State.....		30		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Montana:				
Carbon County.....	June 1-July 31....	6		
Cascade County—				
Great Falls.....	June 1-30.....	1		
Chouteau County.....	June 1-30.....	1		
Custer County.....	June 1-30.....	1		
Dawson County.....	May 1-31.....	5		
Deerlodge County.....	May 1-31.....	1		
Fergus County.....	June 1-30.....	1		
Flathead County.....	May 1-31.....	4		
Gallatin County.....	May 1-31.....	4		
Jefferson County.....	May 1-31.....	2		
Lewis and Clark County—				
Helena.....	May 1-31.....	1		
Missoula County—				
Missoula.....	June 1-Aug. 31....	6		
Park County.....	May 1-June 30.....	21		
Livingston.....	May 1-Aug. 31....	14		
Sanders County.....	May 1-31.....	1		
Silverbow County.....	June 1-Aug. 31....	24		
Butte.....	June 11-Oct. 14..	49		
Teton County.....	May 1-31.....	1		
Valley County.....	May 1-31.....	1		
Yellowstone County.....	May 1-July 31....	7		
Total for State.....		151		
Nebraska:				
Lincoln.....	May 1-July 31....	34		
Total for State.....		34		
New Jersey:				
Newark.....	Sept. 19-25.....	1		
Total for State.....		1		
New York, general.				
Buffalo.....	May 1-Aug. 31....	462		
	Oct. 3-9.....	1		
Total for State.....		463		
North Carolina:				
Beaufort County.....	June 1-30.....	1		
Bladen County.....	Apr. 1-30.....	5		
Buncombe County.....	Apr. 1-30.....	1		
Caldwell County.....	Apr. 1-June 30....	19		
Camden County.....	Apr. 1-June 30....	70		
Carteret County.....	Apr. 1-30.....	1		
Craven County.....	Apr. 1-Aug. 31....	10		
Cumberland County.....	May 1-Aug. 31....	2		
Davie County.....	Aug. 1-31.....	1		
Duplin County.....	Apr. 1-Aug. 31....	35		
Harnett County.....	June 1-July 31....	7		
Johnston County.....	Apr. 1-July 31....	3		
Jones County.....	Aug. 1-31.....	8		
Lee County.....	Apr. 1-30.....	6		
Lenoir County.....	July 1-Aug. 31....	6		
Madison County.....	May 1-June 30....	7		
Mecklenburg County.....	May 1-31.....	2		
Charlotte.....	Sept. 26-Oct 8....	5		
Mitchell County.....	July 1-31.....	8		
Montgomery County.....	July 1-31.....	10		
Nash County.....	June 1-30.....	1		
Onslow County.....	Apr. 1-30.....	2		
Pamlico County.....	May 1-31.....	4		
Pasquotank County.....	Apr. 1-May 31....	15		
Pitt County.....	Apr. 1-June 30....	17		
Robeson County.....	June 1-July 31....	14		
Rowan County.....	May 1-July 31....	17		
Sampson County.....	Apr. 1-June 30....	51		
Transylvania County.....	May 1-31.....	5		
Wake County.....	Apr. 1-Aug. 31....	3		
Watauga County.....	June 1-Aug. 31....	38		
Wayne County.....	May 1-31.....	14		
Wilson County.....	Apr. 1-30.....	1		
Yancey County.....	Apr. 1-Aug. 31....	10		
Total for State.....		399		
North Dakota:				
Bottineau County.....	May 1-July 31....	2		
Cass County.....	July 1-31.....	2		
Emmons County.....	July 1-31.....	3		

Apr. 1-30 present.

In extreme northern part.

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
North Dakota—Continued.				
Grand Forks County.....	May 1-July 31.....	13	.....
Lamoure County.....	May 1-June 30.....	3	.....
McHenry County.....	May 1-31.....	1	.....
Stutsman County.....	June 1-July 31.....	15	.....
Walsh County.....	June 1-30.....	2	.....
Ward County.....	May 1-July 31.....	11	.....
Total for State.....		52	.....
Ohio:				
Cincinnati.....	June 12-Oct. 9.....	5	.....
Columbus.....	Sept. 12-18.....	1	.....
Dayton.....	July 18-Oct. 16.....	19	1	
Springfield.....	Oct. 10-16.....	9	.....
Toledo.....	July 25-Aug. 7.....	2	.....
Total for State.....		36	1	
Oklahoma:				
Coal County.....	Aug. 1-31.....	3	.....
Ellis County.....	Aug. 1-31.....	1	.....
Kay County.....	Aug. 1-31.....	5	.....
Kiowa County.....	Aug. 1-31.....	4	.....
Muskogee County.....	Aug. 1-31.....	1	.....
Oklahoma County.....				
Oklahoma.....	Apr. 3-Aug. 21.....	51	1	
Washington County.....	Aug. 1-31.....	1	.....
Total for State.....		66	1	
Oregon:				
Clackamas County.....	May 1-June 30.....	3	.....
Coos County.....	June 1-30.....	1	.....
Marion County.....	May 1-June 30.....	11	.....
Multnomah County.....	May 1-June 30.....	3	.....
Portland.....	Apr. 1-Aug. 31.....	40	.....
Umatilla County.....	June 1-30.....	2	.....
Union County.....	June 1-30.....	1	.....
Washington County.....	May 1-June 30.....	14	.....
Yamhill County.....	June 1-30.....	3	.....
Total for State.....		78	.....
Pennsylvania:				
Philadelphia.....	July 10-24.....	4	.....
Total for State.....		4	.....
Tennessee:				
Knoxville.....	June 20-Aug. 21.....	7	.....
Total for State.....		7	.....
Texas:				
Anderson County.....	Aug. 1-31.....	5	.....
Archer County.....	June 1-30.....	1	.....
Baylor County.....	June 1-30.....	22	.....
Bee County.....	June 1-30.....	6	.....
Bexar County.....	June 1-July 31.....	1	1	
San Antonio.....	June 13-July 31.....	10	.....
Bowie County.....	June 1-30.....	7	.....
Cameron County.....	June 1-30.....	1	.....
Cherokee County.....	June 1-30.....	1	.....
Childress County.....	June 1-30.....	4	.....
Concho County.....	Aug. 1-31.....	2	.....
Ellis County.....	May 1-June 30.....	2	.....
Galveston County.....	June 1-30.....	1	.....
Galveston.....	June 19-25.....	1	.....
Gonzales County.....	May 1-June 30.....	6	2	
Grayson County.....	June 1-30.....	9	.....
Harris County.....	June 1-30.....	12	.....
Houston.....	Mar. 28-June 19.....	17	.....
Harrison County.....	June 1-Aug. 31.....	17	.....
Hays County.....	July 1-31.....	8	.....
Henderson County.....	June 1-July 31.....	30	.....
Jefferson County.....	May 1-June 30.....	3	.....
Jones County.....	June 1-30.....	2	.....
Klinney County.....	June 1-30.....	1	1	
Lamar County.....	June 1-Aug. 31.....	27	.....
Matagorda County.....	May 1-Aug. 31.....	11	.....
McLennan County.....	June 1-30.....	19	.....
Milam County.....	June 1-30.....	5	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Texas—Continued.				
Runnels County.....	May 1-July 31.....	26		
San Saba County.....	Apr. 9-June 30.....	11		
Smith County.....	June 1-30.....	10		
Stephens County.....	June 1-30.....	33	1	
Tarrant County.....	May 1-June 30.....	19	3	
Fort Worth.....	June 1-July 31.....	5		
Travis County.....	May 1-June 30.....	19		
Upshur County.....	May 1-Aug. 31.....	52		
Van Zandt County.....	May 1-June 30.....	6		
Victoria County.....	Aug. 1-31.....	6		
Webb County.....				
Laredo.....	June 19.....	1		
Wharton County.....	June 1-30.....	2		
Wichita County.....	June 1-30.....	5		
Williamson County.....	June 1-Aug. 31.....	12	1	
Total for State.....		438	9	
Utah:				
Boxelder County.....	May 1-31.....	3		
Cache County.....	June 1-July 31.....	4		
Carbon County.....	June 1-July 31.....	3		
Davis County.....	May 1-July 31.....	30		
Emery County.....	June 1-July 31.....	4		
Garfield County.....	May 1-Aug. 31.....	20		
Juab County.....	Aug. 1-31.....	9		
Salt Lake County.....	May 1-Aug. 31.....	61	1	
Salt Lake City.....	June 1-Aug. 31.....	99		
Sanpete County.....	May 1-July 31.....	29		
Summit County.....	May 1-Aug. 31.....	78		
Tooele County.....	May 1-31.....	5		
Uintah County.....	May 1-Aug. 31.....	47		
Utah County.....	May 1-Aug. 31.....	26		
Wasatch County.....	Aug. 1-31.....	2		
Weber County.....	May 1-Aug. 31.....	6		
Total for State.....		426	1	
Virginia:				
Lynchburg.....	June 20-26.....	1		
Total for State.....		1		
Washington:				
Seattle.....	July 1-Aug. 31.....	8		
Spokane.....	June 6-July 3.....	7		
Tacoma.....	May 14-June 27.....	6		
Total for State.....		21		
Wisconsin:				
Ashland County.....	Jan. 1-Mar. 31.....	8		
Barron County.....	Jan. 1-June 30.....	93		
Brown County.....	Apr. 1-June 30.....	18		
Buffalo County.....	Jan. 1-Mar. 31.....	5		
Burnett County.....	Jan. 1-Mar. 31.....	11		
Calumet County.....	Jan. 1-June 30.....	2		
Chippewa County.....	Jan. 1-June 30.....	97	1	
Clark County.....	Jan. 1-June 30.....	20		
Columbia County.....	Jan. 1-Mar. 31.....	1		
Dane County.....	Apr. 1-June 30.....	6		
Douglas County.....	Jan. 1-June 30.....	11		
Dunn County.....	Jan. 1-June 30.....	39	2	
Fond du Lac County.....	Jan. 1-June 30.....	3		
Jackson County.....	Jan. 1-Mar. 3.....	1		
Juneau County.....	Jan. 1-June 30.....	42		
La Crosse County.....	Apr. 1-June 30.....	10		
La Crosse.....	June 13-Oct. 9.....	3		
Manitowoc County.....	Jan. 1-June 30.....	41		
Marathon County.....	Jan. 1-June 30.....	2		
Milwaukee County.....	Apr. 1-June 30.....	24		
Milwaukee.....	June 21-Oct. 2.....	3		
Oconto County.....	Jan. 1-June 30.....	25	1	
Oneida County.....	Apr. 1-June 30.....	1		
Outagamie County—				
Appleton.....	June 20-July 31.....	22		
Ozaukee County.....	Jan. 1-Mar. 31.....	13		
Pepin County.....	Jan. 1-Mar. 31.....	2		
Pierce County.....	Jan. 1-Mar. 31.....	4		
Polk County.....	Jan. 1-June 30.....	19		
St. Croix County.....	Jan. 1-June 30.....	65		
Sheboygan County.....	Jan. 1-June 30.....	46		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Wisconsin—Continued.				
Taylor County.....	Jan. 1–Mar. 31.....	5	.....
Trempealeau County.....	Jan. 1–Mar. 31.....	3	.....
Vernon County.....	Jan. 1–Mar. 31.....	51	.....
Walworth County.....	Apr. 1–June 30.....	1	.....
Washburn County.....	Jan. 1–June 30.....	14	.....
Waukesha County.....	Jan. 1–Mar. 31.....	5	.....
Waupaca County.....	Jan. 1–June 30.....	27	.....
Wausara County.....	Jan. 1–Mar. 31.....	1	.....
Winnebago County.....	Jan. 1–June 30.....	17	.....
Wood County.....	Apr. 1–June 30.....	2	.....
Total for State.....		763	4	
Grand total for the United States.....		5,188	26	

