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PULMONARY HEMORRHAGE IN THE TUBERCULOUS AT HIGH ALTITUDE (6,200 FEET); REPORT OF 56 DEATHS; FREQUENCY OF ASSOCIATED HEART DISEASE.

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A review of the clinical records of the Marine Hospital Sanatorium at Fort Stanton, N. Mex., shows that since it was opened, in 1899, 56 deaths from pulmonary hemorrhage have occurred there. All of the subjects were under treatment for tuberculosis of the lungs, and together they constitute a little more than 10 per cent of the total mortality from that disease. The histories of all cases, where the hemorrhage was not immediately fatal, were passed upon by three medical officers before being admitted to this series, the facts in each case being considered sufficient to place hemorrhage in a causal relation to death. Instances where hemorrhage may have sown a new crop of tubercles throughout the lung, death occurring several weeks later from a rapid extension of disease, have not been included, nor has death been ascribed to hemorrhage in any instance simply because it was a sequence of that accident. Two fatalities from ruptured aortic aneurism occurring in tuberculous patients are also omitted.

Age.

	Total deaths from tuberculosis of lungs.		Deaths from pulmonary hemorrhage.	
	Number.	Per cent.	Number.	Per cent.
Number of patients less than 20 years old.....	8	1½	2	3½
Number of patients between 20 and 30 years old.....	180	35	19	34
Number of patients between 30 and 40 years old.....	169	32	20	36
Number of patients between 40 and 50 years old.....	116	22	9	16
Number of patients between 50 and 60 years old.....	39	7½	4	7
Number of patients more than 60 years old.....	12	2	2	3½
	524	100	56	100

All patients at Fort Stanton are adult males, the great majority between the ages of 20 and 50 years. Referring to the table above it will be seen that variation in the frequency of deaths from hemorrhage corresponds fairly closely with that of the total number of deaths from tuberculosis of the lungs in each age period.

Syphilis and alcohol.

	Syphilitic history.		Excessively alcoholic.	
	Number.	Per cent.	Number.	Per cent.
Number of patients admitted (1,754).....	245	14	491	28
Hemorrhagic cases studied (453).....	71	16	133	29
Total number of deaths (527).....	79	15	158	30
Number of deaths from hemorrhage (56).....	12	21	19	34

Fourteen per cent of all patients gave a history of syphilis, although the disease rarely appears in active form here. The preliminary observation to which they are subjected in the local marine-hospitals before being transferred is helpful in eliminating nontuberculous complications. Fifteen per cent of all those who died and 16 per cent of all those who had pulmonary hemorrhages were syphilitic, from which we may conclude that a previous infection with syphilis seems not to have much bearing on either the incidence of hemorrhage or the death rate from tuberculosis. Twenty-one per cent of those dying from pulmonary hemorrhage were syphilitic. A reference to the table shows about the same variation in those entering with a history of excessive alcoholism. As far as they go, the figures would indicate that damage to heart and vessels resulting from previous disease and excess is contributory to the frequency of death from pulmonary hemorrhage.

It is probable that alcoholism would show a more pronounced influence, at least on the total number of deaths, if it were not for the fact that a lapse to alcoholism while under treatment usually results in the discharge of the patient as a disciplinary measure. Inebriates, therefore, tend to eliminate themselves more frequently than do the temperate, before either their disease is arrested or death occurs. It may be mentioned that it is the policy at this sanatorium to secure either an arrest of disease or else, in the interest of the public health, to encourage the patient to remain here until death.

COLOR.

The negro seems to be slightly less liable to hemorrhage than the white. A previous study of our hemorrhagic cases^a seemed to show that a chronic type of pulmonary tuberculosis is more common among hemorrhagic cases than among nonhemorrhagics. Those in whom the disease runs an acute course, as the very young and the negro, are less apt to have hemorrhages, because, instead of living for many years with pulmonary vessels exposed in cavities to tuberculous, pyogenic, atheromatous, or other destructive process, they die of their disease quickly, with opportunity for hemorrhage in inverse proportion to the rapidity of the tuberculous invasion. About 35 per cent of our colored patients have hemoptysis, either before or after beginning sanatorium life, against 38 per cent of the white men. The total mortality has been 50 per cent among the colored and 28 per cent among the white. Five colored patients have died from pulmonary hemorrhage, a number representing 6 per cent of their mor-

^a Hemoptysis in pulmonary tuberculosis.—Transactions of the fourth annual meeting of the National Association for the Study and Prevention of Tuberculosis.

tality. Fifty-one whites died from hemorrhage, 11 per cent of their total mortality.

Relation of size of hemorrhage to death.

	Hemorrhage immediately fatal.	Hemorrhage not immediately fatal.
Large hemorrhage.....	17	11
Moderate hemorrhage.....	11	2
Small hemorrhage.....	1	3
Amount unknown.....	7	4
Total.....	36	20

Hemorrhages of over 500 cubic centimeters have been classed as large and those less than 150 cubic centimeters as small. Forty-one of the fatal hemorrhages were known to be of considerable amount, while small hemorrhages were responsible for only 4 deaths, 3 from broncho-pneumonia, and 1 apparently from shock, the man being greatly frightened and losing consciousness at almost the first show of blood. In this case autopsy was omitted, and it is quite possible that inundation of the bronchi during syncope occurred and that the real cause of death was suffocation.

In 36 instances hemorrhage was immediately fatal. Of these the majority died of suffocation. Death usually occurred in less than ten minutes, and in only one of the hemorrhages classed as immediately fatal, where all the circumstances are known, was life prolonged thirty minutes. Two cases were found dead in bed, suffocation from insufflated blood being the apparent cause of death in each case.

Next to suffocation, cardiac failure was probably the most frequent cause of sudden death. While it is true, that, occasionally, a large amount of blood from the lungs may flow from the mouth of a composed patient without violent cough, the great majority of pulmonary hemorrhages entails tremendous exertions on the part of the subject to free his lungs of blood and preserve his life from suffocation. This labor, and a certain amount of asphyxia, especially in a panic-stricken individual, must throw considerable extra strain on the heart, disease of which, as will be noted below, was frequent in this series. If it shall appear that the results of pulmonary hemorrhage in elevated regions are more serious than those occurring at sea level, it is probable that the explanation will be found in the incapacity of the heart to withstand sudden exertion, and also in the higher mortality from pneumonia at considerable altitudes, two causes which are of course, dependent upon the same thing.

Circumstances.

	Hemorrhage immediately fatal.	Hemorrhage not immediately fatal.
Patient in bed.....	29	5
Patient walking about grounds.....	3	3
Patient in quarters, not in bed.....	2	3
Circumstances unknown.....	2	9
Total.....	36	20

Thirty-four fatal hemorrhages occurred while the subjects were in bed. Of these, 4 took place in the daytime, 9 at unrecorded hours, and 21 between 9 p. m. and 6.45 a. m. It is not unreasonable to suppose that a man surprised during sleep by a hemorrhage is more apt to succumb to suffocation than one in possession of all his faculties.

Eleven of those dying suddenly in bed were under treatment at the time for hemorrhage occurring a few days previously, but the hemorrhage which sent these same men to the hospital ward took place in bed in at least 6 instances. Of 13 hemorrhages immediately fatal in ambulant, afebrile patients, 8 occurred while the man was in bed for the night, while of 19 hospital patients dying suddenly, including the 11 mentioned above, 15 were in bed at the time.

In no case, where the facts are known, either among ambulant or bed patients, or even where hemorrhage had been of recent occurrence, was sudden exertion, straining at stool, bathing, etc., the cause of the fatal hemorrhage. One man, however, who was found dead in bed is known to have been intoxicated the day before, and another who died suddenly from hemorrhage was engaged in a heated argument at the time of the accident and was, moreover, suspected of having imbibed smuggled whisky.

In 21 cases not immediately fatal, 16 died of broncho-pneumonia, 1 of lobar pneumonia, and 1 of cardiac failure thirteen hours after a very severe hemorrhage. The last case was not autopsied. The pneumonia cases died, 1 on the second day, 5 on the third, 5 on the fourth, and 1 each on the fifth, eighth, fourteenth, sixteenth, and seventeenth days after hemorrhage. The two remaining cases died four and a half hours and seven hours, respectively, after the last of a series of hemorrhages which had continued in one case for seventeen days and in the other for two days immediately previous. Both were autopsied, and, in the absence of any grossly apparent cause, the deaths may be properly ascribed to exhaustion. Neither in these two nor in those others where hemorrhage was immediately fatal, while the subject was in hospital recovering from the effects of previous hemorrhage, was there evidence of broncho-pneumonia. This experience supports that recorded by at least one observer (Bonney), that recurrence of hemorrhage is rare after broncho-pneumonia has developed.

Duration of treatment compared with that of other fatal cases.

	Total deaths from pulmonary tuberculosis.		Deaths from hemorrhage.			
	Number.	Per cent.	Number.	Per cent.	Previous hemorrhage.	No previous hemorrhage.
Deaths within one month after admission..	84	16	9	16	7	2
Deaths occurring from one to six months after admission.....	203	39	14	25	8	6
Deaths occurring from six to twelve months after admission.....	93	18	11	26	7	4
Deaths occurring from one to two years after admission.....	87	16	10	18	7	3
Deaths occurring more than two years after admission.....	57	11	12	21	8	4
Total.....	524	100	56	100		

The influence of chronicity on hemoptysis, referred to under the consideration of color, is again evident here. The percentage of deaths from hemorrhage as compared with that from other causes shows a steady rate of increase after six months' stay. If the previous duration of disease could be fixed with any degree of accuracy the total duration of the disease would be a more proper basis for calculation in this connection; but, as is well known, the date of onset is extremely uncertain. The above table would seem to indicate that the institution which retains individual cases longest will have the largest percentage of deaths from hemorrhage.

The earliest death from hemorrhage was one immediately fatal, occurring on the seventh day after arrival, in a patient with a history of pulmonary hemorrhage previous to admission. Of the 9 dying within a month after arrival, 7 had a previous history of bleeding, and 2 died of their first hemorrhage. Five of these cases were immediately fatal and 4 were not. Of the 12 who had been here over two years, 4 died of their first hemorrhage. Eight of these deaths were immediate and 4 succumbed to broncho-pneumonia.

Of the 19 dying of their first hemorrhage, 14 succumbed immediately, 7 had been at Fort Stanton over one year, and 3 more than three and a half years.

Epidemicity.—Occasionally a number of fatal hemorrhages have occurred within a few days. For instance, there were 14 deaths from that cause in the year 1907, 2 within two days in January, 4 within seventeen days in April, 3 within twenty-one days in November. The other 4 took place one each in as many other months. The apparent epidemic nature of hemorrhage from the lungs has been frequently noted and various efforts made to explain it. An occasional grouping of cases is surely no more remarkable than an even distribution would be and is a phenomenon by no means confined to contagious diseases.

Stage of disease.—All of the 56 cases were far advanced, according to the nomenclature adopted by the National Association. Forty-three were so classified on admission and the remaining 13 came as moderately advanced cases, but had progressed to the third stage before death. Excavation, in most cases extensive, was found in each of the 43 autopsied, and cavities had been demonstrated clinically in all the others.

Condition at time of fatal hemorrhage.—In 46 instances the disease was known to be progressing, while 10 patients were supposed to be arrested cases. Nine of the latter were autopsied and while in 6 of these only slight evidence of active tuberculosis was found and while there was ample evidence of healing, none of them could properly be called arrested in the sense that all activity had ceased in all parts of the lungs. Each had a few small, thick-walled cavities, considerable scar tissue, and abundant healthy lung remaining, but careful search revealed in all either a few scattered tubercles of recent deposit or some minute area of softening. But the fact that 6 such cases succumbed to hemorrhage would indicate that that event is sometimes an accident, irremediable, unavoidable, and not to be foretold.

The ruptured vessel responsible for the fatal issue was found only nine times in 43 autopsies. In each instance the vessel was partially exposed in a cavity. Six times the rupture occurred in an aneuris-

mal dilatation, presumably of a branch of the pulmonary artery; three times no dilatation was noted. The occurrence of small, unruptured aneurisms projecting into cavities is not an unusual finding in our autopsies.

In an effort to locate the site of hemorrhage, tracheal injections of colored gelatine were made in a number of cases. In one the injected material was found at autopsy filling the arch of the aorta, but not present in either side of the heart, indicating, possibly, hemorrhage from a bronchial artery, the location of which, however, could not be determined.

Cardiac disease.—The condition of the heart was described forty-two times in 43 autopsies. Valvular disease of the heart with incompetency of the mitral valve was found four times, once associated with aortic stenosis and once with an acute pericarditis and effusion; all four were immediately fatal cases. Aortic incompetency in a small heart showing brown atrophy and with adhesions of the pericardial sack to the right pleura was found once; fatty degeneration of the myocardium once; dilatation of the right auricle in a heart weighing 545 G. once—all in cases dying immediately. Disease of the mitral valves not resulting in incompetency occurred five times, the hearts weighing 385 G., 450 G., 385 G., 250 G., and 320 G., respectively; disease of the aortic valve not resulting in incompetency was found once in a heart of 380 G. All these were also cases where the hemorrhage proved immediately fatal.

Tricuspid incompetency occurred once and dilatation of the right ventricle twice (all in different cases), one of the last in connection with excrescences on the mitral valve and all in cases dying of bronchopneumonia. Another case with greatly enlarged heart (735 G.) and extensive pericardial adhesions also succumbed to this sequel to hemorrhage.

Thus 17 of 42 autopsied are known to have had some serious cardiac disease; 13 of these died suddenly. The preponderance of left-sided cardiac lesions in the cases immediately fatal is noticeable.

Besides those mentioned above, three hearts showed small pericardial effusions of 100, 150, and 350 cubic centimeters, respectively; two enlarged hearts (360 G. and 480 G.) had extensive pericardial adhesions and another heart which produced a mitral systolic murmur in a subject who subsequently died suddenly from hemorrhage showed no disease except a few atheromatous patches on the mitral leaflets, but was associated with a small pleural effusion and an acute pleuritis with plastic exudate. Of the remaining hearts that were examined, 7 were hypertrophied, ranging in weight from 350 G. to 450 G. Thus only 12 hearts, 3 of which were not weighed, and so, perhaps, were not carefully examined, seemed normal out of the 42.

COMPARATIVE FREQUENCY OF HEMOPTYSIS AT HIGH AND LOW ALTITUDES.

It has been scientifically established that blood pressure is lowered with increase of altitude, and while elevated places have never been considered unsuitable for the treatment of cases of pulmonary tuberculosis showing hemorrhagic tendencies, a note as to the comparative frequency of hemorrhages from the lung at this sanatorium may

properly be added here. Our altitude is 6,231 feet; most patients arrive from places at or near sea level.

