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No. 45.

DENGUE IN FLORIDA.

Dr. Joseph Y. Porter, State health officer of Florida, reported October 31 that dengue was present in Tampa, Gainesville, Miami, and Key West, Fla.

TRACHOMA, A SANITARY PROBLEM.

As noted elsewhere in this issue, trachoma has been found to be widely prevalent in the mountain region of Kentucky. Out of approximately 4,000 people examined in this locality, 500, or 12½ per cent, were found to have the disease. The examination of school children in the various mountain counties showed that from 3 per cent in some counties to 18 per cent in others were affected. It is evident that the disease has been present among these native-born Americans for many years. With trachoma so prevalent in the mountain districts of Kentucky it is quite likely that similar conditions will be found to exist in the contiguous mountain regions of Tennessee, West Virginia, and Virginia, and possibly of North Carolina.

Trachoma has also been found to be a very common disease among the Indians in this country and especially among those living on reservations. The disease appears to be much more prevalent in the United States than had been previously believed to be the case.

Although the causal organism in trachoma has not as yet been discovered, the disease is known to be communicable and is believed to be contagious. It is a serious malady, reducing very markedly the efficiency of those affected and, if untreated, causes impaired vision in a large proportion of cases and blindness in not a few.

Wherever present to any great extent the disease is a public-health problem of no small importance and its eradication, which is necessary for the welfare of the community, will require patient and systematic work on the part of the health authorities and the cooperation of the people.

SEVEN-DAYS FEVER.

The occurrence in the Canal Zone during the past summer of a number of cases of what appears to have been the seven-days fever, previously reported only in India and the ports of southeastern Asia,

as noted in last week's issue, adds one more disease to the list of those that the American physician should bear in mind in the consideration of continued fevers.

This disease was differentiated from other fevers by Rogers in 1905-1908 as a sporadic fever occurring in the seaports of India. In India and Ceylon this fever has since been found in the cities and towns in low-lying regions, usually near the sea. In Calcutta and Colombo it occurs during the summer months, May to September. These are the months during which the disease was noted in the Canal Zone. Physicians in the southern ports of the United States should be on the lookout during the summer months for cases of this fever. The cause of the disease has not been found, and no fatal cases have been noted. Where present, however, it is a disease to be thought of in the differential diagnosis of malaria, typhoid fever, dengue, and other fevers.

THE PLAGUE SITUATION.

Porto Rico.—The only development in the plague situation in Porto Rico during the last two weeks was the finding of a plague-infected rat at Arecibo reported October 30.

California.—A plague-infected ground squirrel was found in Contra Costa County October 8. No case of plague in man has occurred in California for 13 months, the last human case having been reported September 18, 1911.

British East Africa.—Plague was reported present at Mombasa October 27.

CHOLERA.

Japan.—Cholera continues to spread in Japan. A considerable extent of territory and a number of important ports and cities have become infected. The disease has also appeared in the interior.

China.—Cholera continues epidemic in a number of southern Chinese ports. It is undoubtedly present in many localities from which no reports have been received.

India.—Cholera has for many years been present in certain localities in India. Its prevalence at present is not unusual.

Turkey in Asia.—In Turkey in Asia cholera has been epidemic during the past summer and autumn over wide stretches of territory, including many important cities and ports.

Italy.—In Italy cases of cholera were reported from August 14 to the end of September. Of the cases occurring since October 1 no reports have as yet been received.

YELLOW FEVER.

Mexico.—Cases of yellow fever continue to be reported at San Juan Bautista and Merida, a case having been reported at the former place November 3 and at Merida November 4. Two cases were also reported at Comalcalco November 3.

POLIOMYELITIS.

Buffalo.—During the week ended November 2 no case of poliomyelitis was reported in Buffalo. It appears that the outbreak is at an end. The last reported case had its onset on October 22. There have been investigated in Buffalo 288 cases of the disease during the past summer; of these 34, or approximately 12 per cent, terminated fatally.

TRACHOMA IN KENTUCKY.

A REPORT OF AN INVESTIGATION OF THE PREVALENCE OF TRACHOMA IN THE MOUNTAINS OF EASTERN KENTUCKY.

By JOHN McMULLEN, Passed Assistant Surgeon, United States Public Health Service.

Having been directed by the Surgeon General to investigate the prevalence of trachoma in Knott, Perry, and other counties in the State of Kentucky, I arrived at Louisville July 8, 1912. After a conference with Dr. J. N. McCormack, secretary of the State board of health, Dr. J. A. Stucky, of Lexington, and some of the health officers, it was decided that my investigations into the prevalence of trachoma should be begun at once in Knott County, and extended later to such other counties as might be deemed advisable.

In company with Dr. R. W. Duke, the county health officer, I arrived July 12, 1912, at Hindman, the county seat of Knott County, 20 miles from the nearest railroad and reached on horseback over very rough roads. Since my examinations were only for the purpose of determining the prevalence of trachoma, with insufficient time for clinical work, it was a question as to how best to proceed in order to secure opportunity of examining a sufficient number of people.

I found the people much interested and willing to lend their assistance and hearty cooperation to any measure which might benefit the appalling numbers suffering from the "sore eyes" or "granulated lids," as trachoma is known there, and this was particularly true of the doctors of Knott County. The majority of the county schools were in session at this time, but none of the town schools, and it was decided to visit as many of the former as possible, in various sections of the counties, since some communities are much more heavily infected than are others, 60 to 75 per cent of families being infected in some neighborhoods. These schools could only be reached on horseback, as the roads are bad, often only the rocky beds of creeks.

The examination of four schools, which was the usual day's work, meant a ride of 20 or more miles. Many persons were examined along the roadside and in the homes in passing, and there was practically never any objection to having their eyes examined, as the people are well acquainted with "granular lids" and its fearful sequelæ, usually willing to discuss the subject, and always interested in learning matters pertaining to health.

The investigation included Knott, Perry, Leslie, Breathitt, Lee, Owsley, and Clark Counties, in the order named. All of these are in the mountains except Clark County, which is in the blue-grass region, but bordering on the mountain counties. A total of 3,974 people were examined, and 500 of them, or 12½ per cent, were found to be

suffering from trachoma in its various stages. The diagnosis of trachoma, for the purpose of this report, was made only in positive cases; those only suspicious were not included, but doubtless some of them were beginning trachoma. Corneal complications, pannus, etc., were very frequent.

Of the total number examined, 2,796 were school children from the mountain counties; 338, or about 12 per cent, had undoubted trachoma, while in Clark County, which is in the blue-grass region where living conditions are totally different, only 15 cases, or about 3 per cent, were found affected among the 436 school children examined. A total of 3,232 school children were examined.

If conditions, as found in the child, are to be taken as an index of what is in the home, certainly a 12 per cent average of trachoma among the school children indicates an appalling amount of trachoma in the homes of these good and honest people in the mountains.

Dr. Stucky reports that in 1 mountain county he examined 100 cases in 2 days, 25 per cent of whom had trachoma, or some infectious disease of the eyes. Also in another mountain county he "examined over 200 cases; 25 per cent and more of these had trachoma. Many of them were the most pitiful and hopeless I had ever seen."

It is obvious that trachoma is plentiful, but it is difficult, outside of schools and public institutions, to secure the examination of sufficient numbers to give exact percentages. However, on the opening day of court week in a county seat I examined the eyes of 245 people in a routine manner, regardless of whether any diseased condition existed, and found that 45 of them, or about 18 per cent, had trachoma and about 10 per cent showed corneal complications. The majority of these were men, heads of families, attending court from all sections of that county.

In examining the eyes of school children it was my habit to request the teacher to write down the names of such pupils as had trachoma, and I was able in this manner to pick out entire families, as all usually had the disease. This list of trachoma cases was left with the teacher with the request that the parents be informed of the serious nature of this communicable disease. In many instances the teacher informed me that the worst cases of sore eyes were not in school that day and were often absent on account of "sore eyes." In one particular instance the teacher volunteered to send for the remainder of the children and produced seven of the worst cases of trachoma I had ever seen, much like the old "Egyptian ophthalmia" formerly seen among immigrants. The remainder of this family were either absent from home or the eyes were too acutely inflamed to make the trip to the schoolhouse possible.

KNOTT COUNTY.

In Knott County 12 schools were visited, 659 school children were examined, and 119 were found to have trachoma—more than 18 per cent or nearly 1 in 5. Two of the 12 teachers were found to have well-marked cases of trachoma. Outside of schools, 400 people were examined throughout the county and 102 cases of trachoma found among them. Some of these 400, however, were presented for examination because they were known to have sore eyes, which accounts

for this rather large percentage. A total of 1,059 people were examined in this county and 221, or about 20 per cent, were suffering from trachoma. The schools averaged from 2 to 44 per cent of trachoma, with a general average of about 18 per cent. It is estimated that from 8 to 10 per cent of the population (11,000 estimated) of this county are suffering from this disease, or about 900 cases of trachoma. This county was taken as a typical one for purposes of the investigation, and therefore more time was spent there and more people were examined than in any one of the other counties, the local doctors heartily cooperating and lending every aid in accomplishing the task.

PERRY COUNTY.

In Perry County 310 people were examined and 52 of them, or about 16 per cent, had trachoma. The great majority of these were school children. The population of Perry County is approximately 12,000, and it is estimated that about 7 per cent of them have trachoma, or about 800 cases in the county.

LESLIE COUNTY.

Owing to the fact that the teachers' institute was in session at Hyden, the county seat, no schools were in session during the time I visited this county. I examined the eyes of about 50 of the teachers and found 3 of them suffering from trachoma. The origin of each case was well known to the county health officer, as trachoma existed in the family. In company with the county health officer, Dr. Ray, I visited a section of the county known as Polls Creek, and there examined for a distance of several miles all the families of this neighborhood; 60 people were examined in this manner and 26 cases, or nearly one-half of all examined, had well-marked cases of trachoma, ranging from the acute infection among the small children to total blindness in adults. I was informed by Dr. Ray that this was the worst infected portion of the county, but evidently the disease existed in all sections, and we estimated that about 7 per cent of the population (approximately 9,000) of the county suffered from trachoma, or that about 600 cases existed.

BREATHITT COUNTY.

A total of 614 persons were examined in Breathitt County, and 77 were found to be suffering from trachoma, or more than 12 per cent. With a population of about 18,000 it is estimated that this county will furnish from 1,000 to 1,200 cases of trachoma.

LEE COUNTY.

A total of 12 schools in various sections of Lee County were visited, 668 pupils examined, and 57 positive cases of trachoma found, or about 8 per cent. The infection of the various schools varied from 2 per cent among the kindergarten and well-kept children to 25 per cent in rural districts among the people living in contracted spaces under insanitary conditions in sparsely populated neighborhoods. Lee County is near the blue-grass region.

OWSLEY COUNTY.

In Owsley County the teachers' institute was being held in the county seat of Booneville, and none of the schools was therefore in session. Dr. Mahaffey very kindly consented to examine some of the schools for me, and he informs me that he visited 8 schools, examined 600 persons, mostly school children, and found 2 cases of trachoma, or about 3 per cent. I examined about 100 people while riding through the county and found about the same percentage of trachoma. This county is near the blue-grass country and the last of the mountain counties investigated.

CLARK COUNTY.

For the purpose of comparison between the mountain counties and the neighboring blue-grass country, I visited Clark County, in the blue-grass region, visited 11 country schools, and examined 436 school children. Only about 3 per cent of these, or 15 cases of trachoma, were found.

Among the hundreds of cases of trachoma seen among these good and honest Anglo-Saxons of the mountains, I witnessed cases pathetic in the extreme. I saw small children shut up in darkened rooms even getting behind the room furnishings to shut out all light from the eyes, so intense was the photophobia. They probably had not seen daylight for weeks or even months, and these unfortunately are by no means isolated cases. In one school visited a number of the nearer neighbors were present, and there were cases of trachoma ranging from the acute onset in the small child to those cases in adults which had existed for a lifetime and had ended in the terminal cicatricial stage and total blindness. These are only instances of the many pathetic sights to be seen in these mountain counties as the result of this dangerous, infectious disease, which, without proper care and treatment, not only lasts throughout the lifetime of the individual, but makes victims of others and gains strength as it advances—certainly a terrible handicap to struggle against through life, only to pass their final days in darkness, a burden to themselves, their families, and their friends. They all give the same history of remissions and acute exacerbations.

To those who doubt the wisdom of classifying trachoma as a dangerous, communicable disease, it is suggested that they visit this disease as it exists in the mountains of eastern Kentucky (and doubtless also in the neighboring States where living conditions are the same)—the real trachoma, the "Egyptian ophthalmia"—and see what a great handicap it imposes upon its victims. There is a preponderance of evidence that it is infectious and will ultimately destroy the eyes, leaving its victim totally blind. Anything which destroys the most important of our senses must be considered as dangerous.

Dr. W. Cheatham, of Louisville, states that 75 per cent of untreated cases of trachoma result in blindness. The people who are suffering most from this disease are the poorer class natives of these mountain counties who live in simple, small cabins in the districts which are somewhat sparsely settled. Many of these natives are unlettered, but not ignorant. Large families are the rule, and 10 to 15 children in one family is not uncommon, the average being about 8. The cabin often consists of one room where they all sleep,

cook, eat, etc. They all use the same large family towel for days, and this is one of the great sources of infection. Some of these cabins have no windows, or they are so small as to be absolutely inadequate to provide the necessary ventilation, and, in winter, this same house is closed as tightly as its construction will permit. The only wonder is that the occupants enjoy as good health as they do.

Once the infection of a dangerous, infectious disease like trachoma is introduced there is every opportunity for its spread. It has apparently taken advantage of every opportunity and secured a firm hold which will prove a difficult, though not insurmountable, task to overcome. The family washbasin is often a large stone partially buried in the ground at the well, having a depression on top, which is practically impossible to thoroughly empty or clean. These mountain folks intermarry rather closely, suffer from the lack of sanitation, and their offspring are, therefore, too often mentally defective and the subjects of tuberculosis. The unkempt and neglected children of some of these inhabitants of the sparsely settled neighborhoods are an easy prey to the many ills with which they are unfortunately surrounded. Many of the children examined in the schools were suffering from errors of refraction, tinea tonsurans, enlarged tonsils with adenoids, and hookworm. They walk for miles over rough roads to attend school, and the schoolhouses, as a rule, are badly lighted and ventilated.

In some instances it appears that trachoma is contracted only after prolonged contact, but this depends upon the condition of the trachomatous eye, whether under treatment when the danger of infection is minimized, or whether the disease is quiescent or in a state of exacerbation. The amount of resistance possessed by the non-trachomatous eye is also a factor. Now that it is proposed to build new railroads through these mountains, making this country more accessible, the danger of the spread of this disease is more to be feared than ever, and accentuates the fact that it is time something was done to eradicate this communicable disease.