Plague in the United States as reported to the Surgeon-General, Public Health and Marine-Hospital Service, August 2–October 29, 1909.

Place.	Date.	Cases.	Deaths.	Remarks.
California:				
Alameda County—				
Sunol.....	Aug. 2–12.....	1	1	Case sickened July 27.
	Sept. 24.....	1	.....	In vicinity of Sunol.

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

[For smallpox and plague, see special tables.]

Cities.	Week ended—	Popula- tion, United States census, 1900.	Total deaths from all causes.	Tuber- culosis.		Enteric fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Allentown, Pa.....	Sept. 18	35,416	19	5	1	16	2	5	.....	7	.....	1	.....	.....	.....
Do.....	Sept. 25	35,416	18	1	1	3	2	.....	.....	3	.....	.....	.....	.....	.....
Do.....	Oct. 2	35,416	14	.....	1	1	.....	2	.....	7	.....	.....	.....	.....	.....
Do.....	Oct. 9	35,416	14	2	.....	5	.....	2	.....	7	.....	.....	.....	.....	.....
Do.....	Oct. 16	35,416	18	2	3	2	1	3	.....	5	.....	.....	.....	.....	.....
Altoona, Pa.....	do.....	38,973	14	2	2	3	1	.....	.....	.....	.....	.....	.....	.....	.....
Ann Arbor, Mich.....	Oct. 9	14,509	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Do.....	Oct. 16	14,509	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashtabula, Ohio.....	Oct. 9	12,949	7	1	1	1	1	.....	.....	.....	.....	.....	.....	1	.....
Do.....	Oct. 16	12,949	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Auburn, N. Y.....	Sept. 4	30,345	9	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Sept. 11	30,345	5	1	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Sept. 18	30,345	8	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Sept. 25	30,345	12	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Oct. 2	30,345	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Oct. 9	30,345	9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baltimore, Md.....	Oct. 16	508,957	208	33	29	42	6	4	.....	16	1	1	.....	7	4
Bayonne, N. J.....	do.....	32,722	.....	.....	.....	.....	.....	4	.....	1	.....	.....	.....	.....	.....
Beaver Falls, Pa.....	do.....	13,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berkeley, Cal.....	Oct. 9	13,214	4	.....	1	1	.....	.....	1	2	1	.....	.....	.....	.....
Biddeford, Me.....	Oct. 16	16,145	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Binghamton, N. Y.....	do.....	38,647	18	.....	2	3	.....	2	.....	2	.....	.....	.....	.....	1
Boston, Mass.....	do.....	560,892	181	56	21	31	5	28	.....	54	2	22	.....	10	.....
Braddock, Pa.....	Oct. 9	15,654	11	.....	.....	8	1	11	3	4	.....	1	.....	3	.....
Bradford, Pa.....	Oct. 16	15,029	4	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Bridgeport, Conn.....	Oct. 2	70,996	18	8	.....	1	.....	8	1	4	.....	.....	.....	.....	.....
Do.....	Oct. 16	70,996	18	1	3	2	1	4	.....	2	.....	.....	.....	3	.....
Brockton, Mass.....	do.....	40,063	6	3	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Butte, Mont.....	Oct. 7	30,470	16	.....	4	4	1	1	.....	.....	.....	.....	.....	.....	.....
Do.....	Oct. 14	30,470	14	.....	2	2	2	3	.....	5	.....	.....	.....	.....	.....
Cambridge, Mass.....	Oct. 16	91,886	27	9	6	2	1	4	.....	10	.....	2	.....	.....	.....

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

Cities.	Week ended—	Popula- tion, United States census, 1900.	Total deaths from all causes.	Tuber- culosis.		Enteric fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Camden, N. J.	Oct. 16	75,935	33	...	...	...	...	...	...	9	1	...	...	...	...
Camden, S. C.	do.	2,441	3	...	...	...	...	...	...	...	...	...	...	...	...
Carbondale, Pa.	do.	13,536	5	...	...	...	...	...	...	1	...	...	...	...	...
Charlotte, N. C.	Oct. 15	18,091	7	1	...	2	1	...	...	1	...	1	...	...	...
Chelsea, Mass.	Oct. 16	34,072	7	1	1	4	...	...	...	2	...	...	...	...	...
Chicago, Ill.	do.	1,698,575	542	72	60	30	7	116	9	98	13	32	...	28	2
Chicopee, Mass.	do.	19,167	5	1	...	...	...	...	...	2	...	...	...	...	...
Cincinnati, Ohio	do.	325,902	112	18	12	2	1	6	1	22	2	2	...	2	...
Cleveland, Ohio	Oct. 15	381,768	108	17	4	16	2	14	...	34	1	6	...	7	...
Clinton, Mass.	Oct. 16	13,667	2	...	...	...	...	...	...	...	...	...	...	...	...
Columbus, Ohio	do.	125,560	60	4	5	6	1	3	...	32	...	2	...	1	...
Concord, N. H.	Oct. 9	19,432	12	...	...	6	3	...	...	10	...	...	...	...	...
Covington, Ky.	Oct. 16	42,938	11	...	1	2	...	...	...	2	1	...	...	...	...
Danville, Ill.	do.	16,534	13	1	1	...	...	1	...	4	...	...	...	...	...
Detroit, Mich.	do.	285,704	123	...	...	...	...	38	2	18	1	...	...	...	...
Duluth, Minn.	Oct. 15	80,000	...	2	2	3	1	4	...	29	...	...	...	...	...
Dunkirk, N. Y.	Oct. 16	11,616	4	1	...	...	...	1	...	...	...	...	...	...	...
Elmira, N. Y.	do.	35,672	10	1	1	3	...	2	...	...	...	...	...	...	...
Elkhart, Ind.	do.	15,184	5	...	...	...	...	...	...	...	...	...	...	...	...
Erie, Pa.	do.	52,733	20	2	3	3	...	3	...	1	...	1	...	1	...
Evansville, Ind.	do.	50,007	17	2	2	2	...	44	2	20	1	1	...	...	...
Everett, Mass.	do.	24,336	6	1	1	2	...	...	...	...	...	...	...	1	...
Fall River, Mass.	do.	104,863	54	5	1	8	2	1	...	3	1	...	...	1	...
Findlay, Ohio	do.	17,613	2	...	...	1	1	1	...	7	...	...	...	...	...
Galesburg, Ill.	do.	18,607	2	...	...	...	...	...	...	1	...	...	...	...	...
Galveston, Tex.	Oct. 15	37,789	...	...	3	...	...	1	...	...	...	...	...	...	...
Gloucester, Mass.	Oct. 16	26,121	9	...	2	...	...	...	...	1	...	...	...	...	...
Grand Rapids, Mich.	do.	87,565	29	2	2	12	2	19	...	...	...	3	...	3	...
Greensboro, N. C.	do.	10,035	6	...	...	...	...	...	...	5	...	...	...	...	...
Hartford, Conn.	Oct. 10	79,850	24	6	1	5	...	1	1	3	...	...	...	...	...
Haverhill, Mass.	Oct. 9	37,175	7	1	1	4	...	1	1	5	...	...	...	...	1
Houston, Tex.	do.	44,633	23	...	...	...	...	2	...	3	2	...	...	...	...
Do.	Oct. 16	44,633	14	...	2	...	...	...	...	5	1	...	...	...	...
Hyde Park, Mass.	do.	13,244	9	...	...	...	...	...	...	...	...	...	...	...	...
Indianapolis, Ind.	Oct. 17	169,164	42	2	5	10	1	6	1	27	4	28	...	...	1
Jacksonville, Fla.	Oct. 16	28,429	24	...	5	2	...	1	...	...	...	...	...	...	...
Jersey City, N. J.	Oct. 17	206,433	59	...	6	1	...	7	...	...	...	1	...	1	...
Kansas City, Kans.	Oct. 16	51,418	20	...	...	6	1	5	...	15	2	...	...	...	...
Kansas City, Mo.	Oct. 9	163,752	66	3	6	11	3	8	...	29	2	...	...	...	...
Do.	Oct. 17	163,752	61	1	9	9	...	14	1	30	5	1	...	...	...
Kearny, N. J.	Oct. 16	10,896	4	2	...	...	...	...	...	...	...	3	...	...	...
Kingston, N. Y.	do.	24,535	7	...	2	...	...	...	...	...	...	...	...	...	...
Knoxville, Tenn.	do.	32,637	11	...	2	...	1	2	...	2	...	...	...	...	...
La Crosse, Wis.	do.	28,895	6	...	...	...	...	1	...	...	...	...	...	...	...
La Fayette, Ind.	Oct. 18	18,116	6	2	...	1	...	...	...	...	...	...	...	...	...
Lawrence, Pa.	Oct. 16	41,459	15	3	1	...	...	4	...	...	...	...	...	...	...
Lawrence, Mass.	do.	10,862	25	1	2	1	...	1	...	2	...	5	...	...	...
Lebanon, Pa.	do.	17,628	10	3	...	5	1	...	...	...	...	1	...	...	...
Lowell, Mass.	do.	94,969	34	6	5	3	...	2	...	8	1	...	...	...	...
Lynchburg, Va.	do.	18,891	...	...	...	...	...	1	...	...	...	...	...	...	...
Lynn, Mass.	do.	68,513	26	...	1	...	...	...	...	10	1	...	...	...	...
Macon, Ga.	Oct. 14	22,746	2	...	...	...	...	1	...	...	...	...	...	...	...
Malden, Mass.	Oct. 16	33,664	7	1	1	1	...	7	1	2	...	1	...	...	...
Manchester, N. H.	do.	56,987	35	1	1	...	...	...	...	4	1	14	2	...	...
Manitowoc, Wis.	do.	11,786	6	...	...	...	...	4	...	...	...	...	...	...	...
Mansfield, Ohio	do.	17,650	...	...	...	3	...	3	1	...	...	...	...	...	...
Marquette, Wis.	do.	16,195	5	...	...	...	...	3	...	3	...	...	...	...	...
Marlboro, Mass.	Oct. 9	13,609	8	...	...	...	...	...	...	4	...	...	...	...	...
Medford, Mass.	Oct. 16	18,244	2	...	1	1	...	1	...	1	...	...	...	...	...
Melrose, Mass.	Oct. 9	12,962	3	1	2	...	...	2	...	1	...	...	...	...	...
Milwaukee, Wis.	Oct. 16	285,315	90	12	5	10	...	50	5	23	2	5	...	4	1
Mobile, Ala.	Oct. 9	38,469	17	...	2	...	...	...	...	...	...	...	...	...	...
Montclair, N. J.	Oct. 16	13,962	6	...	1	1	...	2	...	2	1	...	...	...	...
Montgomery, Ala.	Oct. 15	30,346	17	...	1	...	...	...	...	...	...	...	...	...	...
Morristown, N. J.	Oct. 16	13,030	3	1	1	...	...	...	...	...	...	...	...	...	...
Mount Vernon, N. Y.	do.	21,228	8	...	...	1	...	...	...	...	...	...	...	...	...
Nanticoke, Pa.	Oct. 17	12,616	5	...	1	...	...	4	...	...	...	...	...	...	...
Nashville, Tenn.	Oct. 16	80,855	36	2	6	18	2	18	...	9	...	...	...	...	...
Nebraska City, Nebr.	do.	7,200	2	...	...	5	1	...	...	...	...	...	...	6	1
New Bedford, Mass.	do.	63,442	43	4	4	7	...	1	...	3	...	1	...	...	...
Newburyport, Mass.	do.	14,478	5	2	...	...	...	...	...	...	...	...	...	...	...
New Orleans, La.	do.	278,104	107	26	16	8	...	10	...	11	...	5	...	...	...
Newport, Ky.	do.	28,301	5	...	1	...	...	...	...	2	...	...	...	...	...
Newton, Mass.	do.	33,587	10	1	...	...	1	3	...	2	...	...	...	...	...
New York, N. Y.	do.	3,437,202	1,324	429	152	116	13	112	6	223	14	100	4	53	8