Of the first 453 hemorrhagic cases admitted, 248 had hemorrhages before but not after admission; 106 had hemorrhages both before and after admission; 99 had hemorrhages after but not before admission.

Such data are obviously not of much value without knowing how long the patients were under observation.

Of 248 having hemorrhages before but not after admission, 31 remained over two years, 46 remained from one to two years, 45 remained from six months to one year, 61 remained from three to six months, and 65 remained less than three months.

This still is not conclusive, because the duration of the disease before entering was probably greater in most cases than the time patients remained under treatment here, with consequent greater opportunity for hemorrhage before than after admission. But taking into account the well-known frequency of recurrence in pulmonary hemorrhage, the belief that elevated regions are favorable for the treatment of ordinary hemorrhagic cases of tuberculosis of the lungs would seem fairly well supported.

SUMMARY.

1. Hemorrhage from the lungs is responsible for about 10 per cent of the total mortality from pulmonary tuberculosis at this sanatorium.
2. Syphilis and chronic alcoholism increase the liability to fatal hemorrhage.
3. Small pulmonary hemorrhages are rarely suddenly fatal, but may cause a dangerous insufflation pneumonia.
4. Recurrence of hemorrhage rarely or never occurs after broncho-pneumonia develops.
5. No age period of adult manhood seems especially predisposed to fatal pulmonary hemorrhage.
6. Exciting cause of fatal hemorrhage was noticeably absent; the majority of subjects were in bed at the time and a large number presumably asleep.
7. Acute types of pulmonary tuberculosis are least liable to this accident; negroes showed a lower mortality from hemorrhage than whites.
8. Hemorrhage has not been common immediately after arrival from sea level; the increased mortality from hemorrhage after prolonged residence at high altitude may properly be ascribed to the chronic type of disease in these individuals.
9. Disease of the heart or embarrassed circulation from any cause predispose to a fatal issue when pulmonary hemorrhage occurs.
10. Pulmonary hemorrhage is not more frequent at high altitude than at sea level but the results are perhaps more often serious, especially in those with impaired circulation.

REPORT OF THE PROCEEDINGS OF THE TENTH INTERNATIONAL CONGRESS OF PHARMACY, BRUSSELS, SEPTEMBER 1-6, 1910.

By REID HUNT, professor of pharmacology, Hygienic Laboratory, United States Public Health and Marine-Hospital Service. •

The opening session was held in the Palais des Academies September 1. More than 600 delegates, but one-half of whom came from countries other than Belgium, were present. Sixteen foreign governments had formally accepted the invitation to participate in the congress, and 20 were represented by official delegates. Delegates were present from the following American Republics: Argentina, Chile, Venezuela, Guatemala, San Salvador, Haiti, and the United States.

The work of the congress was outlined at the opening meeting, at which the governor of Brabant, representing the minister of the interior; the president and secretary of the congress; and several of the foreign delegates, made addresses. The speakers emphasized, as the two subjects of greatest international interest: (1) The further unification of the pharmacopœias, with special reference to the adoption of uniform methods of assay of important drugs; and (2) the control of the sale of specialties (proprietary medicines), from the standpoint of public health as well as that of the material interests of the pharmacists. The governor of Brabant, M. Breco, formerly of the ministerial department having control of public health, hygiene, and pharmacy, urged the congress to add to its programme the subject of public hygiene, stating that he did not believe that pharmacists are as well qualified to deal with the problems of this subject as is desirable, and pointing out the possibilities of pharmacists securing for themselves a more privileged position if they will extend their activities beyond the narrower commercial pursuits.

The service of the Belgian Government in connection with the conference of 1902, which resulted in the securing of a greater degree of uniformity in the formulas of heroic medicines in the various pharmacopœias, was the subject of much favorable comment on the part of several of the foreign delegates.

On the succeeding days the congress met in two sections—scientific and professional. At each of these certain general questions, announced in advance, were discussed. A considerable number of communications, dealing for the most part with subjects of general scientific importance and all of international interest, were also presented. As a result of these discussions a number of resolutions were drawn up and voted upon, first by the sections and secondly by the entire congress at its concluding session September 6.

The first of the resolutions, presented by the scientific section, related to the unification of the methods for the assay of crude drugs and of galenical preparations and for the determination of physical constants. The great importance of this subject, from the standpoint not only of medicine but also from that of international commerce, was emphasized. The congress requested the Belgian government to call an international conference for the unifying of the methods of analysis of the heroic medicaments; it also expressed the hope that, in the matter of alkaloidal assays, the commission would adopt, as far as possible, gravimetric methods. These conclusions

and resolutions were based largely upon a paper by Doctor Schamelhout, who treated the subject from the standpoint of a practical pharmacist.

The second resolution related to the international unification of the reagents used in pharmacopœial work. It was pointed out how such a unification would aid in securing uniform analytical results and in the interpretation of the different pharmacopœias.

The third set of resolutions, which were adopted after prolonged and thorough discussion, related to the control of antiseptics, with special reference to the securing of commercial honesty and the safeguarding of the public. The congress expressed the opinion that such preparations should not be placed upon the market until they have been officially examined, both chemically and bacteriologically, and have received the approval of the departments of public health; that their efficiency should be determined and the claims made by the manufacturers be examined; that the amount of their active ingredients and their bactericidal strength should be stated, and that the sale of those claiming to possess therapeutic properties and of those containing poisons, the sale of which is legally restricted, should be limited to pharmacists.

The fourth resolution related to the introduction into the curricula of schools of pharmacy of courses on the analysis of certain physiological and pathological secretions, especially of that of the feces. It was pointed out in the discussion that such work properly comes within the province of the pharmacist as a chemist and that it makes another professional bond between him and the physician.

The fifth resolution related to the preparation of galenicals by pharmacists. The latter were urged to make these preparations themselves as far as possible.

In addition to the formal reports a number of important scientific communications were made, some of which led to the adoption of further resolutions. Thus, as the result of a communication by Möller, it was resolved to advocate the adoption as an international standard of colors the standard of Klinchsieck and Valette. A paper by Hercod led to the adoption of a resolution in favor of the appointment of an international commission to establish a method for the standardization of pharmacopœial preparations of pepsin and for establishing a standard strength for this product.

A resolution was also passed expressing the opinion that it is desirable for the committees on pharmacopœial revision to publish each year supplements calling attention to the real scientific advances made.

Among the notable contributions made in the scientific section the following may be mentioned: Perrot, on the preservation of important plant drugs by the destruction of the intracellular enzymes; Leger, on the constitution of the aloins; Bourquelot, on glucosides; Goris, on plants containing caffeine.

The first of the resolutions presented by the section on professional interests related to the control of the sale of specialties. The basis for the discussion of the subject, which was prolonged and animated, was the very comprehensive report prepared by Breugelmans, Daminet, and Staes in which was reviewed the legislation on the subject in the leading countries of the world. Although the difficulties and complications which have arisen from the great increase in the number

of such preparations and the problem resulting from the competition of manufacturers were recognized, the discussion was limited largely to the phases which more directly concern the commercial side of pharmacy and especially to the subject of price legislation. It was recognized that this is a question which will have to be solved by each country, but certain general principles were proposed, and the congress expressed the opinion that the sale of medical specialties should, in all countries, be reserved to the pharmacists.

The second resolution presented by the section on professional interests related to the formation of an international pharmaceutical federation having for its purpose the protection of pharmacy as a profession and as an applied science. It was decided to appoint a commission to prepare a constitution for such a federation and to accept an invitation from the government of Holland to make The Hague its headquarters.

The third resolution related to the representation on pharmacopœial commissions of practical pharmacy, and the fourth to the limitation of the number of pharmacopœias.

It was also resolved to make the question of patents and trade marks one of the subjects for discussion at the next international congress of pharmacy.

In addition to the scientific programme, visits were made to the exposition, where the chemical and pharmaceutical exhibits of different countries were explained, and to dairies devoted to the production of milk for infants.

UNITED STATES.

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

PLAGUE-PREVENTION WORK.

Surgeon Blue reports:

INFECTED GROUND SQUIRREL.

The finding of 1 plague-infected ground squirrel was reported during the week ended September 17, 1910. It was found September 10 in Contra Costa County, at Curran Ranch on Wildcat Creek, one-half mile northeast of Alameda County line.

ANIMALS EXAMINED FOR PLAGUE INFECTION.

During the week ended September 17, 1910, there were examined at the federal laboratory at San Francisco and the branch laboratories at Oakland and Los Angeles, Cal., animals as follows: Squirrels 2,380, rabbits 13, gophers 7, wood rats 1, rats 1,983. The rats were identified as follows: *Mus norvegicus* 1,601, *Mus rattus* 146, *Mus alexandrinus* 169, *Mus musculus* 67.

The total number of animals examined was 4,384. One plague-infected squirrel was found.

DISTRIBUTION OF POISON.

In connection with the making of a squirrel-free zone around the cities on San Francisco Bay, 325 acres of land in Alameda County were covered with poison during the week ended September 17, 1910.

SEATTLE, WASH.

Assistant Surgeon Chapin reports:

During the week ended September 17, 1910, 1,103 rats were collected. Of these, 965 were necropsied and examined for plague infection. No plague-infected rats were found.

Record of Plague Infection.

Place.	Date of last case of human plague.	Date of last case of rodent plague.	Total number of rodents found infected since May, 1907.
California:			
Cities—			
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	396 rats.
Oakland.....	Oct. 26, 1909	Dec. 1, 1908	126 rats.
Berkeley.....	Aug. 28, 1907	None recorded.	
Los Angeles.....	Aug. 11, 1908	Aug. 21, 1908	1 squirrel.
Counties—			
Alameda (exclusive of the city of Oakland)...	Sept. 26, 1909	May 30, 1910	82 squirrels, 1 wood rat.
Contra Costa.....	July 21, 1908	Sept. 10, 1910	247 squirrels.
Merced.....	None recorded.	June 6, 1910	2 squirrels.
Monterey.....	.....do.....	.....do.....	4 squirrels.
San Benito.....	June 5, 1910	July 11, 1910	20 squirrels.
San Joaquin.....	None recorded.	Aug. 19, 1910	6 squirrels.
San Luis Obispo.....	.....do.....	Jan. 29, 1910	1 squirrel.
Santa Clara.....	Sept. 5, 1910	June 22, 1910	22 squirrels.
Santa Cruz.....	None recorded.	May 17, 1910	3 squirrels.
Stanislaus.....	.....do.....	May 21, 1910	5 squirrels.
Washington:			
Seattle.....	Oct. 30, 1907	Feb. 8, 1910	22 rats.

Rats Collected and Examined for Plague Infection.

Place.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Berkeley.....	Sept. 17	.....	^a 97	97	.....
Oakland.....	.....do.....	26	^b 690	501	.....
San Francisco.....	.....do.....	182	^c 1,968	1,402	.....
Washington:					
Seattle.....	.....do.....	.....	1,103	965	.....
Total.....	.....	208	3,858	2,965	.....

^a Identified, *Mus norvegicus* 80, *Mus musculus* 17.

^b Identified, *Mus norvegicus* 594, *Mus rattus* 5, *Mus musculus* 89, *Mus alexandrinus* 2.

^c Identified, *Mus norvegicus* 1 329, *Mus rattus* 141, *Mus musculus* 331, *Mus alexandrinus* 167.

Squirrels Collected and Examined for Plague Infection.

Place.	Week ended—	Trapped and shot.	Found dead.	Examined.	Found infected.
California:					
Cities—					
San Francisco.....	Sept. 17	13	.....	13	.....
Counties—					
Alameda.....	.....do.....	16	4	20	.....
Calaveras.....	.....do.....	18	.....	18	.....
Contra Costa.....	.....do.....	94	1	95	1
Fresno.....	.....do.....	281	.....	276	.....
Los Angeles.....	.....do.....	63	.....	63	.....
Merced.....	.....do.....	104	.....	104	.....
Monterey.....	.....do.....	261	.....	257	.....
Sacramento.....	.....do.....	34	.....	34	.....
San Joaquin.....	.....do.....	322	.....	315	.....
San Luis Obispo.....	.....do.....	981	1	947	.....
San Mateo.....	.....do.....	42	.....	42	.....
Santa Clara.....	.....do.....	14	.....	14	.....
Solano.....	.....do.....	163	1	164	.....
Tuolumne.....	.....do.....	18	.....	18	.....
Total.....	.....	2,424	7	2,390	1

Other Animals Collected and Examined.

Place.	Week ended—	Animals collected.	Examined.	Found infected.
California:				
Cities—				
San Francisco.....	Sept. 17	12 gophers.....	7	.....
Counties—				
Merced.....	do.....	3 rabbits.....	3	.....
San Luis Obispo.....	do.....	1 wood rat.....	1	.....
San Mateo.....	do.....	4 rabbits.....	6	.....
Santa Clara.....	do.....	4 rabbits.....	4	.....
Total.....			19	.....

SMALLPOX IN THE UNITED STATES.

Reports Received During Week Ended October 7, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Louisiana:				
New Orleans.....	Sept. 18-24.....	2		
Montana:				
Dawson County.....	Aug. 1-31.....	2		
Rosebud County.....	do.....	2		
Silverbow County.....	do.....	1		
Butte.....	do.....	3		
Missouri:				
Kansas City.....	Aug. 6-20.....	4		
Utah:				
Salt Lake County.....	Aug. 1-31.....	3		
Utah County.....	do.....	7		
Wasatch County.....	do.....	1		

Reports Received from June 25 to September 30, 1910.