The infection of trachoma begins as an acute conjunctivitis. While this inflammatory condition may vary somewhat from the ordinary acute conjunctivitis, it requires observation and treatment, varying from several days to several weeks, before a positive diagnosis can be made. Under simple treatment ordinary conjunctivitis will subside in a short time, while the beginning trachoma will soon show the hypertrophy and present the raspberry-like appearance so characteristic of acute trachoma. Judging from some virulent cases of trachoma recently admitted to a local Baltimore hospital from the mountains of West Virginia, it is only fair to assume that the conditions found in eastern Kentucky would be found to prevail through the mountainous sections of the neighboring States or wherever the living conditions were the same and the infection had been introduced. The climate, altitude, etc., are not the reasons why this disease is found so plentifully here, but the manner of living in small cabins, and the fatal "family towel." Failure to treat the cases furnishes an ideal condition for the spread of the disease once the infection is introduced.

This mountain country is a beautiful region. The land is rich in coal and timber, and once these people become educated to the seriousness of the lack of sanitary living, to the value of fresh air,

individual clean linens, wash pans, and clean homes, human life will be prolonged and health and happiness augmented.

The source of the original infection is obscure, but trachoma has been present among the mountain people beyond the recollection of the oldest inhabitants.

The difficulty of eradicating trachoma is, of course, mainly due to the chronicity of the disease; but with perseverance and a determination never to let up until the end is accomplished, only success can come. This will, of course, require time and no little money, for whatever relief is furnished must be carried practically to their doors. These sturdy people do not ask charity, but unfortunately the majority of those suffering with the "sore eyes" have no means and live far from medical centers; but, given a fair opportunity, they will more than do their part.

Relief of the condition naturally falls under two heads: (1) Prevention of further spread of the disease, and (2) treatment of existing cases.

The first, or prevention, will be best accomplished by education. It will help them by teaching them to help themselves. The family towel must be eliminated and individual linen, basins, etc., be insisted upon. The importance of sanitation, clean homes, and fresh air must be shown. These things can be done by lectures accompanied with stereopticon views (showing right and wrong ways of doing things) in the schools and public buildings. These could well be supplemented by placing district nurses through the mountains to conduct nursing classes in the homes and schools. This work of prevention and cure must cover a very large territory and be so systematized as to neglect no neighborhood. The school children should be examined upon entering school, and all excluded who might convey communicable disease. Errors of refraction should be corrected, and this is an important detail in the treatment of trachoma. The schoolhouses should be so arranged as to give the best light and ventilation.

The cure of existing cases is a big problem and one that will require time and money. The semiannual clinic, so ably conducted by Dr. J. A. Stucky, of Lexington, under the auspices of the Woman's Christian Temperance Union Settlement School at Hindman, Knott County, is doing a splendid work, and the good results are to be seen there, but, of course, only a small portion of the trachomatous population is seen in this limited time. Clinics of this character should be established in all counties where the disease is found, and in various sections of each county, in order that no patient be overlooked, and a system of movable or field hospitals could be operated in this manner for those actually requiring surgical treatment. Patients so treated at these clinics could be taught the nature, seriousness, and contagiousness of their eye disease and how to prevent spreading it upon returning home. Accurate records should be kept of all cases, and district nurses should follow them up and see that the instructions are properly carried out. This clinic or movable field hospital should cover the same territory periodically in order to see again the former cases, and also any new ones which might be found, just as is being done in the hookworm dispensary system. During treatment the danger of infection is much lessened and finally a cure can be effected. By patience

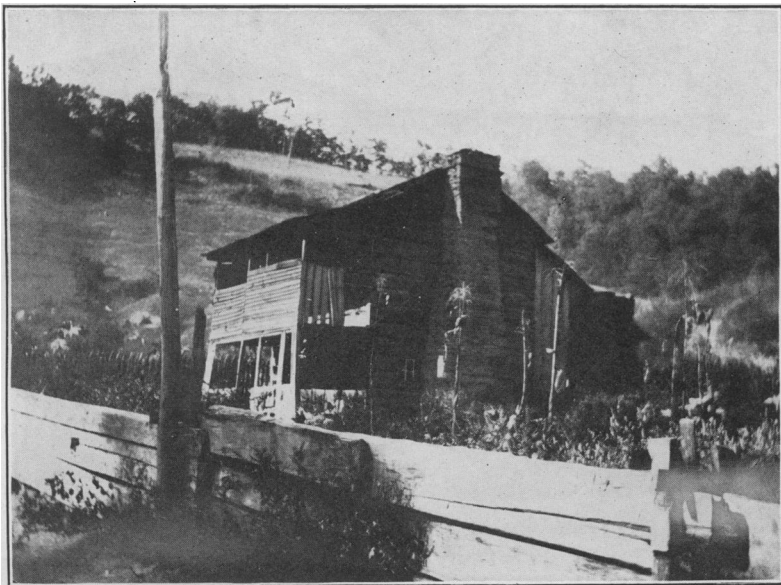


FIG. 1.—A MOUNTAIN CABIN IN KENTUCKY, SHOWING THE TYPE OF DWELLING IN THE REGION WHERE THE PREVALENCE OF TRACHOMA WAS INVESTIGATED BY THE UNITED STATES PUBLIC HEALTH SERVICE.

The window in the cabin is larger than that usually found.



FIG. 2.—A GROUP OF PERSONS AFFECTED WITH TRACHOMA PHOTOGRAPHED DURING THE INVESTIGATION INTO THE PREVALENCE OF THE DISEASE IN KENTUCKY BY THE UNITED STATES PUBLIC HEALTH SERVICE.

The ages of the patients range from a few years to old age. They were grouped for the purpose of being photographed, but the positions assumed were those naturally taken to shield the eyes from light.

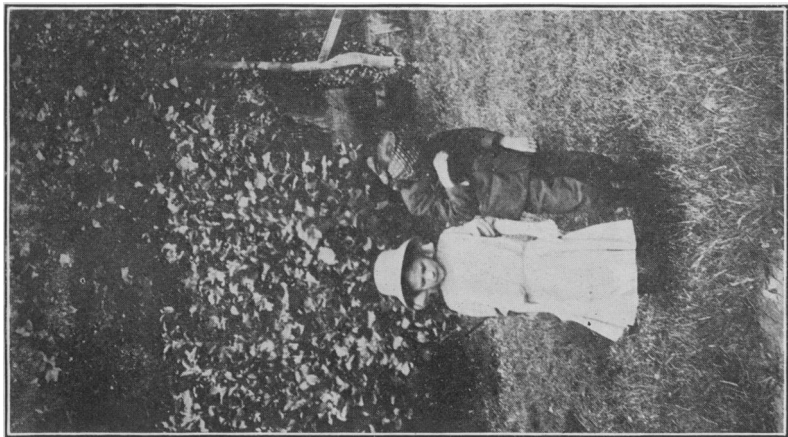


FIG. 3.—TWO CASES OF TRACHOMA OF LONG STANDING IN CHILDREN, MET WITH DURING THE INVESTIGATION OF THE PREVALENCE OF TRACHOMA IN KENTUCKY BY THE UNITED STATES PUBLIC HEALTH SERVICE.

One of the patients has been almost blind for months.

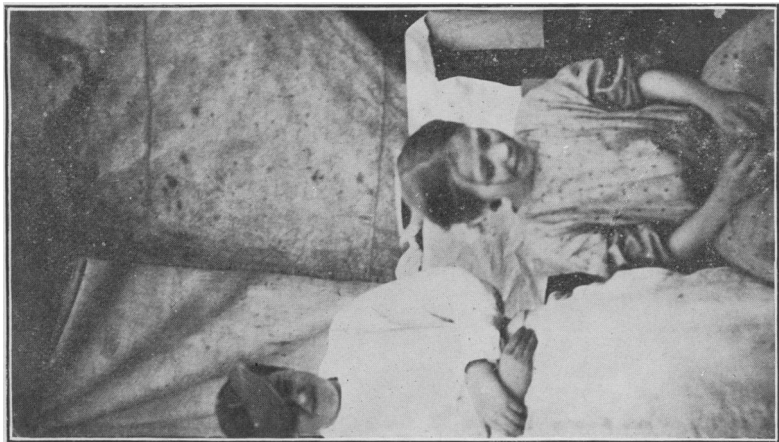


FIG. 4.—TWO OTHER CASES MET WITH DURING THE INVESTIGATION OF THE PREVALENCE OF TRACHOMA IN KENTUCKY BY THE UNITED STATES PUBLIC HEALTH SERVICE.

These patients have had trachoma during most of their lives, and corneal complications were so severe that shielding the eyes from light had become habitual.

and unflagging perseverance this scourge can be removed and these mountain people given the opportunity which has heretofore been denied them by reason of this ever-present handicap, trachoma.

The economic consideration of this disease is thus discussed by Dr. W. Cheatham in his article on "Preventable blindness:"

In the entire United States there are 64,000 registered blind people, and it is a modest estimate that half of these are needlessly blind. The official census of New York in 1906 gives a total of 6,200 blind persons in the State. Of these the instances of preventable blindness numbered 1,084. Viewed solely from an economic standpoint it has been pointed out that the maintenance of her blind citizens costs the State of New York \$110,000 a year. If a blind citizen is dependent upon the State, it is estimated that his maintenance for life will cost the taxpayers at least \$10,000. Dr. Brown has told us that in the institution for the blind in Ohio 67 per cent of the inmates are there from trachoma. Dr. W. O. Bailey found, a year or so ago, in the Kentucky Institution for the Blind, 45 per cent of the inmates were blind of trachoma and 26.3 per cent from ophthalmia of the new born.

It is manifest from the foregoing that we must concede to trachoma a high place among the factors that go to decrease materially not only the economic efficiency of the individual sufferer, but that of the race of people, as a whole, among whom it is prevalent. In addition to the well-nigh constant bodily discomfort of the individual sufferer, the resulting visual impairment can not fail greatly to reduce his efficiency and consequently his value to society at large. The gradual increase in the prosperity of any community of the individual members of such community depends almost exclusively upon the ability to raise their own standard of living. Such improvement in their material condition is in turn dependent upon the productive capacity of the individual unit. One can hardly, therefore, urge that a person afflicted with a chronic disorder such as trachoma, which, in addition to the depression induced by the disease, tends to impair one of the most essential senses of the body, can be on a par in productive capacity with the healthy individual, apart from any danger to which he may expose the community at large by his ability to disseminate the disease.

It is thought that a sufficient number of people have been examined to give some idea of the prevalence of trachoma in the mountains of eastern Kentucky.

It is a pleasure to acknowledge my appreciation to Dr. J. N. McCormack, secretary State board of health, for his hearty cooperation and assistance. Also to Dr. J. A. Stucky, who is doing such splendid work in the mountains, I wish to express my sincere appreciation for his never-failing interest, cooperation, and timely suggestions. I also wish to acknowledge my appreciation to Drs. J. W. and R. W. Duke; Dr. Kelly and Dr. Pigman, of Knott County, for their untiring and valuable assistance; also to Drs. Ray and Collins, of Leslie County; Dr. Eversole, of Perry; Drs. Back, Arnold, and Hoge, of Breathitt; Dr. Evans, of Lee; Drs. Mahaffey, Glass, and Anderson, of Owsley; and Dr. Shirley, of Clark County. I also desire to express my appreciation to the teachers for their uniformly cordial reception and hearty cooperation in the examination of the pupils.

A FURTHER REPORT ON TRACHOMA IN KENTUCKY.

By JOHN McMULLEN, Passed Assistant Surgeon, United States Public Health Service.

In accordance with instructions I returned to Kentucky and arrived in Lexington September 12, 1912, for the purpose of conferring with Dr. J. A. Stucky relative to the investigation and control of trachoma in the State, and also to accompany him to Knott County for the purpose of attending the semiannual clinics at Hindman.

These clinics are held in April and September by Dr. J. A. Stucky, medical director of the Woman's Christian Temperance Union Set-

tlement School at Hindman, Knott County, Ky. The clinics are principally for diseases of the eye, ear, nose, and throat, but all diseases are treated.

The clinic commenced September 16, and continued for four days. During this time 374 patients were examined, and of this number 113 were suffering from trachoma. Of the total number examined, 95 were resident pupils of the settlement school, 150 were day pupils living at home, and the remaining 129 came from this and the adjoining counties. More than 11 per cent of the resident pupils of the school had trachoma, and 16 per cent of the day pupils were suffering from this disease. About one-half of the outside people who came to the clinic were suffering from trachoma and sought relief from this disease and its sequelæ.

Of those suffering from trachoma 40 per cent had corneal complications, ranging anywhere from mild ground-glass appearance to the extreme degree of pannus and ulceration; 10 per cent had trichiasis; 25 per cent were suffering from photophobia; and 25 per cent had impaired vision, ranging anywhere from slightly defective vision to total blindness. The ages of these trachoma cases were all the way from small children to old age, and many of the old people had suffered from the disease the greater portion of their lives. Some of the cases at the clinic were seen on my previous visit in July and August, but many were new cases from counties I had not visited. The entire number comprising the clinic represented the average class of the native mountain people. They experience the exacerbations and remissions to which this disease is so prone in their little isolated mountain homes, with practically no medical aid save that rendered at these clinics and by the trained nurse connected with the settlement school.

All of these trachoma cases were treated at the clinic and given local applications to take home with them. Those requiring it were detained for a few days in the hospital tent before being sent home. Many of these patients live many miles distant, and their treatment will stop when their supply of medicine is exhausted. That trachoma has been present in these mountains for years is evidenced by the ravages of the disease, as seen in the eyes of the several generations attending the clinic at the same time. The large numbers of these people who came to the clinic as they did with their eyes shielded from the light by means of colored shades and glasses, dark cloths tied about their heads, etc., was extremely pathetic.

The time and means which Dr. Stucky is giving and the splendid work he is doing in the mountains entitle him to much praise and substantial encouragement. The field, however, is a very large one, and, in my opinion, one which will have to be dealt with in a very persistent and systematic manner.

It is difficult in advance to outline the details necessary for handling the existing cases and preventing the further spread of the disease, but the general plan as outlined in my previous report will, in my opinion, ultimately give the best results. Too much praise can not be given the Woman's Christian Temperance Union Settlement School at Hindman for the good work it has done and is still doing among the mountain people.

UNITED STATES.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HYGIENE.

[Adopted since Jan. 1, 1912.]

MINNEAPOLIS, MINN.

ICE.

SEC. 1. Every person, firm, or corporation engaged in selling or delivering ice in the city of Minneapolis after the 1st day of April, A. D. 1912, shall, prior to making any such sale or delivery of ice, register at the office of the board of health the name and location of the body or bodies of water from which such ice so to be sold or delivered has been cut or from which the water has been taken for its manufacture. Such registration shall be subscribed and sworn to by the person so proposing to sell ice or cause ice to be delivered in said city, or in the case of a firm, by one of the members of the firm, or in the case of a corporation, by the president, general manager, or one of the directors of the corporation, and no person shall hereafter sell or deliver ice in the city of Minneapolis without first having obtained a permit therefor from the commissioner of health, who shall issue such license upon the registration hereinbefore required. Such license may be revoked at any time by the city council or by the mayor, in their discretion.

