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THE PLAGUE SITUATION.

Porto Rico.—The last plague-infected rat was found at Arecibo October 30; the last case of plague in man occurred at San Juan September 11. It has been, therefore, five weeks since plague has been found in rats and nearly three months since a case has occurred in man. To November 16 there had been caught and examined for plague infection in Porto Rico 28,971 rats, of which 66 were found infected. During the outbreak there were in all 56 cases of plague in man, of which 36 terminated fatally.

Philippine Islands.—During the past few months occasional cases of plague have occurred in Manila and Iloilo. No case has been reported elsewhere in the Philippine Islands, with the exception of one case taken from an incoming vessel from Amoy, China, at the Mariveles Quarantine Station. At Iloilo there had been 9 cases reported in all to September 21 and at Manila 8 cases to September 28 and 5 cases between September 28 and October 19. In Manila rats are being caught at the approximate rate of 9,000 a month. There seems to be very little rodent infection, as to the time of the last report only 3 plague-infected rats had been found, and the last of these was caught on September 7.

THE CHOLERA SITUATION.

The cholera situation at Constantinople and vicinity is reported to be improving. The situation in Japan and in the Chinese ports is also much improved. There is no unusual prevalence of the disease at any place which threatens the United States, unless the presence of the disease in Japan may be so considered.

THE YELLOW-FEVER SITUATION.

At this time of the year there is little or no danger of yellow fever getting into United States' ports. Since the first of October cases of the disease have been reported in Brazil at Manaos; in Mexico at Cardenas, Comalcalco, Cunduacan, Huimanguillo, Frontera, Jalapa, Sitio Grande, and San Juan Bautista in the State of Tobasco, and at Espita and Merida in the State of Yucatan, and in Venezuela at Maiguetia, Victoria, and Caracas.

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OCCURRENCE AND GEOGRAPHIC DISTRIBUTION OF DISEASE IN THE UNITED STATES.

At the Tenth Annual Conference of State and Territorial Health Authorities with the United States Public Health Service, held in Washington, June 1, 1912, a resolution was presented by the conference committee on morbidity reports and adopted by the conference. The purpose of the resolution was to provide a means by which current information regarding the occurrence and geographic distribution of the diseases with which health authorities are concerned might be available to the various authorities. The provisions of the resolution embody a cooperative plan whereby the various State health authorities report the occurrence of disease to the Bureau of the Public Health Service, which thus will serve as a clearing house for these reports and will publish them currently in the Public Health Reports for the information and guidance of the various authorities. Provision was made for the telegraphic report to the Public Health Service of the occurrence of cases of certain exotic or unusual diseases, such as plague, cholera, yellow fever, typhus fever, and Rocky Mountain spotted or tick fever; also for the telegraphic report of outbreaks and epidemics of the commoner epidemic diseases, such as smallpox, typhoid fever, scarlet fever, poliomyelitis, diphtheria, and others, and for monthly reports of all diseases notifiable in the respective States. This will give current information of the prevalence of disease, a matter of fundamental importance in all public health administration, in so far as the data are available through the operation of morbidity reports. The director of the epidemiological division of the Minnesota State Board of Health, Dr. A. J. Chesley, has forwarded reports for the period intervening between the adoption of the resolution, June 1, and the end of October. Certain other States have forwarded reports for the month of October. These will be found elsewhere in this issue of the Public Health Reports. Reports received in the future will be published currently as received.

ANTIMALARIAL MEASURES FOR FARMHOUSES AND PLANTATIONS.

By HENRY R. CARTER, Senior Surgeon, United States Public Health Service.

Malaria is essentially a rural disease. It is found in towns only as they approach rural conditions—that is, in small towns and in the suburbs of large cities—not in the bodies of large cities. It is for this reason that the consideration of antimalarial measures specially applicable for farmhouses and plantations is of interest.

As is known, the direct cause of malarial fever is the presence of an animal parasite in the blood of the man developing it. This parasite is, in nature, introduced into the blood by the bite of a certain kind of mosquito, which has been rendered infective by biting a man himself infected with malarial parasites, and only thus is it introduced.

There are certain conditions necessary for infection. Let us note them, as they will show us what to guard against. To become infected with malarial fever it is necessary:

(1) To be bitten by a certain kind of mosquito.—Only mosquitoes of the genus Anophelina—and not all species of that genus—are con-

cerned in the conveyance of malaria. To guard against all mosquitoes is no wiser than to defend one's chickens from all birds because hawks do prey on them.

(2) This mosquito must have been infected by previously biting some person infected with the malarial parasite. It is not true, as one often hears, that mosquitoes of swamps which have had no access to men can convey malaria. The early English expeditions direct to America, as to the Orinoco and Darien, rarely recorded fever among them until after meeting Spaniards. Those that came by the Slave Coast of Africa suffered severely.

(3) Some time, usually not less than 8 to 10 days, must elapse between the infection of the mosquito and the biting which infects the other man. This is the time for the completion of the sexual cycle of the parasite, which occurs in the body of the mosquito, and for the proõuct of this union—the sporozoites—to reach the mosquito's salivary glands. Until this—the extrinsic incubation of malaria—is accomplished the mosquito is not infective.

No description of this mosquito will be given except to say: (1) That in the female, the sex that bites, the palpi—two little projections on either side of the proboscis—are nearly as long as the proboscis, while in the other varieties the palpi are less than half as long. The males of other species, and anopheles as well, have palpi as long as the proboscis, but in the males they are covered with long hairs and look like plumes. Males of any variety are seldom seen except near the hatching place and are very short lived.

(2) That when resting after a meal of blood the anopheles has her two forelegs, proboscis, and body all in one line, or nearly so, usually at a considerable angle, 45° to 90°, with the wall while other mosquitoes are "humped up," both fore and hind legs being bent on the body toward each other. The anopheles is a slight, graceful mosquito.

Nor shall I go into its life history save only to say: (1) That the female lays her eggs in the shade of grass or bushes on the surface of clear water in swamps, shallow pools, the edges of little streams, etc. She does not like deep water, and the larvæ are not found where fish can get at them. They breed especially in water containing green algæ, "frog broth," and will even breed in rain barrels containing this growth. Otherwise they will not. It is a swamp, not a house, mosquito.

(2) That it is from 15 to 22 days or longer, depending on the temperature, from the time the egg is laid to the birth of the adult mosquito.

(3) That the forms between the egg and the mosquito—larva and pupa—live in water but breathe air from the atmosphere and must come to the surface every few minutes to get it.

(4) That these mosquitoes are attracted by light for some distance and are conveyed by light winds. How far they travel has not been determined. One species—the white-footed anopheles—in Panama was found in large numbers nearly a mile from its breeding place. It was found, however, in a village brilliantly lighted by electricity, and the conditions were otherwise favorable for conveyance. Generally speaking, one-fourth to one-half of a mile, or even less, would be the usual limit of her flight to such lights as one has at a farmhouse. Much depends on the direction and character of the winds during the mosquito season. (5) That she (the female anopheles) flies and feeds in the United States almost exclusively in the evening and at night. The bite is little painful—one used to the pestiferous day mosquito will not notice it—and the insect is so shy that she rarely bites a moving—that is, a waking—person, and hence anopheles frequently exist where there are no complaints of mosquitoes.

(6) That the female anopheles comes into the house at night, attracted by light (and possibly smell), feeds, and, if not exceedingly full, leaves as soon as it becomes light. If she can not leave, she hides in some dark place during the day, so that not finding anopheles in the daytime in a room with open windows is no proof that they were not present at night.

I lay some stress on (5) and (6) because I have known men to be puzzled to account for a malarial outbreak where they could find no evidence of anopheles.

Since malaria is contracted only from the bite of a certain kind of mosquito rendered infective by having fed on a man himself infected with malaria, if we can keep the infective insect from the well man or the man harboring the malarial parasite in his blood from infecting the insect, there will be no spread of malaria. Either method perfectly carried out would extinguish the disease. We will consider the second method first.