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

Place.	Date.	Cases.	Deaths.	Remarks.
Alabama:				
Birmingham.....	June 12-Aug. 6.....	11		
Mobile.....	June 12-Sept. 10.....	14		
Montgomery.....	June 12-25.....	6		
Total for State.....		31		
Arkansas:				
Fort Smith.....	June 19-25.....	1		
California, general.				
Amador County.....	May 1-June 30.....	27		
Hamlet County.....	July 1-Aug. 31.....	2		
Los Angeles County.....	Aug. 1-31.....	2		
Los Angeles County.....	July 1-31.....	1		
Sacramento County.....	Aug. 1-31.....	1		
San Francisco County.....	July 1-Aug. 31.....	2		
San Joaquin County.....	July 1-Aug. 31.....	4		
Santa Clara County.....	July 1-31.....	2		
Total for State.....		41		
Colorado:				
Alamosa County.....	Apr. 1-30.....		1	
Las Animas County.....	Mar. 1-Apr. 30.....		2	
Logan County.....	May 1-31.....		1	
Montrose County.....	Apr. 1-30.....		1	
Adams County.....	July 1-31.....	3		
Archuleta County.....	June 1-Aug. 31.....	17		
Chaffee County.....	July 1-Aug. 31.....	3		
Clear Creek County.....	Aug. 1-31.....	1		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Colorado—Continued.				
Conejos County.....	June 1-Aug. 31.....	4		
Delta County.....	June 1-30.....	2		
Denver County.....	June 1-Aug. 31.....	35		
El Paso County.....	July 1-Aug. 31.....	3		
Huerfano County.....	June 1-Aug. 31.....	15		
Kit Carson County.....	June 1-30.....	4		
Larimer County.....	June 1-30.....	1		
Las Animas County.....	June 1-Aug. 31.....	7		
Logan County.....	June 1-30.....	1		
Mesa County.....	June 1-30.....	1		
Montrose County.....	June 1-30.....	5		
Otero County.....	June 1-30.....	4		
Prowers County.....	June 1-July 31.....	12		
Pueblo County.....	July 1-31.....	1		
Rio Grande County.....	June 1-30.....	4		
Saguache County.....	June 1-July 31.....	13		
San Miguel County.....	June 1-30.....	1	1	
Teller County.....	June 1-July 31.....	2		
Weld County.....	June 1-30.....	5		
Total for State.....		144	6	
District of Columbia.....	July 3-Sept. 10.....	14		
Total for District.....		14		
Florida:				
Brevard County.....	Aug. 7-13.....	1		
Duval County.....	June 19-25.....	2		
Gadsden County.....	July 3-Aug. 13.....	11		
Hillsboro County.....	July 17-Aug. 6.....	2		
Jackson County.....	June 19-Aug. 6.....	3		
Jefferson County.....	July 10-Aug. 6.....	4		
Leon County.....	Mar. 1-31.....		1	
Liberty County.....	July 17-23.....	14		
Santa Rosa County.....	July 31-Aug. 6.....	2		
Taylor County.....	July 3-9.....	1		
Walton County.....	June 12-18.....	1		
Total for State.....		41	1	
Georgia:				
Columbus.....	July 3-9.....	6		
Macon.....	Apr. 1-June 30.....	8		
Total for State.....		14		
Illinois:				
Adams County.....	June 1-30.....	2		
Clay County.....	June 1-30.....	1		
Coles County.....	June 1-Aug. 31.....	30		
Cook County.....	June 1-30.....	1		
Chicago.....	June 1-Aug. 31.....	3		
Edgar County.....	June 1-30.....	2		
Franklin County.....	June 1-30.....	1		
Henry County.....	July 1-31.....	3		
Iroquois County.....	June 1-30.....	1		
Jo Daviess County.....	June 1-July 31.....	9		
Kendall County.....	June 1-July 31.....	2		
Knox County.....	June 1-July 31.....	6		
Madison County.....	June 1-Aug. 31.....	23		
Marion County.....	June 1-30.....	3		
Montgomery County.....	June 1-30.....	6		
Peoria County.....	June 1-Aug. 31.....	6		
Perry County.....	June 1-30.....	1		
Pulaski County.....	June 1-30.....	1		
Randolph County.....	June 1-30.....	1		
Richland County.....	June 1-Aug. 31.....	9		
Rock Island County.....	June 1-Aug. 31.....	8		
St. Clair County.....	June 1-30.....	1		
Sangamon County.....	June 1-30.....	1		
Tazewell County.....	June 1-30.....	2		
Union County.....	June 1-30.....	4		
Wayne County.....	June 1-30.....	3		
Williamson County.....	June 1-30.....	2		
Total for State.....		132		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Indiana:				
Allen County.....	May 1-June 30.....	8		
Carroll County.....	June 1-30.....	1		
Clay County.....	June 1-30.....	2		
Cinton County.....	May 1-31.....	1		
DeKalb County.....	June 1-30.....	1		
Delaware County.....	May 1-31.....	4		
Elkhart County.....	May 1-31.....	1		
Gibson County.....	May 1-31.....	1		
Grant County.....	May 1-June 30.....	13		
Greene County.....	May 1-31.....	9		
Howard County.....	May 1-June 30.....	21		
Lake County.....	June 1-30.....	1		
Madison County.....	June 1-30.....	6		
Marion County.....	May 1-June 30.....	6		
Marshall County.....	June 1-30.....	1		
Martin County.....	June 1-30.....	4		
Miami County.....	June 1-30.....	6		
Montgomery County.....	June 1-30.....	6		
Orange County.....	May 1-31.....	18		
Owen County.....	May 1-June 30.....	23		
Putnam County.....	June 1-30.....	1		
St. Joseph County.....	May 1-June 30.....	10		
Tipton County.....	May 1-31.....	1		
Vigo County.....	May 1-June 30.....	28		
Warren County.....	June 1-30.....	1		
Wayne County.....	June 1-30.....	6		
Total for State.....		180		
Iowa:				
Benton County.....	June 1-July 31.....	4		
Buchanan County.....	June 1-30.....	2		
Cedar County.....	July 1-31.....	1		
Clayton County.....	June 1-30.....	1		
Dallas County.....	June 1-30.....	1		
Delaware County.....	June 1-30.....	10		
Dubuque County.....	June 1-30.....	1		
Linn County.....	June 1-Aug. 31.....	41		
Plymouth County.....	Aug. 1-31.....	1		
Polk County.....	June 1-July 31.....	19		
Pottawattamie County.....	June 1-Aug. 31.....	21		
Scott County.....	June 1-July 31.....	4		
Warren County.....	Aug. 1-31.....	7		
Webster County.....	July 1-31.....	1		
Winneshiek County.....	June 1-30.....	1		
Woodbury County.....	June 1-30.....	1		
Total for State.....		116		
Kansas:				
Allen County.....	May 1-July 31.....	39		
Atchison County—				
Atchison.....	Apr. 1-May 31.....	7		
Barton County.....	June 1-July 31.....	7		
Butler County.....	Apr. 1-June 30.....	8		
Cherokee County.....	June 1-30.....	4		
Clay County.....	July 1-31.....	1		
Coffey County.....	July 1-31.....	1		
Cowley County.....	Apr. 1-July 31.....	12		
Crawford County.....	June 1-30.....	4	1	
Decatur County.....	Apr. 1-July 31.....	37		
Dickinson County.....	May 1-June 30.....	10		
Doniphan County.....	Apr. 1-30.....	10		
Edwards County.....	Apr. 1-June 30.....	4		
Elk County.....	May 1-July 31.....	6		
Ellis County.....	July 1-31.....	3		
Ellsworth County.....	Apr. 1-30.....	1		
Finney County.....	Apr. 1-30.....	2		
Ford County.....	June 1-30.....	1		
Graham County.....	Apr. 1-May 31.....	6		
Greenwood County.....	Apr. 1-June 30.....	56		
Harper County.....	May 1-June 30.....	8		
Harvey County.....	Apr. 1-June 30.....	22		
Hodgeman County.....	July 1-31.....	1		
Jewell County.....	May 1-June 30.....	21		
Kearny County.....	Apr. 1-May 31.....	5		
Kingman County.....	Apr. 1-June 30.....	4		
Labette County—				
Parsons.....	Apr. 1-July 31.....	12		
Lane County.....	May 1-31.....	2		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place	Date.	Cases.	Deaths.	Remarks.
Kansas—Continued.				
Leavenworth County.....	Apr. 1–May 31.....	8		
Leavenworth.....	May 1–June 30.....	2		
Lyon County.....	June 1–30.....	11		
Marion County.....	July 1–31.....	1		
McPherson County.....	May 1–June 30.....	14		
Miami County.....	Apr. 1–May 31.....	2		
Montgomery County.....	Apr. 1–July 31.....	62	2	
Coffeyville.....	Apr. 1–June 30.....	12		
Nemaha County.....	July 1–31.....	2		
Neosho County.....	May 1–July 31.....	38		
Norton County.....	Apr. 1–June 30.....	50		
Osage County.....	Apr. 1–May 31.....	6		
Osborne County.....	Apr. 1–June 30.....	32		
Pawnee County.....	Apr. 1–30.....	3		
Phillips County.....	May 1–31.....	6		
Pratt County.....	June 1–July 31.....	2		
Rawlins County.....	June 1–30.....	1		
Reno County.....	Apr. 1–June 30.....	23	3	
Riley County.....	Apr. 1–May 31.....	5		
Rush County.....	Apr. 1–30.....	3		
Saline County.....	Apr. 1–June 30.....	21		
Scott County.....	Apr. 1–May 31.....	5		
Sedgewick County.....	Apr. 1–May 31.....	7		
Wichita.....	Apr. 1–July 31.....	52		
Seward County.....	May 1–31.....	2		
Shawnee County.....	June 1–30.....	1		
Topeka.....	July 1–31.....	7		
Sheridan County.....	Apr. 1–30.....	1		
Sherman County.....	May 1–31.....	1		
Stafford County.....	June 1–July 31.....	4		
Sumner County.....	May 1–31.....	4		
Thomas County.....	Apr. 1–May 31.....	2	1	
Trego County.....	June 1–30.....	1		
Wallace County.....	June 1–30.....	1		
Wyandotte County.....	Apr. 1–30.....	4		
Kansas City.....	Apr. 1–June 30.....	57		
Total for State.....		744	7	
Kentucky:				
Covington.....	June 26–July 2.....	1		
Total for State.....		1		
Louisiana:				
Avoyelles Parish.....	June 1–30.....	12		
Calcasieu Parish.....	June 1–30.....	2		
Iberia Parish.....	June 1–30.....	19		
Orleans Parish.....	June 1–30.....			
New Orleans.....	June 12–Sept. 10.....	91		
St. John Parish.....	June 1–30.....	10		
St. Tammany Parish.....	June 1–30.....	2		
Tangipahoa Parish.....	June 1–30.....	25		
Vermilion Parish.....	June 1–30.....	30		
Total for State.....		191		
Maine:				
Biddeford.....	May 1–31.....	1		
Total for State.....		1		
Maryland:				
Allegany County—				
Cumberland.....	May 1–July 31.....	2		
Total for State.....		2		
Massachusetts:				
Middlesex County.....	July 1–31.....	1		
Suffolk County.....	June 1–July 31.....	8		
Total for State.....		9		
Michigan:				
Alicona County.....	June 1–30.....	1		
Arenac County.....	June 1–30.....	2		
Baraga County.....	Aug. 1–31.....	5		
Bay County.....	June 1–Aug. 31.....	9	2	