SEC. 2. Every person, firm, or corporation who sells, delivers, or causes to be delivered ice in the city of Minneapolis after the 1st day of April, A. D. 1912, shall permit the department of health of said city and its inspectors at all reasonable times to have access to and freely examine the ice intended for sale or delivery, and shall permit samples to be taken by said department or its inspectors for the purpose of analysis.

SEC. 3. No person shall bring into, or store, sell, deliver, or distribute, or cause to be brought into, or stored, sold, delivered, or distributed in the city of Minneapolis any ice for domestic use, or ice used in connection with drinking water, liquids, or foods, or ice used in connection with any food or drink for human consumption that shall contain any bacteria responding to the standard tests for the colon group of bacilli.

SEC. 4. This ordinance shall not be construed to prohibit the selling or delivery of impure ice to be used only for packing or cooling purposes; that is to say, for use in refrigerators, refrigerator cars, freezing-machine rooms, and other places where it will not come in contact with articles of food or drink, provided that a permit be first obtained from the commissioner of health to sell, deliver, or use impure ice for the purposes aforesaid, and for no other purpose, and provided that whenever any impure ice for packing or cooling purpose shall be delivered or sold from any wagon or other vehicle there shall be printed in large, legible letters in a conspicuous place on the outside of the wagon or vehicle the words "Ice for packing and cooling purposes only. Not for domestic use."

SEC. 5. Any person who shall violate any of the provisions of the ordinance shall, upon conviction thereof before the municipal court of the city of Minneapolis, be punished by a fine not to exceed \$100, or by imprisonment not to exceed 90 days.

[Ordinance adopted Mar. 8, 1912.]

NEW ORLEANS, LA.

PRIVIES AND CESSPOOLS.

Resolved, That from and after the promulgation of this resolution it shall be unlawful for anyone to construct any open privy vault or cesspool on any premises within the limits of the city of New Orleans, providing that the public sewers are accessible for connection.

Be it further resolved, That where present existing privy vaults or cesspools are condemned as defective by the board of health of the city of New Orleans, same shall be demolished, reconstruction prohibited, and premises connected with sewers where same are accessible.

[Resolution, board of health, adopted Apr. 9, 1912.]

LOS ANGELES, CAL.

COMMUNICABLE DISEASES—BURIAL OF DECEASED—DISINFECTION OF FOMITES—NOTIFICATION OF CASES—PLACARDING—REMOVAL OF CASES—QUARANTINE—HOSPITALIZATION—SCHOOL ATTENDANCE—VACCINATION.

SEC. 8. It shall be unlawful for any person to hold or to attend any public gathering or funeral or burial services in connection with any person who shall have died of bubonic plague, Asiatic cholera, smallpox, typhus fever, yellow fever, diphtheria, scarlet fever, glanders, or leprosy, but such funeral or burial services shall be private.

It shall be unlawful for any person to permit any child under the age of 16 years to attend any funeral or burial services held in connection with any person who shall have died of any such disease, or for any such child to attend any such services.

The body of any person who shall have died of any such disease shall be thoroughly disinfected and shall be inclosed in a tight burial case; and it shall be unlawful for any person to open, or to cause or permit to be opened, any such burial case after such body shall have been inclosed therein.

SEC. 9. It shall be unlawful for any person to fail, refuse, or neglect to destroy by fire or to disinfect to the satisfaction of the health commissioner all articles which shall have been used about the body of any person who shall have died of bubonic plague, Asiatic cholera, smallpox, typhus fever, yellow fever, diphtheria, scarlet fever, typhoid fever, glanders, leprosy, tuberculosis, or membranous croup, or which shall have been used in the room where such person shall have died:

* * * * *

SEC. 12. It shall be unlawful for any physician to fail, refuse, or neglect to report to the health commissioner in the manner required by this section the name and location of any person he is attending who is, or whom such physician may have reasonable ground to suspect to be, affected with bubonic plague, Asiatic cholera, smallpox, chickenpox, measles, typhus fever, yellow fever, diphtheria, scarlet fever, typhoid fever, glanders, leprosy, or tuberculosis. Such report shall be made both by telephone and in writing to the health commissioner immediately upon ascertaining by such physician that such person is or may be so affected.

SEC. 13. It shall be unlawful for any owner, manager or person in charge of any hotel, boarding house, lodging house, tenement house, or apartment house, or for any householder or other person, to fail, refuse, or neglect immediately to report, in writing, to the health commissioner, the name and location of any inmate of his or her house whom he or she has reason to believe is sick of any disease mentioned in the preceding section of this ordinance.

SEC. 14. Whenever the health commissioner shall receive knowledge of the existence of bubonic plague, Asiatic cholera, smallpox, typhus fever, yellow fever, diphtheria, scarlet fever, glanders, or leprosy, he shall immediately cause to be placed in a conspicuous place upon the house or building in which such disease exists a card upon which shall be printed in legible letters at least 2½ inches in height the name of such disease.

It shall be unlawful for any person to obstruct the view of, deface, remove or destroy any such card, or to cause or permit the same to be defaced, removed, or destroyed, or the view thereof to be obstructed, until after the same shall have been removed upon the direction of the health commissioner.

A green card shall be used for cases of diphtheria, a red card for scarlet fever, a yellow card for smallpox, and a black card for Asiatic cholera, yellow fever, or bubonic plague. The colors designating other diseases shall be determined by the health commissioner.

SEC. 15. It shall be unlawful for any person to remove, or to cause to be removed, or to assist in removing, or to direct the removal of any person affected with bubonic plague, Asiatic cholera, smallpox, typhus fever, yellow fever, scarlet fever, glanders, or leprosy, from any house or place to another house or place without first obtaining a permit in writing so to do, signed by the health commissioner.

It shall be unlawful for any person to drive or use, or to cause or permit to be driven or used, any vehicle for the conveyance or removal of any person affected with any such disease without first obtaining a permit in writing so to do, signed by the health commissioner.

SEC. 16. It shall be unlawful for any person who shall have visited or otherwise come in contact with any infections, contagious or communicable disease or who shall

wear any infected clothing or who shall carry any material that will convey infection, to enter any public conveyance without first giving notice thereof to the owner, driver, or person in charge of such conveyance, and it shall be unlawful for any person to use such conveyance, or to cause or permit the same to be used, until after the same shall have been thoroughly disinfected to the satisfaction of the health commissioner.

Sec. 17. It shall be unlawful for any person who shall be affected with bubonic plague, Asiatic cholera, smallpox, measles, typhus fever, yellow fever, diphtheria, scarlet fever, typhoid fever, glanders, leprosy, or tuberculosis, and who shall have been placed in quarantine, in any house, building, or place on account thereof by the health commissioner, or for any person who shall be in any house, building or place that shall have been placed in quarantine or upon which a card shall have been posted indicating the existence in such house, building, or place of any such disease, to leave, absent himself, or remove therefrom without a permit, in writing, signed by the health commissioner, until after such house, building, or place shall have been released from quarantine and shall have been disinfected to the satisfaction of the health commissioner, and such card shall have been removed by or under the direction of the said health commissioner.

It shall be unlawful for any person to enter any such house, building, or place while the same is quarantined, or while a card is posted thereon indicating the existence therein of any such disease, without a permit in writing from the health commissioner so to do.

Sec. 18. The health commissioner is hereby authorized and empowered to place in quarantine any person who shall have been exposed to or who shall have become infected with bubonic plague, Asiatic cholera, smallpox, typhus fever, yellow fever, diphtheria, scarlet fever, or glanders, either in the house, building, or place in which such person shall have been so exposed or became infected, or in the house, building, or place in which such person may be found.

It shall be unlawful for any person who shall have been exposed to or infected with any such disease and placed in quarantine by the health commissioner to leave, absent himself, or depart from the place in which he shall have been so quarantined until the expiration of the period of 21 days after such person shall have been so placed in quarantine unless sooner released by the health commissioner.

Sec. 19. The health commissioner is hereby authorized and empowered to place in quarantine, in such place as he may deem necessary for the preservation of the public health, any person who shall have become affected with leprosy.

It shall be unlawful for any person affected with leprosy and placed in quarantine by the health commissioner to leave, absent himself, or depart from the place in which he shall have been so quarantined without a permit, in writing, from the said health commissioner.

Sec. 20. The health commissioner is hereby authorized and empowered to remove or to cause to be removed to the detention hospital of the city of Los Angeles any person affected with any infectious or contagious disease, when such person can not be properly quarantined in the house, building, or place wherein he is located when found to be affected with such disease.

Sec. 21. It shall be unlawful for any person, firm, or corporation owning, controlling, occupying, or having charge of any house, building, or premises in which shall have been any person affected with bubonic plague, Asiatic cholera, smallpox, chickenpox, measles, typhus fever, yellow fever, diphtheria, scarlet fever, typhoid fever, glanders, leprosy, or tuberculosis to fail, refuse, or neglect to renovate, clean, purify, and disinfect such house, building, or premises in such manner and at such time as the health commissioner may direct.

Sec. 22. The health commissioner shall make such rules and regulations for the quarantine or health of the city as from time to time may be deemed necessary. The physician in charge of any quarantine station, hospital, or place shall enforce all rules and regulations of the health department as may be necessary for the proper management and conduct thereof; and it shall be the duty of all persons in quarantine, and all agents, officers, policemen, or others employed by the city about such quarantine station, hospital, or place to carry out, enforce, and obey such rules and regulations.

Sec. 23. No person who shall have been suffering from or affected with any infectious or contagious disease, or who shall reside with the family or in the same house in which a person so affected shall be located, shall be permitted to attend any public or private school within the limits of the city of Los Angeles. The board of education and every principal, teacher, or other person in charge of any such school shall exclude every such person from such school until such person so excluded shall present a certificate from the health commissioner stating that there is no longer any danger from infection or contagion.

[Ordinance adopted May 1, 1912.]

TACOMA, WASH.

MILK—PRODUCTION, CARE, AND SALE.

SEC. 1. It shall be unlawful for any person to sell, exchange or deliver, offer or expose for sale, or have in his possession with intent to sell or deliver, within the city of Tacoma,

(1) Any unwholesome milk or cream; or

(2) Any milk containing less than 8.75 per cent of milk solids, exclusive of fat, or less than 3.25 per cent of fat, except in the manner and under the conditions prescribed for the sale of skimmed milk; or

(3) Any skimmed milk except under the name of "skimmed milk" and in cans or other receptacles plainly stamped or marked in some conspicuous place with the words "Skimmed milk"; and every person who shall sell or serve, or keep for sale or for the purpose of serving in any hotel, restaurant or boarding house, any skimmed milk, shall display in a conspicuous place in the room where the same is sold or served, a placard bearing the words in large letters "Skimmed milk sold here"; or

(4) Any cream containing less than 18 per cent of fat.

SEC. 2. Milk or cream shall be deemed to be unwholesome in the following cases:

(1) When any foreign substance has been added thereto or placed therein for the purpose of thickening, coloring or preserving the same; or

(2) When it contains any pathogenic bacteria or germs, pus cells or blood cells; or

(3) When it contains more than 200,000 bacteria or germs of all kinds to the cubic centimeter; or

(4) When any water has been added thereto; or

(5) When any part of it has been drawn from a cow fed on refuse or unwholesome food; or

(6) When any part of it has been drawn from an unhealthy or dirty cow, or cow kept in an unclean shed, or has been milked by unclean milkers; or

(7) When any part of it has been contaminated; or

(8) When any part of it has been exposed to any contagious or infectious disease; or

(9) When any part of it has been drawn from a cow within 10 days before or 5 days after parturition, or in any case before such cow is free from fever.

SEC. 3. Skimmed milk is hereby defined to be any wholesome milk from which the cream has been removed or which contains less than 3.25 per cent of butter fat.

SEC. 4. It shall be unlawful to keep or maintain a dairy within the city of Tacoma. The maintenance of a dairy is hereby defined to be the keeping of more than two cows and selling the whole or any part of the milk therefrom.

SEC. 5. It shall be unlawful for any person to sell or deliver, offer or expose for sale, or have in his possession with intent to sell or deliver, any milk or cream in the city of Tacoma without having a permit so to do duly issued by the health officer of said city; or without having such permit displayed in a conspicuous manner in his place of business, or without having the number of such permit and the name of the owner thereof printed in a conspicuous manner on both sides of every wagon or other vehicle used for the sale or delivery of milk or cream. Application for a permit shall be made in writing and upon blanks provided by said health officer for that purpose, on which shall be stated the name of the applicant, the location of his place or places of business, the number of cows, if any, owned or controlled by such applicant, the location of any dairy or dairies other than his own from which he secures or proposes to sell milk, the number and description of all wagons or other vehicles to be used by the applicant in his business; and no permit shall be granted to said applicant by said health officer until the city milk inspector shall have inspected the cows owned or controlled by the applicant, and the cows of all other persons, if any, from whom he obtains or intends to obtain milk or cream; the stables or barns in which such cows are kept, the food upon which such cows are fed, and their water supply and the apparatus used or to be used by said applicant in caring for, gathering, and distributing milk or cream, and shall have certified to said health officer that said cows are in healthy condition, apparently free from disease, and that the stables or barns in which such cows are kept, the appliances used or to be used in caring for, gathering, or distributing milk or cream are in a clean and sanitary condition, and that the food upon which said cows are fed is clean and wholesome.

If, after the issuance of any permit, the applicant shall change the location of his place of business, notice thereof shall be given forthwith to the health officer.

Such permit shall be issued without cost and shall remain in force for a period of one year.

In case additions are made from time to time to the herd of cows belonging to the holder of any permit, or to any of the herds of cows from which he obtains milk, it shall

be his duty at such time to immediately report such fact to the health officer, in order that such cows may be inspected.

SEC. 6. It shall be unlawful for any person to sell milk or cream, or offer it for sale in any booth, stand, store or market place in the city of Tacoma, without first registering his name and place of business in the book kept by the inspector of milk of said city for that purpose.

SEC. 7. It shall be unlawful for any retail or wholesale dealer in milk in the city of Tacoma to sell, offer, or expose for sale, any milk or cream unless the same shall have been procured by him from a dairy or dairies which have been duly inspected and have complied with the provisions of this ordinance.

SEC. 8. It shall be unlawful for any person to ship or bring into the city of Tacoma for the purpose of selling or offering for sale, or sell or offer for sale therein, for human food, any milk or cream, unless the cans, vessels and receptacles used in handling the same, and all packages, refrigerators, compartments or other places where such milk or cream is kept, stored or handled, shall be kept and maintained clean and neat and free from the presence of any article or thing of any kind likely to contaminate or injure the quality or sweetness of such milk or cream, and unless the cans or other receptacles in which such milk or cream is kept shall be used for such purposes only, and shall be thoroughly sterilized with boiling water or live steam each time they are used; and unless all pouring cans, dippers, or other vessels used in handling or delivering such milk shall be scalded and sterilized daily. All bottles in which milk or cream is distributed shall be washed clean and sterilized immediately before they are used and sealed immediately after they are filled.

SEC. 9. All milk brought or shipped into the city of Tacoma to be sold for human food shall, immediately after being drawn from the cow, be aerated and cooled to a temperature of not to exceed 60° F., and until such milk or the cream therefrom is delivered to the consumer it shall be kept at a temperature not to exceed that above specified.