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

Cities.	Week ended—	Popula- tion, United States census, 1900.	Total deaths from all causes.	Tuber- culosis.		Enteric fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Niagara Falls, N. Y.	Oct. 16	19,457	11	....	2	6	....	4	1	1	....	....	....	....	....
Norristown, Pa.	....do....	22,265	10	....	4	1	....	1	....	....	....	....	....	....	....
North Adams, Mass.	....do....	24,200	7	....	....	1	1	....	....	....	....	....	....	....	....
Northampton, Mass.	....do....	18,643	7	2	1	....	....	1	....	....	....	....	....	1	....
Oakland, Cal.	Oct. 11	66,940	33	1	1	1	....	5	....	2	1	....	....	....	....
Orange, N. J.	Oct. 16	24,141	12	1	....	1	....	....	....	....	....	....	....	....	....
Ottumwa, Iowa.	Oct. 9	18,197	5	....	....	....	....	....	....	....	....	....	....	....	....
Do.	Oct. 16	18,197	9	....	....	....	....	....	....	....	....	....	....	....	....
Palmer, Mass.	....do....	7,801	....	....	....	....	....	....	....	6	....	....	....	....	....
Peekskill, N. Y.	....do....	10,358	5	1	....	....	....	1	....	....	....	....	....	....	....
Pittsburg, Pa.	....do....	321,616	178	25	9	19	1	37	3	19	6	4	1	2	....
Pittsfield, Mass.	....do....	21,766	3	....	....	1	....	....	....	1	....	1	1	....	....
Plainfield, N. J.	....do....	15,369	....	2	....	....	....	....	....	1	....	....	....	....	....
Plymouth, Pa.	Oct. 9	13,649	2	....	....	....	....	....	....	....	....	1	....	....	....
Do.	Oct. 16	13,649	1	....	1	....	....	....	....	....	....	3	....	....	....
Portsmouth, N. H.	....do....	10,637	....	....	....	....	....	....	....	2	....	....	....	....	....
Portsmouth, Va.	Oct. 19	17,427	7	....	....	....	....	5	....	1	1	....	....	....	....
Pottstown, Pa.	Oct. 16	13,696	3	....	....	1	....	....	....	3	1	....	....	....	....
Providence, R. I.	....do....	175,597	68	35	6	6	1	10	....	9	3	11	....	....	....
Racine, Wis.	....do....	29,102	9	....	....	....	....	....	....	1	....	....	....	....	....
Reading, Pa.	Oct. 18	78,961	28	1	1	9	3	6	....	3	....	1	....	....	....
Richmond, Va.	Oct. 16	85,050	45	3	3	7	1	1	....	8	1	....	....	7	....
Rock Island, Ill.	....do....	19,493	6	....	1	....	....	....	....	1	....	....	....	....	....
Saginaw, Mich.	Sept. 25	42,345	15	1	1	....	....	....	....	....	....	1	....	....	....
Do.	Oct. 2	42,345	18	1	1	....	....	1	....	....	....	....	....	....	....
Do.	Oct. 9	42,345	25	2	2	....	....	....	....	....	....	1	....	1	1
San Francisco, Cal.	....do....	342,782	119	27	12	7	2	8	....	6	....	6	....	8	....
San Jose, Cal.	....do....	21,500	3	....	....	....	....	....	....	....	....	....	....	....	....
Schenectady, N. Y.	....do....	31,682	21	2	3	2	....	....	....	5	1	....	....	....	1
Do.	Oct. 16	31,682	13	....	2	2	....	....	....	3	....	1	....	....	....
Somerville, Mass.	....do....	61,643	15	1	....	10	2	8	....	5	....	1	....	....	....
South Bend, Ind.	....do....	35,999	20	2	2	2	1	3	....	....	....	....	....	....	....
South Bethlehem, Pa.	....do....	13,241	5	....	1	....	....	....	....	....	....	....	....	....	....
Steelton, Pa.	....do....	12,068	3	....	1	4	....	....	....	3	1	4	....	....	....
Superior, Wis.	....do....	31,091	12	....	....	....	1	7	....	4	1	....	....	....	....
Tacoma, Wash.	Oct. 10	37,714	21	....	2	4	....	11	....	4	1	....	....	....	....
Taunton, Mass.	Oct. 16	31,036	15	....	....	11	1	....	....	2	....	....	....	....	....
Terre Haute, Ind.	....do....	36,673	10	3	....	23	2	....	....	7	....	12	....	....	....
Titusville, Pa.	....do....	8,244	1	....	1	....	....	1	....	....	....	....	....	....	....
Trenton, N. J.	....do....	73,307	....	1	2	4	....	2	....	1	1	....	....	....	....
Waltham, Mass.	....do....	23,481	13	....	1	5	....	....	....	3	1	....	....	....	....
Washington, D. C.	....do....	278,718	90	16	13	27	3	12	....	13	....	2	....	2	....
Weymouth, Mass.	....do....	11,324	1	2	....	....	....	....	....	....	....	....	....	....	....
Wheeling, W. Va.	Oct. 9	38,878	9	1	1	....	....	1	....	3	....	2	....	....	....
Do.	Oct. 16	38,878	11	1	2	1	....	2	....	5	....	....	....	....	....
Wichita, Kans.	....do....	24,671	14	1	1	....	....	....	....	2	....	....	....	....	....
Wilkes Barre, Pa.	Oct. 15	51,721	27	4	2	1	....	2	....	5	....	1	....	3	....
Williamsport, Pa.	Oct. 16	28,757	6	....	....	2	....	1	....	....	....	....	....	....	....
Wilmington, Del.	....do....	76,508	28	....	4	....	....	....	....	....	....	....	....	....	....
Winona, Minn.	Oct. 19	19,714	2	....	....	....	....	....	....	....	....	....	....	....	....
Woburn, Mass.	Oct. 16	14,254	3	....	....	1	....	1	....	....	....	....	....	....	....
York, Pa.	....do....	33,708	....	....	....	....	....	....	....	4	....	5	....	....	....
Zanesville, Ohio	....do....	23,538	6	....	....	2	....	2	....	2	....	....	....	....	....

FOREIGN AND INSULAR.