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Michigan—Continued.				
Berrien County.....	July 1-Aug. 31.....	2		
Choboygan County.....	June 1-Aug. 31.....	33		
Clare County.....	June 1-July 31.....	12		
Emmet County.....	Aug. 1-31.....	2		
Easton County.....	June 1-30.....	7		
Genesee County.....	June 1-Aug. 31.....	44		
Grand Traverse County.....	July 1-Aug. 31.....	6		
Gratiot County.....	June 1-Aug. 31.....	10		
Houghton County.....	June 1-30.....	3		
Huron County.....	June 1-July 31.....	12		
Ingham County.....	June 1-Aug. 31.....	10		
Ionia County.....	June 1-Aug. 31.....	7		
Isabella County.....	June 1-July 31.....	4		
Kalamazoo County.....	June 1-July 31.....	8		
Kent County.....	June 1-30.....	17		
Keweenaw County.....	July 1-31.....	1		
Lapeer County.....	June 1-July 31.....	16		
Livingston County.....	June 1-30.....	17		
Manistee County.....	June 1-30.....	9	1	
Marquette County.....	June 1-30.....	1		
Mason County.....	June 1-Aug. 31.....	11		
Mecosta County.....	June 1-Aug. 31.....	7		
Midland County.....	June 1-July 31.....	11		
Missaukee County.....	June 1-July 31.....	12		
Monroe County.....	June 1-30.....	2		
Montcalm County.....	July 1-31.....	1		
Muskegon County.....	June 1-30.....	2		
Newaygo County.....	June 1-30.....	2		
Osceola County.....	June 1-Aug. 31.....	5		
Ottawa County.....	June 1-30.....	1		
Roeccommon County.....	June 1-30.....	4		
Saginaw County.....	June 1-Aug. 31.....	35		
St. Clair County.....	June 1-Aug. 31.....	51		
Sanilac County.....	June 1-July 31.....	3		
Shiawassee County.....	June 1-Aug. 31.....	54		
Tuscola County.....	June 1-Aug. 31.....	18		
Wayne County.....	June 1-Aug. 31.....	19		
Total for State.....		476	3	
Minnesota:				
Pope County.....	Apr. 1-30.....		1	
St. Louis County.....	June 1-30.....		1	
Rice County.....	Mar. 1-31.....		1	
Beltrami County.....	May 26-June 5.....	4		
Blue County.....	June 6-12.....	1		
Carver County.....	June 13-July 10.....	2		
Faribault County.....	May 26-July 31.....	2		
Hennepin County.....	May 26-July 31.....	53		
Kittson County.....	June 6-19.....	2		
Koochiking County.....	May 26-June 5.....	6		
Lesueur County.....	June 13-19.....	32		
Meeker County.....	June 6-12.....	1		
Mower County.....	July 11-17.....	4		
Ramsey County.....	June 13-July 31.....	22		
Renville County.....	June 6-12.....	1		
Rice County.....	May 26-July 10.....	2		
St. Louis County.....	May 26-June 5.....	10		
Stearns County.....	June 20-28.....	1		
Steele County.....	June 6-19.....	2		
Wabasha County.....	June 13-26.....	2		
Wright County.....	July 4-31.....	2		
Total for State.....		149	3	
Mississippi:				
Natchez.....	July 24-30.....	5		
Total for State.....		5		
Missouri:				
Kansas City.....	May 15-June 30.....	32		
St. Louis.....	June 12-July 16.....	9		
Savannah.....	June 26-July 2.....	5		
Total for State.....		46		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Montana:				
Beaverhead County	June 1-30	1		
Cascade County	June 1-30	1		
Custer County	Apr. 1-30		1	
Dawson County	June 1-July 31	12		
Fergus County	June 1-July 31	8		
Flathead County	June 1-30	1		
Meagher County	June 1-30	1		
Park County	June 1-30	2		
Rosebud County	June 1-30	2		
Silver Bow County	June 1-July 31	11		
Butte	June 1-July 31	40		
Teton County	July 1-31	2		
Yellowstone County	June 1-30	2		
Total for State		83	1	
Nebraska:				
Lincoln	Apr. 1-June 30	30		
South Omaha	June 1-30	3		
Total for State		33		
New Jersey:				
Cumberland County	June 1-Aug. 31	7		
Total for State		7		
New York, general				
Erie County—	June 1-July 31	53	3	
Buffalo	May 1-31	1		
Tonawanda Township	May 1-31	2		
Niagara County—				
Niagara Falls	May 1-31	1		
North Tonawanda	May 1-31	1		
St. Lawrence County	May 1-31	19		
Schenectady County	May 1-31	2		
Total for State		79	3	
North Carolina:				
Forsyth County	Feb. 1-28		1	
Rowan County	Feb. 1-28		1	
Alamance County	Mar. 1-June 30	41		
Alexander County	Mar. 1-June 30	75		
Anson County	Apr. 1-June 30	9		
Ashe County	Mar. 1-31	12		
Beaufort County	Mar. 1-June 30	5		
Bladen County	Apr. 1-June 30	19		
Buncombe County	June 1-30	1		
Cabarrus County	Mar. 1-June 30	15		
Caldwell County	Mar. 1-Aug. 31	13	1	
Catawba County	Mar. 1-June 30	42		
Chatham County	Mar. 1-June 30	18		
Chowan County	Mar. 1-31	3		
Cleveland County	June 1-30			Few cases.
Columbus County	Apr. 1-Aug. 31	25		
Craven County	Mar. 1-31	1		
Curruck County	Mar. 1-June 30	23		
Davidson County	Mar. 1-June 30	5		
Davie County	Mar. 1-31	8		
Durham County	Mar. 1-Aug. 31	32		
Edgecombe County	June 1-30	1		
Forsyth County	Mar. 1-Aug. 31	28		
Franklin County	Mar. 1-31	5		
Gaston County	Mar. 1-June 30	13	2	
Graham County	Mar. 1-Apr. 30	8		
Greene County	Mar. 1-June 30	20		
Guilford County	Mar. 1-Aug. 31	58		
Halifax County	Mar. 1-31	40		
Haywood County	Aug. 1-31	6		
Henderson County	May 1-June 30	6		
Hertford County	Mar. 1-31	1		
Iredell County	June 1-30	20		
Johnston County	Apr. 1-May 31	4		Several cases in May.
Jones County	Mar. 1-31	1		Several cases in March.
Lee County	Mar. 1-June 30	6		
Lenoir County	Mar. 1-June 30	19		
Lincoln County	Mar. 1-June 30	3		
Madison County	Apr. 1-30	5		
Martin County	Apr. 1-May 31	4		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.	
North Carolina—Continued.					
Mecklenburg County	Mar. 1-Aug. 31	26		Few.	
Mitchell County	Aug. 1-31				
Montgomery County	Mar. 1-Aug. 31	54			
Nash County	Mar. 1-Aug. 31	55			
New Hanover County	Mar. 1-Aug. 31	35			
Onslow County	Mar. 1-May 31	5			
Orange County	Mar. 1-June 30	45			
Pamlico County	Mar. 1-Aug. 31	6			
Pender County	Aug. 1-31	7			
Perquimans County	May 1-31	1			
Person County	May 1-June 30	4			
Pitt County	Mar. 1-Aug. 31	28			
Polk County	Mar. 1-31	7			
Richmond County	Apr. 1-30	2			
Robeson County	Apr. 1-Aug. 31	29			
Rockingham County	Mar. 1-31	48			
Rowan County	Mar. 1-June 30	43	1		
Sampson County	May 1-Aug. 31	3			
Scotland County	May 1-31	5			
Stanly County	Apr. 1-June 30	26			
Stokes County	Mar. 1-31	64			
Surry County	Mar. 1-31	4			
Union County	Mar. 1-Aug. 31	34			
Vance County	Apr. 1-30	4			
Wake County	Apr. 1-May 31	22			
Warren County	Apr. 1-Aug. 31	27			
Washington County	Mar. 1-Apr. 30	4			
Watauga County	Apr. 1-Aug. 31	35			
Wayne County	Apr. 1-May 31	6			
Wilkes County	Mar. 1-June 30	37			
Wilson County	Mar. 1-June 30	25	1		
Yancey County	Mar. 1-31	26			
Total for State		1,305	7		
North Dakota:					
Bowman County	Aug. 1-31	37			
Cass County	June 1-July 31	3			
Cavalier County	June 1-30	1			
Grand Forks County	June 1-10	4			
Logan County	June 1-30	1			
McKenzie County	June 1-30	1			
Morton County	July 1-31	4			
Pierce County	June 1-30	1			
Stark County	July 1-31	1			
Stutsman County	Aug. 1-31	1			
Trall County	June 1-30	6			
Ward County	June 1-30	4			
Total for State		64			
Oklahoma, general.					
Canadian County	Jan. 1-31		1	Reported out of date.	
Canadian County	Apr. 1-30		1		
Comanche County	Apr. 1-30		3		
Oklahoma County	Apr. 1-30		4		
Pottawatomie County	Apr. 1-30		2		
Atoka County	May 1-31	20			
Beckham County	May 1-31	2			
Blaine County	May 1-31	8			
Caddo County	May 1-31	1			
Canadian County	May 1-31	17			
Choctaw County	May 1-31	1			
Coal County	May 1-31	5			
Comanche County	May 1-31	4	1		
Custer County	May 1-31	9			
Garvin County	May 1-31	1			
Grady County	Apr. 1-30		1		
Grady County	May 1-31	6	6		
Haskell County	May 1-31	7			
Hughes County	May 1-31	42			
Jefferson County	May 1-31	3			
Kiowa County	May 1-31	1			
Lincoln County	May 1-31	4			
McLain County	May 1-31	9			
McIntosh County	May 1-31	11			
Murray County	May 1-31	1			
Muskogee County	May 1-31	5			
Noble County	May 1-31	8			
Nowata County	May 1-31	3			
Okluskee County	May 1-31	1			

SMALLPOX IN THE UNITED STATES—Continued.
Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Oklahoma, general—Continued.				
Oklahoma County	May 1-31	1	1	
Okmulgee County	May 1-31	2		
Pawnee County	May 1-31	4		
Payne County	May 1-31	10		
Pittsburg County	May 1-31	6	1	
Pontotoc County	May 1-31	12		
Seminole County	May 1-31	2		
Texas County	May 1-31	4		
Tillman County	May 1-31	2		
Tulsa County	May 1-31	1	1	
Washita County	May 1-31	1		
Total for State		214	22	
Ohio:				
Allen County	June 1-30	3		
Athens County	July 1-31	1		
Butler County	June 1-July 31	4		
Clarke County	July 1-31	3		
Clinton County	June 1-30	10		
Columbiana County	June 1-July 31	6		
Cuyahoga County	June 1-July 31	16	1	
Fairfield County	June 1-30	1		
Franklin County	June 1-Aug. 31	10		
Hancock County	June 1-30	1		
Hancock County	July 1-31	4		
Hocking County	June 1-July 31	26		
Jefferson County	July 1-31	1		
Lucas County	June 1-Aug. 31	7		
Mahoning County	July 1-31	1		
Marion County	July 1-31	1		
Perry County	June 1-30	1		
Pickaway County	June 1-30	1		
Portage County	June 1-30	7		
Ross County	June 1-Aug. 31	73		
Seneca County	July 1-31	1		
Scioto County	June 1-30	2		
Stark County	June 1-July 31	29		
Summit County	July 1-31	5		
Wayne County	June 1-30	2		
Wood County	June 1-30	2		
Total for State		218	1	
Oregon:				
Baker County	May 1-31	1		
Benton County	May 1-31	2		
Linn County	June 1-30	2		
Multnomah County	Apr. 1-May 31	10		
Umatilla County	May 1-31	1		
Union County	May 1-31	2		
Wasco County	Apr. 1-30	2		
Washington County	Apr. 1-June 30	3		
Yamhill County	Apr. 1-June 30	15		
Total for State		38		
Pennsylvania, general.				
	Apr. 1-30		2	
	May 1-June 30	29	3	
Total for State		29	5	
South Carolina:				
Charleston	June 1-July 31	28		
Total for State		28		
Tennessee:				
Benton County—				
Camden	July 1-7	2		
Davidson County—				
Nashville	June 12-July 9	2		
Hamilton County—				
Chattanooga	June 12-July 16	4		
Knox County—				
Knoxville	June 12-July 16	8		
Shelby County	May 1-June 30	39		
Memphis	June 12-July 19	8		
Total for State		63		

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from June 25 to September 30, 1910.

Place.	Date.	Cases.	Deaths.	Remarks.
Texas, general.....	Apr. 1-July 31....	881	27	
Total for State.....		881	27	
Utah, general.....	Mar. 1-31.....	112		Report received out of date.
Boxelder County.....	May 1-31.....	1		
Cache County.....	May 1-31.....	6		
Davis County.....	May 1-July 31.....	43		
Juab County.....	June 1-July 31.....	3		
Salt Lake County.....	May 1-July 31.....	31	1	
Utah County.....	May 1-July 31.....	3		
Weber County.....	May 1-July 31.....	25		
Total for State.....		224	1	
Virginia:				One case from the schooner Persis A. Colwell from Gaspe, Quebec.
Alexandria.....	Aug. 25.....			
Lynchburg.....	June 12-18.....	1		
Total for State.....		1		
Washington, general.....	Feb. 1-Mar. 31.....		4	
Wisconsin:				
Ashland County.....	June 1-Aug. 31.....	17		
Barron County.....	June 1-30.....	1		
Brown County.....	July 1-31.....	5		
Douglas County.....	June 1-July 31.....	3		
Dunn County.....	July 1-31.....	1		
Eau Claire County.....	June 1-July 31.....	4		
Florence County.....	June 1-30.....	4		
Fond du Lac County.....	July 1-31.....	1		
Kenosha County.....	July 1-31.....	1		
Lafayette County.....	June 1-30.....	1		
La Crosse County.....	June 1-30.....	2		
Milwaukee County.....	July 1-Aug. 31.....	13		
Pierce County.....	July 1-31.....	1		
Polk County.....	July 1-Aug. 31.....	6		
Rusk County.....	June 1-30.....	1		
St. Croix County.....	July 1-31.....	5		
Sawyer County.....	June 1-30.....	8		
Waupaca County.....	June 1-Aug. 31.....	4		
Winnebago County.....	July 1-31.....	1		
Total for State.....		79		
Grand total for the United States.....		5,685	91	

PLAGUE IN THE UNITED STATES.

Reports Received from June 25 to September 30, 1910.

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

MORBIDITY AND MORTALITY—Continued.

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

Cities.	Week ended—	Total deaths from all causes.	Tuberculosis.		Typhoid fever.		Scarlet fever.		Diphtheria.		Measles.		Whooping cough.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Orleans, La.	Sept. 10	126	20	18	9	3	2	5	2	4				
Newton, Mass.	do.	7	1		2		1	1						
New York City, N. Y.	do.	1,402	553	154	179	14	56	6	152	14	60	8	20	6
Niagara Falls, N. Y.	do.	13			2									
Norristown, Pa.	do.	4	3		5	1							3	
Northampton, Mass.	do.	6		1										
Orange, N. J.	do.	6	3				2							
Paducah, Ky.	do.	12				4								
Palmer, Mass.	do.	4				1								
Peekskill, N. Y.	do.	4												
Pittsfield, Mass.	do.	6	1		3									
Plainfield, N. J.	do.	4		1			1							
Portsmouth, N. H.	do.				1									
Portsmouth, Va.	do.	12												
Providence, R. I.	do.	68		4	8	1	4		2	1		1	1	
Reading, Pa.	do.	32	1	2	8	3	1	1	1		3		17	
Rock Island, Ill.	do.	8			1		1		5					
St. Louis, Mo.	do.	186	24	19	34	4	20	6	15		11	3	13	2
Salt Lake City, Utah.	do.	29			20	3	4	1	5	1			1	
San Antonio, Tex.	do.	5		4	4	1		2	2					
Schenectady, N. Y.	Sept. 3	22	6	2	3				2				1	1
Somerville, Mass.	Sept. 10	18	2	1	1				1	1				
Springfield, Mass.	do.	31	1	1	1		1		4				2	1
Tacoma, Wash.	Sept. 3	19			1	1			3					
Taunton, Mass.	Sept. 10	17	1											
Terre Haute, Ind.	do.	16		2			2		3					
Toledo, Ohio.	do.	43		4	27	3	2		8	1				
Waltham, Mass.	do.	9	1	2	3		1		1					
Warren, Ohio.	do.	0		2	2									
Weymouth, Mass.	Aug. 27	5												
Do.	Sept. 3	5												
Do.	Sept. 10	4												
Wheeling, W. Va.	Sept. 3	11	1		1		2		1					
Do.	Sept. 10	4			2		1		1					
Wichita, Kans.	do.	14												
Wilkes-Barre, Pa.	do.	19	3	1	11						5			
Wilkinsburg, Pa.	do.	3	1	1	2									
Williamsport, Pa.	do.	7			3				1					
Worcester, Mass.	do.	51	7	2	11	1	2		13					
Zanesville, Ohio.	do.	8		1	3				2					

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

CALIFORNIA.—Month of July, 1910. Population, 2,037,929. Total number of deaths from all causes 2,576, including typhoid fever 49, measles 12, scarlet fever 4, diphtheria 21, tuberculosis 349.

FLORIDA.—Reports from the state board of health show as follows: Week ended September 17, 1910. Typhoid fever present in 3 localities with 9 cases, diphtheria in 5 localities with 7 cases, malaria in 6 localities with 15 cases, tuberculosis in 3 localities with 9 cases.

Week ended September 24, 1910. Typhoid fever present in 5 localities with 7 cases, diphtheria in 1 locality (Jacksonville) with 1 case, malaria in 10 localities with 16 cases, tuberculosis in 5 localities with 5 cases.

INDIANA.—Month of July, 1910. Population, 2,732,550. Total number of deaths from all causes 2,947, including typhoid fever 45,

diphtheria 9, tuberculosis 370. Cases reported: Typhoid fever 246 in 47 counties, diphtheria 82 in 30 counties.

IOWA.—Month of August, 1910. Population, 2,192,608. Total number of deaths from all causes 1,785, including typhoid fever 37, measles 2, scarlet fever 4, diphtheria 14, tuberculosis 116.

MASSACHUSETTS.—Week ended July 2, 1910. Population, 2,401,701. Total number of deaths from all causes 741, including typhoid fever 4, measles 4, scarlet fever 6, diphtheria 9, tuberculosis 72.

Week ended July 9, 1910. Total number of deaths from all causes 797, including typhoid fever 4, measles 5, scarlet fever 4, diphtheria 5, tuberculosis 67.

Week ended July 16, 1910. Total number of deaths 941, including typhoid fever 4, measles 6, scarlet fever 4, diphtheria 12, tuberculosis 69.

Week ended July 23, 1910. Total number of deaths 812, including typhoid fever 4, measles 2, scarlet fever 2, diphtheria 9, tuberculosis 70.

Week ended July 30, 1910. Total number of deaths 909, including typhoid fever 6, measles 4, scarlet fever 1, diphtheria 2, tuberculosis 62.