SEC. 10. It shall be unlawful for any person to sell milk or cream at retail in the city of Tacoma on and after the 1st day of February 1912, in any manner whatsoever except in glass bottles or other receptacles securely sealed, which milk or cream shall be bottled or placed in said receptacles at the dairy where it is produced, or at a milk depot, storeroom, or other place kept exclusively for the purpose of storing and handling milk and maintained in a cleanly and sanitary condition. In no case shall milk or cream be bottled in the wagon or vehicle in which it is being conveyed or from which it is being distributed. *Provided, however,* That this section is not intended to prohibit restaurants, hotels, or boarding houses from serving milk or cream to guests in any other manner.

The sale of milk or cream at retail is hereby defined to be the sale of milk or cream in quantities of 1 gallon or less.

SEC. 11. It shall be the duty of the milk inspector to inspect from time to time all dairies selling or supplying milk for sale in the city of Tacoma. He shall inspect the cows, the stables, drainage, ventilation, food, water, yards, pasture, methods of milking, and all matters connected with the care and management of such dairies. He shall inspect all places and vehicles in or from which milk or cream is sold, offered, or exposed for sale, kept, stored, delivered, or disposed of, including restaurants, hotels, and boarding houses, and all vessels, cans, receptacles, refrigerators, compartments of any store, building, or other place used in storing, handling, delivering, or disposing of milk or cream in the city of Tacoma, to ascertain whether the provisions of this ordinance are being complied with, and report to the board of health any violation thereof. In order to make such inspection he shall have the right to enter and shall have free access to any building, establishment, vehicle, or place where such milk is produced, being transported, stored, kept, or offered for sale, and he shall have the right to take samples of milk or cream therefrom in quantities not to exceed one quart each for the purpose of inspecting, testing, or analyzing the same.

SEC. 12. Nothing in this ordinance shall be so construed as to prohibit the sale of what is commonly known as buttermilk, provided the same is produced from pure, healthful, wholesome, and uninfected milk.

SEC. 13. The word "person" wherever used in this ordinance shall be held and construed to mean any person, firm, or corporation, and the act of an agent or servant shall be deemed to be the act of the principal or employer.

SEC. 14. Any person violating any of the provisions of this ordinance shall, upon conviction, be fined in any sum not exceeding \$100 or imprisoned in the city jail for a period not exceeding 30 days.

[Ordinance No. 4828, adopted Jan. 3, 1912.]

PLAGUE.

RECORD OF PLAGUE INFECTION.

Places.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
California:				
Cities—				
San Francisco.....	Jan. 30, 1908.....	Oct. 23, 1908.....	None.....	398 rats.
Oakland.....	Aug. 9, 1911.....	Dec. 1, 1908.....	.....do.....	126 rats.
Berkeley.....	Aug. 28, 1907.....	None.....	.....do.....	None.
Los Angeles.....	Aug. 11, 1908.....	.....do.....	Aug. 21, 1908.....	1 squirrel.
Counties—				
Alameda (exclusive of Oakland and Berkeley)	Sept. 24, 1909.....	Oct. 17, 1909; wood rat.	Sept. 10, 1912.....	260 squirrels; 1 wood rat.
Contra Costa.....	July 21, 1911.....	None.....	Oct. 8, 1912.....	1,120 squirrels.
Fresno.....	None.....	.....do.....	Oct. 27, 1911.....	1 squirrel.
Merced.....	.....do.....	.....do.....	July 12, 1911.....	5 squirrels.
Monterey.....	.....do.....	.....do.....	Aug. 6, 1911.....	6 squirrels.
San Benito.....	June 5, 1910.....	.....do.....	June 8, 1911.....	22 squirrels.
San Joaquin.....	Sept. 18, 1911.....	.....do.....	Aug. 26, 1911.....	18 squirrels.
San Luis Obispo.....	None.....	.....do.....	Jan. 29, 1910.....	1 squirrel.
Santa Clara.....	Aug. 31, 1910.....	.....do.....	Oct. 5, 1910.....	23 squirrels.
Santa Cruz.....	None.....	.....do.....	May 17, 1910.....	3 squirrels.
Stanislaus.....	.....do.....	.....do.....	June 2, 1911.....	13 squirrels.
Louisiana:				
City—				
New Orleans.....	.....do.....	July 27, 1912.....	None.....	1 rat.
Washington:				
City—				
Seattle.....	Oct. 30, 1907.....	Sept. 21, 1911.....	.....do.....	25 rats.

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Berkeley.....	Oct. 19, 1912.....	3	1 178	111	.....
Oakland.....	.....do.....	24	2 598	467	.....
San Francisco.....	.....do.....	20	1,811	1,360	.....

¹ Identified: *Mus norvegicus*, 126; *Mus musculus*, 52.

² Identified: *Mus norvegicus*, 511; *Mus musculus*, 86; *Mus alexandrinus*, 0; *Mus rattus*, 1.

³ Identified: *Mus norvegicus*, 1,032; *Mus musculus*, 333; *Mus alexandrinus*, 195; *Mus rattus*, 251.

PLAGUE-INFECTED SQUIRREL, CALIFORNIA.

During the week ended October 12, 1912, positive diagnosis of plague was made of 1 ground squirrel found in Contra Costa County, October 8, 1912.

SQUIRRELS COLLECTED AND EXAMINED FOR PLAGUE INFECTION, CALIFORNIA.

During the week ended October 12, 1912, there were examined for plague infection 1 squirrel from Alameda County, 175 squirrels from Contra Costa County, 70 from Stanislaus County, 76 from San Joaquin County, and 92 from Santa Clara County. One plague-infected squirrel was found in Contra Costa County.

CEREBROSPINAL MENINGITIS.

**CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR
THE WEEK ENDED OCT. 19, 1912.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Binghamton, N. Y.	1		Kansas City, Kans.	1	1
Boston, Mass.	2		Los Angeles, Cal.		1
Brockton, Mass.	1		New York, N. Y.	4	1
Cincinnati, Ohio	1		Pawtucket, R. I.		1
Cleveland, Ohio		1	Pittsburgh, Pa.		1
Dayton, Ohio		1	Waltham, Mass.	1	1
East Orange, N. J.	1				

ERYSIPELAS.

**CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR
THE WEEK ENDED OCT. 19, 1912.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.		2	Philadelphia, Pa.	3	1
Buffalo, N. Y.	2		Pittsburgh, Pa.	5	1
Hartford, Conn.	1		St. Louis, Mo.	4	1
Los Angeles, Cal.	1		San Francisco, Cal.	4	
New York, N. Y.	6	2	York, Pa.	1	

PELLAGRA.

During the week ended October 19, 1912, pellagra was reported as follows by city health authorities: New Orleans, La., 1 death; Wilmington, Del., 2 deaths.

PNEUMONIA.

**CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES
FOR THE WEEK ENDED OCT. 19, 1912.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal.	1	1	Los Angeles, Cal.	2	12
Ann Arbor, Mich.	1		Lowell, Mass.	2	2
Auburn, N. Y.	3	1	Newark, N. J.		8
Baltimore, Md.		11	New Orleans, La.		5
Bayonne, N. J.		2	Newton, Mass.	3	3
Beaver Falls, Pa.	1		New York, N. Y.		90
Berkeley, Cal.		1	Niagara Falls, N. Y.		1
Binghamton, N. Y.	3	3	North Adams, Mass.		4
Boston, Mass.		30	Omaha, Nebr.		5
Braddock, Pa.	5		Passaic, N. J.	3	3
Bridgeport, Conn.		3	Peoria, Ill.		3
Buffalo, N. Y.		9	Philadelphia, Pa.	29	23
Butte, Mont.		3	Pittsburgh, Pa.	12	26
Cambridge, Mass.		7	Providence, R. I.		2
Chicago, Ill.	18	58	Reading, Pa.	1	1
Chicopee, Mass.		1	Richmond, Va.		11
Cincinnati, Ohio.		7	Sacramento, Cal.		4
Cleveland, Ohio	11	10	Salem, Mass.		2
Dayton, Ohio		2	San Francisco, Cal.	4	
Elizabeth, N. J.		2	Schenectady, N. Y.	1	1
Evansville, Ind.		1	Springfield, Ill.		1
Everett, Mass.		2	Springfield, Mass.		3
Fall River, Mass.		6	South Bend, Ind.	1	
Fort Wayne, Ind.		1	South Omaha, Nebr.	1	
Harrisburg, Pa.		1	Spokane, Wash.		1
Hartford, Conn.		2	Toledo, Ohio		2
Homestead, Pa.		3	Waltham, Mass.		1
Jersey City, N. J.		8	Wheeling, W. Va.		1
Johnstown, Pa.		1	Williamsport, Pa.		2
Kalamazoo, Mich.	1	1	Wilmington, N. C.		2
Knoxville, Tenn.		2	Woburn, Mass.		2
Lancaster, Pa.	1		Yonkers, N. Y.		4
Logansport, Ind.		1	Zanesville, Ohio		1

POLIOMYELITIS (INFANTILE PARALYSIS).

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED OCT. 19, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.	1		Omaha, Nebr.	2	
Buffalo, N. Y.	6	3	Pasadena, Cal.	1	
Cambridge, Mass.	1		Philadelphia, Pa.		1
Cleveland, Ohio	2	1	Sacramento, Cal.	2	
Los Angeles, Cal.		1	San Diego, Cal.	2	1
Nanticoke, Pa.	2		Taunton, Mass.	1	1
New York, N. Y.	15	3	Worcester, Mass.	1	1
Northampton, Mass.	1		Yonkers, N. Y.	1	

BUFFALO, N. Y.

Asst. Surg. Leake reports: During the week ended November 2 no case of poliomyelitis was reported at Buffalo, the last case having been reported October 24 with onset October 22. It would thus appear that the epidemic has ceased, although occasional cases may be expected from time to time.

There have been investigated in Buffalo 288 cases of poliomyelitis occurring this year, of which 34 have been fatal—giving a case fatality rate of approximately 12 per cent.

TETANUS.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED OCT. 19, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Chicago, Ill.		2	Richmond, Va.		2
Pittsburgh, Pa.		2	Toledo, Ohio.		1
Portsmouth, Va.		1	Worcester, Mass.	1	

SMALLPOX IN THE UNITED STATES.

CITY REPORTS.

Cases and Deaths Reported by City Health Authorities for the Week Ended Oct. 19, 1912,

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Butte, Mont.	2		Niagara Falls, N. Y.	1	
Chicago, Ill.	1		Pittsburgh, Pa.	1	3
Detroit, Mich.	3		Rutland, Vt.	1	
Newburyport, Mass.	1		St. Louis, Mo.	1	
New Orleans, La.	2		Spokane, Wash.	4	

DALLAS, TEX.

The following statement relative to smallpox in Dallas during the period from July 1 to October 28, 1912, was received from Dr. A. W. Nash, city health officer:

Months.	Cases.	Deaths.
July	5	1
August	36	4
September	11	5
Oct. 1 to 28.	8	

STATE REPORTS.

This table is compiled from reports made to the Bureau of the United States Public Health Service by the health authorities of certain States and shows the number of cases of smallpox notified to the authorities in these States.

The following States report monthly: Arizona, California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Montana, New Jersey, New York, North Carolina, North Dakota, Oklahoma, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming.

Florida, Minnesota, and the District of Columbia report by weeks.

Reports Received During Week Ended Nov. 8, 1912.

Places.	Date.	Cases.	Deaths.	Remarks.
California:				
Counties—				
Alameda.....	Sept. 1-30.....	1		
Los Angeles.....	do.....	8	1	
Sacramento.....	do.....	3		
Sonoma.....	do.....	1		
Tehama.....	do.....	1		
Tuolumne.....	do.....	1		
San Francisco.....	do.....	14		
Total for State.....		29	1	
Indiana:				
Counties—				
Carroll.....	Sept. 1-30.....	1		
Greene.....	do.....	1		
Posey.....	do.....	1		
Vigo.....	do.....	1		
Total for State.....		4		
New York:				
Counties—				
Essex.....	Sept. 1-30.....	33		
Niagara.....	do.....	3		
St. Lawrence.....	do.....	1		
Saratoga.....	do.....	5		
Washington.....	do.....	1		
Total for State.....		43		
North Dakota:				
Counties—				
Bottineau.....	Sept. 1-30.....	3		
Cavalier.....	do.....	2		
Total for State.....		5		
Oklahoma:				
Counties—				
Beaver.....	July 1-31.....	2		
Canadian.....	do.....	6		
Total for State.....		8		
Pennsylvania.....				
	Aug. 1-31.....		10	
	Sept. 1-30.....	86		
South Dakota:				
Counties—				
Aurora.....	Oct. 1-30.....	3		
Brown.....	do.....	7		
Clark.....	do.....	1		
Faulk.....	do.....	2		
Hand.....	do.....	1		
Total.....		14		
Grand total.....		189	11	

MORBIDITY AND MORTALITY.