CHINA.

Report from Amoy—Cholera and plague—Quarantine against Amoy removed in Straits Settlements.

Passed Assistant Surgeon Foster reports, September 6:

Week ended September 4. No bills of health issued from this office. During the week there were 47 deaths from plague and 17 from cholera in Amoy.

The government of the Straits Settlements has removed the quarantine on vessels arriving from Amoy.

Report from Shanghai—Inspection of vessels.

Acting Assistant Surgeon Ransom reports, September 15:

Week ended September 11. Supplemental bills of health granted to 2 steamships, the aggregate personnel of which amounted to 357. There were inspected 1 vessel, 58 members of crews, and 13 steerage passengers. Manifests were viséed for 12,281 pieces of freight, and 10 pieces were disinfected by steam. There were also disinfected by steam 28 pieces of steerage baggage, and 24 pieces were inspected and passed. There were examined 20 passengers for San Francisco per steamship *Tenyo Maru*, of whom 19 were passed and 1 was recommended for rejection on account of trachoma.

CUBA.

Report from Cienfuegos—Inspection of vessels—Sanitary conditions.

Acting Assistant Surgeon Suarez reports, October 11:

Week ended October 9.

Vessels inspected.....	6
Bills of health issued.....	6
Members of crews inspected.....	100
Members of crews landed.....	1
Members of crews taken.....	2
Passengers in transit.....	15
Passengers landed.....	13

No quarantinable diseases have been reported.

Report from Matanzas—Inspection of vessel—Sanitary conditions.

Acting Assistant Surgeon Nuñez reports, October 18:

Week ended October 16. A bill of health was issued to a vessel bound to Mobile, Ala.

No quarantinable diseases have been reported during the week.

Report from Santiago—Inspection of vessels—House and water-deposit inspection.

Acting Assistant Surgeon Wilson reports, October 13:

Week ended October 9. Bills of health issued to 4 vessels bound for the United States and its dependencies. No vessel disinfected. No quarantinable disease reported.

The sanitary department reports 2,781 houses inspected, and larvæ found in 12 water deposits.

GUATEMALA.

Reports from Puerto Barrios, fruit port—Stegomyia calopus present.

Acting Assistant Surgeon Ames reports:

Week ended October 9. Present officially estimated population, 350. General sanitary condition of this port and the surrounding country during the week, good. *Stegomyia calopus* present.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
Oct. 4	Corlogo.....	New Orleans via Belize....	80	5	3
7	Agnella.....	do.....	22	0	0
8	Jose.....	New York via Panama....	25	0	0

HAWAII.

Report from Honolulu—Dates of last cases of human and rat plague—Examination of rats for plague infection.

Chief Quarantine Officer Hobdy reports, October 4:

HONOLULU.

Last case rat plague (Aiea), 9 miles from Honolulu, August 22, 1907.

Last case human plague, Honolulu, July 17, 1907.

Last case rat plague (Olaa), 9 miles from Hilo, September 24, 1909.

Last case human plague (Olaa), 9 miles from Hilo, September 19, 1909.

Week ended October 2.

Total rats taken.....	723
Trapped.....	528
Found dead.....	0
Shot from trees.....	195
Examined bacteriologically.....	503
Plague infected.....	0
Classification of rats trapped:	
Mus alexandrinus.....	46
Mus musculus.....	148
Mus norvegicus.....	112
Mus rattus.....	184
Classification of rats shot from trees:	
Mus alexandrinus.....	57
Mus rattus.....	104
Average number of traps set daily.....	1, 294

HILO.

Hilo rat cases referred to this laboratory for bacteriological diagnosis.....	6
Hilo rat cases proved to be plague infection during week.....	0
Hilo rats still under investigation.....	10
Hilo human cases proven to be plague infection during week.....	1

HONDURAS.

Report from Ceiba, fruit port.

Acting Assistant Surgeon Jumel reports:

Week ended October 13. Present officially estimated population, 6,800. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Oct. 8	Navigator.....	21	0	0	0
8	Joseph Vaccaro.....	32	4	0	0
13	Viator.....	17	0	0	0

NOTE.—Temperature of all persons on board above-named vessels taken at time of clearance.

Report from Tela, fruit port.

Acting Assistant Surgeon Roe reports:

Week ended October 2. Present officially estimated population, about 1,500. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
Sept. 26	Viator.....	New Orleans.....	17	0	0
29	Colombia.....	Mobile.....	18	0	0

INDIA.

Report from Calcutta—Transactions of Service—Cholera, plague, and smallpox—Summary of plague in Bengal and India.

Acting Assistant Surgeon Allan reports, September 23:

Week ended September 18. Bill of health issued to the steamship *Matappo* bound for Boston and New York with a total crew of 49. The usual precautions were taken, holds fumigated, rat guards placed on wharf lines, and Asiatics' effects disinfected.

Week ended September 11. At Calcutta there were 9 deaths from cholera and 5 from plague; in Bengal, 81 cases of plague, with 37 deaths; in India, 2,781 cases of plague, with 2,096 deaths.

JAPAN.

Report from Yokohama—Inspection and fumigation of vessels—Cholera at Seoul, Korea.

Passed Assistant Surgeon Cumming reports, September 29:

Week ended September 25. Three vessels inspected. One vessel fumigated. Four hundred and forty cases of cholera to date have been reported in Seoul.

MEXICO.

Report from Coatzacoalcos—Inspection of vessels—Sanitary conditions.

Acting Assistant Surgeon Thompson reports, October 14:

Week ended October 13. Four vessels inspected. The health of the port is good; no quarantinable diseases reported.

Report from Tampico—Inspection and fumigation of vessels—Sanitary conditions

Acting Assistant Surgeon Stowe reports, October 14:

Week ended October 13.

Vessels inspected and passed.....	6
Bills of health issued.....	6
Members of crews of outgoing vessels inspected.....	174
Passengers of outgoing vessels inspected.....	12
Vessels fumigated prior to sailing.....	1

No case of quarantinable disease occurred during the past week.

Report from Veracruz—Inspection and fumigation of vessels—Smallpox—Sanitary conditions.

Acting Assistant Surgeon Carter reports, October 11:

Week ended October 11.

Bills of health issued.....	9
Vessels inspected.....	3
Vessels fumigated.....	6
Passengers inspected.....	115
Members of crews inspected.....	371

The sanitary condition of Veracruz and vicinity remains fairly good. Three cases of smallpox with one death were reported during the week. These cases were all from interior points in the Republic and were isolated at once in the lazaretto. The usual precautions were taken. No sickness occurred on any of the vessels which cleared during the week for the United States during their stay in the harbor.

NETHERLANDS.

Report from the Hague—Cholera at Hansweert and Lopik.

The information is received through the Department of State, under date of October 2, that a third case of cholera has appeared in Hansweert, in the family of which two members are already suffering from the disease, and that a second case has appeared at Lopik, in the wife of the patient previously reported.

NICARAGUA.

Reports from Bluefields, fruit port—Stegomyia.

Acting Assistant Surgeon Layton reports:

Twelve days ended September 30 and October 12. Present officially estimated population, 2,500. General sanitary condition of this port and the surrounding country during the week, good.

Mosquitoes present in large numbers, chiefly *Stegomyia calopus*.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
Sept. 26	Dictator.....	New Orleans, via Cape Gracias, Nicaragua.	22	16	0
27	Chelston.....	New York, via Prinzapulca, other Central American ports, and Inagua, West Indies.	27	1	0

NOTE.—Temperatures of all on board steamship *Dictator* taken day of sailing; all normal.

Twelve days ended October 12. Present officially estimated population, 2,500. General sanitary condition of this port and the surrounding country during the week, good.

Mosquitoes present in large numbers, chiefly *Stegomyia calopus*.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
Oct. 1	Marietta di Georgio.....	New Orleans, La.....	19	9	0
12	Dictator.....	.....do.....	22	10	0

NOTE.—Temperatures of all on board taken day of sailing, all normal.

PHILIPPINE ISLANDS.

Report from Manila—Cholera in Manila—Status of cholera in the provinces—Inspection of vessels.

Chief Quarantine Officer Heiser reports September 15:

Week ended September 11. Twenty cases of cholera, with 13 deaths, were reported for the city of Manila.

Cholera in the provinces.

Province.	Cases.	Deaths.
Ilocos Norte.....	18	10
Bohol.....	11	9
Cebu.....	52	43
Bulacan.....	82	65
Oriental Negros.....	75	59
Bataan.....	11	9
Tarlac.....	15	12
Camarines.....	50	36
Total.....	314	248

Diligent effort has been made to trace the origin of the infection in the city of Manila, but so far nothing definite has developed. The indications are that the outbreak was due to infected food, probably fish, from the Province of Bulacan, in which the disease has been continuously present during the past few months and from which a large amount of the fish consumed in the city of Manila is obtained. So far the disease has been confined mostly to sailors and fishermen, and almost all of the cases have occurred in Tondo district.

The disease has also been carried by fish to the Province of Bataan, which is situated on the other side of the bay from Manila. The type of the disease is very virulent in character, most of the patients dying a few hours after being seized.

Cholera has also gained a foothold in the port of Cebu, and there is great danger of the disease being spread throughout the densely populated island of Cebu, in which event a general outbreak in the southern islands is to be expected. At Cebu the service has imposed a 48-hour outgoing quarantine detention upon vessels bound for noninfected ports.

On account of the general vigilance which is being exercised throughout the islands, and on account of the infection being widespread, it has not been deemed advisable to impose an outgoing quarantine detention upon vessels leaving the port of Manila. General warnings have been sent out, and boats are inspected at ports of arrival.

Consular bills of health issued:

September 10, the United States Army transport *Sheridan*, from Manila to San Francisco, with 192 in crew, 181 cabin and 1,025 steerage passengers, was granted a bill of health. Members of crew and steerage passengers bathed, and their effects disinfected. Ship partially disinfected.