MINNESOTA.—Month of June, 1910. Population, 1,751,395. Total number of deaths from all causes 1,641, including typhoid fever 18, measles 27, scarlet fever 28, diphtheria 62, tuberculosis 175.

TEXAS—*Fort Worth*.—Month of August, 1910. Population, 60,000. Total number of deaths from all causes 61. Cases reported: Typhoid fever 12, scarlet fever 1, diphtheria 1.

UTAH.—Month of August, 1910. Population, 346,873. Total number of deaths from all causes 264, including typhoid fever 10, scarlet fever 1, diphtheria 3, tuberculosis 7. Cases reported: Typhoid fever 200, smallpox 11, measles 8, scarlet fever 124, diphtheria 21, tuberculosis 9.

FOREIGN AND INSULAR.

ECUADOR.

Yellow Fever and Plague.

Passed Assistant Surgeon Parker at Guayaquil reports, September 5:

During the month of August, 1910, yellow fever and plague were reported in Ecuador as follows:

Yellow fever.—There were 13 reported cases of this disease for the month, with 3 deaths. This is about the usual August number and mortality. The disease was also reported in Milagro, with 2 cases and 1 death, and in Duran, a small town on the river opposite Guayaquil, 1 case. Both of the latter towns are favorable for the spread of the disease, but contain few nonimmune inhabitants.

Plague.—This disease showed a marked increase for the month, there being reported 26 cases, of which 5 died. One case was also reported at Rocafuerte. The disease is apparently of a milder type than in previous seasons.

During this same period there were reported 229 deaths, which, with an estimated population of 70,000, would give a mortality of 39.25.

FRANCE.

Marseilles—Cholera.

Consul-General Gaulin reported, October 4, to the Department of State:

Two fatal cases of cholera at Marseilles among immigrants from Greece. Necessary measures have been taken by the authorities. Persons in contact with the patients have been isolated.

GERMANY.

Measures Against Importation of Cholera by Waterways.

Consul Teichmann at Stettin reports, September 8:

The president of the province of West Prussia issued the following order, September 2:

On all rafts entering the province by the River Vistula payment and release of the raftsmen who wish to leave the raft at the city of Thorn shall either be controlled on the raft or at certain specified places. After their discharge these raftsmen are to be transferred in groups to the railway depot of Thorn and from there in special cars by rail to Alexandrova in Russia. All such rafters are to obey strictly the rules attending this regulated return to Russia. Any violations of these regulations are punished with fine or corresponding imprisonment.

Another bacteriological station for the examination of patients, suspects, and suspected clothing, etc., has been recently established at the city of Thorn, so that the River Vistula is now controlled bacteriologically as far as the Prussian frontier.

At the bacteriological station at Schillno, where the Vistula crosses the border line of Prussia, three Russian subjects, a rafter and his two children, were recently placed under quarantine, and the raft

and rowing boat were thoroughly disinfected after bacteriological examination established the presence of the germ of cholera on the raft. Thus far no symptoms of the disease have been observed on these persons, notwithstanding the positive identification of the germ. The extension of bacteriological examinations to clothing, effects, and all objects in immediate contact with the suspect, marks an advance in sanitary control worthy of serious attention by all health organizations.

A vigilant control of all immigration from Russia, is continued on the Prussian border line and also at the emigrant station of Ruhleben, near Berlin. This double control is of importance to Russian immigration at New York and at ports of the Gulf of Mexico, because almost all of these immigrants come by the route via Ruhleben and Bremen or Hamburg and only a very small percentage, if any, via Cherbourg, Havre, Antwerp, or Amsterdam.

HAWAII.

Last case of human plague at Honolulu occurred July 12, 1910.

The last plague-infected rat was found at Aiea, 9 miles from Honolulu, April 12, 1910.

At Hilo the last case of human plague occurred March 23, 1910.

The last plague-infected rat was found at Piihuona, 4 miles from Hilo, April 9, 1910.

Passed Assistant Surgeon Ramus reports, September 6:

HONOLULU—Plague-prevention Work.

Week ended September 3, 1910.

Total rats and mongoose taken.....	807
Rats trapped.....	732
Mongoose trapped.....	18
Rats found dead (<i>Mus rattus</i> 2, <i>Mus musculus</i> 1).....	3
Rats shot from trees.....	27
Examined bacteriologically.....	632
Plague rats.....	0
Classification of rats trapped:	
<i>Mus alexandrinus</i>	96
<i>Mus musculus</i>	302
<i>Mus norvegicus</i>	65
<i>Mus rattus</i>	296
Classification of rats shot from trees:	
<i>Mus alexandrinus</i>	15
<i>Mus rattus</i>	8
Average number of traps set daily.....	1, 738

Week ended September 10, 1910.

Total rats and mongoose taken.....	682
Rats trapped.....	642
Mongoose trapped.....	12
Rats found dead.....	0
Rats shot from trees.....	28
Examined bacteriologically.....	563
Plague rats.....	0
Classification of rats trapped:	
<i>Mus alexandrinus</i>	75
<i>Mus musculus</i>	239
<i>Mus norvegicus</i>	69
<i>Mus rattus</i>	258
Classification of rats shot from trees:	
<i>Mus alexandrinus</i>	6
<i>Mus rattus</i>	18
Average number of traps set daily.....	1, 738

INDIA.

BOMBAY—Improved Health Conditions.

Consul Dennison reports, August 30:

In contrast with the unhealthy conditions which prevailed during the month of July, Bombay is now enjoying a period of almost record healthiness for this season of the year.

In the week ended August 30 there were 566 deaths in the city compared with 610 in the previous week, 593 in the corresponding week of last year, and a quinquennial average of 653. Plague has dropped to 25 deaths a week, which is approximately the mean for this season. Smallpox, for the first time for nearly a year, does not figure in the mortality returns at all. The average weekly number of deaths from cholera at this time of the year is 27, and last week there were only two.

The less noteworthy diseases have also diminished, so that the comparatively small total mortality represents an improvement of health in every direction.

The death rate of 30.09 is probably an exaggeration, for there is no doubt that the population of the city has largely increased since the last census was taken. Expert observers believe that the inhabitants of Bombay now number considerably over a million. The health of the population is, therefore, even considerably better than the figures show.

Changes of weather and other influences cause large fluctuations, but a steady tendency to improvement is manifesting itself, and there are good reasons to attribute it to a higher sanitary understanding on the part of the people.

CALCUTTA—Cholera and Plague.

Acting Assistant Surgeon Allan reports, September 1:

During the week ended August 13, there were 13 deaths from cholera and 4 from plague in Calcutta; in all Bengal, 102 cases of plague, with 70 deaths; in all India, 1,543 cases of plague, with 1,037 deaths.

ITALY.

Status of Cholera.

Surgeon Geddings reports, September 12 and 19:

During the week ended September 10, 1910, cholera was reported in Italy as follows:

PROVINCE OF BARI.

	Cases.	Deaths.
Andria.....	4	.....
Barietta.....	34	16
Canosa.....	3	.....
Molfetta.....	9	6
Trani.....	2	4
	52	26

PROVINCE OF FOGGIA.

Cerignola.....	6	5
Margherita di Savoia.....	5	9
Ortanova.....	3	2
Trinitapoli.....	22	14
San Ferdinando.....	4	3
	40	33

Trani has been almost entirely cleared up, and but for an unexpected recrudescence Barletta would have made an almost equally favorable showing. Trinitapoli, in the Province of Foggia, is now the greatest danger point, but the measures being taken there are very active, and it is believed will soon show results.

Situation in Naples.—Cases and deaths from gastro-enteritis continue. For the period from August 24 to September 10, 1910, there have been 34 deaths from this cause alone, and while the death rate has been very high, the exact number of cases is not known. The cases are rather widely scattered over the city, and so far as reported there have been no secondary cases in any family nor dwelling in which primary cases have occurred.

The situation with regard to emigration continues unchanged. There have been no suspicious cases among those embarking or awaiting embarkation. Examinations have been made of the dejecta of 150 individuals coming from actually infected districts and held under observation upon the quarantine ship, and not a single bacillus carrier has been found. These emigrants were destined not only for the United States, but also for points in South America.

The Naples water supply.—Daily bacteriological examinations are made of the Serino water supplied to the city. A condition of remarkable purity is reported as a result of these examinations. On an average each cubic centimeter of water contains about 8 colonies, of which only 2 or 3 are liquefiers of gelatine. There is an entire absence of intestinal organisms.

WEEK ENDED SEPTEMBER 17, 1910.

	Cases.	Deaths.
Province of Bari:		
Andria.....	2	2
Barletta.....	13	5
Molfetta.....	6	1
	21	8
Province of Foggia:		
Cerignola.....	4	3
San Ferdinando.....	2	1
Trinitapoli.....	9	5
	15	9

The improvement in the condition is evident from the figures. Centers of infection are gradually being cleaned up and eliminated and the number of cases is diminishing.

In Trani the epidemic is reported to be on the decline. The cities of Ruvo and Bitonto have been declared free from cholera. Great difficulty is experienced in the eradication of the infection from Barletta, where several cases are daily reported. Disinfection is carefully carried on in the streets and especially in two wards of the city, one of which is inhabited by fishermen, the other by peasants.

The condition in Naples.—This continues unsatisfactory, but I think shows an improvement over that reported last week. In a general way it may be said that the cases of "gastro-enteritis" are fewer in number, and that the mortality from them is not so pronounced. The hopeful feature of the absence of secondary cases in houses and families where primary ones have occurred continues.

The detention upon the quarantine ship of persons from the infected districts continues. No suspicious cases have occurred, and bacteriological examinations have failed to reveal the occurrence of a single "bacillus carrier."

On October 5 Doctor Geddings further reported:

From September 17 to October 2, in Bari and Foggia, 71 cases of cholera with 33 deaths. In Naples, from September 25 to October 2, 132 cases with 68 deaths; October 4, 8 cases, 5 deaths. In other provinces, 36 cases.

Cholera in Sardinia.

The following information was received from the Department of State, October 3:

Cholera in Sardinia. Four cases, 1 death.

Precautions Observed on Italian Steamships.

Doctor Geddings reports, September 17:

As a rule vessels from Genoa arrive at Naples in the early morning, take on their passengers and cargo, and sail for the United States in the afternoon or evening of the same day. The crew are fully occupied on board, and there is a minimum of communication with the shore. Some vessels make a longer stay in the port. Owing to the lack of pier room these vessels lie in the open harbor and shore leave is not usually granted. All vessels carrying passengers are provided with one or more medical officers. As the shortest time of passage from this port to New York is about ten and one-half days, a period far in excess of the period of incubation of cholera, any infection among passengers or crew in all probability would be recognized and all precautions taken before reaching New York. In addition to medical officers all vessels carrying Italian passengers carry a medical officer of the Italian army or navy. These officers are on board for the purpose of protecting the interests, sanitary and otherwise, of the passengers, and are vigilant in the discharge of their duties.

NAPLES—Examination of Emigrants.

Doctor Geddings further reports:

Vessels inspected at Naples and Palermo week ended September 10.

NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
Sept. 6	Venezia	New York	313	50	320
6	Luisiana	do.	231	20	260
8	Ancona	Philadelphia	609	110	820
9	Oceania	New York	633	140	850
9	Königin Luise	do.	181	20	210
	Total		1,967	340	2,470

PALERMO.

Sept. 7	Luisiana	New York	133	275	100
10	Königin Luise	do.	215	500	150
	Total		348	775	250

Rejections recommended.

NAPLES.

Date.	Name of ship.	Trachoma.	Favus.	Suspected trachoma.	Other causes.	Total.
Sept. 6	Venezia.....	12	.....	6	2	20
6	Luisiana.....	6	3	2	2	13
8	Ancona.....	14	2	2	12	30
9	Oceania.....	18	3	6	3	30
9	Königin Luise.....	3	1	3	2	9
	Total.....	53	9	19	21	102

PALERMO.

Sept. 7	Luisiana.....	12	.....	9	2	23
10	Königin Luise.....	15	.....	15	2	32
	Total.....	27	.....	24	4	55

JAPAN.

Cholera and Plague on Steamships.

Surgeon Irwin at Yokohama reports, September 5:

The steamship *Suma Maru*, from Shanghai, arrived in the harbor of Chinampo, northwest coast of Korea, August 26, with 2 cases of cholera on board. One case ended fatally August 27.

The steamship *Manchuria* arrived at quarantine at Yokohama August 31 with a case of plague on board. The case ended fatally on the same date. The patient was a Chinese who had embarked at Hongkong. The vessel was held in quarantine and released September 3. All on board were bathed and personal effects were disinfected. The steerage quarters were washed with carbolic-acid solution. The *Manchuria* sailed for Honolulu September 4 after a thorough examination. All steerage passengers and members of the crew were examined for glandular enlargement.

Typhoid Fever and Dysentery.

Sanitary conditions in Kanagawa prefecture, according to official reports, are in a most unsatisfactory state at present. Typhoid fever is on the increase, especially in the Odawara district. The number of cases now reported is 554, an increase of 181 over the highest of last year. In Odawara 190 new cases were reported in three days. The cases of dysentery, however, are less than the record for the same period of last year, the number of cases reported being 214 against 287.

The authorities are taking all the precautions possible to prevent any further spread of typhoid and dysentery.

MEXICO.

Yellow Fever at Campeche.

The following information, dated October 1, was received from the president of the superior board of health of Mexico:

Three cases of yellow fever at Campeche. Suppressive measures are being taken.

RUSSIA.

Status of Cholera.

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

During the week ended September 9, 345 cases of cholera, with 122 deaths, were reported in the city of St. Petersburg and suburbs; in all Russia, exclusive of St. Petersburg, 11,894 cases, with 6,571 deaths.

LIBAU.—Smallpox—Examination of Emigrants.

Doctor De Forest further reports:

During the three weeks ended September 4, 1 case of smallpox was reported at Libau. There are 5 cases present. For the steamship *Lituania*, sailing September 13, 1,025 passengers have been examined.

ODESSA—Cholera and Plague.

Consul Grout reports, September 13:

During the week ended September 9, 9 new cases of cholera with 7 deaths were reported. At the close of the week there were 10 cases in the hospital. The total number of cases to date is 546, with 301 deaths.

During the period from September 5 to 10, inclusive, 16 new cases of plague with 5 deaths were reported. At the close of the week there were 44 cases in hospital. The total number of cases to date is 98, with 23 deaths.

VENEZUELA.

Yellow Fever at Caracas.

Acting Assistant Surgeon Kellogg at La Guaira reports, September 17:

Yellow fever is present at Caracas

ZANZIBAR.

ZANZIBAR—Smallpox—Examination of Rats for Plague Infection.