MORBIDITY AND MORTALITY TABLES FOR CERTAIN DISEASES, CITIES OF THE UNITED STATES, FOR WEEK ENDED OCT. 19, 1912.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.		Typhoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Cities having over 500,000 inhabitants.</i>												
Baltimore, Md.	558,485	178	35	2	2	15	36	30	44	4	4	4
Boston, Mass.	670,585	202	20	2	35	1	19	64	15	13	3	3
Chicago, Ill.	2,185,283	612	186	27	47	1	107	12	199	80	39	7
Cleveland, Ohio.	560,663	141	155	4	4	20	2	15	14	15	15	7
New York, N. Y.	4,766,883	1,243	307	13	64	1	85	5	388	143	85	18
Philadelphia, Pa.	1,549,008	425	60	3	48	1	41	2	53	44	20	7
Pittsburgh, Pa.	533,905	165	62	3	90	4	40	2	18	7	14	2
St. Louis, Mo.	687,029	189	47	6	9	15	28	20	18	2	18	2
<i>Cities having from 300,000 to 500,000 inhabitants.</i>												
Buffalo, N. Y.	423,715	137	14	45	1	8	16	11	11	2	1	1
Cincinnati, Ohio.	364,463	109	23	1	34	1	14	28	12	2	2	1
Detroit, Mich.	465,766	147	40	7	1	7	17	18	9	8	1	1
Los Angeles, Cal.	319,198	112	5	1	1	13	1	17	18	9	8	1
Milwaukee, Wis.	373,857	99	20	5	3	5	10	7	7	5	5	1
Newark, N. J.	347,469	90	21	3	1	8	37	7	5	5	5	1
New Orleans, La.	339,075	114	208	8	2	10	26	14	5	5	5	1
San Francisco, Cal.	416,912	137	11	1	2	21	10	6	6	1	1	1
<i>Cities having from 200,000 to 300,000 inhabitants.</i>												
Jersey City, N. J.	267,779	61	26	1	18	5	7	3	11	2	2	2
Providence, R. I.	224,326	58	26	1	18	5	7	3	11	2	2	2
<i>Cities having from 100,000 to 200,000 inhabitants.</i>												
Bridgeport, Conn.	102,054	24	1	8	2	2	2	3	3	3	3	3
Cambridge, Mass.	104,839	30	2	7	2	9	1	2	1	1	1	1
Dayton, Ohio.	116,577	26	38	4	2	2	2	1	2	1	1	1
Fall River, Mass.	119,295	31	5	1	1	5	1	2	2	3	3	3
Grand Rapids, Mich.	112,571	33	7	3	1	1	2	2	8	1	1	1
Lowell, Mass.	106,294	38	5	9	32	3	2	2	2	2	2	2
Nashville, Tenn.	110,364	40	4	1	6	7	5	2	2	2	2	2
Omaha, Nebr.	124,096	40	5	1	17	4	1	6	2	2	2	2
Richmond, Va.	127,628	58	9	1	1	4	7	6	2	2	2	2
Spokane, Wash.	104,402	49	1	3	10	2	1	3	3	3	3	3
Toledo, Ohio.	168,497	49	17	2	3	10	1	7	6	2	2	2
Worcester, Mass.	145,986	29	13	2	5	2	1	3	3	3	3	3
<i>Cities having from 50,000 to 100,000 inhabitants.</i>												
Altoona, Pa.	52,127	10	2	2	1	2	2	2	2	2	2	2
Bayonne, N. J.	55,545	20	5	4	1	2	2	2	2	2	2	2
Brockton, Mass.	56,878	5	1	1	2	7	1	2	2	2	2	2
Camden, N. J.	94,538	8	1	1	2	4	2	2	2	2	2	2
Elizabeth, N. J.	73,409	14	6	1	1	4	4	1	1	1	1	1
Evansville, Ind.	69,647	17	14	1	4	1	1	1	1	1	1	1
Fort Wayne, Ind.	63,933	20	3	1	2	2	2	1	3	3	3	3
Harrisburg, Pa.	64,186	21	13	1	1	5	4	1	1	1	1	1
Hartford, Conn.	98,915	30	13	1	8	5	4	4	4	4	4	4
Hoboken, N. J.	70,324	6	1	1	4	4	1	1	1	1	1	1
Johnstown, Pa.	55,482	14	18	1	1	2	1	1	1	1	1	1
Kansas City, Kans.	82,331	4	3	1	2	1	2	1	1	1	1	1
Lynn, Mass.	89,336	14	3	1	3	4	1	1	1	1	1	1
Manchester, N. H.	70,063	14	5	3	2	13	1	1	1	1	1	1
New Bedford, Mass.	96,652	42	1	3	2	13	1	2	2	2	2	2
Oklahoma City, Okla.	64,205	13	2	1	3	1	1	7	7	7	7	7
Passaic, N. J.	54,773	19	5	1	3	3	1	1	1	1	1	1
Pawtucket, R. I.	51,622	8	1	1	2	3	1	1	1	1	1	1
Peoria, Ill.	66,950	16	8	1	1	2	1	3	3	3	3	3
Reading, Pa.	96,071	23	6	1	1	1	1	3	5	5	5	5
Schenectady, N. Y.	72,826	17	2	1	4	3	1	1	1	1	1	1
South Bend, Ind.	53,684	17	5	3	1	1	1	1	1	1	1	1
Springfield, Ill.	51,678	20	8	3	1	4	2	2	2	2	2	2
Springfield, Mass.	88,926	20	7	1	1	4	2	1	1	1	1	1

MORBIDITY AND MORTALITY—Continued.

Morbidity and mortality table for certain diseases, cities of the United States, for week ended Oct. 19, 1912—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.		Ty- phoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Cities having from 50,000 to 100,000 inhabitants—Continued.</i>												
Trenton, N. J.	96,815	32	5		3		2		6	3		
Wilkes-Barre, Pa.	67,105	26	4		3	1	2		4		1	
Wilmington, Del.	87,411									2		
Yonkers, N. Y.	79,803	19	12	1					5		1	
<i>Cities having from 25,000 to 50,000 inhabitants.</i>												
Atlantic City, N. J.	46,150	7	1				1					1
Auburn, N. Y.	34,668	14			2		1					1
Aurora, Ill.	29,807	8	1									
Berkeley, Cal.	40,434	8	1							1		
Binghamton, N. Y.	48,443	8									3	
Brookline, Mass.	27,792	4	4									
Butte, Mont.	39,165	19					3			2		
Chelsea, Mass.	32,452	12	1	1	1				4		2	
Chicopee, Mass.	25,401	5	2		2		2	1				
Danville, Ill.	27,871	9	1		1		9	1				
East Orange, N. J.	34,371		1		1				3		1	
Elmira, N. Y.	37,176	11	3						1		12	1
Everett, Mass.	33,484	4					2					
Fitchburg, Mass.	37,828	11			1			1	1			
Haverhill, Mass.	44,115		1				3		1		1	
Kalamazoo, Mich.	39,437	14	3				1		2	1	2	
Knoxville, Tenn.	36,346	11	1							1		
La Crosse, Wis.	30,417	4										
Lancaster, Pa.	47,227		4				2		3			
Lexington, Ky.	35,009	8	7				1			1		
Lynchburg, Va.	29,494	14	5	1	1				1		4	1
Malden, Mass.	44,404	10	5		1		1		2	1		
Montgomery, Ala.	38,136	18	1	1	1				1		2	1
Mount Vernon, N. Y.	30,919		4						1			
Newcastle, Pa.	36,280		13				1				5	
Newport, Ky.	30,309	7	7				4		1	1		
Newton, Mass.	39,806	6					2		1			
Niagara Falls, N. Y.	30,445	10	3		1							
Norristown, Pa.	27,875	8	1		1				1		9	
Orange, N. J.	29,630	10	3		1				1			
Pasadena, Cal.	30,291	8							2	1		
Pittsfield, Mass.	32,121	7	6				1		1			1
Portsmouth, Va.	33,190	11	6				1			1		
Racine, Wis.	38,002	12	3				1					
Roanoke, Va.	34,874	11	6				4		3	2	11	2
Rockford, Ill.	45,401	17	3				1				8	1
Sacramento, Cal.	44,696	23								1	4	1
Salem, Mass.	43,697	18	2								1	1
San Diego, Cal.	39,578						1		1	1	1	
South Omaha, Nebr.	26,259	7										
Superior, Wis.	40,384	10	3							2		1
Taunton, Mass.	34,259	16	1				1			1		
Waltham, Mass.	27,834	10	2				1		1			
Wheeling, W. Va.	41,641	18	19				2		3	1		
Williamsport, Pa.	31,860	9	3								1	
Wilmington, N. C.	25,748	12	2				2				3	3
York, Pa.	44,750	2	2		9				1		3	1
Zanesville, Ohio	28,026	6	9								1	
<i>Cities having less than 25,000 inhabitants.</i>												
Alameda, Cal.	23,833	5										
Ann Arbor, Mich.	14,817	7	1				1					
Beaver Falls, Pa.	12,191		1								1	
Biddeford, Me.	17,079	1										
Braddock, Pa.	17,759		3		3		3		2		2	
Cambridge, Ohio.	11,327	4					3				1	
Clinton, Mass.		2	1									

17 cases imported.

MORBIDITY AND MORTALITY—Continued.

Morbidity and mortality table for certain diseases, cities of the United States, for week ended Oct. 19, 1912—Continued.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.		Typhoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Cities having less than 25,000 inhabitants—Continued.</i>												
Coffeyville, Kans.....	12,687											1
Columbus, Ga.....	20,554	5										
Columbus, Ind.....		3	7									1
Concord, N. H.....	21,497	9								1		
Cumberland, Md.....	21,839	6					5		1			3
Dunkirk, N. Y.....		4										2
Galesburg, Ill.....	22,039	2										
Harrison, N. J.....	14,498	5	1									
Homestead, Pa.....	18,710	9	5		3		1					
Kearny, N. J.....	18,659	1	3		1		1		1			
La Fayette, Ind.....	20,081	4								2		
Logansport, Ind.....		7	1				1					
Marinette, Wis.....	14,610	3										1
Marlboro, Mass.....	14,749	4		1								
Massillon, Ohio.....	23,830	2										
Medford, Mass.....	23,150	5										
Moline, Ill.....	24,190	10								1		2
Montclair, N. J.....	21,450	6							2			
Morristown, N. J.....	12,507	6	1	1					1	1		2
Nanticoke, Pa.....	18,857	6	1						1			
Newburyport, Mass.....	19,240	2										
North Adams, Mass.....	22,019	12										
Northampton, Mass.....	19,431	7							3			
Ottumwa, Iowa.....	22,012	5			1		7			1		1
Plainfield, N. J.....	23,550	10							2			
Pottstown, Pa.....	15,599	6										1
Saratoga Springs, N. Y.....		1										
South Bethlehem, Pa.....		8	5									
Steelton, Pa.....	14,476	2	1		1					1		
Warren, Pa.....	11,080	1			1							2
Wilksburg, Pa.....	11,080	5			11							1
Woburn, Mass.....	18,594	6								1		

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

NORTH DAKOTA.—Month of September, 1912. Population 577,056. Total number of deaths from all causes 209, including scarlet fever 2. Cases reported: Diphtheria 20, measles 8, scarlet fever 2, smallpox 5, tuberculosis 4, typhoid fever 12.

PENNSYLVANIA—Mortality.—Month of August, 1912. Population 7,665,111. Total number of deaths from all causes 9,155, including typhoid fever 121, scarlet fever 38, diphtheria 111, measles 39, whoopingcough 85, smallpox 10, influenza 16, malaria 5, tuberculosis of lungs 616, tuberculosis of other organs 121, cancer 472, diabetes 50, meningitis 49, poliomyelitis 11, pneumonia 379, diarrhea and enteritis, under 2 years, 1,603; diarrhea and enteritis, over 2 years, 224; Bright's disease and nephritis 538, early infancy 712, suicide 65, accidents in mines 116, railway injuries 115, other forms of violence 486, all other diseases 3,213.

Morbidity.—Month of September, 1912. The total number of cases of communicable diseases reported was 6,372, distributed as follows: Poliomyelitis 56, cerebrospinal meningitis 13, chickenpox 162, diphtheria 1,466, epidemic dysentery 3, erysipelas 54, German measles 9, malarial fever 24, measles 1,012, mumps 91, pneumonia 175, puerperal fever 4, rabies 1, scarlet fever 543, smallpox 86, tetanus 16, trachoma 2, trichiniasis 5, tuberculosis 921, typhoid fever 1,126, whoopingcough 603.

OKLAHOMA.—Month of July, 1912. Population 1,657,155. Total number of deaths from all causes 772, including scarlet fever 1, tuberculosis 61, typhoid fever 44, Cases reported: Diphtheria 11, scarlet fever 17, smallpox 8, tuberculosis 102, typhoid fever 308.

FOREIGN AND INSULAR.

CUBA.

Habana—Examination of Rats.

During the week ended October 19, 1912, there were examined at Habana for plague infection 646 rats. No plague-infected rat was found.

ECUADOR.

Plague and Yellow Fever.

Passed Asst. Surg. Parker reports: During the period from October 1 to 15, 1912, there were reported at Guayaquil 26 new cases of plague with 10 deaths and 2 cases of yellow fever with 1 death. On the sugar plantations in Naranjito a small epidemic was reported, with 7 cases, of which 4 were fatal.

ITALY.

Examination of Emigrants.

Passed Asst. Surg. Robinson at Naples reports:

Vessels inspected at Naples, Messina, and Palermo, week ended October 12.

NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
Oct. 8	Sant' Anna.....	New York.....	550	110	750
9	America.....	do.....	1,291	260	1,680
9	San Guglielmo.....	do.....			
11	König Albert.....	do.....	1,130	190	1,750
11	Pasquale Lauro.....	Pensacola.....			
12	San Guglielmo.....	New York.....	882	280	1,320
	Total.....		3,853	840	5,500

MESSINA.

Oct. 9	Lucia.....	New York.....			
10	San Guglielmo.....	do.....	147	320	250

PALERMO.

Oct. 8	America.....	New York.....	453	360	250
9	Sant' Anna.....	do.....	598	500	600
10	Lucia.....	do.....			
10	Patrie.....	do.....			
11	San Guglielmo.....	do.....	487	200	480
	Total.....		1,538	1,060	1,330

Cholera.

From September 27 to 29, 1912, there were reported in Cagliari, Island of Sardinia, 4 cases of cholera with 3 deaths.

Typhus Fever.

Typhus fever has been reported in Italy as follows: Catania, two weeks ended October 11, 1912, 3 deaths; Leghorn, two weeks ended October 12, 1912, 4 deaths.

JAPAN.**Circular on Account of Cholera.**

The following circular relative to detention of passengers on vessels destined to United States ports was issued by Surg. Irwin at Yokohama:

AMERICAN CONSULATE,
Yokohama, October 11, 1912.

Circular letter to agents, owners, and masters of vessels requiring bills of health from this office.

GENTLEMEN: Beginning October 13 all second class and steerage passengers will be required to undergo five days' detention under observation before sailing to American ports.

Respectfully,

FAIRFAX IRWIN,
Surgeon.

JAVA.**Ports Declared Cholera-Infected.**

Consul Rairden at Batavia reports: The ports of Batavia and Tandjok Priok (the harbor of Batavia) were declared September 10, 1912, to be cholera-infected.

MEXICO.**Yellow Fever.**

During the week ended October 19, 1912, there were reported at San Juan Bautista, State of Tabasco, 2 new cases of yellow fever with 2 deaths, and during the week ended October 21, 1 new case. On November 3 a new case was reported at San Juan Bautista and 2 new cases were reported at Comalcalco. On November 4, 1 case of yellow fever was reported at Merida.

Typhus Fever.

Typhus fever has been reported in Mexico as follows: Aguascalientes, week ended September 29, 2 deaths; week ended October 20, 1 death. Mexico City, 3 weeks ended September 7, 126 cases with 14 deaths; two weeks ended September 28, 57 cases with 8 deaths.

PORTO RICO.**Plague Situation.**

Passed Asst. Surg. Creel reports:

Rats examined October 12 to 19, 1912.

Places.	Rats examined.	Rats found infected.
All Porto Rico.....	1,193	12
San Juan municipality:		
San Juan.....	143	.....
Puerta de Tierra.....	33	.....
Santurce.....	279	.....

A summary of the plague situation to October 12, 1912, including human and rodent cases, reported or discovered, was as follows: Rats examined, 24,052; rats found infected, 63; human cases, 56; deaths, 36.

VENEZUELA.

Plague and Yellow Fever.

A case of plague was reported at La Guaira November 1, 1912.

Acting Asst. Surg. Stewart at La Guaira, reports: Two cases of yellow fever were reported at Maiquetia October 2, and on October 5 one case was reported. At Caracas; during the period from October 1 to 10, there were reported two cases of yellow fever, both originating in the city.

MOVEMENTS OF INFECTED VESSELS.¹

CHOLERA.