September 11, the Norwegian steamship *Henrik Ibsen*, en route from Hongkong to Portland, Oreg., with 38 crew and 1 passenger, was granted a supplemental bill of health. Personnel and cargo inspected prior to sailing.

RUSSIA IN ASIA.

Report from Vladivostok—Cholera.

Consul Maynard reports, September 22:

Six cases of cholera were discovered in the Korean village, a suburb of Vladivostok, September 17, and additional cases were reported at the rate of one a day, all in the same quarter. Additional cases have been discovered in various parts of the city. The disease now exists in epidemic form.

ZANZIBAR.

Report from Zanzibar—Examination of rats for plague infection.

Consul Garrels reports, September 17:

Week ended September 7. Rats received and examined, 1,234. No infection found. Week ended September 14. Rats received and examined, 1,369. No infection found.

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

AUSTRALIA—Fremantle.—Month of July, 1909. Estimated population, 261,563. Total number of deaths, 9. No contagious diseases reported.

New South Wales—Sydney.—Month of July, 1909. Estimated population, 592,100. Total number of deaths, 517, including diphtheria, 3; enteric fever, 1; measles, 1; scarlet fever, 1; and 38 from tuberculosis.

Brazil—Ceara.—Month of August, 1909. Estimated population, 55,000. Total number of deaths, 94, including enteric fever 7, and 18 from tuberculosis.

Canada—British Columbia—Vancouver.—Month of September, 1909. Estimated population, 66,500. Total number of deaths, 79, including enteric fever 1, and 11 from tuberculosis.

Dutch Guiana—Paramaribo.—Month of September, 1909. Estimated population, 34,962. Total number of deaths, 114. No contagious diseases.

Japan—Formosa.—Two weeks ended September 18, 1909. Estimated population, 3,108,723. Total number of deaths not reported. One death from diphtheria and 4 deaths from enteric fever reported.

France—Nice.—Month of August, 1909. Estimated population, 150,881. Total number of deaths, 183, including diphtheria 1, enteric fever 3, and 26 from tuberculosis.

St. Etienne.—Two weeks ended September 30. Estimated population, 150,000. Total number of deaths 90, including enteric fever 3, and 13 from tuberculosis.

Great Britain—England and Wales.—The deaths registered in 76 great towns in England and Wales during the week ended September 25, 1909, correspond to an annual rate of 12.6 per 1,000 population, which is estimated at 16,445,281.

London.—One thousand one hundred and twenty-seven deaths were registered during the week, including measles 5, scarlet fever 8, diphtheria 16, whooping cough 14, tuberculosis 159, enteric fever 2, and 114 from diarrhea. The deaths from all causes correspond to an annual rate of 12.2 per 1,000. In Greater London 3,477 deaths were registered. In the "outer ring" the deaths included 1 from measles, 4 from diphtheria, and 8 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended September 25, 1909, in the 21 principal town districts of Ireland was 16.9 per 1,000 of the population, which is estimated at 1,142,308. The lowest rate was recorded in Clonmel, viz, 5.1, and the highest in Kilkenny, viz, 29.5 per 1,000.

Scotland.—The deaths registered in 8 principal towns during the week ended September 25, 1909, correspond to an annual rate of 13.8 per 1,000 of the population, which is estimated at 1,865,571. The highest rate of mortality was recorded in Perth, viz, 19.8, and the lowest in Greenock, viz, 10.1 per 1,000. The aggregate number of deaths registered from all causes was 494, including diphtheria 8, enteric fever 7, measles 3, scarlet fever 7, and 5 from whooping cough.

MEXICO—Veracruz.—Month of September, 1909. Estimated population 32,000. Total number of deaths 167, including enteric fever 1, yellow fever 1 (imported), smallpox 1, and 28 from tuberculosis.

PORTO RICO.—Month of July, 1909. Estimated population, 1,053,963. Total number of deaths 225, including diphtheria 2, enteric fever 16, measles 5, and 199 from tuberculosis.

SOCIETY ISLANDS—Tahiti.—Five weeks ended September 25, 1909. Estimated population, 4,000. Total number of deaths 6. No deaths from contagious diseases.

SPAIN—Almeria.—Month of June, 1909. Estimated population, 50,910. Total number of deaths 126, including enteric fever 5, measles 1, scarlet fever 1, whooping cough 1, and 9 from tuberculosis.

Huelva.—Month of August, 1909. Estimated population, 24,000. Total number of deaths 74, including enteric fever 2, smallpox 8, and 6 from tuberculosis.

WEST INDIES—Curaçao.—Two weeks ended October 8, 1909. Estimated population, 30,000. Total number of deaths 11. No contagious diseases.

Cholera, yellow fever, plague, and smallpox, from June 26 to October 29, 1909.

[Reports received by the Surgeon-General, Public Health and Marine-Hospital Service, from American consuls, through the Department of State, and from other sources.]

[For reports received from December 25, 1908, to June 25, 1909, see PUBLIC HEALTH REPORTS for June 25, 1909.]

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

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	June 13-Sept. 4		178	
Chefoo.....	Aug. 28.....		5	Among Europeans; Sept. 11, epidemic.
Hankow.....	July 17-Aug. 28...	8	5	Sept. 11, still present among natives.
Kang Thau.....	Apr. 1-June 30....	4	2	
Shanghai.....	July 26-31.....	3	1	On s. s. Hudson; Aug. 7, present among foreigners and natives; Sept. 11, still present among natives.
Swatow.....	May 11-29.....			Present in vicinity; Aug. 28, 3 cases, 2 deaths, on s. s. Waishing.
Germany:				
Königsberg.....	July 21.....		1	
Pakalsne.....	Sept. 20.....	2	1	Near Russ.
Stoltzenhagen.....	Sept. 18.....		1	25 miles from Stettin.
India:				
Bombay.....	May 30-Sept. 21.....		394	
Calcutta.....	May 16-Sept. 11.....		925	
Madras.....	May 29-Aug. 20.....		7	
Negapatam.....	May 8-14.....		4	
Rangoon.....	May 16-Sept. 11.....		55	
Indo-China:				
Saigon.....	May 9-July 24.....	23	17	
Japan:				
Amagasaki.....	Aug. 14-21.....	4		
Kagawa, prefecture.....	Aug. 8-14.....	7		
Karatsu.....	Sept. 1-9.....	11	2	On s. s. Takan Maru.
Kobe.....	Sept. 6-13.....	3	1	July 31, 1 case on s. s. Nile.
Mita-jiri.....	Aug. 22.....	21		From s. s. Kaga Maru.
Java:				
Batavia.....	Sept. 21.....			Present.

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

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Korea.	Aug. 28.			Epidemic in northern part.
Chernulpo.	Sept. 11.			Epidemic.
Seoul.	Sept. 19-25.	400		
Manchuria:				
Dalny.	Aug. 11-Sept. 18.	21	17	Case Aug. 11 on s. s. Kobe Maru.
Liaoyang.	Aug. 10.		1	
Mukden.	Aug. 14.		1	
Tashihchiao.	Aug. 11.		1	
Yinkou.	Aug. 14.	6	1	
Netherlands, The.	Aug. 20-Sept. 4.			5 deaths among boatmen from Rotterdam.
Amsterdam.	Sept. 10.	1	1	
Breda.	Aug. 30-Sept. 4.	1		
Dirksland.	Sept. 10.	1		
Dordrecht.	Aug. 30.			Present.
Gorkum.	Aug. 30-Sept. 4.	1		
Hansweert.	Sept. 27-Oct. 2.	3		
Holsteren.	Sept. 1-7.	1		
Hoogvliet.	Sept. 1-7.	1		
Iopik.	Sept. 27-Oct. 2.	2		
Middleburg.	Sept. 4.	1		
Pernis.	Sept. 1-7.	2		
Rotterdam.	Aug. 20-Sept. 11.	34	15	
Tholen.	Sept. 4.	1		
Uithorn.	Aug. 30-Sept. 4.	1		
Utrecht.	Sept. 4.	1		
Vlaardinger.	Sept. 4.	1		
Philippine Islands:				
Manila.	July 11-Sept. 11.	33	23	Fourth quarter 1908, 308 cases and 190 deaths; first quarter 1909, 1 death (imported); second quarter 1909, no cholera.
Provinces.				Fourth quarter 1908, 7,330 cases and 4,292 deaths; first quarter 1909, 2,221 cases and 1,405 deaths; second quarter 1909, 961 cases and 630 deaths.
Albay.	Aug. 27-Sept. 4.	353	258	
Ambo Camarines.	July 4-Sept. 11.	464	335	
Batan.	Sept. 5-11.	11	9	
Bohol.	Aug. 28-Sept. 11.	53	33	
Bulacan.	July 4-Sept. 11.	214	156	
Caayan.	July 11-Sept. 4.	220	116	
Cebu.	May 16-Sept. 11.	126	82	
Dapitan.	May 9-15.			Present.
Ilocos Norte.	Aug. 15-Sept. 11.	125	64	
Iloilo.	May 23-June 19.	28	18	
Isabela.	July 18-24.	5	4	
Leyte.	June 6-July 31.	22	11	
Moro.	May 29-July 3.	9	9	
Mountain.	June 20-26.	27	15	
Negros Occidental.	May 9-15.	8	2	
Negros Oriental.	May 16-Sept. 11.	507	360	
Pampanga.	May 9-Sept. 4.	378	268	
Pangasinan.	June 13-19.	1		
Rizal.	July 25-Sept. 4.	2	2	
Samar.	May 9-July 10.	42	26	
Sorsogon.	May 9-15.	8	2	
Tarlac.	July 4-Sept. 11.	28	23	
Russia, general.	May 23-Sept. 18.	9,743	3,978	July 23, present in Kreutzburg, Mahigraben, Muravjevo, Pienega, Radswillschki, Reval, Schaulen, and Tver.
Alexandrovsk.	Aug. 28-Oct. 1.	10	8	
Archangel.	June 26-Oct. 1.	355	191	
Astrachan.	Sept. 17-Oct. 1.	14	7	
Baku, government.	July 4-Oct. 1.	2		
Chmalysk, district.	July 1.	1		
Courland.	July 5-Oct. 1.	245	107	
Cronstadt.	June 30-Sept. 17.	66	26	
Dorpat.	Aug. 14-20.	1		
Drissa.	July 23-Sept. 17.	38	17	
Esthonia, government.	July 1-Aug. 21.	4	3	
Finland, general.	July 16.	1		
Mariehamn.	June 23-24.	1	1	
Viborg.	July 9-16.	1		
Gadjatschek.	Aug. 13-Sept. 3.	53	18	
Griva.	Sept. 25-Oct. 1.	128	56	
Hungerburg.	July 30-Oct. 1.	11	7	
Jaroslav, government.	Sept. 11-Oct. 1.	361	177	
Jaroslav.	July 4-Oct. 1.	470	237	