Consul Garrels reports, August 10, 16, and 25:

During the three weeks ended August 21, 23 deaths from smallpox were reported. From June 8 to August 21 there were 125 cases of smallpox, with 57 deaths. The total number of persons vaccinated during the same period was 15,233.

From August 1 to 21, 3,293 rats were collected and examined for plague infection. No plague-infected rats were found.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended October 7, 1910.

These tables include cases and deaths recorded in reports received by the Surgeon-General, Public Health and Marine-Hospital Service, from American consuls through the Department of State and from other sources.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Matrah.....	Sept. 29.....			Present.
Austria-Hungary:				
Gonoyo.....	Sept. 3-6.....	1	1	
Mohacs.....	Aug. 25-26.....	1	1	
Nagybalca.....	Sept. 7.....	1	1	
Pozsony.....	Aug. 24-30.....	1	1	From the steamer <i>Rogensburg</i> .
Vienna.....	Sept. 4-10.....	3	1	
Vorosmarton.....	Aug. 19-30.....	1	1	

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

Reports Received During Week Ended October 7, 1910.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
France:				
Marseilles.....	Oct. 4.....	2	2	Among immigrants from Greece.
India:				
Bombay.....	Aug. 24-30.....		2	
Calcutta.....	Aug. 7-13.....		13	
Madras.....	Aug. 20-26.....		16	
Rangoon.....	Aug. 14-20.....		1	
Italy:				
Naples.....	Sept. 25-Oct. 4....	140	73	
Apulia, department— Province of Bari.....				Sept. 17—Oct. 2: Provinces of Bari and Foggia, cases 71, deaths 33.
Andria.....	Sept. 4-10.....	6	4	
Barietta.....	Sept. 4-17.....	47	21	
Canosa.....	Sept. 4-10.....	3		
Molfetta.....	Sept. 4-17.....	15	7	
Trani.....	Sept. 4-10.....	2	4	
Province of Foggia—				
Cerignola.....	do.....	10	8	
Margherita di Savoia.....	do.....	5	9	
Ortanova.....	do.....	3	2	
San Ferdinando.....	do.....	6	4	
Trinitapoli.....	do.....	31	19	
Sardinia.....	Oct. 3.....	4	1	
Java:				
Batavia.....	Aug. 14-20.....	16	7	
Korea:				
Chinampo.....	Aug. 26-27.....	2	1	From steamship Suma Maru.
Manchuria:				
Dalny.....	Aug. 21-27.....	2	1	
Russia, general.	Aug. 21-27.....	12,510	6,376	
City of St. Petersburg.....	do.....	435	178	
City of Cronstadt.....	do.....	31	27	
The following are govern- ments:				
St. Petersburg.....	do.....	68	37	
Vologda.....	do.....	42	23	
Pskov.....	do.....	1		
Novgorod.....	do.....	38	17	
Minsk.....	do.....	63	31	
Mohlev.....	do.....	22	8	
Vitebsk.....	do.....	20	2	
Smolensk.....	do.....	10	5	
Podolia.....	do.....	89	46	
Volynia.....	do.....	1	1	
Kief.....	do.....	846	333	
Tcherniga.....	do.....	93	34	
Poltava.....	do.....	163	69	
Kharkov.....	do.....	50	23	
Orel.....	do.....	44	19	
Koursk.....	do.....	284	147	
Voronega.....	do.....	1,706	801	
Tambov.....	do.....	341	185	
Penza.....	do.....			
Toula.....	do.....	2		
Riazan.....	do.....	179	96	
Moscow.....	do.....	45	12	
Tver.....	do.....	4		
Iaroslav.....	do.....	137	86	
Koestroma.....	do.....	234	158	
Nijni-Novgorod.....	do.....	115	50	
Kazan.....	do.....	293	137	
Simbirsk.....	do.....	503	251	
Samara.....	do.....	876	472	
Saratov.....	do.....	400	191	
Astrakhan.....	do.....	122	55	
Stavropol.....	do.....	48	14	
Perm.....	do.....	59	29	
Viatka.....	do.....	22	8	
Orenbourg.....	do.....	299	132	
Ekatherinoslaw.....	do.....	322	533	
Tauride.....	do.....	193	114	
Kherson.....	do.....	564	243	
Black Sea.....	do.....	7	1	
Baku.....	do.....	91	56	
Tiflis.....	do.....	243	85	
Koutals.....	do.....	48	29	
Erivan.....	do.....	205	66	
Tomsk.....	do.....	23	5	
Tobolsk.....	do.....	20	8	

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

Reports Received During Week Ended October 7, 1910.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia, general—Continued.				
Territory of—				
Toura.....	Aug. 21-27.....	18	10	
The Oural.....	do.....	15	8	
The Don.....	do.....	1,038	538	
Kuban.....	do.....	657	417	
Terek.....	do.....	127	90	
Daghestan.....	do.....	187	97	
Kars.....	do.....	167	72	
Syr-Daria.....	do.....	24	11	
Akmolinsk.....	do.....	218	131	
Prefecture of—				
Kertchlenikale.....	do.....	6	.....
Sebastopol.....	do.....	4	2	
Rostoff-on-Don.....	do.....	48	15	
Odessa.....	do.....	19	23	
Baku.....	do.....	81	46	
Siam:				
Bangkok.....	July 19-Aug. 13...	63	63	
Straits Settlements:				
Singapore.....	Aug. 7-13.....	6	8	

YELLOW FEVER.

Brazil:				
Manaos.....	Aug. 21-27.....	2	2	
Para.....	Sept. 4-10.....	8	4	
Mexico:				
Campeche.....	Oct. 1.....	3	.....
Venezuela:				
Caracas.....	Sept. 17.....	.....	.....	Present.

PLAGUE.

Chile, general	Jan. 1-May 31.....	104	35	
Iquique.....	Aug. 21-27.....	1	1	
China:				
Chang Chow Fu, district.....	June 4.....	.....	.....	Epidemic.
Hongkong.....	Aug. 7-13.....	1	1	
India:				
Bombay.....	Aug. 24-30.....	.....	25	
Calcutta.....	Aug. 7-13.....	.....	4	
Kurrachee.....	Aug. 21-27.....	14	14	
Rangoon.....	Aug. 14-20.....	.....	19	
Japan:				
Yokohama.....	Aug. 31.....	1	1	On steamship Manchuria from Hongkong.
Mauritius	July 1-29.....	8	8	
Russia:				
Moscow.....	Aug. 28-Sept. 3....	1	.....
Odessa.....	Aug. 28-Sept. 10...	30	8	
Siam:				
Bangkok.....	July 19-Aug. 13...	4	3	

SMALLPOX.

Argentina:				
Rosario.....	July 1-31.....	2	2	
Belgium:				
Antwerp.....	Sept. 4-10.....	1	.....
Ghent.....	Sept. 4-10.....	.....	1	
Brazil:				
Manaos.....	Aug. 21-Sept. 3....	.....	.....	Present.
Para.....	Sept. 4-10.....	3	.....
Canada:				
Halifax.....	Sept. 18-24.....	1	.....
Chile:				
Valparaiso.....	Aug. 28-Sept. 3....	30	.....
China:				
Shanghai.....	Aug. 15-21.....	2	.....

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

Reports Received During Week Ended October 7, 1910.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany, general.....	Sept. 4-10.....	1		
India:				
Madras.....	Aug. 20-26.....		3	
Java:				
Batavia.....	Aug. 14-20.....	1		
Mexico:				
Aguascalientes.....	Sept. 11-17.....		2	
Netherlands:				
Rotterdam.....	Sept. 4-17.....		1	
Portugal:				
Lisbon.....	Sept. 4-10.....	28		
Russia:				
Libau.....	Aug. 29-Sept. 4.....	1		
Moscow.....	Aug. 28-Sept. 3.....	5		
Riga.....	Sept. 6-10.....	15		
St. Petersburg.....	Aug. 14-Sept. 3.....	57	19	
Siberia:				
Vladivostok.....	July 27-Aug. 13.....	3	1	
Madrid.....	Aug. 1-31.....		3	
Vigo.....	Sept. 12-18.....		2	
Straits Settlements:				
Penang.....	Aug. 14-20.....	10	4	
Singapore.....	Aug. 7-13.....	19	8	
Zanzibar:				
Zanzibar.....	Aug. 1-21.....	30	16	

Reports Received from June 25 to September 30, 1910.

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

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary, general.....	Sept. 13.....			In 8 localities on Danube between Kressburg and Mohacs.
Galicia—				
Padwoloczyaska.....	June 20.....	1	1	From Russia.
Vienna.....	Aug. 21-27.....	2	1	
China:				
Amoy.....	July 17-Aug. 13.....	5	5	Epidemic.
Fatsan.....	July 1.....		1	
Hankow.....	Aug. 7-13.....	2	1	
Hongkong.....	July 10-16.....	9	6	Imported.
Swatow.....	May 10-June 6.....		254	In vicinity from 3,000 to 4,000 deaths.
Ceylon:				
Ceylon.....	July 3-9.....	1		
Germany:				
Kalthoff.....	Sept. 14.....	10	6	Suburb of Marienburg.
Ruhleben (near Berlin).....	June 23-27.....	2	2	Among Russian emigrants.
Spandau (near Berlin).....	Aug. 29.....	2	1	
India:				
Bombay.....	June 8-Aug. 23.....		23	
Calcutta.....	May 1-Aug. 6.....		438	
Kurrachee.....	July 24-30.....	1	1	
Madras.....	May 21-Aug. 19.....		7	
Moulmine.....	May 1-7.....	1	1	
Negatapam.....	Apr. 16-Aug. 12.....		199	
Rangoon.....	May 8-July 30.....		14	
Italy:				
Naples.....	Sept. 26.....	1		
Rome.....	Sept. 27.....	4	1	
Province of Bari—				
Andria.....	Aug. 17-Sept. 4.....	29	21	
Barietta.....	Aug. 17-Sept. 4.....	114	77	
Bisceglie.....	Aug. 17-20.....	2	2	
Bitonto.....	Aug. 17-Sept. 4.....	3	1	
Canosa.....	Aug. 17-Sept. 4.....	7	2	
Grumo Appula.....	Aug. 17-27.....	1		
Molfetta.....	Aug. 17-Sept. 4.....	21	13	
Ruvo.....	Aug. 17-27.....	3	1	
Spinazzola.....	Aug. 17-Sept. 4.....	15	8	
Trani.....	Aug. 17-Sept. 4.....	91	67	

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

Reports Received from June 25 to September 30, 1910.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Italy—Continued.				
Province of Foggia—				
Cerignola.....	Aug. 17-Sept. 4.....	11	5	
Margherita di Savoia.....	Aug. 17-Sept. 4.....	16	15	
Ortanova.....	Aug. 17-27.....	1		
San Ferdinando.....	Aug. 17-Sept. 4.....	9	11	
Trinitapoli.....	Aug. 17-27.....	41	22	
Province of Potenza—				
Genzano.....	Aug. 17-27.....	2	1	
Palazzo San Gervaso.....	Aug. 17-27.....	1	1	
Japan:				
Awajii Island.....	July 22-28.....	3		
Ibogun.....	Aug. 5.....	3	1	
Kobe.....	Sept. 21.....			Present.
Mojil.....	Aug. 13.....	1		On s. s. Helios.
Nagasaki.....	Aug. 15.....	1		On s. s. Kasuga Maru from Shanghai.
Osaka.....	Aug. 6-13.....	1		
Yokohama.....	Aug. 22.....	1		On s. s. Siberia from Shanghai.
Java				
				June 18, present in extreme eastern part. July 30, disappearing from interior and from the coast.
Batavia.....	May 8-Aug. 13.....	300	212	Mainly among natives.
Samarang.....	May 8-June 4.....	187	152	
Soerabaya.....	May 8-July 15.....	103	56	
Netherlands:				
Rotterdam.....	July 23-29.....	1		From a vessel from Russia.
Persia:				
Ardabil.....	July 1-6.....	20	6	
Enzell.....	Aug. 20.....		3	
Erzeroum, province.....	Aug. 31-Sept. 2.....	10	8	
Hassan Branch.....	July 11-13.....	6	2	
Philippine Islands:				
Manila.....	May 22-Aug. 6.....	122	89	July 29, one fatal case from s. s. Batangueno.
Provinces—				
Batangas.....	May 1-Aug. 6.....	128	57	
Bulacan.....	May 1-Aug. 6.....	678	472	
Cavite.....	June 12-30.....	3	2	
Mountain Province.....	June 26-July 30.....	4	3	
Nueva Ecija.....	June 26-Aug. 6.....	329	223	
Pampanga.....	Apr. 24-Aug. 6.....	232	211	
Pangasinan.....	Apr. 24-Aug. 6.....	3,441	2,612	
Rizal.....	June 12-Aug. 6.....	114	74	
Tarlac.....	May 8-Aug. 6.....	108	79	
Union.....	May 1-July 30.....	3	1	
Roumania:				
Galatz.....	Sept. 16.....	1	1	An Italian seaman.
Russia (total for all Russia)				
				May 8-Sept. 3—cases, 170,353; deaths, 77,466. June 25, present in districts of Igoumen, Mazir, Pinsk, Retchitsk, and Sloutsk.
Amolnusk, territory.....	Aug. 7-20.....	29	12	
Archangel, government—				
Archangel.....	July 17-23.....	1		
Astrakhan, government.....	July 3-Aug. 20.....	1,424	635	
Baku, government.....	May 29-Aug. 20.....	916	452	
Baku.....	July 3-Aug. 20.....	692	275	
Bessarabia.....	June 5-Aug. 13.....	55	16	
Black Sea, province.....	July 3-Aug. 13.....	459	140	
Cronstadt.....	July 17-Aug. 20.....	145	63	
Daghestan, territory.....	July 17-Aug. 20.....	503	198	
Don, territory.....	May 29-Aug. 20.....	18,504	5,227	
Rostov on the Don.....	June 19-Aug. 20.....	2,997	1,006	
Erivan, government.....	July 24-Aug. 20.....	334	187	
Esthonia, government—				
Reval.....	July 24-30.....	1		
Finland.....	Aug. 6.....	2		
Kaluga, government.....	July 17-Aug. 6.....	21	3	
Kars, territory.....	Aug. 7-20.....	213	99	
Kharkov, government.....	May 29-Aug. 6.....	2,179	870	
Khasan.....	June 26-Aug. 13.....	1,314	549	
Kherson, government.....	May 29-Aug. 6.....	5,780	3,541	
Odessa.....	May 29-Aug. 20.....	480	47	June 18-20: Fatal case on steamship Colenzo. Aug. 1-30: Cases 126, deaths 78.
Kief, government.....	May 29-Aug. 20.....	1,365	494	
Kostroma, government.....	July 10-Aug. 20.....	550	233	