Russian vessel, Nagasaki, Japan, August 10 and 13, 1912, 2 cases of cholera in personnel of vessel. (Name of vessel and its itinerary not given.)

Otaru Maru, Nagasaki, Japan, August 23, 1912, from Shanghai, 1 case of cholera in crew.

Kuchinotsu, Japan, August 29, 1912, from Shanghai, via Nagasaki, 1 case of cholera on board.

Yokohama Maru, Moji, Japan, August 21, 1912, from Hongkong, August 13, via Shanghai August 18, 1 case of cholera in the person of a first-class passenger; August 29 another case on board.

Mexico Maru, Moji, Japan, August 29, 1912, from Hongkong August 17, via Shanghai, 4 cases of cholera on board.

Penza, Nagasaki, Japan, August 29, 1912, from Shanghai, 1 case of cholera on board.

Seiun Maru, Nagasaki, Japan, August 29, 1912, from Shanghai, 4 cases of cholera on board.

Nitsusho Maru, Dairen, China, August 23, 1912, from Shanghai, 3 cases of cholera on board.

Kobe, Japan, August 28, 1912, from Shanghai, via Dairen, 3 cases of cholera on board.

Kobe Maru, Dairen, China, August 23, 1912, from Shanghai, 1 case of cholera on board.

PLAGUE.

India, Aden, Arabia, July 1, 1912, from Bombay, June 22, 1 case of plague on board.

Guillermite, Arroyo, Porto Rico, July 2, 1912, from San Juan, 1 case of plague on board.

Ezan Maru, at sea, July 15 to 20, 1912, from Miike to Hongkong, 3 cases of plague on board.

Amphitrite, Trieste, Austria, July 14 to 25, 1912, from Mersina, via Port Said and Alexandria, 2 cases of plague on board.

Bellaïlsa, Hamburg, Germany, September 2 to 5, 1912, from Rosario, July 2, via Cape Verde Islands, 2 cases of plague in crew. River Tyne, September 28, 1912, from Hamburg, 1 case of plague in crew.

¹ Reported since July 1, 1912.

YELLOW FEVER.

Chile, Panama, Canal Zone, July 14, 1912, from Guayaquil, 1 case of yellow fever on board.

Valkyrien, Frontera, Mexico, August 19 to 21, 1912, from Maracaibo, June 18, 2 cases of yellow fever on board.

Puebla, Laguna del Carmen, Mexico, September 14, 1912, from Vera Cruz and other Mexican ports, 1 case of yellow fever on board.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Nov. 8, 1912.

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

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	Sept. 22-28.....	4	2	
Madras.....	do.....	10	7	
Italy:				
Cagliari.....	Sept. 27-29.....	4	3	
Japan:				
Chosen (Korea):				
Chemulpo.....	Sept. 19.....	1		
Seoul.....	do.....	1	1	
Fukuoka ken.....				Sept. 28-Oct. 1, 42 cases.
Kobe.....	Oct. 1-6.....	3	3	
Milke.....	Sept. 8-15.....	16	13	
Shimabara.....	To Sept. 15.....	3	1	
Shimonoseki.....	do.....		13	
Yamaguchi ken.....				Sept. 28-Oct. 1, 16 cases.
Other districts.....				Sept. 28-Oct. 1, 86 cases.
Yokohama.....	Oct. 1-6.....	5	5	
Wakamatsu.....	To Sept. 15.....	68	21	
Siam:				
Bangkok.....	Aug. 28-Sept. 14.....		9	
Zanzibar.....	Sept. 15-30.....	6	3	

YELLOW FEVER.

Ecuador:				
Guayaquil.....	Sept. 1-30.....	4	4	
Milagro.....	Sept. 16-30.....	1		
Naranjito.....	Sept. 1-30.....	7	2	
Mexico:				
Tabasco—				
Comalcalco.....	Nov. 3.....	2		
Merida.....	Nov. 4.....	1		
San Juan Bautista.....	Oct. 13-Nov. 3.....	4	2	
Venezuela:				
Caracas.....	Oct. 1-10.....	2		
Maiquetia.....	Oct. 2-5.....	3		

PLAGUE.

Brazil:				
Rio de Janeiro.....	Sept. 30-Oct. 5.....	2		
British East Africa:				
Mombasa.....	Sept. 1-15.....	4	3	
Nairobi.....	do.....	2		
Ecuador:				
Guayaquil.....	Sept. 1-30.....	40	15	
Egypt:				
Alexandria.....	Sept. 28-Oct. 6.....	3	3	
Port Said.....	To Aug. 28.....		1	Not previously reported.
Provinces—				
Behera.....	Aug. 12-Oct. 7.....	3	1	
Gharbieh.....	Sept. 25-Oct. 9.....	2		
Menouf.....	Aug. 31-Sept. 30.....	5	1	

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

Reports Received during week ended Nov. 8, 1912.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	Sept. 22-28.....	8	7	
Karachi.....	do.....	2	2	
Provinces.....				
				Total Aug. 3-30: Cases, 3,244; deaths, 2,332.
Bombay.....	Aug. 10-31.....	1,574	1,065	
Madras.....	do.....	312	227	
Bengal.....	do.....	19	19	
Bihar and Orissa.....	do.....	151	116	
United Provinces.....	do.....	158	128	
Punjab.....	do.....	24	10	
Burma.....	do.....	256	241	
Mysore state.....	do.....	613	439	
Hyderabad.....	do.....	137	87	
Venezuela:				
La Guaira.....	Nov. 4.....	1		

SMALLPOX.

Austria-Hungary:				
Galicia.....	Sept. 22-28.....	2		
Brazil:				
Rio de Janeiro.....	Sept. 15-Oct. 5.....	17		
Canada:				
Montreal.....	Oct. 19-26.....	3		
Egypt:				
Alexandria.....	Oct. 1-7.....	1		
Honduras:				
San Pedro.....	Oct. 14.....	1		
India:				
Madras.....	Sept. 22-28.....	10	7	
Italy:				
Naples.....	Oct. 6-12.....	2	1	
Mexico:				
Mazatlan.....	Oct. 16-22.....		2	
Portugal:				
Lisbon.....	Oct. 6-12.....	1		
Russia:				
Moscow.....	Sept. 8-14.....		1	
Riga.....	July 1-31.....		1	
Siam:				
Bangkok.....	Aug. 28-Sept. 14.....		3	
Straits Settlements:				
Singapore.....	Sept. 8-14.....	1		
Switzerland:				
Basel.....	Oct. 6-12.....	4		
Turkey in Europe:				
Constantinople.....	Oct. 6-12.....		24	
Union of South Africa:				
Johannesburg.....	Aug. 16-31.....	22		
Zanzibar.....	Sept. 15-30.....	1	1	

Reports received from June 29 to Nov. 1, 1912.

[For reports received from Dec. 30, 1911, to June 28, 1912, see PUBLIC HEALTH REPORTS for June 28, 1912. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

CHOLERA.

Austria-Hungary:				
Hungary—				
Csongrad, district	July 17-22.....	1	1	
Mindszent.				
Ceylon:				
Colombo.....	May 19-25.....	1		In the port.
China:				
Amoy.....	June 16-Aug. 24...	12	60	June 1-20, present in vicinity.
Dalny.....				Aug. 23-29, 3 cases on s. s. Nitsusho Maru and 1 case on s. s. Kobe Maru from Shanghai.

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

Reports Received from June 29 to Nov. 1, 1912.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Hankow	Sept. 15-21	4	1	
Hohow				July 5, 15 to 20 deaths daily; Aug. 3, decreasing. The seaport of the island of Hainan.
Nanking	Aug. 29	14	1	Among Europeans. Endemic.
Pechuia	Sept. 9	14		30 to 40 deaths daily; 15 miles from Amoy.
Shanghai	July 15-Sept. 25	20	8	Among Europeans. Among natives increasing to end of August.
Swatow	July 20-Aug. 5		41	July 20-25, 3 cases, 1 death among Europeans. Among Europeans June 1-22, sporadic cases occurring in the port.
Dutch East Indies:				
Java—				
Batavia	June 16-Sept. 14	42	35	Sept. 14, 5 cases among Europeans.
Rembang, Province	May 31-June 6	1	2	
Surabaya	Mar. 28-June 18	14	8	
Sumatra—				
Padangsche, Upperland Section Agam.	May 26-June 22	37	35	
Tapanoeli, Province	July 11			Present.
India:				
Bassein	May 5-July 20	35	26	
Bombay	May 19-Sept. 21	1,883	1,471	
Calcutta	May 5-Aug. 31		501	Apr. 21-27, 87 deaths. Received out of date.
Karachi	Aug. 14-Sept. 14	140	65	Report of deaths incomplete; nearly all cases fatal.
Madras	May 19-Sept. 21	202	151	Madras Presidency, May 1-June 31: Cases, 47,447; deaths, 25,591.
Maulmain	May 5-Aug. 17	22	22	
Rangoon	Apr. 1-July 31	99	70	
Indo-China:				
Saigon	May 14-Aug. 12	624	505	
Italy:				
Sardinia—				
Cagliari	Aug. 14-Sept. 24	51	15	
Japan				
Ehime ken.	Sept. 21-27	5		Total to Sept. 27: Cases, 610. To Sept. 27, 29.
Formosa				Total June 16-Aug. 31: 65 cases, 34 deaths.
Kelung	June 27			Epidemic.
Fukuoka ken.	do.	23		To Sept. 27, 344.
Hiroshima ken.	do.	1		To Sept. 27, 7.
Hyogo ken.	do.			To Sept. 27, 7, including Kobe.
Kobe.	Sept. 15-29	13	7	Aug. 28, 3 cases on s. s. Nitsusho Maru. Sept. 12-18, 2 cases, 1 death in the suburbs.
Kagoshima ken.	Sept. 21-27			To Sept. 27, 3.
Kanagawa ken.				
Yokohama.	Oct. 2	4		
Kiushiu.				
Kuchinotsu				Aug. 21-29, 1 case on s. s. Otaru Maru from Shanghai.
Miike	Sept. 1-7	4		
Mitsui coal mines.	Sept. 23			Present.
Moji.	Sept. 1-7	7	2	Aug. 21-29, 2 cases on s. s. Yokohama Maru, and 4 cases on s. s. Mexico Maru from Shanghai. Total to Sept. 23, 141 cases.
Wakamatsu	Sept. 7	1		
Kumamoto ken.	Sept. 21-27			To Sept. 27, 2.
Kyoto fu.	do.	5		
Kyoto	Sept. 10-19	4	2	
Miyako Islands	July 10	81		
Nagasaki ken.	Sept. 21-27	4		
Nagasaki.				To Sept. 27, 14.
Oita ken.	Sept. 21-27	1		Aug. 10-13, 2 cases among the personnel of vessel of the Russian volunteer fleet. Aug. 21-29, 1 case on s. s. Penza, 4 cases on s. s. Seiun Maru, and 1 case on s. s. Otaru Maru from Shanghai.
Okayama ken.	do.			To Sept. 27, 4.
				To Sept. 27, 2.

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

Reports Received from June 29 to Nov 1, 1912.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Japan—Continued.				
Osaka fu.....	.....do.....	4		To Sept. 27, 27, including Osaka for same period.
Osaka.....	Sept. 11-25.....	24	19	
Saga ken.....	Sept. 21-27.....			To Sept. 27, 1.
Shimonoseki.....	Sept. 23.....	40		
Tokyo fu.....	.....do.....	4		To Sept. 27, 8.
Tokyo.....	Sept. 24-30.....	24		
Do.....	Oct. 2-4.....	2		
Yamaguchi ken.....	Sept. 21-27.....	17		To Sept. 27, 157.
Russian Empire:				
Astrakhan.....	June 11-July 27...	6	2	
Siam:				
Bangkok.....	Apr. 21-Aug. 27.....		1,017	
Straits Settlements:				
Singapore.....	May 12-Sept. 7.....	60	54	
Turkey in Asia:				
Beirut.....	Aug. 6-Sept. 22.....	15	9	
Damascus.....	July 18-Oct. 4.....	327	260	And vicinity.
Provinces—				
Adana—				
Adana.....	May 14-Aug. 1.....	17	12	
Ak Keupru.....	Apr. 8-June 13.....	12	6	
Ayas.....	June 11-24.....	12	4	
Bor.....	May 28-Aug. 10.....	24	23	
Deurt Yol.....	Sept. 16-22.....	7	4	
Djihan.....	May 28-June 15.....	11	1	
Dorach Bache.....	.....do.....	4	5	
Nigde.....	June 15-Aug. 24.....	72	80	
Onla Kichla.....	May 28-July 6.....	5	10	
Sis.....	May 28-June 15.....	5	5	
Tarsus.....	May 28-June 24.....	10	3	
Aleppo—				
Aleppo.....	May 19-Aug. 31.....	305	267	
Alexandretta.....	May 28-Aug. 1.....	8	3	
Amk.....	July 1-6.....	5	4	
Aintab.....	July 1-Sept. 21.....	17	22	
Antioch.....	Apr. 17-Aug. 6.....	26	26	
Arka.....	Apr. 17.....	10	4	
Bilan.....	Sept. 8-15.....	7		
Djisri-Chougour.....	June 23-Sept. 7.....	17	5	
Delbeston.....	July 23-Sept. 15.....	11	2	
Gisser.....	July 7-13.....	13	6	
Harem.....	June 23-July 22.....	47	33	
Hersem.....	July 1-6.....	5	4	
Idlib.....	June 23-July 8.....	6	5	
Keudige.....	June 23-29.....	4		
Killis.....	June 16-Sept. 7.....	40	21	
Kiriqiu.....	July 14-22.....	2	2	
Marach.....	June 15-Sept. 7.....	212	103	
Ourfa.....	Aug. 20-Sept. 22.....	25	33	
Reca.....	Aug. 23-Sept. 22.....	19	12	
Sarenda.....	July 1-6.....	7	6	
Talacrin.....	.....do.....	3	3	
Angora—				
Cehissar.....	June 10-July 29.....	3	8	
Iskilib.....	Aug. 26-Sept. 7.....	4		
Nehie-Tomarza.....	July 29-Aug. 6.....	16	6	
Sandal.....	June 28-July 5.....	4	9	
Ufkure.....	Sept. 9-22.....	13	13	
Diarbekir.....	Aug. 21-Sept. 22.....	5	7	
Viran-C'ehir.....	.....do.....	11	10	
Erzeroum—				
Hassan-Mansour.....	July 31-Sept. 7.....	25	11	
Hejaz—				
Mekka.....	Sept. 26.....			Present among troops and pilgrims.
Konia—				
Ergeli.....	June 18-Sept. 7.....	84	54	
New Chehir.....	July 30-Sept. 22.....	117	75	
Oulou-Kichla.....	Sept. 15.....	4	2	
Mersina.....	June 9-July 28.....	40	33	
Severek.....	Aug. 14-17.....	3	8	
Smyrna—				
Smyrna.....	Sept. 1-15.....		1	
Syria.....	July 19-Sept. 22.....	37	43	
Latakia.....	Aug. 31-Sept. 7.....		2	
Tarsus.....	June 25-July 9.....	11	16	

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

Reports Received from June 29 to Nov. 1, 1912.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Straits Settlements:				
Singapore.....	Aug. 25-31.....	1	1	
Zanzibar.....	Aug. 5-Sept. 7.....	79	56	Outbreak in the native prison. Only 1 case in the city. Including Aug. 5-Sept. 7, 15 cases at Mvera, 4 at Bububu, 1 at Mtoni, 6 among prisoners, 2 at N'Gambo district, 9 at Kibonde-Mzungu, 2 in Fuoni, and 4 in Walezo.