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

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				
Kem.....	Aug. 8-Oct. 1.....	47	24	July 30, present.
Kharkov.....	Aug. 1-Sept. 3.....	20	10	
Kherson.....	Oct. 1.....	1	.....
Kief.....	Sept. 11-Oct. 1.....	26	17	
Kostroma.....	July 23-Oct. 1.....	186	64	
Kretsky, district.....	July 1.....	1	.....
Livonia.....	July 5-Aug. 21.....	85	41	
Mitau.....	July 15-Oct. 1.....	28	17	
Mohileve, government.....	Aug. 2-Oct. 1.....	131	67	
Moscow.....	July 9-Oct. 1.....	25	9	
Nishni Novgorod.....	July 4-Sept. 17.....	57	31	
Novgorod, government.....	July 4-Oct. 1.....	393	131	
Olonets, government.....	June 20-Aug. 14.....	11	7	
Perin.....	Aug. 2-Oct. 1.....	27	11	
Polotzk.....	June 27-Oct. 1.....	711	202	
Poltava, government.....	Aug. 15-Oct. 1.....	105	47	
Pskov.....	July 1-Sept. 17.....	120	42	
Reval.....	Aug. 2-27.....	2	.....
Riga.....	July 1-Oct. 1.....	307	123	
Rjasin.....	June 24-July 16.....	3	3	
Rubinsk.....	July 30-Sept. 17.....	185	103	
Samara.....	Aug. 15-17.....	5	2	
Saratov.....	Aug. 15-Oct. 1.....	7	1	
Simbirsk.....	July 13.....	2	.....
St. Petersburg, government.....	June 9-Sept. 18.....	789	370	
St. Petersburg.....	June 2-Oct. 1.....	5,232	2,038	
Tver, government.....	Aug. 15-Oct. 1.....	348	81	
Viatka, government.....	July 6-24.....	2	2	
Vilna.....	July 11-Aug. 21.....	61	20	
Vitebsk, government.....	July 9-Sept. 17.....	703	261	
Vologda, government.....	May 31-Oct. 1.....	544	234	
Siam:				
Bangkok.....	Apr. 25-May 28.....	1	
Siberia:				
Vladivostok.....	Sept. 23-Oct. 1.....	32	14	
Straits Settlements:				
Singapore.....	May 9-Aug. 28.....	19	
Sumatra:				
Djambi.....	July 15-Aug. 20.....	220	113	Among natives.
Sweden:				
Stockholm.....	Aug. 12.....	1	Imported.

YELLOW FEVER.

Barbados, general.....	June 13-Aug. 14.....	2	1	St. Joseph Parish, December to June, 14 deaths not previously reported.
Brazil:				
Bahia.....	May 22-Sept. 17.....	46	22	Apr. 24-May 1-2 deaths. Reported out of date.
Manaos.....	May 23-Aug. 14.....		11	
Para.....	May 30-Sept. 25.....	53	48	
Pernambuco.....	Apr. 15-July 31.....		10	
British Guiana:				
Suddie.....	July 22.....	1	1	35 miles from Georgetown.
Ecuador:				
Guayaquil.....	May 23-Sept. 11.....		50	
Mexico:				
Merida.....	June 5-Oct. 1.....	10	4	Sept. 11, 2 cases imported from the district of Acanceh.
Tekik.....	Oct. 1.....	1		
Veracruz.....	Sept. 24.....		1	On s. s. Sonora.
Panama:				
Canal Zone—				
Ancon.....	Mar. 1-31.....			1 case at Culebra Island quarantine station, from a vessel, and 1 fatal case en route from Guayaquil.
Venezuela:				
Maiquetia.....	Aug. 15-25.....	2	2	

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

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Australia:				
Adelaide.....	Apr. 30-June 12...	2	2	And vicinity.
Mackay.....	Jan. 21-June 6....	2	2	
Sydney.....	Apr. 18-May 29....	5	1	
Azores:				
Terceira.....	June 16.....	3	1	
Bahrain Island, Persian Gulf...	May 29-June 10....		6	
Brazil:				
Bahia.....	May 22-Sept. 24....	24	21	
Rio de Janeiro.....	May 17-Sept. 12....	5	2	
Chile:				
Antofagasta.....	May 9-30.....	13	5	July 10, 4 cases in the lazaretto.
Iquique.....	May 20-Sept. 8....	21	10	Sept. 8, 2 cases in the lazaretto.
Magillones.....	May 4.....			Still present.
China:				
Amoy.....	June 1-Sept. 4....		869	
Canton.....	May 9-Aug. 7.....	325	211	
Chang-Poo.....	July 23.....			Epidemic.
Chinchew.....	May 22.....			Do.
Eng-Ta-Tau.....	July 1-31.....	11	4	
Hongkong.....	May 2-Aug. 18....	92	83	
Kang-be.....	July 24.....	61	59	
Kang Thau.....	Apr. 1-July 31....	123	62	
Pollam.....	May 23-29.....	8	7	
Swatow district.....	May 16-July 3....		450	July 1, 200 cases still present in Touchowfu and Yin Shan.
Swatow.....	May 16-July 19....		2	
Ecuador:				
Babohoyo.....	Sept. 21.....			Present.
Chunchi.....	June 1-30.....	3	1	
Duran.....	July 16-31.....	3		Sept. 21, again present.
Guayaquil.....	May 23-Sept. 30....	149	70	
Huagra.....	May 1-June 15....	16	3	
Egypt:				
Alexandria.....	May 30-Sept. 20....	14	10	
Port Said.....	May 29-Sept. 21....	14	5	
Provinces—				
Assiout.....	May 14-Sept. 28....	48	8	
Beherach.....	June 14-Sept. 8....	37	14	
Galyoobeeyeh.....	June 2-Sept. 6....	10	2	
Garbleh.....	June 2-Sept. 14....	47	18	
Fayum.....	June 3-23.....	15	6	
Menouf.....	Jan. 18-Aug. 17....	87	17	
German East Africa:				
Muanza district.....	Apr. 30-May 22....		12	
Hawaii:				
Hilo.....	Aug. 19-Sept. 19....	3	2	Cases Sept. 6 and 19 at Papaikou. The case arrived on the s. s. Korea, had been ill 11 days, and probably received infection at Hongkong.
Honolulu.....	July 20.....	1		
Olaa plantation.....	Aug. 20-22.....	3	2	
India:				
Bombay Presidency and Sind.....	May 16-Sept. 4....	5,548	4,150	
Madras Presidency.....	May 16-Sept. 4....	1,944	1,217	
Bengal.....	May 16-Sept. 4....	1,008	846	
United provinces.....	May 16-Sept. 4....	4,202	3,615	
Punjab.....	May 16-Sept. 4....	7,167	6,135	
Burma.....	May 16-Sept. 4....	1,415	1,348	
Central provinces, including Berar.....	May 16-Sept. 4....	967	703	
Mysore State.....	May 16-Sept. 4....	1,364	972	
Central India.....	July 18-Sept. 4....	302	173	
Rajputana and Ajmer-Merwara.....	May 16-Sept. 4....	1,062	887	
Kashmir.....	May 16-June 12....	4	3	
Grand total.....		24,983	20,009	
Indo-China:				
Saigon.....	May 9-Sept. 4....	107	103	
Japan:				
Formosa.....	May 23-July 17....	223	156	In south and central parts.
Kobe.....	May 30-Sept. 25....	71	55	Revised.
Osaka.....	July 4-10.....	1	1	
Nacasaki.....	Sept. 11.....			Present on a vessel.
Nacasaki, Island.....	July 17-Aug. 3....	3	1	
Shimonoseki.....	Sept. 11.....			Present.
Tokyo.....	June 26.....	3		
Yokohama.....	May 25-Aug. 7....	28	24	

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

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mauritius.....	Apr. 1-Aug. 12....	24	23	
Morocco:				
Casablanca.....	July 15-Sept. 17....		4	Among troops.
Peru:				
Arequipa, department.....	May 8-Sept. 9.....	12	2	
Chala.....	July 3-15.....			Present.
Mollendo.....	July 3-15.....			Do.
Cajamarca, department.....	May 8-July 15.....	20	6	
Callao, department.....	May 8-Aug. 12.....	10	4	
Callao.....	June 20-Aug. 7.....			Present. Sept. 1, again present.
Ica, department.....	July 3-Sept. 9.....	2		
Lambayeque, department.....	May 8-Aug. 12.....	18	11	
Eten.....	July 15.....			Present.
Libertad, department.....	May 8-Sept. 9.....	21	11	
Salaverry.....	July 15.....			Do.
Lima, department.....	May 8-Sept. 9.....	34	14	
Cerro Azul.....	July 15.....			Do.
Moquegua, department.....	July 16-29.....	6	2	
Ilo.....	July 15.....			Do.
Pescadores Islands.....	June 27-July 3.....	4		From s. s. Lodore.
Piura, department.....	June 18-Sept. 9.....	41	28	
Paíta.....	June 20-July 15.....			Present.
Russia:				
Kirgisenaul.....	Aug. 5-8.....	19	18	In the Ural district, to Aug. 14, 22 deaths.
Siam:				
Bangkok.....	Apr. 25-Aug. 28....	22	22	
Trinidad:				
Port of Spain.....	June 13-July 18....	6	5	
Turkey in Asia:				
Adalia.....	June 25-July 29....	5	3	
Beirut.....	June 23-July 4.....	1		In Harrett Aryk.
Uruguay:				
Montevideo.....	May 1-June 30.....		2	
Venezuela:				
Caracas.....	June 18-Aug. 16....	13	3	
Zanzibar.....	July 14-26.....	3	3	

SMALLPOX.