I.

MEASURES INVOLVING THE CONTROL OF THE HUMAN HOST.

The writer is on record as regarding methods to prevent the access of mosquitoes to men infected with malaria as in practice entirely inefficient for the elimination or even control of malaria in villages or thickly settled communities where it is prevalent, as in some parts of the Tropics. The reason is the large number of "carriers" i. e., people who carry malarial parasites in their blood and are infective to mosquitoes with no signs of illness whatever. There are obviously no practicable means of isolating all such men from mosquitoes, save by measures applicable for the whole community which is impossible.

But for families in farmhouses and in plantation houses not too close to colored quarters much may be done on this line. Especially is this true of places in districts not very malarious or, at least, with a long period—winter and spring—during which malaria is not contracted, so that it is reasonable to expect during some part of the year that none of the household is a carrier.

(a) Under such conditions, then, a case of malarial fever should be treated like a case of communicable disease, which it is. No access to anopheles mosquitoes should be allowed. The patient should be kept in a screened room, and—not "or"—under a mosquito bar especially at night.

(b) For sanitary reasons quinine should be freely administered and in sufficient doses, with such other medication as is necessary, to cure the case, to rid him of his parasites, and not simply to reduce their number, and get him on his feet. Remember that a few say, two—doses of quinine will practically free the blood vessels of the skin of malarial parasites and render the man temporarily incapable of infecting the mosquito. The prompt use of quinine, then, will greatly lessen the chance of infecting the mosquitoes, which, in spite of our efforts, do have access to the patient.

Visitors convalescent of malarial fever or from badly infected neighborhoods are so apt to be carriers that the above antimalarial measures are indicated for them also as far as they can be applied. Parasites in the blood of a carrier can always be demonstrated by blood examination.

(c) Killing the mosquitoes which one finds in the sick room each morning with a flyflap or small pan of coal oil (for the ceiling) may be made an efficient antimalarial measure. Anopheles enter the room in the evening or night when the light burns, feed and remain quiet until morning; then, unless they can get out quickly, a thing sometimes prevented by the windows being shut toward morning, or by the mosquitoes being full of blood, they hide themselves in dark corners, where they can be easily killed. They are frequently found in the early morning—before sunrise—on the glass of the window trying to get out.

These measures are of little value in a community unless one can be assured that it is free from carriers to start with. It is, I think, of no value in houses close to the quarters of negroes, as is frequently the case in southern plantations; so many negroes, especially children, are carriers of the parasite.

(d) The use of quinine by well people in small doses to prevent the development of malaria is not admitted to be efficient universally by sanitarians, yet the general consensus of opinion is in its favor and comparative experiments by the Japanese in Formosa and the Germans in East Africa would show it decidedly valuable. There are two methods of giving it, one from 3 to 5 grains a day and one a single dose of 10 or even 15 grains once a week. The latter seems to give the best results—certainly in proportion to the quinine taken. The former was the method mainly used on the Canal Zone. It gave, I think, no discomfort to those using it, as a great many of the higher officials and their families did for long periods from 1904 to 1906, when malaria was prevalent. This method, in the opinion of the writer, is mainly for use to tide over a specially bad season. He is sure it prevents sickness; it may not prevent infection.

(e) Personal hygiene, especially the avoidance of getting chilled, is of value in preventing the *development* of malarial fever, but apparently does not prevent becoming infected by it.

II.

MEASURES INVOLVING THE CONTROL OF THE INSECT HOST.

The measures found efficient for villages, etc., are, of course, efficient for farmhouses, but some—and these among the most efficient in the former—are not practicable for farmhouses on account of the expense involved. Fortunately farmhouses are usually better situated with regard to elevation, wind, and proximity to marshes than are villages.

It may be taken as a principle in bionomics that when an animal is exceedingly prolific, like rats, mosquitoes, flies, etc., control of their numbers, far less their extermination, is not possible by killing Obviously any one of these methods perfectly carried out would be sufficient. Each one is intended to supplement the imperfect success of the others. But the problem is so difficult that imperfect success with any one—or maybe with all—is the most that can be hoped for on most farms and plantations in malarial regions.

(1) To destroy the breeding places, one drains all pools, marshes, and wet land near the house and cleans up the banks of the streams. If this drainage be done by open ditches it is likely enough that they will themselves breed anopheles, although in less—generally far less—numbers than formerly. Tile or box or "blind" drainage generally is not open to this objection. If the pools and small streams contain fish, cleaning up of their edges so that the fish can get to the larvæ will be sufficient. Do not be afraid of very dirty water, as from laundries and stables. Anopheles will not breed in it.

(2) Ponds which can not be drained are best treated by coal oil. This forms a film on the surface through which the larvæ can not pass to get air, and without air they die. It takes a very small amount. The oiling in the United States needs to be done only about once in two weeks, but it is safer to do so every week as one is less apt to forget it. It is of little use in ponds of large surface or with grass growing in them and, in general, is far less dependable than drainage.¹

(3) To prevent the access of anopheles to man there are three things of service: (a) To cut down the brush and tall weeds about the house. These harbor mosquitoes—they do not breed them and keep a supply close to the house. Porch vines and most shrubbery also act in this way. Anopheles can not live long in full sunlight. A treeless, shrubless yard open to the sun and wind, shade being given by galleries and awnings, is the most sanitary so far as malaria is concerned. Trees, high branched, furnish little shelter to mosquitoes unless very dense. Aromatic trees and shrubs are usually avoided by them.

(b) To plant a screen of trees some distance from the house between the mosquito breeding place and the house. This probably serves to hide the lights of the house from the marsh or stops the mosquitoes brought by the breeze from their breeding places, or both.

(c) To use screening and mosquito bars. (a) and (b) are of some value, but screening is our reliance to keep out mosquitoes. Properly applied it will do it. Screening is manyfold better than mosquito bars, which seldom protect for long if anopheles be abundant. Screened houses, however, are safe to intelligent and careful people, provided they are well screened. It is, however, quite an art to do this. The writer was at one time chairman of a board on screening

¹ The use of agents which act by poisoning the larvæ is not taken up. There is a wide field for their use in village and community sanitation, but the need of special material and methods render them, it is thought, little applicable to purely rural work.

for the Isthmian Canal Commission, and will give a few of their findings applicable to farmhouses.

No. 16-mesh wire is the best for screens. A very few anopheles may pass No. 14, but the mesh is large enough to be painted, which will double its time of lasting and hence halve its cost. After being painted it will exclude anopheles. If one screens against stegomyia mosquitoes, two sizes smaller should be used. The writer has used the ordinary bobinet of mosquito bars, sometimes single, sometimes double. It is simply tacked over the entire window opening on the outside. It made a perfect screen, was cheap, and lasted one season.

As few entrances as possible to the screened part of the house should be allowed. It is nearly always possible to cut them down to two. The screens in the windows should, if possible, be fixed so that they can not be opened—especially in the servant's part of the house. Unless they exclude mosquitoes, no matter how the window is opened—i. e., cover the whole window—constant pains must be taken to have the screens arranged during the evening and night so as to exclude them.

Screen doors must open outward and the light inside should be arranged so as not to fall on the door when shut, else mosquitoes will gather on it and come in when opened. It should, of course, have a strong spring to close it. It is far better to screen the porch if it runs around a good part of the house than to screen the doors and windows on that side. It is also more expensive. It will do little good, however, to rely on a screened house and sit in the evening on an unscreened porch.

When the door of entrance is at the top of a flight of steps, no landing intervening, it should be so placed that the edge of the door opposite the hinge comes as near the middle of the length of the step as may be. This may be done by having folding doors, one best to stay fastened, or by moving the whole single door to the left and fill in the space to the right by screening. The reason is that one always goes up about the middle of the steps, and, if the door opens from the end of the steps, the person entering, after beginning to open the door, steps down a couple of steps so as to get out of its way, thus opening the door more widely and holding it open longer than advis-Intelligent people in a screened house become instinctively able. careful about doors, opening them at night as seldom as possible and keeping them open but a short time. The ideal plan is undoubtedly to have a vestibule with double screen doors and in the evening a fumigation between them as I have seen in many small houses in the lower Indian River, red mangrove chips being the fumigant, but this is too much to hope for at present.