YELLOW FEVER.

Brazil:				
Ceara.....	July 1-31.....	1		
Manaos.....	June 2-Oct. 5.....		32	
Pernambuco.....	Apr. 16-July 15.....		12	
Chile:				
Toco district.....	May 1-16.....	62	17	
Tocopilla.....	May 1-June 17.....	502	195	Total Jan. 28-June 17: Cases 1,072; deaths, 374, including report, p. 1058, Pt. I.
Colombia:				
Baranquilla.....	July 14-20.....		1	From up Magdalena River.
Dahomey:				
Abomey.....	May 25-June 5.....	6	3	
Porto Novo.....	June 13.....		1	
Ecuador:				
Bucay.....	June 1-15.....	1		
Chobo.....	June 15-30.....	2	1	
Duran.....	May 1-June 30.....	2	1	
Guayaquil.....	May 1-Aug. 31.....	45	29	Report for July not received.
Milagro.....	May 16-June 30.....	10	6	
Naranjito.....	May 1-Aug. 31.....	9	5	
Yaguachi.....	May 16-June 30.....	2	1	
Mexico:				
Campeche—				
Carmen.....	Sept. 6-29.....	2	2	The fatal case Sept. 6 on s. s. Puebla. From Vera Cruz and other Mexican ports.
Tabasco.....	Oct. 11.....		2	
Cardenas.....	Oct. 16.....			Present.
Comalcalco.....	Sept. 28-Oct. 9.....	2		
Cunduacan.....	Oct. 12.....	1		
Huimanguillo.....	Oct. 11.....	1		
Frontera.....	Aug. 31-Oct. 11.....	10	3	Aug. 19-21, 2 cases and 1 death on the Swedish schooner Valkyrien.
Jalapa.....	Oct. 11.....	1		
San Juan Bautista.....	June 23-Oct. 11.....	32	8	Total May 4-Oct. 11: Cases, 54; deaths, 23, including previous reports.
Yucatan—				
Espita.....	Aug. 25-30.....	1		
Merida.....	July 14-Sept. 22.....	3	2	Total Aug. 1, 1911, to Sept. 22: Cases, 71; deaths, 33, including previous reports. The 2 cases July 16-22 from Motul, 29 miles distant.
Canal Zone:				
Panama.....	July 14.....	1	1	At Santo Tomas Hospital, from s. s. Chile from Guayaquil.
Peru:				
Iquitos.....	Jan. 1-May 31.....		42	Endemic. Year 1908, deaths, 11; 1910, 1; 1911, 76.
Do.....	July 1-31.....		1	
Venezuela:				
Caracas.....	May 1-Aug. 31.....		10	July 22, 3 cases from El Valle; 1 case from Villa de Cura, about 29 miles distant; and to July 31, 2 other cases, Caracas, Aug. 31, 1 case. Total Jan. 1-Aug. 31: Cases, 41; deaths 19, including previous reports. Sept. 24, 1 case from Cua; Sept. 26, 1 case from Ocumare. Year 1911: Cases 172, deaths 107.

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

Reports Received from June 29 to Nov. 1, 1912.

YELLOW FEVER—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Venezuela—Continued.				
Cua.....	July 20.....			Present.
La Guira.....	May 1.....	1		
La Victoria.....				Endemic. July 20, present.
Mar. to.....	June 1.....	1	1	
Maiquetia.....	June 17-Sept. 20.....	9	5	
Victoria.....	Oct. 1.....			Present.

PLAGUE.

Algeria:				
Algiers.....	July 12.....		1	In Hospital El Kettar, in vicinity. Pneumonic.
Le Ruisseau.....	July 9-13.....		5	4 miles from Algiers. Pneumonic.
Arabia:				
Aden.....	July 1.....		1	From s. s. India.
Oman—				
Maskat.....	June 1-22.....	1		
Argentina:				
Buenos Aires.....	Oct. 7.....		3	Outbreak occurred in cancer section, clinical hospital.
Austria-Hungary:				
Trieste.....	July 14-25.....	2		In isolation hospital from s. s. Amphitrite from Mersina via Port Said and Alexandria.
Azores:				
Terceira.....	Sept. 11-25.....	8	3	
Brazil:				
Nitheroy.....	Mar. 25.....	8	2	
Pernambuco.....	Aug. 16-31.....		1	
Rio de Janeiro.....	June 23-29.....	1		
British East Africa:				
Mombasa.....	Oct. 27.....			Present.
Chile:				
Iquique.....	May 26-Sept. 21.....	26	13	
China.....				May 18-June 15, present in the magistracies of Fungshun, Cayung, and Puning.
Amoy.....	May 20-Aug. 24.....		307	May 20-June 1, 46 cases.
Ampo.....	May 18-June 29.....			Present.
Canton.....	July 1-10.....			May 18, present. 45 cases daily. Mainly among children.
Chefu.....	June 2-8.....			2 deaths on s. s. Cheongshing between Tientsin and Taku.
Eng. Chhun.....	July 6.....			Present. 100 miles inland from Amoy, and prevalent in the surrounding country.
Hongkong.....	May 12-Sept. 14.....	1,393	1,144	
Packhoi.....	May 1-29.....		35	
Tientsin.....	June 2-8.....	1	1	From s. s. Cheongshing from Hongkong.
Wenchang.....	June 4.....			On the island of Hainan, 10 to 20 cases daily.
Cuba:				
Habana.....	July 4-27.....	3	2	
Dutch East Indies:				
Java—				
Paseroean Residency.....	May 12-Aug. 3.....	203	198	
Provinces—				
Kediri.....	Mar. 31-July 31.....	8	5	
Madioen.....	Mar. 31-Aug. 3.....	37	37	
Ecuador:				
Guayaquil.....	May 1-Aug. 31.....	23	10	Report for July not received.
Egypt.....				Total, Jan. 1-Sept. 15: Cases 813; deaths, 406, including report, p. 1059, Pt. I.
Alexandria.....	May 27-Sept. 27.....	21	5	
Port Said.....	May 29-Aug. 26.....	8	1	
Provinces—				
Assiout.....	May 25-Aug. 27.....	16	7	
Behera.....	July 31-Aug. 11.....	2		
Beni Souef.....	May 30-July 28.....	13	10	
Charkieh.....	Apr. 28-Sept. 2.....	12	4	
Dakahlia.....	Aug. 8.....	1	1	
Fayoum.....	Apr. 28-Aug. 1.....	50	26	
Galioubeh.....	Apr. 23-Sept. 15.....	4		

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

Reports Received from June 29 to Nov. 1, 1912.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Egypt—Continued.				
Provinces—Continued.				
Garbieh.....	Aug. 27—Sept. 24...	17	3	
Girgeh.....	May 26—Aug. 6....	52	42	
Minieh.....	May 27—Sept. 9....	40	12	
Germany:				
Hamburg.....				Sept. 2-5, 2 cases on s. s. Bellailsa from Rosario via Cape Verde Islands.
Great Britain:				
Liverpool.....	July 26.....	1		
River Tyne Port Sanitary District.	Sept. 10-16.....	1	1	From s. s. Bellailsa from Rosario via Hamburg.
Hawaii:				
Pepeekeo.....	Sept. 13.....	1	1	
India:				
Bombay.....	May 19—Sept. 21....	386	313	
Calcutta.....	Apr. 21—Aug. 31....		475	
Karachi.....	Apr. 1—Sept. 14....	62	61	
Rangoon.....	Apr. 1—July 31....	301	280	
Bombay Presidency and Sind.	Apr. 21—Aug. 3....	2,542	1,988	
Madras Presidency.....	do.....	297	225	
Bengal.....	do.....	602	592	
Bihar and Orissa.....	do.....	5,412	4,712	
United Provinces.....	do.....	7,436	6,933	
Punjab.....	do.....	15,922	13,107	
Burma.....	do.....	708	670	
Central Provinces.....	do.....	284	238	
Mysore State.....	do.....	475	333	
Hyderabad State.....	do.....	219	176	
Central India.....	Apr. 21—May 25....	276	227	
Rajputana and Ajmere Merwara.	Apr. 21—June 29...	570	474	
Kashmir.....	Apr. 21—Aug. 3....	290	172	Total for India, Apr. 21—Aug. 3: Cases, 35,103; deaths, 30,847.
Indo-China:				
Saigon.....	May 14—Aug. 12....	57	41	
Japan:				
Formosa.....	Apr. 22—Aug. 17....	97	69	
Mauritius.....	Apr. 7—Aug. 8....	52	18	
Morocco:				
Casablanca.....	Sept. 12-29.....	11	1	To Sept. 29, 5 cases were among Europeans.
Persia:				
Bushir.....	May 12—June 15....	130	116	Total Feb. 4—June 15: Cases, 1,045; deaths, 719, including report, p. 1060, Pt. I. June 1-7, on the route to Shiras, 4 fatal cases. Year 1911: Cases, 879; deaths, 426. July 6, 1 fatal case.
Peru:				
Callao.....				
Trujillo.....	Oct. 1.....	2		
Philippine Islands:				
Iloilo.....	July 5—Sept. 7....	7	7	
Manila.....	June 14—Aug. 24....	7	7	
Mariaves quarantine station.	Apr. 30—May 7....	1	1	From s. s. Taisan from Amoy.
Porto Rico:				
Arroyo.....	June 22.....	1		Total June 14—Sept. 14: Cases, 57; deaths, 36.
Carolina.....	June 25—July 19....	2	2	On the schooner Guillermito, from San Juan.
Dorado.....	July 15.....	1	1	
Loiza.....	June 28.....	1	1	
San Juan.....	June 21—Sept. 11....	26	17	Total June 14—Sept. 11: Cases, 38; deaths, 17.
Santurce.....	June 22—Aug. 5....	13	3	
Russian Empire:				
Astrakhan government.				
Libistchensky district.				Total July 4—Sept. 8: Cases, 55; deaths, 41. Sept. 16, free.
Balaptubek.....	May 15—June 2....	2	2	
Karabas.....	May 15—June 16....	13	12	
Kudeymula.....	May 27—June 16....	5	5	
Tchernoyarsk.....	July 1—Sept. 8....	32	24	Including previous report.
Tsarevsk district.	July 29—Sept. 8....	17	13	
Djanibek.....	Aug. 21—Sept. 8....	6	4	
Ural—				
Tschelirtinsky.....	May 20—June 16....	13	11	

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

Reports Received from June 29 to Nov. 1, 1912.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Siam:				
Bangkok.....	Apr. 21-July 13.....		2	
South Africa:				
Durban.....				Jan. 14-June 21: Cases, 32; deaths, 26, including report, p. 1060, Pt. I.
Straits Settlements:				
Kwala Lampour.....	Apr. 15.....	3	1	
Singapore.....	May 5-July 20.....	17	11	Sept. 1-7, 1 fatal case.
Turkey in Asia:				
Adalia.....	May 28-July 6.....	3	3	
Basra.....	May 20.....	1	1	
Hiddah.....	May 18.....	1		
West Indies:				
Trinidad.....				Total Apr. 1-June 13: Cases, 11; deaths, 7; including report, p. 1060, Pt. I: 3 of these cases were in Tunapuna.
Do.....	July 2-11.....	2		
Venezuela:				
Caracas.....	June 1-Aug. 16.....	5	4	
At sea.....	July 15-20.....	2		On s. s. Ezan Maru en route from Miike, Japan, to Hongkong.

SMALLPOX.

Abyssinia:				
Adis Ababa.....	Sept. 7.....			Prevalent.
Algeria:				
Departments—				
Algiers.....	Jan. 1-July 31.....	33		
Constantine.....	Apr. 1-Aug. 31.....	87		
Oran.....	May 1-Aug. 31.....	31		
Arabia:				
Aden.....	June 18-24.....		1	
Argentina:				
Buenos Aires.....	June 1-30.....		1	
Australia:				
Fremantle quarantine station.....	Apr. 19.....	1		From s. s. Malwa from London via Colombo.
Townsville.....	May 24.....			1 case on s. s. Yawata Maru from Japan.
Austria-Hungary:				
Bohemia.....	May 12-Sept. 21.....	25		
Galicia.....	May 12-Sept. 7.....	23		
Vienna.....	July 14-Aug. 3.....	1		
Brazil:				
Pernambuco.....	Apr. 16-Sept. 15.....		252	
Rio de Janeiro.....	May 19-Sept. 14.....	28	6	
British East Africa:				
Mombasa.....	May 1-July 31.....	11	2	
Canada:				
Provinces—				
British Columbia—				
Vancouver.....	July 14-20.....	1		
Nova Scotia—				
Halifax.....	July 7-13.....	1		
Ontario—				
Ottawa.....	June 9-15.....	1		
Toronto.....	Oct. 13-19.....	1		
Windsor.....	June 12-22.....	2		
Quebec—				
Montreal.....	June 16-Oct. 19.....	23		
Quebec.....	July 28-Oct. 12.....	5		
Chile:				
Coquimbo.....	May 26-Sept. 28.....	99	18	Mar. 1-May 1, 30 cases.
La Serena.....	Nov. 30-May 7.....	300	40	
China:				
Amoy.....	May 21-June 8.....			Present in vicinity.
Chungking.....	May 5-Sept. 14.....			Present.
Dalny.....	June 23-July 13.....	2	1	
Hongkong.....	May 12-Sept. 14.....	29	14	
Nanking.....	May 19-July 20.....			Present.
Shanghai.....	May 28-Sept. 8.....	6	17	Deaths among natives.
Tientsin.....	June 2-8.....		1	