Algeria:				
Algiers.....	May 1-Aug. 31.....	27	19	
Bona.....	June 1-Aug. 31.....	49	25	
Arabia:				
Aden.....	Aug. 3-9.....		1	
Argentina:				
Buenos Aires.....	Mar. 1-July 30.....		51	
Rosario.....	Apr. 1-July 31.....	3	3	
Austria:				
Bohemia.....	Sept. 26-Oct. 2.....	1		Imported.
Galicia.....	June 6-July 31.....	6		
Silesia.....	June 20-Aug. 7.....	17		
Belgium:				
Antwerp.....	July 18-24.....	4		
Brazil:				
Bahia.....	May 22-Sept. 24....	100	50	
Pernambuco.....	Apr. 1-Aug. 15.....		82	
Rio de Janeiro.....	May 17-Sept. 12....	80	31	
Santos.....	May 10-16.....		1	
São Paulo.....	May 10-July 18.....		12	
Canada:				
British Columbia—				
Vancouver.....	June 1-July 31.....	4		
Nova Scotia—				
Halifax.....	June 13-Aug. 7.....	5		
Ontario.....				
Hamilton.....	Sept. 1-30.....	2		
Quebec—				
Montreal.....	June 17.....			2 cases additional at Grosse Isle on s. s. Virginian.
Ceylon:				
Colombo.....	May 23-29.....	2		
Chile:				
Valparaiso.....	May 16-Aug. 28....			Present.
Santiago.....	May 29-Aug. 21....			Do.

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

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	June 1-July 10.....	24	31	May 9-15, present.
Eng-Ta-Tau.....	July 1-31.....	9		
Hankow.....	Aug. 21.....	1		Apr. 26-June 12, present among natives.
Hongkong.....	May 2-June 26.....	16	12	
Kang Thau.....	Apr. 1-June 30.....	7	1	
Newchwang.....	Aug. 1-14.....	2	1	
Shanghai.....	May 10-Aug. 7.....		8	Sept. 7, still present among natives. Sept. 4, one cas. on s. s. Wilmington.
Tientsin.....	June 27-July 3.....	1	2	
Egypt, general	Apr. 30-Sept. 16.....	1,512	356	
Alexandria.....	June 1-30.....	3		
Cairo.....	May 21-Sept. 23.....		19	
Suez.....	May 21-July 8.....	46	3	
Ecuador:				
Ensenada.....	Aug. 25.....			Epidemic.
Guayaquil.....	June 1-Aug. 10.....	3		In July, 4 cases and 1 death in vicinity.
France:				
Bordeaux.....	Sept. 4.....		1	
Marseille.....	June 1-30.....		5	
Nantes.....	July 1-31.....	1		
Paris.....	May 23-Oct. 2.....	41	3	
Toulon.....	July 25-31.....		1	
Germany, general	May 30-Sept. 25.....	23		
Gibraltar.....	Aug. 8-Sept. 26.....	3		
Great Britain:				
Cardiff.....	July 6.....	1		
Liverpool.....	June 21-26.....	2		Case, June 22, from s. s. Canada.
India:				
Bombay.....	May 26-Sept. 7.....		89	
Calcutta.....	May 16-Sept. 4.....		128	
Madras.....	May 22-Sept. 10.....		17	
Rangoon.....	May 12-Sept. 4.....		29	
Indo-China:				
Saigon.....	May 9-Aug. 7.....	21	20	
Italy, general	May 31-Oct. 3.....	266		
Genoa.....	June 1-Sept. 30.....	20		
Naples.....	May 31-Oct. 3.....	310	55	
Ottiana.....	June 23.....	1		
Rome.....	Mar. 7-13.....	1	1	
Japan:				
Formosa.....	June 13-19.....	1		
Moji.....	June 6.....	1		From s. s. Selja.
Osaka.....	Jan. 1-May 31.....	3		
Yokohama.....	June 1-7.....	1		
Java:				
Batavia.....	May 6-Sept. 11.....	31	1	
Malta:				
Valetta.....	Sept. 11-18.....	3		
Mauritius:				
Port Louis.....	Apr. 1-30.....	1	1	
Mexico:				
Aguascalientes.....	June 21-27.....		1	
Chihuahua.....	Aug. 16-22.....	1		
Guadalajara.....	June 11-Sept. 9.....		4	
Mexico.....	May 16-Oct. 9.....		89	
Monterey.....	June 14-Sept. 26.....		28	
Vera Cruz.....	June 1-Oct. 2.....	13	5	Aug. 12-Oct. 2, 7 cases imported from Medellin.
Newfoundland:				
St. Johns.....	Sept. 4.....	3		
Norway, general	Apr. 1-May 30.....	3		
Panama:				
Canal Zone—				
Ancon.....	Mar. 1-31.....	1		At Culebra Island quarantine station; from a vessel.
Persia:				
Khorassan.....	June 1-30.....			Epidemic.
Kurdistan.....	June 1-30.....			Do.
Mazanderan.....	July 1-31.....			Do.
Meshed-i-Sur.....	June 1-30.....			Epidemic in vicinity.
Shiraz.....	May 1-31.....			Present.
Turbat-i-Haidari.....	May 1-31.....			Do.
Peru:				
Lima.....	July 4-10.....	1		In the lazaretto.
Mollendo.....	Aug. 28.....			Present.

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

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila.....	May 9-July 31.....	17	7	Fourth quarter, 1908, 28 cases and 8 deaths; first quarter, 1909, 55 cases and 16 deaths; second quarter, 1909, 76 cases and 9 deaths.
Portugal:				
Lisbon.....	May 30-Oct. 2.....	138	.....
Russia:				
Lihau.....	May 6-Aug. 1.....	4	.....
Moscow.....	May 16-Sept. 25.....	318	111	
Odessa.....	May 30-Sept. 25.....	87	15	
Riga.....	June 6-Oct. 2.....	74	.....	May 1-July 31, 24 deaths.
St. Petersburg.....	May 16-Sept. 25.....	360	87	
Warsaw.....	Apr. 25-Aug. 28.....	.....	20	
Siam:				
Bangkok.....	Apr. 25-June 28.....	2	1	
Siberia:				
Vladivostok.....	May 15-June 3.....	4	1	
Spain:				
Almeria.....	June 1-31.....	.....	3	
Barcelona.....	June 1-Oct. 4.....	.....	69	
Huelva.....	May 1-Aug. 31.....	.....	29	
Madrid.....	May 1-Aug. 31.....	.....	352	
Seville.....	May 1-June 30.....	.....	2	
Tarragona.....	July 20-26.....	.....	1	
Valencia.....	May 20-Oct. 22.....	74	3	
Vigo.....	May 23-Oct. 2.....	.....	17	
Straits Settlements:				
Penang.....	Aug. 15-21.....	1	.....
Singapore.....	May 16-July 10.....	.....	2	
Switzerland:				
Aargau, canton.....	June 20-26.....	1	.....
Fribourg, canton.....	June 13-19.....	1	.....
Geneva, canton.....	May 30-June 26.....	9	.....
Tripoli:				
Tripoli.....	May 23-Aug. 28.....	84	17	
Turkey in Asia.....	July 19.....	.....	.....	Present in interior.
Bagdad.....	May 9-Aug. 14.....	.....	.....	Present.
Bassorah.....	May 23-June 26.....	.....	.....	Do.
Hadjin.....	July 19.....	.....	.....	Do.
Smyrna.....	May 7-Sept. 17.....	.....	143	
Turkey in Europe:				
Constantinople.....	May 31-Aug. 1.....	.....	8	
Uruguay:				
Montevideo.....	Apr. 1-July 31.....	.....	16	

Weekly mortality table, foreign and insular cities.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Aberdeen.....	Oct. 2	181,918	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Acapulco.....	do.	5,000	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Aguaascalientes.....	Oct. 10	40,000	49	.....	.....	.....	.....	.....	1	.....	.....	.....	2
Aix-la-Chapelle.....	Sept. 18	160,104	60	4	.....	.....	.....	.....	.....	.....	.....	1	4
Amoy.....	Sept. 4	400,000	172	.....	47	17	.....	.....	.....	1	.....	.....	3
Amsterdam.....	Oct. 2	565,830	113	21	.....	.....	.....	.....	.....	2	.....	2	3
Athens.....	Sept. 11	241,058	46	6	.....	.....	.....	.....	.....	.....	.....	1	.....
Do.....	Sept. 18	241,058	82	16	.....	.....	.....	.....	.....	7	.....	1	.....
Baracoa.....	Sept. 25	27,000	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Oct. 2	27,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barcelona.....	do.	600,000	375	19	.....	.....	.....	3	.....	13	.....	4	1
Barmen.....	Sept. 18	162,300	27	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Basel.....	Sept. 25	131,000	24	2	.....	.....	.....	.....	.....	.....	.....	.....	1
Belfast.....	Oct. 2	386,576	99	18	.....	.....	.....	.....	.....	2	.....	.....	4