Naturally all screens and screen doors must fit tightly and be heavy enough not to warp. Where they do not fit tight and are immovable the writer has frequently rendered them mosquito proof by calking the openings with newspapers. An imperfectly screened house is simply a mosquito trap. They come in at small crevices at night, which they find by the light streaming through, and at daylight fly directly to the screened windows through which they can not go and thus remain in the house; the number so remaining accumulating night after night.

SUMMARY.

For farmhouses antimalarial measures based on the control of both the human and the insect host should be used.

Of the first the isolation of men sick of malarial fever from mosquitoes is the most important.

Of the second, draining mosquito breeding land near the house, especially to windward, is of great value.

Of almost equal value is the screening of the house. This is always possible. Drainage, unfortunately, is not always possible in many parts of the country. Until drainage is done screening must be our sheet anchor in preventing malarial fever in farmhouses.

The problem of drainage should be taken up both by the individual farmer and by the community just as plantation and county roads are.

UNITED STATES.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

[Adopted since June 30, 1911.]

FLORIDA.

Regulations State Board of Health adopted February 27 and 28, 1912, under authority of Florida General Statutes, 1906, section 1120.

COMMUNICABLE DISEASES-MANAGEMENT OF.

Reports of communicable diseases.

RULE 1. It shall be the duty of every physician in the State of Florida to report immediately to the State health officer or to a representative of the State board of health, by first mail, every case of scarlet fever,¹ diphtheria, measles, cerebrospinal meningitis, anterior poliomyelitis, bubonic plague, glanders, anthrax, rabies, or leprosy which occurs within his practice or which he may be called to attend. Where there is no physician in attendance upon any case of the diseases herein mentioned it shall be the duty of any person having charge of or in attendance upon or upon whose premises a case of such diseases is suspected to exist to report the same in the manner herein provided.

Concealing communicable diseases.

RULE 2. No person shall willfully or knowingly hide, conceal, or prevent the discovery of or assist in hiding, concealing, or preventing the discovery of any case of yellow fever, smallpox, cholera, or other communicable disease mentioned in rule 1 within the State of Florida. No person shall hinder, prevent, or impede the reporting of the existence of any case of yellow fever, scarlet fever, diphtheria, smallpox, cholera, or any other communicable disease mentioned in rule 1, in the State of Florida, to the State health officer. No person shall secrete or conceal or assist in secreting or concealing from the State health officer or the local health authorities any personal effects, clothing, bedding, or other articles which have been used in or about any case of communicable disease whereby contagion or infection may be conveyed or imported.

Isolation of persons having communicable diseases.

RULE 3. When any person coming from abroad or residing within this State is found to be infected with any malignant, communicable disease, so dangerous to public health that complete isolation thereof is necessary, the State health officer and his assistants and the agents of the State board of health are empowered and authorized to remove such infected persons to a safe, suitable, and proper place, and there provide medical treatment for such person, provided same can be done without danger to the life of such person. If, in the opinion of the State health officer or such assistant or agent, complete isolation of such infected person can be had in the house where he or she is found, such person may be permitted to remain there, in which event a complete isolation of the physician, nurse, attendant, and persons sick therein, and all persons approaching or coming within the limits thereof, and all furniture and other articles used or brought there shall be subject to such restrictions as the State health officer may prescribe. Such infected persons are forbidden to appear on the public

¹Yellow fever, smallpox, and cholera are to be reported by telegram, charges collect. See sec. 1114, General Statutes, 1906. All other diseases should be reported by first mail or by paid telegram.

thorough press or in public vehicles of travel and must remain in constant and complete isolation until released therefrom by the State health officer, his assistant, or his agent. Provided, that since there is no danger of transmitting scarlet fever and diphtheria by a second to a third person when reasonable precautions are taken, the State health officer, his assistant or agent may permit those who do not have the direct care of the patient or patients to leave the premises in order to attend to their regular occupations.

Definition of isolation.

RULE 4. Isolation is defined to be the complete separation of the persons sick with a communicable disease as prescribed by these rules, and those attendant upon him, from all other persons upon the premises.

Attendants.

RULE 5. When financially able or otherwise possible a nurse should be obtained to care for the patient, but where from necessity or choice the parents or other members of the family assume the duties of nurse, the isolation shall apply to them.

Smallpox.

Rule 6. Warning cards.—The local health officer of any municipality, or the local representative of the State board of health, having knowledge of, or having reason to suspect, the existence of smallpox, shall investigate, and at once place upon any house where smallpox is found to exist, a sign or warning card¹ setting forth the facts. This sign is to serve only as a warning to those who may wish to avoid the house, and not as an indication of quarantine. When the attending physician considers a smallpox patient as having recovered, he shall report the fact in writing to the local health officer or representative of the State board of health, who shall thereupon remove the warning card from the house. The patient must not leave the house until after the removal of the warning card.

RULE 7. Reports of cases.—Every physician shall immediately report to the State health officer or to a representative of the State board of health the name, age, sex, and race of every smallpox patient under his care, the state of his or her disease, and his or her place of residence. A report must be made for each case as it occurs in a family or household.

RULE 8. Reports of deaths.—Every.physician shall report in writing to the State health officer or to a representative of the State board of health the death of any small-pox patient under his care within 12 hours thereafter. The report shall state the name, sex, race, and age of the deceased.

Rule 9. Vaccination after exposure to smallpox.—When smallpox occurs in a family or community every person exposed or likely to be exposed should be promptly vaccinated (voluntarily), and those refusing vaccination do so at their own risk of taking smallpox.

Rule 10. Disinfection after smallpox.—The apartments occupied by a smallpox patient shall be deemed infected, and when made vacant by the death, removal, or recovery of the patient, shall, together with their contents, be thoroughly disinfected, except where all the inmates are immune, when disinfection shall be a voluntary matter. All persons having been ill with smallpox, should, before being released from their isolated premises, have their clothing disinfected and take a disinfecting bath.

Diphtheria.

RULE 11. Diagnosis and isolation of diphtheria.—The attending physician should immediately secure a culture from the nose and throat of any individual suspected of being infected with diphtheria and submit the same to one of the laboratories of the State board of health for bacteriological examination. A suspicious case should be isolated as diphtheria until the diagnosis is confirmed or denied by the laboratory findings. An undoubted clinical case of diphtheria should be isolated even with negative findings from the first laboratory examination.

¹ The management of smallpox consists in vaccination, isolation, and disinfection. Guards are not employed, nor will the expense of such if placed by citizens or physicians around a case of smallpox be paid for by the State board of health. The word "quarantine," as well as such procedure, has been abandoned in the management of smallpox. Patients not observing the isolation when suffering from smallpox are guilty of a misdemeanor, and should be reported to the prosecuting attorney of the county in which the offense occurs by whoever has cognizance of the fact.

RULE 12. Sale of dairy products.—No butter, milk, or other dairy products shall be sold or given to any party, or delivered at any creamery or butter factory, from a house isolated because of the presence of diphtheria therein.

RULE 13. Reports of cases.—Every physician shall immediately report, in writing, to the State health officer, or to a representative of the State board of health, the name of every patient under his care having diphtheria, the state of his or her disease, and his or her place of residence. A report must be made for each case as it occurs in a family or household.

RULE 14. Reports of deaths.—Every physician shall report, in writing, to the State health officer, or to a representative of the State board of health, the death of any diphtheria patient under his care within 12 hours thereafter.