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

Reports Received from June 29 to Nov. 1, 1912.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Java—				
Batavia.....	May 12—Sept. 14...	53	15	
Surabaya.....	Apr. 1-30.....	155	70	June 4-July 24, still epidemic.
Egypt:				
Cairo.....	May 14—Sept. 2....	11	5	
Port Said.....	do.....	2	2	
France:				
Marseille.....	July 1—Aug. 31....		7	
Nantes.....	June 17—July 6....	4		
Paris.....	June 2—Aug. 3....	7	1	
Germany.....				Total, June 2-Oct. 5, 39 cases.
Hamburg.....	Sept. 8-14.....	1		
Great Britain:				
Bristol.....	June 22—Aug. 3....	2	1	
Liverpool.....	June 2-8.....	1		
London.....	Aug. 24—Sept. 7....	2		
Hawaii:				
Honolulu.....	July 9-13.....	1		
Honduras.....	July 19-31.....			Present in vicinity of the terminus and along the Honduras National Railway.
La Pimienta.....	July 29.....			Present.
Portorillas.....	July 31.....			Do.
San Pedro.....	Oct. 16.....			Do.
Santa Barbara.....	July 29.....			Do.
Teguicgalpa.....	Sept. 19.....	36		35 of these cases occurred several weeks previous to this date.
Zacapa.....	July 29.....			Do.
India:				
Bombay.....	May 19—Sept. 31....	220	176	
Calcutta.....	May 5—Aug. 17....		25	Apr. 21-27, 2 cases.
Karachi.....	May 19—Aug. 10....	3	3	
Madras.....	May 19—Sept. 21....	23	14	
Maulmain.....	Jan. 1—July 6.....		117	
Rangoon.....	Apr. 1-31.....	207	78	
Indo-China:				
Saigon.....	May 14—Aug. 12....	10	5	
Italy:				
Leghorn.....	June 9—July 6....	9		
Messina.....	July 1-31.....		1	
Naples.....	June 2—Sept. 28....	26	3	
Palermo.....	May 26—Sept. 7....	9	3	
Rome.....	Mar. 31—Apr. 6....	1	1	
Turin.....	June 3-9.....	1		
Venice.....	Jan. 1—Apr. 30....	40	10	
Japan:				
Kobe.....	June 3-23.....	3		
Mexico:				
Aguascalientes.....	June 9—Sept. 29....		14	
Chihuahua.....	Mar. 4—Oct. 13....	112	66	
Durango.....	June 1—Sept. 30....	2	2	
Frontera.....	July 7-11.....	1		
Guadalajara.....	June 9—Aug. 31....	7	4	
Guaymas.....	July 14-20.....			Present in small towns in vicinity.
Jalapa.....	Sept. 1-7.....	1		
Juarez.....	June 16—Oct. 19....		3	
Mazatlan.....	June 19—Oct. 15....		7	Total Jan. 1-June 30: Deaths, 29.
Minatitlan.....	July 29.....	2		Aug. 21, still present.
Mexico.....	May 19—Sept. 28....	407	184	
Piedras Negras.....	Sept. 1-7.....		1	32 miles from Vera Cruz on the Vera Cruz & Pacific R. R.
Puerto Mexico.....	July 11—Aug. 31....	5	3	
Salina Cruz.....	June 29—Aug. 31....	23	5	
San Geronimo.....	Aug. 1.....			Present.
San Louis Potosi.....	Apr. 7—July 20....	7	10	
Tampico.....	Sept. 10-20.....		1	
Tehuantepec.....	Aug. 1-21.....			Do.
Newfoundland:				
St. Johns.....	July 14—Aug. 7....	7		
Peru:				
Callao.....	May 19—June 29....			Present.
Portugal:				
Lisbon.....	May 27—Oct. 5....	75		
Roumania.....				Total Mar. 1-June 30: Cases, 38.

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

Reports Received from June 29 to Nov. 1, 1912.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Batoum.....	July 1-31.....	1		
Libau.....	May 14-Aug. 4.....	1	1	
Do.....	June 22-28.....	2		
Moscow.....	May 19-Aug. 31.....	20	3	
Odessa.....	do.....	17	5	
Reval.....	June 1-30.....		1	
Riga.....	June 9-29.....	8		May 1-31, 2 deaths.
St. Petersburg.....	May 27-Sept. 28.....	95	29	
Warsaw.....	Apr. 21-Aug. 17.....	63	23	
Siam:				
Bangkok.....	Apr. 21-Aug. 27.....		74	
Siberia:				
Vladivostok.....	May 17-June 28.....	2		
Spain:				
Almeria.....	June 1-Sept. 30.....		34	
Barcelona.....	July 1-Oct. 5.....		11	
Cadiz.....	May 1-July 31.....		5	
Madrid.....	July 1-Aug. 31.....		7	
Malaga.....	July 1-31.....		3	
Seville.....	June 1-Sept. 30.....		69	
Valencia.....	June 2-Sept. 28.....	106	6	
Straits Settlements.				
Penang.....	July 14-20.....	2	2	
Penang.....	June 23-July 20.....	4	1	
Singapore.....	May 5-Sept. 7.....	17	10	
Switzerland:				
Basel.....	Sept. 22-28.....	1		
Berne.....	May 5-11.....	2		
Geneva.....	do.....	1		
Lucerne.....	May 12-18.....	1		
Neuchatel.....	do.....	1		
Turkey in Asia:				
Beirut.....	May 26-Oct. 5.....	157		
Dardanelles.....	June 23-Aug. 24.....		13	Sept. 14: 1 case.
Turkey in Europe:				
Constantinople.....	May 27-Oct. 5.....		217	
Union of South Africa:				
Durban.....	Apr. 28-July 27.....	21	4	
Johannesburg.....	July 22-Aug. 17.....	51		
Uruguay:				
Montevideo.....	May 1-31.....	1		
Venezuela:				
La Guaira.....	June 6.....	1		

MORTALITY.

WEEKLY MORTALITY TABLE, FOREIGN AND INSULAR CITIES.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—											
				Cerebro spinal meningitis.	Cholera.	Diphtheria.	Plague.	Pollomyelitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Typhus fever.	Yellow fever.	
Aberdeen.....	Sept. 28	163,084	68			2							1		
Do.....	Oct. 5	164,300	37												
Do.....	Oct. 12		41			1						14	1		
Aguascalientes.....	Oct. 20	40,000	36	1								13			
Alexandria.....	Sept. 30	420,000	225			5	2			6		16	5	1	
Do.....	Oct. 7		248			9						13	3		
Amsterdam.....	Oct. 12	584,978										15			
Antwerp.....	Sept. 29	327,668	61									7			
Do.....	Oct. 12		66							1		2	1		
Assuncion, Paraguay.....	Sept. 14	75,000	34									4			
Do.....	Sept. 21		50									2	1		
Athens.....	Sept. 28	250,000	78	1								10			
Do.....	Oct. 5		80	1								25			

MORTALITY—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Cerebro-spinal meningitis.	Cholera.	Diphtheria.	Plague.	Pollomyelitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Typhus fever.	Yellow fever.
Belfast.....	Oct. 12	391,974	135			3			4		20	1		
Berlin.....	Sept. 28	2,082,265	439			9			2		61	1		
Do.....	Oct. 5	2,072,925	482			3			5		63			
Birmingham.....	Oct. 12	850,947	201			3			4		13			
Do.....	Oct. 19		218			4			5		18	1		
Bombay.....	Sept. 28	979,445	653		2		7		5		54			
Bremen.....	Oct. 5	246,850	59			4					3			
Breslau.....	Sept. 27	529,617	145								29			
Do.....	Oct. 5													
Brunswick.....	Oct. 12	145,000				3			3		6			
Brussels.....	Oct. 12	745,380	195			1					14	2		
Budapest.....	Aug. 24	1,000,000							8		12	2		
Do.....	Aug. 31					1					2	1		
Do.....	Sept. 14					2			13		3	1		
Do.....	Sept. 21					3			8		3	1		
Do.....	Sept. 28					4			8		1	1		
Do.....	Oct. 5					4			10		1	1		
Cairo.....	Sept. 9	704,701	494			19					23		4	
Catania.....	Oct. 18	225,000	72								4	2		
Chemnitz.....	Oct. 5	306,875	82								10	1		
Chihuahua.....	Aug. 11	30,000	38						1	1	3	1		
Do.....	Aug. 18		35								1	1		
Do.....	Aug. 25		38							2	2	3		
Do.....	Sept. 1		30							3	1	1		
Do.....	Sept. 8		32							2	1	2		
Do.....	Sept. 15		37							1	1	1		
Do.....	Sept. 22		35			2				1	1	1		
Do.....	Sept. 29		29						1	2	2	2		
Do.....	Oct. 6		37						2	1	2	2		
Do.....	Oct. 13		32			1				1	5	1		
Coburg.....	Oct. 5	24,261	10			1								
Cologne.....	Sept. 28	531,820	126								9			
Do.....	Oct. 11		136			1					18			
Colombo.....	Sept. 21	227,026	111								7	4		
Constantinople.....	Oct. 12	1,300,000	179			1			6	24	21	5		
Dalny.....	Sept. 21	48,442	20						1		4			
Dresden.....	Oct. 5	560,200	142			6			1	1	17			
Dublin.....	Sept. 28	406,536	141						2		25			
Do.....	Oct. 5		136			1			1		22	2		
Do.....	Oct. 12		161			3					24	1		
Dundee.....	do.....	165,300	60			2			1		3			
Do.....	Oct. 19		60			2					7			
Erlurt.....	Oct. 5	126,983	24			1					2			
Glasgow.....	Oct. 11	785,600	208			6			4					
Do.....	Oct. 18		231			3			1					
Gothenburg.....	Oct. 5	170,100	37			1					10			
Hamburg.....	do.....	953,079	227			9			1		19			
Do.....	Oct. 12		219			8			2		29			
Havre.....	Oct. 5	136,159	66								14	1		
Do.....	Oct. 12		52			1					11	2		
Karachi.....	Sept. 28	157,290	129				2							
Kohe.....	Oct. 6	425,023	161		3									
Leeds.....	Oct. 12	445,568	122			6			1		9			
Leipzig.....	Oct. 5	605,755	142			1					26			
Liverpool.....	Oct. 12	752,055	267			4			1		23	1		
Do.....	Oct. 19		253			1			2		22	1		
London.....	do.....	7,340,079	1,874			16			6					
Lubeck.....	Oct. 8	100,000	24			1						2		
Lyon.....	Sept. 29	523,796	191	21		2					29			
Madras.....	Sept. 28	518,660	380		7									
Manchester.....	Oct. 5	724,168	145			3			1	1		1		
Do.....	Oct. 12		194						2					
Mannheim.....	Sept. 21	202,926	30								5			
Do.....	Sept. 28		27			1			1		3			
Mazatlan.....	Oct. 8	22,000	12							1				
Do.....	Oct. 15		10							2				
Meassina.....	Oct. 5	127,000	44						4		4	1		
Do.....	Oct. 12		57						10		4		1	
Moncton.....	Oct. 26	12,000	4								1	1		
Montrey.....	Oct. 13	100,000	56								4	3		

MORTALITY—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—																
				Cerebro-spinal meningitis.	Cholera.	Diphtheria.	Plague.	Pollomyelitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Typhus fever.	Yellow fever.						
Montreal	Oct. 19	466,197	149							1										
Do	Oct. 26		157																	
Moscow	Sept. 14	1,625,487	735																	
Do	Sept. 21		710																	
Munich	Sept. 14	615,000	156																	
Nagoya	Sept. 21	346,683	116																	
Newcastle-on-Tyne	Oct. 5	269,193	76																	
Do	Oct. 12		77																	
Newcastle, N. B	Oct. 19	2,945																		
Nottingham	Oct. 12	262,563	81																	
Odessa	Sept. 28	600,000	168																	
Ottawa	Oct. 19	90,000	30																	
Penang	Aug. 31	102,167	73																	
Do	Sept. 7		56																	
Do	Sept. 14		63																	
Do	Sept. 21																			
Port Elizabeth	Aug. 24	31,692	14																	
Port of Spain	Sept. 28	60,000	43																	
Do	Oct. 5		28																	
Port Said	Sept. 16	53,713	33																	
Prescott, Canada	Oct. 29	3,019																		
Quebec	Oct. 19	78,200																		
Rangoon	Sept. 14	293,316	223																	
Rio de Janeiro	Sept. 21	946,134	382																	
Do	Sept. 28		398																	
Do	Oct. 5		351																	
Rotterdam	Sept. 28	443,290	89																	
Do	Oct. 5		97																	
St. Johns	do	33,000																		
Do	Oct. 26																			
San Luis Potosi	July 20	82,946	58																	
Do	July 27		68																	
Do	Aug. 3		65																	
Santa Cruz de Teneriffe	Oct. 5	46,000	21																	
Santiago de Cuba	do	58,000	21																	
Do	Oct. 12		24																	
Sault Ste. Marie	Oct. 5	12,500	3																	
Shanghai	Sept. 22	500,000	220																	
Do	Sept. 29		172																	
Do	Oct. 6		149																	
Shefield	Sept. 21	455,000	95																	
Do	Sept. 28		109																	
Do	Oct. 5		124																	
Do	Oct. 12		107																	
Stettin	Oct. 5	240,000	74																	
Stockholm	do	346,599	99																	
Stoke-on-Trent	Oct. 12	237,153	71																	
Swansea	do	117,157	26																	
Do	Oct. 19		39																	
Trieste	Sept. 28	235,999	80																	
Do	Oct. 5	239,549	81																	
Tripoli in Barbary	Sept. 22	50,000	93																	
Do	Oct. 6																			

MORTALITY FOREIGN AND INSULAR COUNTRIES AND CITIES (Untabulated).

ALGERIA—Oran.—Month of September, 1912. Population, 123,086. Total number of deaths from all causes 207, including diphtheria 1, measles 1, smallpox 1, tuberculosis 16, typhoid fever 8.

CHILE—Punta Arenas.—Month of August, 1912. Population, 14,000. Total number of deaths from all causes 49, including tuberculosis 4.

GREAT BRITAIN.—Week ended September 28, 1912.

England and Wales.—The deaths registered in 95 great towns correspond to an annual rate of 11.9 per 1,000 of the population which is estimated at 17,639,881.

Ireland.—The deaths registered in 21 principal town districts correspond to an annual rate of 14.5 per 1,000 of the population which is estimated at 1,154,150. The lowest rate was recorded at Londonderry, viz, 3.8, and the highest at Newtownards, viz, 21.8 per 1,000.

Scotland.—The deaths registered in 18 principal towns correspond to an annual rate of 13 per 1,000 of the population which is estimated at 2,182,400. The lowest rate was recorded at Hamilton, viz, 5.3, and the highest at Coatbridge, viz, 17.7 per 1,000. The total number of deaths from all causes was 544, including diphtheria 7, measles 1, scarlet fever 5, typhoid fever 1.

PORTUGUESE EAST AFRICA—*Lourenço Marquez.*—Month of August, 1912. Population, 10,000. Total number of deaths from all causes 49, including measles 1.

RUSSIA—*Riga.*—Month of July, 1912. Population, 385,000. Total number of deaths from all causes 842, including diphtheria 5, measles 4, scarlet fever 5, smallpox 1, typhoid fever 5, typhus fever 1.

SIAM—*Bangkok.*—Four weeks ended September 14, 1912. Population, 600,000. Total number of deaths from all causes not reported. The deaths include cholera 9, smallpox 3.

SOUTH AFRICA—*Johannesburg.*—Three weeks ended August 31, 1912. Population, 237,220. Total number of deaths from all causes 171, including diphtheria 2, measles 7, tuberculosis 14, typhoid fever 4.

Two weeks ended September 14, 1912. Total number of deaths from all causes 192, including diphtheria 1, measles 8, tuberculosis 20, typhoid fever 3.

TURKS ISLANDS.—Three weeks ended October 12, 1912. Population, 1,675. One death from tuberculosis.

By authority of the Secretary of the Treasury.

RUPERT BLUE,
Surgeon General,
United States Public Health Service.

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