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

Reports Received from June 25 to September 30, 1910.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				
Koutals, government.....	Aug. 7-13.....	159	166	
Kuban, government.....	May 29-Aug. 20.....	18,166	9,487	
Kursk, government.....	June 26-Aug. 20.....	2,992	965	
Livonia, government—				
Riga.....	Aug. 1-6.....	1	.....
Minsk, government.....	May 29-Aug. 20.....	301	96	
Mohilev, government.....	May 15-Aug. 20.....	128	57	
Moscow, government.....	July 24-Aug. 20.....	61	37	
Moscow.....	July 10-30.....	10	5	
Nizhni Novgorod, govern- ment.....	July 3-Aug. 13.....	1,172	443	
Novgorod, government.....	July 17-Aug. 20.....	203	83	
Olonetz, government.....	Aug. 14-20.....	1	1	
Orel, government.....	May 30-Aug. 20.....	275	104	
Orenburg, government.....	July 17-Aug. 13.....	637	328	
Orlov.....	July 3-9.....	22	8	
Perm, government.....	July 17-30.....	55	19	
Podolia, government.....	July 3-Aug. 13.....	327	114	
Pensa, government.....	July 10-Aug. 13.....	401	138	
Perm, government.....	July 24-30.....	41	15	
Poltava, government.....	May 29-Aug. 13.....	2,307	912	
Pskov, government.....	Aug. 14-20.....	2	1	
Rjasan, government.....	July 3-Aug. 13.....	1,253	477	
St. Petersburg, govern- ment—				
St. Petersburg.....	June 19-Aug. 20.....	1,904	836	
Samara, government.....	June 19-Aug. 20.....	5,795	2,527	
Sarapul, government.....	July 17-30.....	530	283	
Saratov, government.....	June 19-Aug. 20.....	3,150	1,239	
Simbirsk, government.....	June 19-Aug. 20.....	1,877	814	
Smolensk.....	July 24-Aug. 20.....	19	12	
Stavropol, government.....	June 26-Aug. 13.....	3,641	1,766	
Syr Darya.....	July 24-Aug. 6.....	5	3	
Tambov, government.....	June 19-Aug. 20.....	2,607	1,217	
Taurida, government.....	May 29-Aug. 20.....	3,658	1,788	
Kertsch.....	May 29-Aug. 20.....	464	210	
Sebastopol.....	June 19-Aug. 20.....	35	21	
Theodosia.....	June 19-25.....	.....	.....	Present.
Terek, territory.....	June 19-Aug. 13.....	506	295	
Tiflis, government.....	July 17-Aug. 13.....	741	296	
Tiflis.....	June 19-July 16.....	113	41	
Tschernigov.....	May 29-Aug. 13.....	879	313	
Tobal.....	Aug. 7-13.....	14	8	
Trans-Caspian, territory.....	July 3-Aug. 13.....	57	24	
Trans-Caucasia—				
Tschernomorsk, dis- trict—				
Novorossysk.....	June 19-July 3.....	7	6	
Tula, government.....	July 10-23.....	7	2	
Tula, government.....	July 24-30.....	10	4	
Turgai, territory.....	July 24-Aug. 20.....	20	12	
Tver, government.....	July 24-Aug. 20.....	7	.....
Ufa, government.....	July 10-Aug. 13.....	407	251	
Vitebek, government.....	May 29-Aug. 20.....	41	9	
Veronesch, government.....	May 29-Aug. 13.....	953	429	
Viatka.....	July 24-Aug. 13.....	190	100	
Vladimir, government.....	July 24-30.....	7	2	
Volhynia, government.....	July 3-30.....	38	19	
Vologda, government.....	Aug. 14-20.....	69	47	
Warsaw, district.....	Aug. 25-Sept. 2.....	25	28	
Yaroslavl, government.....	July 24-Aug. 20.....	762	378	
Yaroslavl.....	July 10-23.....	25	13	
Yekaterinislav, govern- ment.....	May 29-Aug. 20.....	12,744	5,628	
Yellsavetpol.....	Aug. 7-13.....	2	1	
Slam:				
Bangkok.....	May 4-July 18.....	648	641	
Straits Settlements:				
Singapore.....	May 8-July 30.....	91	89	
Turkey:				
Trebizond.....	Sept. 18.....	.....	.....	Present.

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

Reports Received from June 25 to September 30, 1910.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Apr. 30-June 3....	2	2	
Manaos.....	May 30-Aug. 20....	32	32	
Para.....	May 30-Sept. 3....	99	64	July 25: One death on steamship Augustine, en route from Para to Lisbon, 2 days previous to arrival at Madeira.
Pernambuco.....	May 16.....	21	1	
Costa Rica:				
Limon.....	July 9-14.....	1	1	
San Jose.....	May 28-July 9....	3	2	Fatal case May 28 from Barranquilla; case June 29 from Siquires; fatal case July 9 from Tivives.
Siquires.....	July 31.....	1	1	
Ecuador:				
Duran.....	Aug. 16-31.....	1		
Guayaquil.....	May 16-Aug. 31....	64	27	
Milagro.....	Aug. 16-31.....	2	1	
Gold Coast:				
Sekondi.....	May 1-27.....	8	8	
Sierra Leone:				
Freetown.....	May 1-Aug. 1.....	7	7	
Sherboro.....	May 20.....			Present.
Venezuela:				
La Guaira.....	June 16-30.....		1	

PLAGUE.

Argentina:				
Rosario.....	Feb. 1-28.....	1	1	
Tucuman.....	Feb. 26-May 31....	37	16	
Brazil:				
Bahia.....	Apr. 30-Aug. 13....	6	6	
Para.....	Sept. 21.....			Present.
Pernambuco.....	Apr. 1-June 30....		2	
Rio de Janeiro.....	June 5-Aug. 31....	2		
Chile:				
Iquique.....	May 8-Aug. 6.....	36	11	
Mejillones.....	Apr. 27.....			Present.
Pisagua.....	Apr. 1-May 31....	14	4	
Taltal.....	Apr. 1-27.....	12		
China:				
Amoy.....	July 3-Aug. 20....		10	May 8-June 11, 8 to 12 deaths daily. Aug. 6, present in vicinity.
Kulangsu, international city.	June 5-11.....		1	
Canton.....	July 13-Aug. 6....	43	31	
Chao Yang district.....	May 5-19.....		3,000	Mainly at Ho Peng. Present also at Chelin, Feng-chow-so, Taipushien, and Tsai-tang-shi.
Chang-pu district.....	June 11.....			Epidemic.
Ching-chew district.....	June 11.....			Do.
Hankow.....	May 15-28.....	5	3	
Hongkong.....	May 8-Aug. 6.....	18	17	
Swatow.....	June 1-July 11....			Present in vicinity.
Ecuador:				
Guayaquil.....	May 16-Aug. 31....	43	9	
Rocafuerte.....	Aug. 16-31.....	1		
Egypt:				
Alexandria.....	May 24-Sept. 6....	23	13	
Ishmalia.....	June 19.....	1	1	
Port Said.....	June 14-Aug. 27....	27	11	
Provinces—				
Assiout.....	May 26-Sept. 7....	18	9	
Assouan.....	Apr. 30-June 8....	2	2	
Beni Souef.....	May 27-June 29....	8	5	
Dakalyieh.....	Aug. 16-26.....	3	2	
Galloobeeh.....	May 21-July 29....	8	1	
Garbieh.....	May 14-Aug. 27....	25	11	
Fayoum.....	May 28-July 11....	20	14	
Kena.....	May 27-June 18....	24	22	
Menouf.....	May 24-July 22....	117	22	
Minieh.....	May 31-Aug. 19....	24	9	

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

Reports Received from June 25 to September 30, 1910.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Hawaii:				
Honolulu.....	July 5-12.....	2	2	
India:				
Bombay.....	May 18-Aug. 23.....		818	
Calcutta.....	May 1-Aug. 6.....		499	
Kurrachee.....	May 15-Aug. 20.....	295	285	
Madras.....	June 25-July 1.....		1	
Rangoon.....	May 8-Aug. 13.....		394	
Bombay Presidency and Sind.....	May 1-July 16.....	2,831	2,459	
Madras Presidency.....	May 1-July 16.....	275	203	
Bengal.....	May 1-July 16.....	1,220	1,104	
United provinces.....	May 1-July 16.....	6,111	5,609	
Punjab.....	May 1-July 16.....	43,740	38,133	
Burma.....	May 1-July 16.....	1,359	1,285	
Eastern Bengal and Assam.....	June 12-July 9.....	48	45	
Central provinces, including Berar.....	May 1-July 16.....	196	129	
Mysore State.....	May 1-July 16.....	283	202	
Hyderabad State.....	May 1-July 16.....	101	76	
Central India.....	May 1-July 16.....	23	22	
Rajputana and Ajmer-Merwara.....	May 1-July 16.....	7,881	6,991	
Kashmir.....	May 1-June 11.....	58	49	
North West Province.....	June 12-18.....	3	3	
Grand total.....		64,154	56,310	
Japan:				
Formosa.....	May 8-June 18.....	16	12	
Osaka.....	May 1-June 25.....	9	9	
Malta:				
Valletta.....	July 16.....	1		In quarantine station on Comino Island, from s. s. North Wales.
Mauritius.....	Apr. 1-June 30.....	14	9	
New Zealand:				
Auckland.....	May 23.....	1		
Persia:				
Bouchir.....	Apr. 29-June 25.....	51	40	
Peru:				
Arequipa Department.....	Mar. 1-31.....	16	8	
Mollendo.....	May 16-June 19.....	1	1	Aug. 12, one case.
Callao Department.....	Mar. 1-31.....	2		
Callao.....	May 12-19.....	2		Case May 12 from s. s. Victoria; case May 19 from s. s. Nicarie; June 28, present.
Lambayeque Department.....	Mar. 1-July 31.....	40	20	
Libertad Department.....	Mar. 1-July 31.....	55	39	
Lima Department.....	Mar. 1-July 31.....	20	12	
Piura Department.....	Mar. 1-July 31.....	6	3	
Rhodes:				
Aplakia.....	May 22-28.....			Present.
Russia:				
Astrakhan, government—Khirgiz Steppe.....	June 26-July 7.....	13	12	In Kalmuk and Nartnsk.
Moscow.....	Aug. 14-20.....	1	1	
Odessa.....	July 18-Aug. 27.....	68	15	
St. Petersburg.....	May 6-28.....	3	3	
Siam:				
Bangkok.....	Apr. 25-July 18.....	22	20	
Straits Settlements:				
Singapore.....	May 8-28.....	3	3	
Trinidad:				
Port of Spain.....	May 15-July 14.....	2	2	
Tunis:				
Tunis.....	June 30.....	5	3	
Turkey in Asia:				
Basra.....	June 12-Aug. 13.....	5	4	
Lobela.....	May 1-24.....	25	27	And vicinity.
Venezuela:				
Caracas.....	July 30-Aug. 13.....	2	2	
Zanzibar:				
Zanzibar.....	Sept. 10.....	1		

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

Reports Received from June 25 to September 30, 1910.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Abyssinia:				
Adis Ababa.....	May 16-Aug. 20.....			Present.
Argentina:				
Buenos Aires.....	Feb. 1-June 30.....		362	
Mendoza, province.....	July 27.....			Epidemic.
Rosario.....	Feb. 1-June 30.....	4	4	Report for February received out of date.
San Juan, province.....	July 27.....			Epidemic.
Algeria:				
Bona.....	May 1-31.....	1	1	
Arabia:				
Maskat.....	July 19-23.....	1		
Australia:				
Victoria, general.....	Apr. 3-19.....	1	1	
Austria-Hungary:				
Bukowina.....	July 10-16.....	1		
Galicia.....	May 29-July 23.....	5		
Barbados	Aug. 16.....	1		From steamship Byron.
Belgium:				
Antwerp.....	July 24-30.....	1		
Ghent.....	July 24-30.....		1	
Brazil:				
Bahia.....	Apr. 30-Aug. 5.....	270	206	
Campinas.....	July 17-23.....		1	
Manaos.....	Aug. 6.....			Present.
Para.....	May 29-Aug. 20.....	43	18	
Pernambuco.....	Mar. 16-June 30.....		331	
Rio de Janeiro.....	Apr. 18-July 21.....	7		
Santos.....	May 22-July 16.....		11	
Sao Paulo.....	June 12-25.....		4	
Canada:				
British Columbia—				
Fernie.....	June 12-25.....	4		
Vancouver.....	May 1-31.....	2		
Victoria.....	Aug. 21-Sept. 3.....	2		
Manitoba—				
Winnipeg.....	June 19-25.....	1		
Nova Scotia—				
Hallifax.....	June 14-Sept. 3.....	13		
Pictou.....	June 12-July 23.....	9	1	
Sydney.....	July 3-16.....	20		
Ontario—				
Toronto.....	June 5-Aug. 27.....	12		
Ceylon:				
Colombo.....	June 26-July 30.....	1	1	
Chile:				
Antofagasta.....	July 3-9.....	4		
Chilean.....	May 14.....			Epidemic.
Santiago.....	June 19-25.....			Present.
Valparaiso.....	May 19-Aug. 13.....	177		Deaths not reported.
Victoria.....	May 14.....			Present.
China:				
Canton.....	May 8-28.....	9		
Chefoo.....	June 18-July 2.....	1	1	June 5—Present. July 2—One case from a vessel.
Hongkong.....	May 8-July 30.....	6	3	
Nanking.....	May 7-Aug. 13.....			Present.
Shanghai.....	May 22-Aug. 28.....	5	45	Cases among foreigners, deaths among natives. June 4—Three cases from U. S. cruiser New Orleans from Nanking.
Swatow.....	June 6-July 17.....			Present.
Tsingtau.....	June 12-18.....	2		
Cuba:				
Habana.....	Sept. 17.....	1		On s. s. Corcovado, from Coruna.
Egypt, general	Apr. 30-June 17.....	415	85	
Alexandria.....	May 1-June 30.....	4	10	
Cairo.....	May 21-Aug. 5.....	10	5	
Suez.....	May 21-27.....	1		
France:				
Paris.....	May 29-Sept. 3.....	34		
Germany, general	May 29-Aug. 6.....	18		
Hamburg.....	June 5-11.....	1		
Gibraltar.....	June 20-Sept. 11.....	5	2	
Great Britain:				
Liverpool.....	July 17-Aug. 20.....	2		
London.....	June 19-Aug. 6.....	6		
South Shields.....	May 22-June 4.....	4	1	