RULE 15. Disinfection after diphtheria.—The apartments occupied by a diphtheria patient shall be deemed infected and, when vacated by death, removal, or recovery of the patient, shall, together with their contents, be thoroughly disinfected. All persons having occupied such apartments during the period of isolation must have their clothing disinfected and take a disinfecting bath before being released from isolation. All disinfection prescribed in this rule shall be a part of the control of the disease: *Provided*, That if the inmates of the house have their throats examined bacteriologically and find their throats free from diphtheria bacilli, then the requirements of this rule may be disregarded until such time as all patients have recovered.

Scarlet fever (scarlatina, scarlet rash).

RULE 16. Isolation.—The attending physician of any case of scarlet fever should at once completely isolate said patient and those having the care of or coming in contact with such patient, except the health officer, sanitary patrolman, or, in case of death, a licensed embalmer, and shall report such case or cases to the local representative of the State board of health.

Scarlet fever patients shall not be released from isolation until the local health officer or a representative of the State board of health has satisfied himself that desquamation is completed and that there is no further danger of infection from the patient.

RULE 17. Disinfection of apartments and contents.—The apartments occupied by a scarlet-fever patient shall be deemed infected, and when vacated by death, removal, or recovery of the patient shall, together with their contents, be thoroughly disinfected. All persons having occupied such apartments during the period of isolation shall have their clothing disinfected and shall take a disinfecting bath previous to their release from the isolated apartment. All disinfection prescribed in this rule shall be a part of the control of the disease.

RULE 18. Reports of cases.—Every physician shall immediately report, in writing to the State health officer, or to a representative of the State board of health, the name, age, sex, and race of every scarlet-fever patient under his care, the state of his or her disease, and his or her place of residence. A report must be made for each case as it occurs in a family or household.

RULE 19. Reports of deaths.—Every physician shall report, in writing, to the State health officer, or to a representative of the State board of health, the death of any scarlet-fever patient under his care, within 12 hours thereafter.

Measles.

RULE 20. Warning cards.—The local health officer or a representative of the State board of health, having knowledge of or having reason to suspect the existence of measles, shall investigate and shall at once placard the house in which the disease exists. The placard must give the name of the disease and state that children in the house will not be allowed to leave the premises. The placard or warning card must be kept on the house until at least 10 days after the appearance of the disease in the last case in such family or household. Children who have had the disease may be permitted to attend school although the house is placarded. Disinfection after measles is not necessary.

RULE 21. Reports of cases.—Every physician shall immediately report in writing to the State health officer, or to a representative of the State board of health, the name of every patient under his care having measles, the state of his or her disease, and his or her place of residence. A report must be made for each case as it occurs in a family or household.

RULE 22. Reports of deaths.—Every physician shall report in writing to the State health officer the death of any patient from measles within 24 hours thereafter.

Poliomyelitis.

RULE 23. Reports of cases.—Every physician shall immediately report, in writing, to the State health officer, or to a representative of the State board of health, the name of every patient under his care having anterior poliomyelitis (infantile or spinal paralysis), or suspected case of said disease, the state of his or her disease, and his or her place of residence. A report must be made for each case as it occurs in a family or household.

RULE 24. Reports of deaths.—Every physician shall report, in writing, to the State health officer, the death of any patient from anterior poliomyelitis within 12 hours thereafter.

Rabies.

RULE 25. Suspected rabid animal to be confined.—When an animal suspected of having rabies has bitten a human being the person so bitten or their legal representative shall secure, or cause to be secured, such animal alive and without injury if possible. The animal shall be confined in a safe, quiet, roomy, and comfortable place and a report giving full particulars concerning the action taken sent to the State health officer at Jacksonville, Fla. This report shall include the name of the locality in which the biting occurred, the date the bite was inflicted, the name, residence, and address of the owner of the animal; the full name or names of the person or persons bitten, together with their place of residence, age, sex, race, and information as to location and extent of bite or bites; the name, addresses, and residences of all owners of animals which have been bitten by the animal in question, together with a list and description of the animals bitten and the disposition made of the same. Such supposedly rabid animal must be kept under careful observation for at least five days, when if rabid clinical evidence of rabies will manifest itself and death will shortly ensue.

RULE 26. Laboratory examination in rabies.—When such suspected animal dies, the head and several inches of the neck must be cut off and sent to the nearest bacteriological laboratory of the State Board of Health of Florida for microscopical examination. Care must be taken not to injure the brain or the spinal cord. The head and neck of the animal must be carefully packed in a tin container, surrounded with sufficient ice to preserve it from decomposition while in transit, and so prepared for shipment that its contents will not become a nuisance to the transportation company handling the shipment, the expense of preparation and of transportation all to be borne by the shipper.

RULE 27. Pasteur treatment to be administered.—All indigent persons bitten by an animal suspected of having rabies or declared upon microscopical examination by the State board of health to have been so infected should, with the advice of the State health officer, have the Pasteur treatment administered for the prevention of the development of hydrophobia in the human, such antirabic serum to be furnished by the State Board of Health of Florida at no cost to indigent patients, the serum to be administered by an agent or representative of the State board of health or by a physician to be designated by the State health officer. The physician so administering the antirabic treatment to a person shall be entitled to receive from the patient such fee for his services as is usual and proper.

RULE 28. *Muzzling.*—If it shall appear to the State health officer that the life and health of any settlement, village, town, or city is endangered by the prevalence of rabies, then the State health officer shall require all dogs kept in such settlement, village, town, or city to be effectively muzzled, and for such a length of time as shall be necessary and proper. It shall be the duty of the mayor and police authorities of any settlement, village, town, or city, when such an order is promulgated by the State health officer, to enforce its provisions.

Epidemic cerebrospinal meningitis.

RULE 29. Reports and precautions.—Every case of epidemic cerebrospinal meningitis shall be reported to the local health officer of the municipality where occuring, or to the State health officer, by the attending physician. The patient shall be isolated. The discharges from the nose, throat, and mouth of the patient should be received on cloths and burned at once. After death or recovery of the patient all personal clothing and bedding, together with the contents of the room and the room itself, should be thoroughly disinfected. Every doubtful case of cerebrospinal meningitis must be classed as of epidemic type and cared for accordingly until proved to be otherwise.

Leprosy.

RULE 30. Isolation and reports.—All persons affected with leprosy shall be continuously confined upon their home premises and kept off the public thoroughfares and out of public vehicles of transportation or confined in such place as shall be designated by the State health officer. It shall be the duty of attending physicians and of representatives of the State board of health to report to the State health officer the name, age, social condition, sex, race, and residence of all persons affected with leprosy within the community or county over which he has jurisdiction.

Membranous croup.

RULE 31. Isolation and reports.—So-called membranous croup shall be classed, isolated, reported, and cared for as diphtheria.

Trachoma.

RULE 32. Trachoma excluded from schools.—Persons afflicted with trachoma are prohibited from attending public, private, or church schools, or close association with other individuals.

Warning cards.

RULE 33. Warning cards for diphtheria, scarlet fever, and other diseases.—The local health officer of any municipality, or when so directed, the representative of the State board of health, shall forbid by warning cards or notices posted upon or at the entrance to premises where a patient is sick with diphtheria, scarlet fever, measles, or epidemic cerebrospinal meningitis, any person except the attending physician, health officer, sanitary inspector, or, in case of death, a licensed embalmer, from going to or leaving such premises without his permission, or the carrying of, or causing to be carried therefrom, any material whereby such disease may be conveyed, until after the disease has abated and the premises, dwelling, and clothes have been rendered free from danger by means of such disinfection and cleansing as the State health officer may direct.

RULE 34. Specifications of warning cards.—The State health officer shall, upon request, furnish to attending physicians, local health officers, and to local representatives of the State board of health, such warning or isolation cards as are required by rules 6, 20, and 33, to be placed when necessary or required upon infected or isolated premises, which cards shall be of such size and color and shall contain thereon such written or printed warning and such designation of the disease as the State health officer may consider reasonable and proper for the protection of the public.