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Belize.....	Oct. 7	9,113	3											
Berlin.....	Sept. 18	2,103,814	550	73							9	11	2	
Birmingham.....	Oct. 2	558,336	130								3	2		3
Bombay.....	Sept. 21	977,822	578	44	12	20		1		2			1	
Bradford.....	Oct. 2	293,983	53	5										2
Bremen.....	do.....	235,648	56	10								2		2
Breslau.....	Sept. 25	335,186	226	31								2		3
Bristol.....	Oct. 2	377,642	92	6							1	2	2	2
Brussels.....	Sept. 25	704,975	164	11						1	1	1		1
Budapest.....	Sept. 19	804,201								5	1	2		1
Do.....	Sept. 25	804,201								3		1	4	
Calcutta.....	Sept. 11	847,796	403	23	5	9								
Canton.....	Sept. 4	1,000,000	300	25						8				
Ceiba.....	Oct. 2	6,500	3	1										
Do.....	Oct. 9	6,500	2											
Chemnitz.....	Sept. 25	277,988	91	4							1		1	
Chihuahua.....	Sept. 27	37,000	19	2										
Christiania.....	Oct. 2	236,000	38	4									1	2
Cienfuegos.....	Sept. 25	37,000	24											
Do.....	Oct. 2	37,000	11											
Coburg.....	Sept. 25	23,396	6	1										
Cognac.....	Oct. 2	19,483	2	1										
Cologne.....	Sept. 25	471,872	137	15						1	1	2	1	6
Colombo.....	Sept. 4	183,872	108	18										
Constantinople.....	Sept. 26	1,000,000	188	30						9		2	1	
Copenhagen.....	Sept. 18	450,000	87	12						2	1	3		
Couquimbo.....	Sept. 11	12,000	12	1										
Dalny.....	do.....	38,364	31			7				1				
Dundee.....	Sept. 25	169,409	50							1	1	1		
Do.....	Oct. 2	169,409	47	5								1		1
Durban.....	Sept. 11	60,244	10											
Edinburgh.....	Oct. 2	355,366	87	3						1		2		3
Flume.....	Sept. 25	50,811	35	7										
Do.....	Oct. 2	50,811	26	5										
Flushing.....	do.....	21,208	3											
Geneva.....	Sept. 25	121,500	36									3		
Georgetown.....	Sept. 18	56,000	49	8						1	1			
Do.....	Sept. 25	56,000	49	4						1				
Ghent.....	do.....	164,579	54	3						1	1			1
Glasgow.....	Oct. 8	872,021	210							2	2	4		1
Gothenburg.....	Oct. 2	162,400	34	5										
Greenock.....	do.....	72,300	13											
Guayaquil.....	Sept. 18	75,000	67	8	11	3						1		1
Halifax.....	Oct. 9	50,000	19	1								1		
Hamburg.....	Oct. 2	872,252	218	27							1	5		4
Havre.....	Sept. 25	132,430	45	8										
Do.....	Oct. 2	132,430	56	17								1		
Hilo.....	Sept. 25	3,500	3	1						1				
Do.....	Oct. 2	3,500	8											
Hull.....	Sept. 25	275,552	88							1		1		1
Do.....	Oct. 2	275,552	61											
Kobe.....	Sept. 25	380,717	264		2					2		1	6	
Konigsberg.....	do.....	240,000	89	12								1		
La Guaira.....	Sept. 11	10,000	10											
Do.....	Sept. 18	10,000	14	7										
Do.....	Sept. 25	10,000	12	1										
La Paz.....	do.....	5,000	6	1										
Lausanne.....	do.....	60,000	13											
Leeds.....	Oct. 2	484,012	117	13						1		1		1
Leipzig.....	Sept. 25	537,686	154	20						1	1		1	3
Leith.....	Oct. 2	85,721	21	1										
Liege.....	Sept. 25	175,843	34	3									3	
Liverpool.....	Oct. 2	760,357	234	22						1	2	2	2	1
London.....	do.....	4,833,938	1,079	114						4	10	13	3	14
Lyon.....	Sept. 18	472,114	137	27						1				
Do.....	Sept. 25	472,114	134	22						2		3		
Madras.....	Sept. 17	509,346	365		2								2	
Magdeburg.....	Sept. 25	250,628	69	9								1		
Managua.....	Sept. 18	22,278	15	2										
Manaos.....	do.....	52,000	28	3										
Do.....	Sept. 25	52,000	27	1										
Manchester.....	Oct. 2	631,533	193	17						1	2	2		2

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Mannheim	Sept. 18	184,152	52	4								1		
Matamoros	Oct. 2	8,000	1											
Do	Oct. 9	8,000	2											
Mazatlan	Oct. 2	22,000	33											
Do	Oct. 9	22,000	30											
Monterey	Oct. 10	100,000	47	4						1				
Montreal	Oct. 16	389,837	130	12					3	3	3			
Moscow	Sept. 25	1,500,000	891	60		2		2	7	17	2	10		
Munich	do	566,000	184	24						2	2			
Nagasaki	Sept. 19	175,936	68	7										
Naples	Oct. 2	593,729	297					2	1	1	1			
Newcastle-on-Tyne	do	281,584	73	6						1	1	2		
Niuchwang	Sept. 4	60,000	47											
Do	Sept. 11	60,000	38											
Do	Sept. 18	60,000	23											
Nottingham	Sept. 25	260,000	64											
Nuevo Laredo	Oct. 9	8,000	7	3										
Nuremberg	Sept. 4	316,180	117	13										
Do	Sept. 11	316,180	102	14						1				
Ottawa	Oct. 9	80,200	32											
Palermo	Sept. 25	335,000	143	8					2	1		1		
Paris	do	2,774,394	775	206				1	7	2	2	2		
Penang	Sept. 11	102,520	99	17										
Plymouth	Oct. 2	124,180	31	4					1					
Port Elizabeth	Sept. 18	32,959	10	4					1					
Prague	Sept. 25	229,905	115	32					1		1			
Queenstown	Oct. 2	7,909	175	2										
Rangoon	Sept. 11	252,155	175	6	10	3								
Rome	May 22	559,715	178	22					1	2	2		8	1
Do	May 29	559,715	175	18								2	8	1
Do	June 5	559,715	195	17						3			3	2
Do	June 12	559,715	212	16					1			10		3
Rotterdam	Oct. 2	415,271	100						3					
St. John, N. B.	Oct. 16	47,000	8								1			
San Pedro	Sept. 18	7,400	6	1										
Do	Sept. 25	7,400	5											
Santa Cruz de Tenerife	do	46,000	14	2										
Santiago de Cuba	Oct. 9	53,614	20	1										
Schledam	Sept. 25	31,863	14	1					1					
Do	Oct. 2	31,863	5											
Sheffield	Sept. 25	472,000	109	5							1			
Do	Oct. 2	472,000	105	4					3	1	1			1
Singapore	Sept. 11	271,060	204	29					3					

The following cases of, and deaths from, smallpox, yellow fever, cholera, and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended October 29, 1909:

SMALLPOX—UNITED STATES.

Place.	Date.	Cases.	Deaths.	Remarks.
California, general.....	Aug. 1-31.....	.....	2	
Connecticut:				
Bridgeport.....	Sept. 26-Oct. 2.....	1	.....
Georgia:				
Macon.....	Oct. 2-8.....	3	.....
Illinois:				
Chicago.....	Oct. 7-16.....	1	.....
Indiana:				
Allen County.....	Aug. 1-31.....	28	.....
St. Joseph County.....	Aug. 1-31.....	1	.....
Massachusetts:				
Boston.....	Oct. 9-16.....	1	.....
Montana:				
Butte.....	Oct. 1-14.....	12	.....
New York:				
Buffalo.....	Oct. 9.....	1	.....
North Carolina:				
Nine counties.....	Aug. 1-31.....	37	.....
Ohio:				
Dayton.....	Oct. 10-16.....	1	.....
Springfield.....	Oct. 9-16.....	9	.....
Washington:				
Seattle.....	Aug. 1-31.....	6	.....

SMALLPOX—FOREIGN.

Austria:				
Bohemia.....	Sept. 26-Oct. 2.....	1	.....
Brazil:				
Bahia.....	Aug. 28-Sept. 24.....	44	28	
Egypt:				
Cairo.....	Sept. 10-16.....	1	2	
France:				
Paris.....	Sept. 29-Oct. 2.....	1	.....
Java:				
Batavia.....	Aug. 29-Sept. 11.....	5	.....
Malta:				
Valetta.....	Sept. 12-18.....	1	.....
Mexico:				
Mexico.....	Oct. 9.....	3	.....
Portugal:				
Lisbon.....	Sept. 27-Oct. 2.....	5	.....
Russia:				
Riga.....	Sept. 27-Oct. 2.....	3	.....
St. Petersburg.....	Sept. 12-25.....	21	11	
Spain:				
Almeria.....	June 1-30.....	.....	3	
Barcelona.....	Sept. 28-Oct. 4.....	.....	3	
Huelva.....	Aug. 1-31.....	.....	8	
Vigo.....	Sept. 26-Oct. 2.....	.....	1	

CHOLERA.

China:				
Amoy.....	Aug. 29-Sept. 4.....	.....	17	
Hankow.....	Sept. 5-11.....	5	.....
Shanghai.....	.....do.....	.....	.....
Swatow.....	Aug. 28.....	3	2	Present among natives. On s. s. Waising.
India:				
Bombay.....	Sept. 15-21.....	.....	1	
Calcutta.....	Sept. 5-11.....	.....	9	
Rangoon.....	.....do.....	.....	3	
Korea:				
Seoul.....	To Sept. 25.....	400	.....
Manchuria:				
Dalny.....	Sept. 5-18.....	18	14	
Netherlands:				
Lopik.....	Oct. 2.....	1	.....
Hansweert.....	.....do.....	1	.....
Philippine Islands:				
Manila.....	Sept. 5-11.....	20	13	
Provinces.....do.....	314	248	
Sumatra:				
Djambi.....	Aug. 10-20.....	6	

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YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil: Bahia.....	Aug. 28-Sept. 17.....	6	3	

PLAGUE.

Brazil: Bahia.....	Aug. 29-Sept. 24.....	11	8	
China: Amoy.....	Aug. 29-Sept. 4.....		47	
India, general.....	Sept. 5-11.....	2,781	2,096	
Madras.....	Sept. 11-17.....		2	
Calcutta.....	Sept. 5-11.....		5	
Rangoon.....	do.....		10	
Japan: Kobe.....	Sept. 18-25.....	2	2	
Mauritius.....	Aug. 6-12.....	3	2	

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service.