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

Reports Received from June 25 to September 30, 1910.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Hawaii:				
Hilo.....	Sept. 10.....	1		Case on s. s. Wilhelmina, from San Francisco via Honolulu.
India:				
Bombay.....	May 18-Aug. 16.....		116	
Calcutta.....	July 10-16.....		1	
Kurrachee.....	May 15-July 10.....	12	3	
Madras.....	May 14-Aug. 19.....		21	
Rangoon.....	May 8-Aug. 6.....		37	
Italy, general.....	May 30-Aug. 7.....	66		
Genoa.....	June 16-30.....	1		
Naples.....	May 30-Aug. 21.....	88	17	June 26—One case from s. s. San Giovanni. One case, July 3, on s. s. Pannonia.
Japan:				
Formosa.....	May 22-July 16.....	3	4	
Java:				
Batavia.....	May 22-July 16.....	3		
Korea:				
Fusan.....	May 1-7.....	1		
Seoul.....	May 26-July 2.....	3	4	
Malta.....	May 22-July 30.....	18	2	
Mexico:				
Aguascalientes.....	June 5-Aug. 6.....		26	
Guadalajara.....	June 11-July 2.....		6	
Mexico.....	May 15-Aug. 20.....		30	
San Luis Potosi.....	May 29-July 30.....	9	5	
Veracruz.....	July 3-9.....	1		
Persia:				
Kerman.....	July 2.....			Present.
Teheran.....	May 1-31.....		28	Among pilgrims.
Portugal:				
Lisbon.....	May 29-Sept. 3.....	640		Jan. 1-Aug. 6, deaths 150.
Russia:				
Libau.....	May 30-Sept. 2.....	142	9	
Moscow.....	May 22-Aug. 27.....	169	66	
Odessa.....	May 22-July 30.....	50	12	
Riga.....	May 29-Sept. 3.....	385		Apr. 1-June 30, deaths 88.
St. Petersburg.....	May 8-Aug. 27.....	367	148	
Warsaw.....	Mar. 6-June 25.....		148	
Siam:				
Bangkok.....	Apr. 25-June 18.....	3	3	
Siberia:				
Vladivostok.....	Apr. 22-July 21.....	6		
Spain:				
Almeria.....	June 1-Aug. 31.....		3	
Barcelona.....	May 31-Sept. 4.....		17	
Cadiz.....	May 1-31.....		1	
Madrid.....	May 1-July 31.....		5	
Seville.....	May 1-Aug. 30.....		5	
Valencia.....	June 19-July 23.....	6		
Vigo.....	June 12-Sept. 4.....		6	
Straits Settlements:				
Penang.....	May 29-July 30.....	4	3	
Singapore.....	May 8-Aug. 6.....	128	38	
Switzerland:				
Thurgau, Canton.....	July 10-16.....	1		
Zurich, Canton.....	June 19-Aug. 27.....	8		
Tripoli:				
Tripoli.....	June 12-18.....	1		
Turkey:				
Constantinople.....	Aug. 22-23.....		1	
Turkey in Asia:				
Basra.....	June 5-Aug. 13.....			Present.
Uruguay:				
Montevideo.....	Apr. 1-June 30.....	654	273	
San Jose.....	July 7.....			Do.
Zanzibar:				
Zanzibar.....	June 1-July 31.....	95	41	

MORTALITY.

WEEKLY MORTALITY TABLE, FOREIGN AND INSULAR CITIES.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—																
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Typhoid fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.						
Aberdeen.....	Sept. 3	185,703	33							1										
Agusalientes.....	Sept. 10	40,000	79	2																2
Do.....	Sept. 17	40,000	61																	1
Amsterdam.....	Sept. 10	571,225	107	9																
Do.....	Sept. 17		96	17																
Antwerp.....	Sept. 10	326,351	75	7																1
Athens.....	Aug. 28	250,010	85	26								8								
Do.....	Sept. 3		95	19								7								2
Barcelona.....	Sept. 11	591,272	285	22								7								1
Do.....	Sept. 19		285	19								9								1
Barmen.....	Aug. 27	164,600	42	4																
Batavia.....	Aug. 20	217,630					7													
Belfast.....	Sept. 10	391,167	103	18																1
Belgrade.....	Do.....	80,000																		
Berlin.....	Sept. 3	2,128,109	535	75								1								1
Birmingham.....	Sept. 17	570,113	119									1								
Bombay.....	Aug. 30	977,822	566	56	25	2						6								
Bremen.....	Sept. 10	241,653	54	10																
Brussels.....	Do.....	562,895	184																	1
Budapest.....	Do.....	950,610										12	1							
Cairo.....	Aug. 26	677,663	654	36							7	4								
Do.....	Sept. 2		543	19							5	6								
Do.....	Sept. 9		481	35							9	10	15	3						
Calcutta.....	Aug. 13	847,976	335	15	4	13														
Campbelltown.....	Sept. 26	2,500	3								1	2								
Catania.....	Sept. 10	210,000	74	6							1	1								
Chemnitz.....	Do.....	286,885	77	8										1						
Chihuahua.....	Sept. 11	37,000	34	1															1	1
Do.....	Sept. 18		28	2								2								
Christiania.....	Sept. 10	250,000	53	4									1							1
Cologne.....	Do.....	513,355	161	8																3
Colombo.....	Aug. 20	187,554	119	16								4								
Copenhagen.....	Sept. 3	455,000	127	12								1	3							1
Constantinople.....	Sept. 12	1,000,000	183	32								5								
Do.....	Sept. 18		176	10								4								
Dalny.....	Aug. 27	44,546	33									2								
Dresden.....	Sept. 10	552,100	117	15								1								2
Dundee.....	Sept. 7	170,206	51																	
Durango.....	Sept. 11	75,000	32	1																
Do.....	Sept. 18		20	1																1
Edinburgh.....	Sept. 10	360,276	85	7																1
Erfurt.....	Do.....	109,140	24	5																
Frankfort on the Main.....	Do.....	409,800	84																	
Georgetown.....	Sept. 3	53,176	42	2								1								2
Ghent.....	Sept. 10	165,475	62	4																
Glasgow.....	Sept. 16	834,520	218																	6
Greenock.....	Sept. 17	73,605	20																	2
Hamburg.....	Sept. 10	895,804	263																	1
Havre.....	Sept. 3	132,430	61	10								1								1
Do.....	Sept. 10		68	12								1								1
Hilo.....	Sept. 3	3,500	8	1								2								
Do.....	Sept. 10		9	1								2								
Hongkong.....	Aug. 13	336,488																		
Hull.....	Sept. 17	280,006	94									1								
Iquique.....	Aug. 17	38,382	4																	
Do.....	Aug. 27		5										1							
Konigsberg.....	Sept. 10	244,200	86	9																2
Kurrachee.....	Aug. 31	130,000	92																	
Leeds.....	Sept. 17	498,350	151	10																4
Leipzig.....	Sept. 10	590,329	182	21								2								1
Leith.....	Do.....	86,767	20	2																
Libau.....	Sept. 11	90,000	271	16																5
Liverpool.....	Sept. 17	767,606	1,405										1	6						5
London.....	Sept. 10	7,537,196											4	3	16	23				19
Madras.....	Aug. 26	590,000	484																	
Manaos.....	Aug. 27	50,000	41	4																
Manchester.....	Sept. 16	631,533	163	15																
Montreal.....	Sept. 24	450,000	164	17																1
Moscow.....	Sept. 3	1,500,000	718	64								1	5	14	21	1				6

MORTALITY—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—													
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Typhoid fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.			
Nantes.....	Sept. 18	161,908	52	11						1							
Newcastle-on-Tyne.....	Sept. 10	285,891	73	8									2	3	1		
Nuremberg.....	Aug. 27	323,500	104	16										2	1		
Palermo.....	Sept. 10	340,000	106	7						1							
Para.....	Sept. 3	185,000	75	6			2							2			
Do.....	Sept. 10		65	7			4										
Paris.....	Sept. 10	2,776,394	748	164							3		1	5	4		
Penang.....	Aug. 20	103,582	64	8				4									
Port of Spain.....	do.....	60,000	32	6												3	
Port Said.....	Sept. 2	53,711	34	2									2				
Prague.....	Sept. 10	233,344	64	15								1	1			1	
Rangoon.....	Aug. 20	252,155	154	9	19	1											
Rome.....	Apr. 16	587,096	272	15							2		5				
Do.....	Apr. 23		230	21								1	6				
Do.....	Apr. 30		246	21							2	4	8	23		2	
Do.....	May 7		230	21							5	1	1	21		2	
Do.....	May 14		238	17							2		5		1		
Do.....	May 21		233	16									2	21		2	
Rotterdam.....	Sept. 10		96														
Do.....	Sept. 17	423,677	83					1				1	1				
San Luis Potosi.....	Aug. 20	1,900	75	7								2			3		
Do.....	Aug. 27	1,900	61	3										3	1		
St. Petersburg.....	Aug. 20	1,673,000	842	98	147			7		6	8	12	14	6	6		
Do.....	Aug. 27		834	83	187					9	18	7	8	7			
Do.....	Sept. 3		802	100	170			4		11	16	8	4	6			
Santa Cruz de Teneriffe.....	Sept. 10	46,000	17								1						
Seoul.....	July 30	38,884								1							
Do.....	Aug. 6									2							
Sheffield.....	Sept. 10	472,000	126	10							1	1		2	3		
Do.....	Sept. 17		135	6							1	1		1	2		
Shanghai.....	Aug. 21	565,000	229	18				2									
Singapore.....	Aug. 13	271,060	213	27	8			8		2							
Southampton.....	Sept. 17	127,157	20	1										1			
Stettin.....	Sept. 10	239,000	73	11						1		1				1	
Talcahuana.....	Aug. 13	28,000		2								1		2		2	
Do.....	Aug. 20												1	1		2	
Do.....	Aug. 27			2										1		2	
Do.....	Sept. 5													1		1	
Turin.....	Sept. 1	391,988	124	14							1						
Do.....	Sept. 8		100	16							3					2	
Victoria.....	Sept. 17	35,000	11								1						
Vienna.....	Sept. 10	2,107,981	561	107	1						2	7	2	1			
Vigo.....	Sept. 18	40,000	18	2				2									
Vladivostok.....	Aug. 18	90,182	18	1				1									
Winnipeg.....	Sept. 24	135,000	80	1							1	5					

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

ALGERIA—*Bona*.—Month of August, 1910. Population, 42,000. Total number of deaths from all causes 66, including typhoid fever 1, typhus fever 2, tuberculosis 12.

ARGENTINA—*Buenos Aires*.—Month of May, 1910. Population, 1,268,254. Total number of deaths from all causes 1,602, including typhoid fever 22, typhus fever 1, smallpox 68, scarlet fever 6, diphtheria 19, tuberculosis 163.

Month of June, 1910. Total number of deaths from all causes 1,834, including typhoid fever 19, smallpox 70, diphtheria 28, tuberculosis 165.

AUSTRIA—*Brünn*.—Month of May, 1910. Population, 94,500. Total number of deaths from all causes 246, including typhoid fever 1, scarlet fever 1, diphtheria 4, tuberculosis 63. Month of July, 1910. Total number of deaths 197, including typhoid fever 3, tuberculosis 44.

CANADA—*Hamilton*.—Month of August, 1910. Population, 70,000. Total number of deaths from all causes 132, including typhoid fever 1, diphtheria 1, tuberculosis 10.

***Vancouver*.**—Month of July, 1910. Population, 78,900. Total number of deaths from all causes, 89, including measles 1, tuberculosis 9.

***Yarmouth*.**—Month of August, 1910. Population, 6,700. Total number of deaths from all causes, 11, including diphtheria 1, tuberculosis 3.

FRANCE—*Cherbourg*.—Month of August, 1910. Population, 43,837. Total number of deaths from all causes, 55, including typhoid fever 1, tuberculosis 13.

***Nice*.**—Month of July, 1910. Population, 150,881. Total number of deaths from all causes, 190, including typhoid fever 1, scarlet fever 1, tuberculosis 29.

***St. Etienne*.**—Month of August, 1910. Population, 150,000. Total number of deaths from all causes, 213, including typhoid fever 1, measles 2, diphtheria 1, tuberculosis 39.

GREAT BRITAIN.—Week ended August 13, 1910.

***England and Wales*.**—The deaths registered in 77 great towns correspond to an annual rate of 11.1 per 1,000 of the population, which is estimated at 16,940,895.

***Salford*.**—Three months ended July 2, 1910. Population, 244,636. Total number of deaths from all causes, 917, including typhoid fever 8, measles 28, scarlet fever 4, diphtheria 14, tuberculosis 132.

***Ireland*.**—The deaths registered in 21 principal town districts correspond to an annual rate of 15.7 per 1,000 of the population, which is estimated at 1,151,790. The lowest rate was recorded at Drogheda, viz, 4.1, and the highest at Kilkenny, viz, 73.7 per 1,000.

***Scotland*.**—The deaths registered in 8 principal towns correspond to an annual rate of 12.7 per 1,000 of the population, which is estimated at 1,865,571. The lowest rate was recorded at Leith, viz, 7.8, and the highest at Perth, viz, 21 per 1,000. The total number of deaths from all causes was 460, including typhoid fever 2, measles 4, scarlet fever 3, diphtheria 4.

GREECE—*Patras*.—Month of August, 1910. Population, 40,000. Total number of deaths from all causes 33, including tuberculosis 7.

ITALY—*Milan*.—Two weeks ended August 15, 1910. Population, 900,000. Total number of deaths from all causes, 64, including typhoid fever 12, measles 3, tuberculosis 48.

JAMAICA—Kingston.—Month of August, 1910. Population, 48,500. Total number of deaths from all causes, 76, including tuberculosis 24.

NEW ZEALAND.—Month of April, 1910.

Auckland.—Population, 97,929. Total number of deaths 66, including typhoid fever 2, diphtheria 1, tuberculosis 4.

Christchurch.—Population, 78,605. Total number of deaths 59.

Dunedin.—Population, 62,584. Total number of deaths 80, including tuberculosis 6.

Wellington.—Population, 76,390. Total number of deaths 52, including typhoid fever 1, diphtheria 1, tuberculosis 6.

RUSSIA—Riga.—Month of June, 1910. Population, 355,000. Total number of deaths from all causes 150, including typhus fever 10 typhoid fever 1, smallpox 53, measles 13, scarlet fever 52, diphtheria 10.

SPAIN—Almeria.—Month of August, 1910. Population, 50,910. Total number of deaths from all causes 78, including typhoid fever 2, smallpox 2, tuberculosis 6.

Seville.—Month of August, 1910. Population 154,315. Total number of deaths from all causes 396, including typhoid fever 1, smallpox 1, scarlet fever 6, diphtheria 5, tuberculosis 66.

TURKS ISLANDS.—Three weeks ended September 10, 1910. Population, 1,800. Total number of deaths from all causes 2. No deaths from contagious disease.

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service