RULE 35. Destroying or defacing warning cards.—No person or persons shall alter, deface, remove, destroy, or tear down any warning card posted by a local health officer or representative of the State board of health. The occupant or persons having possession or control of a building upon which a warning card has been placed shall, within 24 hours after the destruction or removal of such notice by other than the proper sanitary officials, notify the local health officer or representative of the State board of health of such destruction or removal.

Disinfection.

RULE 36. Occupying infected apartments.—No person shall let for hire, or cause or permit anyone to occupy, apartments previously occupied by a person ill with smallpox, scarlet fever, diphtheria, epidemic cerebrospinal meningitis, or tuberculosis until such apartments shall have been thoroughly disinfected.

RULE 37. *Placards.*—Whenever the order or direction of the State health officer, or a representative of the State board of health, requiring the disinfection of articles, premises, or apartments shall not be complied with, the local health officer or representative of the State board of health shall forthwith cause a placard, of such size, shape, and color, as may be deemed reasonable and proper by the State health officer, to be placed on the door of the apartment or premises, and containing such order or warning thereon as may be proper and reasonable.

SANITARY REQUIREMENTS FOR SCHOOLS.

RULE 38. Disposal of sewage.—Every building used for public-school purposes shall be furnished with two closets, one for males and one for females, separated as far as possible from each other and so arranged as to give the greatest possible privacy to persons using the same. Buildings to which water and sewerage are available shall be provided with water-closets and connected with the sewerage system. When water and sewerage are not available, buildings shall be provided with dry closets, which shall be fly-proof and built and maintained in accordance with correct sanitary principles. It shall be the duty of the several county boards of public instruction in the case of public schools, and of the principals in the case of private schools, to carry into effect the provisions of this rule.

SANITATION OF PUBLIC BUILDINGS.

RULE 39. Ventilation.—All churches, halls, theaters, and other buildings used for public meetings should be kept at all times in a clean and sanitary condition. Every such building should be provided with proper methods for maintaining the purity of the atmosphere while in use, and such methods should be employed at all times.

RULE 40. Method of cleansing.—All buildings used for public meetings should be cleaned after each meeting held in them, such cleansing to consist of thorough sweeping of floors and wiping of woodwork, together with the opening of all windows and doors to permit the entrance of fresh air and sunshine. No such building or room should be swept without first sprinkling the floor with water or throwing on it damp sawdust or other absorbent material to prevent dust; except that when the vacuum system of cleansing is used this last provision may be disregarded. Woodwork should be wiped with a damp cloth, and dry dusting with feathers or dry cloths should not be practiced. In construing this rule, all meetings held during the course of a single day may be regarded as one meeting.

RULE 41. Cuspidors.—An ample number of spittoons or cuspidors should be provided in all public buildings, and should contain sufficient water to stand one-half inch deep on the bottom. Such spittoons or cuspidors should be emptied, washed, and disinfected with an approved disinfectant after each day's use. Caution should be exercised by caretakers, janitors, and superintendents of such buildings that contents of cuspidors and sweepings from floors are disposed of in a sanitary manner and by such methods as not to endanger the public health or become nuisances to public comfort and safety.

THE HOUSE FLY.

RULE 42. Screening against flies.—It shall be unlawful for hotels, boarding houses, and restaurants in the State of Florida, where persons are served with food or drink of any description for pay, not to have kitchens and dining rooms securely screened against flies; and all lunch counters operated at railway stations or elsewhere in the State, and all fruit stands and butcher shops, shall protect food and fruit offered for sale by wire screens covers or netting so placed that flies can not crawl over food or fruit.

RULE 43. Breeding of flies.—It shall be unlawful for any person or persons to keep or maintain any horse or mule within any incorporated city or town in the State of Florida, within 500 feet of any residence or store, except under such conditions as shall effectively prevent the breeding and liberating of flies.

Mosquitoes.

RULE 44. Screening against mosquitoes.—It shall be unlawful to operate a hotel, boarding house, or lodging house for pay in the State of Florida without having the beds effectively screened against mosquitoes, either by screening the windows and doors of the sleeping rooms or by providing efficient mosquito nets.

SPITTING.

RULE 45. Spitting in public places.—It shall be unlawful for any person to spit upon sidewalks, railway depots and platforms, or the floors, walls, or other parts of any church, theater, street car, railway car, sleeping car, steamboat, cigar factory, public hall, or other public building or room where people are accustomed to gather, except into spittoons or other receptacles especially provided for such purpose; and the person or corporation who shall own or be in charge or control of such church, theater, street car, railway car, sleeping car, steamboat, cigar factory, public hall, or other public building or room shall furnish a sufficient number of spittoons for the use of the persons frequenting such places. It shall be unlawful for any person or corporation owning, conducting, or having charge of such place wherein spitting is forbidden as aforesaid, knowingly to permit a violation of this rule. All spittoons provided under this rule shall be thoroughly cleansed and disinfected at least once each day, and each spittoon after being cleansed shall contain at least one-half pint of an efficient germicidal solution. RULE 46. Spitting forbidden in places of public transportation.—No person shall spit upon the floor, furnishings, or equipment of any railway coach, chair car, parlor car, sleeping or dining car, depot, or depot platform in the State of Florida. The State health officer will furnish, at the expense of the State, upon request, or when it is found to be necessary, and each railway, steamship, or other transportation company operating in the State of Florida is hereby required to post and display in each passenger coach, and in all station waiting rooms, a placard of such shape, size, and color, and containing thereon such printed notice, warning, or prohibition against spitting, as may be deemed reasonable and proper by the State health officer.

MUNICIPAL SANITATION.

RULE 47. Disposal of garbage.—No dumping ground for garbage or refuse matter of any kind shall be maintained at or near any city, town, or settlement in this State; and the mayor or other chief executive officers of any incorporated city or town and the chairman of the county commissioners of the county in which any unincorporated village is situated shall promptly cause any such nuisance to be destroyed by fire when the same occurs within his city, town, or unincorporated village, as the case may be, and shall by the same means prevent the accumulation of refuse matter or garbage in such quantity as to endanger the health or life of any citizen or citizens.

RAILWAY SANITATION.

RULE 48. Interstate restrictions and inspection.—Whenever yellow fever, smallpox, or any other communicable disease shall exist or prevail in any city or town of any State of the United States, Mexico, Canada, or any other foreign country, to such an extent as the State health officer may deem dangerous to the health of the State of Florida, then the State health officer may declare a restricting order against such place, and all persons entering the State of Florida from such infected locality shall be detained at such points on or near the border line of the State of Florida as may be selected by the State health officer, for observation, isolation, and treatment of the sick and for fumigation of baggage, freight, and mails as the case may require and as may be suitable and proper. The length of time of detention and methods of treatment of the sick and fumigation of property and of the wearing apparel, freight, and baggage of persons coming from such infected points shall be determined by the State health officer at the time of the declaration of such quarantine and from time to time thereafter as may be convenient.

RULE 49. Health certificates.—Persons desiring to enter the State of Florida when any restrictions have been declared, on any railroad, steamboat, stage coach, or other carrier, public or private, or by any other means of transportation, passing any detention station, are required to exhibit to the inspecting officer appointed by this board a certificate signed by the mayor or city health officer, under the corporate seal, if such person is from a municipal corporation, or in other cases by a justice of the peace or State health officer, that neither said person nor his baggage has been exposed to the infection or contagion against which said restrictions have been declared within 15 days prior to the date of said certificate. Said certificate shall bear continuous daily stamp or date of whereabouts not less than five days before its presentation. Any person failing to present such certificate shall be subject to detention at such detention as is provided in rule 48.

RULE 50. Sanitation of railway cars and stations.—Any person having charge or control of any railway station house or houses, and every railroad company, sleeping-car company, or other corporation or individual or the receiver thereof, engaged in the carrying of passengers in this State, and every agent of any such corporation or person having charge or control of such passenger cars, shall keep and maintain all such railway station houses and passenger cars in their charge, as aforesaid, in a clean and sanitary condition at all times in the manner and in accordance with the following specifications:

First. Each passenger coach or sleeping car used for passengers must be provided with one cuspidor for each seat or every two chairs. Each cuspidor must contain not less than one-half pint of an efficient germicidal solution. The contents of the cuspidors are to be emptied into a similar solution and the solution is to be replenished each trip or every 24 hours.

Second. Railway station houses must be provided with a sufficient number of cuspidors, or not less than four in each room or hall, and are to be treated in a manner similar to that specified above.

Third. The floors of cars and railway station houses must be sprinkled with an efficient germicidal solution before sweeping.

Fourth. Seats, windows, and walls of cars in transit must be wiped off with a dampened cloth or sponge, but must not be dusted in transit, except at division terminals or meal stations where passengers are given an opportunity to leave cars during that time.

Fifth. All sleeping cars must be thoroughly cleaned and aired at the end of each round trip in the State of Florida.

Sixth. All sleeping cars coming into the State of Florida must be thoroughly cleaned and aired at their points of destination in this State. All carpets, curtains, blankets, and bedding, except linen, shall also be thoroughly aired.

Seventh. If a car becomes infected by being occupied by a person having a communicable disease, it must be disinfected immediately at end of its run; and in addition, the bedding and blankets and all sleeping cars shall be thoroughly sterilized at least once each trip, and if same shall be stained or known to have been exposed to any communicable disease, they shall be disinfected or destroyed forthwith.

Eighth. Containers of water for drinking in cars and station buildings must be emptied and thoroughly cleansed at least once every 48 hours.

Ninth. Ice which is for use in drinking-water containers in cars or station buildings must not be placed on the floors, sidewalks, or car platforms where people may ex-pectorate, nor placed by unclean hands in the drinking water. It shall be washed and then handled with the ice tongs.

Tenth. Passengers, patrons, employees, or others are prohibited from washing their teeth over or expectorating in basins (which are used for bathing the face and hands) in sleeping cars, passenger cars, or railway station buildings. Large cuspidors or dental lavatories must be provided for such purposes.

Domestic Animals.

RULE 51. Destruction and disposal of domestic animals.¹-No carcass of any diseased animal shall be left unburied in the State of Florida, nor shall it be thrown into any stream, lake, pond, well, or other body of water therein. Any such carcass shall be buried by the owner 2 so that it will be covered by at least 3 feet of earth. Burial shall be made within 24 hours after death, and in all cases of death from such diseases as are declared by statute ³ to be nuisances, such carcasses shall be thoroughly envel-oped in unslacked lime. At all municipal dumping grounds where carcasses are disposed of provision must be made for their immediate burial. In lieu of the foregoing the dead bodies of animals may be burned, or disposed of in such a manner as the veterinarian of the State board of health may direct.

TRANSPORTATION OF THE DEAD.⁴

RULE 52. Burials.—The body of any person dying from diphtheria, scarlet fever, smallpox, Asiatic cholera, or bubonic plague shall be buried or cremated within 12 hours from the time of death. The body of any person dying from a disease other than those hereinabove named shall be buried or cremated within 24 hours from the time of death, unless properly embalmed and encased in a metal-lined casket or container, in which case such body may be held for interment or transportation for a period not exceeding 5 days.

RULE 53. When transportation forbidden.—The bodies of persons who have died of smallpox or bubonic plague shall not be transported or disinterred in Florida, or from another State, Territory, or foreign country to any place in this State, or from any place in this State to another State, territory, or foreign country. RULE 54. When required to be embalmed.—The transportation of bodies of persons

who have died of Asiatic cholera, diphtheria, membraneous croup, scarlet fever, erysipelas, glanders, anthrax, or leprosy shall not be accepted for transportation unless prepared for shipment by being thoroughly disinfected by (a) arterial and cavity injection with an approved disinfecting fluid; (b) disinfection and stopping all orifices with absorbent cotton, and (c) washing the body with a disinfectant, all of which must be done by an experienced embalmer holding a license from the State board of health. After being disinfected as above, such body shall be enveloped in a layer

¹ In accordance with sec. 7, ch. 5933, Laws of Florida, 1909.
² If the owner should refuse to bury the carcass of such animal, provision is made in sec. 5, ch. 5933, Laws of Florida, 1909, for the burial of the same by the sheriff upon order of the State health officer.
³ See sec. 1, ch. 5933, Laws of Florida, 1909.
⁴ The licensing of embalmers by the State board of health is based upon the provisions of sec, 1120, General Statutes, 1906, and upon the necessity of regulating the transportation of the dead on railway and steamship lines in this State and from this State to other States and countries. See Twenty-first (1909) Annual Report, State Board of Health of Florida, pp. 38-45, which gives correspondence with and the opinion of the attorney general of Florida upon this subject.

of cotton, not less than 1 inch thick, complet ely wrapped in a sheet securely fastened, and encased in an air-tight zinc, tin, copper, or lead lined coffin or iron casket, all joints and seams hermetically sealed, and all inclosed in a strong, tight, wooden box; or, the body being prepared for shipment, by disinfecting and wrapping as above, may be placed in a strong coffin or casket, and said coffin or casket encased in an airtight zinc, copper, or tin lined box, all joints and seams hermetically soldered. For transportation under this rule, only embalmers holding a license or certificate issued or approved by the State board of health shall be recognized as competent to prepare such bodies for shipment.

RULE 55. When required to be embalmed or otherwise especially prepared.—The bodies of those who have died of typhoid fever, puerperal fever, tuberculosis, or measles may be received for transportation when prepared for shipment by arterial and cavity injection with an approved disinfecting fluid, washing the exterior of the body with the same, and enveloping the entire body with a layer of cotton not less than 1 inch thick, and all wrapped in a sheet securely fastened, and encased in an air-tight coffin or casket or air-tight metal-lined box; provided, that this shall apply only to bodies which can reach their destination within 30 hours from the time of death. In all other cases such bodies shall be prepared by a licensed embalmer holding a license as provided for in the preceding rule. When prepared by a licensed embalmer, as defined and directed in these rules, the air-tight sealing and bandaging with cotton may be dispensed with.

 \dot{R}_{ULE} 56. When death not caused by malignant disease.—The bodies of those dead from any cause not stated in rules 54 and 55 may be received for transportation when encased in a sound coffin or casket and inclosed in a strong outside wooden box, provided they can reach their destination within 30 hours from the time of death. If the body can not reach its destination within 30 hours from the time of death, it must be prepared for shipment by arterial and cavity injection with an approved disinfecting fluid, washing the exterior of the body with the same, and enveloping the entire body with a layer of dry cotton not less than 1 inch thick, and all wrapped in a sheet securel fastened, and encased in an air-tight metallic coffin or casket or in an air-tight metal-lined box.

RULE 57. Transportation regulations.—In the shipment of bodies dead from any disease named in rule 54, such body must not be accompanied by persons or articles which have been exposed to the infection of the disease, unless certified by the local or State health officer as having been properly disinfected. Before selling tickets, agents of the carrier must carefully examine the transit permit and note the name of the passenger in charge and of any others proposing to accompany the body and see that all necessary precautions have been taken to prevent the spread of the disease. The transit permit in such cases shall specifically state who is authorized by the health authorities to accompany the remains. In all cases where bodies are forwarded under rule 54, notice must be sent by telegram by the shipping embalmer to the health officer, or, when there is no health officer, to other competent authority, at destination of such body, advising the date and train on which the body may be expected.

RULE 58. How corpse must be shipped .- Every dead body must be accompanied by a transit permit (Form 119) showing physician's or coroner's certificate, name of deceased, date and hour of death, age, place of death, cause of death, and all other items of the standard certificate of death recommended by the American Public Health Association and adopted by the United States Bureau of the Census, which are hereby adopted by the State Board of Health of Florida, so far as obtainable or applicable, including health officer's or agent's permit for removal, whether a communicable or noncommunicable disease, the point to which the body is to be transported, and when death is caused by any of the diseases specified in rule 54 the names of those authorized by the health authorities to accompany the body, also the undertaker's certificate as to how the body has been prepared for shipment. The transit permit must be made in triplicate, and the signature of physician or coroner, health officer, and undertaker must be on the original, duplicate, and triplicate copies. The undertaker's or agent's certificate and paster of the original shall be detached from the transit permit and securely fastened on the end of the coffin box. All coffin boxes must be provided with at least four handles. The physician's certificate and transit permit shall be handed to the passenger or agent in charge of the corpse, if any. The whole duplicate copy shall be sent to the official in charge of the baggage department of the initial line, and by him to be forwarded to the State board of health of the State of destination and the triplicate copy to the State Board of Health of Florida.

RULE 59. Shipment of bodies by express.—When bodies are shipped by express, a transit permit, as described in rule 58, must be made out in triplicate. The under-taker's affidavit and paster of the original shall be detached from the transit permit

and securely fastened on the coffin box. The physician's certificate and transit permit shall be attached to and accompany the express waybill covering the remains, and be delivered with the body at the point of destination to the person to whom it is consigned. The whole duplicate copy shall be sent by the forwarding express agent to the State board of health of the State from which said shipment was made, and the triplicate copy to the State Board of Health of Florida.

RULE 60. Disinterments.—Disinterred bodies of persons who have died from any disease or cause, shall be treated as infectious or dangerous to the public health, and shall not be accepted for transportation in or removal from this State unless said removal has been approved by the State health officer, if the disinterment be in this State, and unless the consent of the health authorities of the locality to which the corpse is consigned has first been obtained; and no such dead body shall be brought into Florida without the approval of the public health authorities having jurisdiction of the place where such body was disinterred, and no such bodies shall be transported, received, or buried in this State unless satisfactory evidence of compliance with the rules of this board respecting same shall be submitted to the State health officer and his written consent obtained to such transportation, receipt, or burial; and no disinterred body shall be shipped or transported from one place to another in this State without the written permission of the State health officer, and full compliance with the rule of this board respecting disinterments of bodies. All such disinterred remains or the coffin or casket containing the same must be wrapped in a woolen blanket, thor-oughly saturated with a 1-1000 solution of corrosive sublimate and inclosed in a hermetically soldered zinc, tin, or copper lined box. But bodies deposited in receiv-ing vaults shall not be treated or considered the same as buried bodies, when originally prepared by a licensed embalmer, as defined in rule 54 (according to the nature of the disease causing death), provided shipment takes place within 30 days from the time The shipment of bodies prepared in the manner above directed by licensed of death. embalmers from receiving vaults may be made within 30 days from time of death without the necessity of obtaining permission from the health authorities of the locality to which the body is consigned. After 30 days the casket or coffin box containing said body must be inclosed in a hermetically soldered box.

RULE 61. Examination and licensing of embalmers.—For the purpose of effecting a compliance with the foregoing rules 52 to 60 governing the transportation of the dead, there shall be a board of embalmers' examiners consisting of the State health officer, who shall act as chairman of said board, one of the assistant State health officers (to be selected annually by the State board of health in annual session), and the senior bacteriologist of the State board of health, who shall constitute a board for the purpose of examining and licensing embalmers to embalm and otherwise prepare dead bodies for transportation in accordance with rules 52 to 60 of the State Board of Health of Florida. Examinations shall be conducted by this board of embalmers' examiners in the city of Jacksonville, county of Duval, State of Florida, in the months of April and October of each year, and at such other times and places as the State board of health may direct: *Provided*, That should not more than five persons make application for such examination, as hereinafter provided, within a period of 10 days previous to the first day of the month of October in each year, the State health officer, as the chairman of the examining board, may be empowered to defer such meeting of the examining board until the regular spring examination.

The examining board until the regular spring examination. RULE 62. Qualifications of applicants.—All applicants for license under these rules shall have attained the age of 21 years and shall have had not less than two years' practical experience as an apprentice under a licensed embalmer, or in lieu thereof shall have had a practical experience of not less than one year under a licensed embalmer and have completed the regular course of instruction in a school of embalming recognized as being in good standing by the State Board of Health of Florida; and in addition to said requirements, each applicant for an embalmer's license shall have actually embalmed not less than 10 bodies under the supervision of a licensed embalmer prior to the day of examination. Each applicant for examination shall file with the secretary of the State board of health (who is the State health officer) not later than 10 days prior to the date of the next examination, a sworn statement of his or her age and other qualifications as required by these rules, and a certificate of good moral character, signed by three responsible citizens, one of whom must be a licensed embalmer personally acquainted with the applicant for at least one year. All applications under this rule shall be made upon blanks furnished by the State Board of Health of Florida.

RULE 63. Subjects of examination.—Under the provisions of these rules, each applicant for an embalmer's license shall be examined in the following subjects: Anatomy, sanitary science, bacteriology, the care, disinfection, preservation, transportation, and burial, or other final disposition, of dead bodies, and the rules and regulations of the State Board of Health of Florida relating to communicable diseases and their prevention and control; the applicant's efficiency as an embalmer shall also be demonstrated by operations on cadaver, all at the discretion of the board of embalmers' examiners.

RULE 64. Grading and rating in examinations.—The examination papers and written and oral answers shall, when concluded, be graded upon the scale of 100; the average rating required to pass shall be fixed by the board of examiners prior to the examination, but shall not at any examination be less than a ratio of 75 correct answers to 100 questions. If the examination be satisfactory to the members of the examining board it shall authorize its chairman to issue a license to the successful candidate or candidates. The license while in force shall confer upon the holder the right to prepare dead bodies for transportation and the right to disinter and remove for burial dead bodies, as provided for and regulated in rules 52 to 65 of the State Board of Health of Florida.

RULE 65. Revocation of licenses.—The board of embalmers' examiners may refuse to issue licenses provided for in these rules to individuals who have by false and fraudulent representation obtained or sought to obtain such license, or by false or fraudulent representation of their profession have obtained or sought to obtain money or anything of value, or for any other unprofessional and dishonorable conduct, or for the willful violation of the rules of the State board of health, and the board may revoke such licenses for any other like causes: *Provided*, That no license shall be revoked until the holder shall be given reasonable notice of the charge against him and an opportunity for a full hearing before said board.¹

COUNTY AGENTS AND INSPECTORS.

RULE 66. Appointment of officers and agents.—The State health officer is hereby authorized and empowered to employ, with the approval of the president of this board, suitable and proper persons to serve in the capacity of county sanitary agents, special agents, sanitary inspectors, and in such other capacities and to perform such other duties as may be necessary to prevent the introduction or spread of disease, for the preservation of the public health, and to secure the performance of the powers and duties of this board. Such persons shall be so employed only while their services are necessary, and shall be subject to removal at the pleasure of the State health officer or of the president of this board. The compensation of such persons shall be fixed at the time of employment by the State health officer and president of this board at such sum as they shall consider just and reasonable for the services to be rendered.

PUBLIC HEALTH LITERATURE.

RULE 67. Educational work.—It shall be the duty of local health officers and representatives of the State board of health to have on hand at all times a quantity of literature and pamphlets bearing upon and explaining in easily understood terms the nature and danger of communicable diseases, especially as regards tuberculosis, smallpox, scarlet fever, diphtheria, measles, typhoid fever, hookworm disease, and rabies, published by the State board of health or by local health organizations approved by the State board of health, which shall be furnished free of cost to physicians in attendance upon patients infected with any of the above-named diseases, and to the parents of such patients and to the teachers of public and private schools.

¹ Fees: No fees will be charged by the board of embalmers' examiners nor by the State board of health to be paid by the applicants for either the privilege of applying for license or for the issuance of a license to successful applicants; but all costs and expenses of conducting the examinations will be paid by the State board of health.

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

[Adopted since Jan. 1, 1912.]

ABERDEEN, WASH.

FOODSTUFFS-PROTECTION, PREPARATION, CARE, AND SALE OF MILK, MEAT, FISH, OYSTERS, BIRDS, FOWL, VEGETABLES, FRUIT, BREAD, CANDIES, CAKES, AND OTHER PROVISIONS IN MARKETS, SHOPS, STORES, BAKERIES, ICE-CREAM AND CANDY FAC-TORIES, STOREHOUSES, CANNING FACTORIES, RESTAURANTS, HOTELS, AND BOARD-ING HOUSES.

SECTION 1. Every person keeping, maintaining, or being in charge of any public or private market, stall, shop, store, bakery, ice-cream or candy factory, storehouse, warehouse, cold storage, cart, wagon, or other vehicle in, on, or about which any meat, fish, oysters, birds, fowl, vegetables, fruit, milk, bread, candies, cakes, or other provisions are kept, held, or stored, or offered for sale or other disposition, as food intended for human consumption, shall keep such place or vehicle in a clean, pure, and wholesome condition, and if any person shall allow or permit the same to become or remain unclean, impure, or unwholesome he shall be guilty of a violation of this ordinance.

SEC. 2. All meat, game, fish, vegetables, fruit, or other prepared foodstuffs shall be kept in an open receptacle not less than 2 feet above the floor. It shall also be unlawful to keep meat, fish, dairy products, cooked meats, figs, dates, dried olives, sauerkraut, mince meat, lard, butter, butterine, candy, crackers, cakes, bread, or any prepared food exposed for sale on the sidewalk in front of, or at any place outside of, or in front of any place where the same is exposed to soot, dust, or flies. SEC. 3. Every manager, owner, or other person in control of any store, market, or other

SEC. 3. Every manager, owner, or other person in control of any store, market, or other place where any of the food products heretofore mentioned are prepared for sale, stored for sale, offered for sale, or sold, or where food which is prepared for immediate consumption is prepared for sale, stored for sale, offered for sale, or sold shall cause the same to be screened in such manner as to prevent flies and other insects from obtaining access to such food, and to prevent handling of the same by patrons or prospective purchasers. All fruit, vegetables, meats, and other food kept, or sold, or offered for sale shall be kept in receptacles free from decayed matter of all kinds.

SEC. 4. Every person who shall bring into, hold, offer or expose for sale, or sell or deliver for sale or consumption within the city of Aberdeen, any milk or milk product, meat, vegetable, fish, or bread in any wagon, cart, or other vehicle shall provide such wagon, cart, or other vehicle with a suitable clean canvas cover, which shall be used at all times.

SEC. 5. It shall be unlawful to prepare, keep for sale, or sell any kind of meat, milk product, fish, game, vegetables, fruit, bread, cake, candy, or other food in any room in which a toilet is located, or in any room opening directly into a toilet room, unless there is outside ventilation to such toilet room.

SEC. 6. All dealers in meats, fowls, fish, vegetables, fruits, groceries, or other foods intended for human consumption shall maintain in their respective places of business, and in the part of the building occupied by them for business purposes, at least one water faucet connected by pipes with a suitable water supply, and sanitary lavatory conveniences must be provided for the use of employees.

SEC. 7. The baking of bread, cakes, pies, the manufacturing of candy, or the cooking of other food is prohibited from being done in a cellar or basement or other room where there is no direct ventilation to the outer air.

It shall be unlawful for any person to sell, or offer for sale, any bread, cake, pastry, or other baked food products, having attached to it a label or stamp, which is affixed thereto by foreign adhesive substance.

SEC. 8. Any person or persons owning or managing or in charge of any canning establishment or other place where meats, fish, oysters, fowls, fruits, vegetables, or other foods are canned or preserved for human consumption, who shall keep or conduct said places in an unclean, unwholesome, or insanitary manner; and any person canning, curing, or otherwise preserving any meats, fish, oysters, fowls, fruits, or vegetables for human consumption, who shall utilize in this way any diseased or decayed or unwholesome meat, fish, oysters, fowls, or any diseased or decayed or unwholesome fruit or vegetables, from filthy boxes, baskets, or other container, or use any chemicals therein deleterious to health, shall be deemed guilty of violating this ordinance.

SEC. 9. It shall be unlawful for any person in charge of any restaurant, hotel, boarding house, or other place where food is sold or served in cooked or raw state, to keep such place in an unclean or unsanitary condition, and all persons employed in or about such places shall keep themselves and their clothing in a clean and healthful condition.

SEC. 10. It shall be unlawful for any person in charge of or maintaining any restaurant, hotel, boarding house, or other place where meals or lunches are served in a cooked state or otherwise, to serve or cause to be served any tainted or diseased meat, fish, oysters, fowl, or any diseased, decayed, or partially decayed or unwholesome fruit, vegetables or any unwholesome food whatever, to any person or persons, either at said place or sent to any person or persons to be eaten at any other place.

SEC. 11. It shall be unlawful for any person or persons to keep live chickens, ducks, geese, turkeys, or other live fowl in any cellar or basement underneath any grocery store, market, or other place where foodstuffs are kept for sale. It shall also be unlawful for any person or persons to keep any live chickens, turkeys, ducks, geese, or live fowl of any kind in any room where any kind of foodstuffs, such as are enumerated in sections 1 and 2 hereof, are kept, prepared for sale or sold. Slaughterhouses and other places where fowl are killed and prepared for sale or storage shall be constructed with water-tight flooring, with properly trapped sewer connections, and these connected with the sewer, and immediately after each killing the floor shall be thoroughly washed and the place at all times kept in a clean and wholesome condition.

SEC. 12. The wrapping of meats, fish, breadstuffs, dairy products, vegetables, etc., destined for sale or delivery for food purposes, in newspapers or other unclean materials is hereby prohibited.

SEC. 13. All baker's products sold or offered for sale in stores in which groceries or other articles are sold shall be kept in a cleanly manner in suitable covered cases or receptacles.

SEC. 14. No foodstuff which is to be offered for sale shall be stored or kept in any living or sleeping room of any house.

SEC. 15. No foodstuffs shall be exposed in open windows or doorways or in front of stores unless properly protected from dust, flies, and animals.

SEC. 16. No provisions or foodstuffs of any kind shall be carried through any street, private way, or public places unless properly protected from dust and flies. SEC. 17. No ice cream shall be manufactured or stored in any portion of a building

SEC. 17. No ice cream shall be manufactured or stored in any portion of a building which is used for the stabling of horses or other animals, or in any room used in whole or in part for domestic or sleeping purposes, unless the manufacturing and storage room for ice cream is separated from other parts of the building to the satisfaction of the health officer of the city of Aberdeen.

SEC. 18. All rooms in which ice cream is manufactured or stored shall be provided with tight walls and floors and kept constantly clean. The walls and floors of said rooms shall be of such construction as to permit rapid and thorough cleansing. The room or rooms aforesaid shall be equipped with appliances for washing or sterilizing all utensils employed in the mixing, freezing, storage, sale, or distribution of ice cream, and all such utensils after use shall be thoroughly washed with boiling water, or sterilized by steam. Vessels used in the manufacture and sale of ice cream shall not be employed as containers for other substances than ice cream.

SEC. 19. All establishments in which ice cream is manufactured shall be equipped with facilities for the proper cleansing of the hands of operatives, and all persons immediately before engaging in the mixing of the ingredients entering into the composition of ice cream, or its subsequent freezing and handling, shall thoroughly wash his or her hands and keep them cleanly during such manufacture and handling. All persons shall be dressed in clean outer garments while engaged in the manufacture and handling of ice cream.

SEC. 20. No urinal, water-closet, or privy shall be located in the rooms mentioned in the preceding section, or so situated as to pollute the atmosphere of said rooms.

SEC. 21. All vehicles used in the conveyance of ice cream for sale or distribution shall be kept in a cleanly condition and free from offensive odors.

SEC. 22. Ice cream kept for sale in any shop, restaurant, or other establishment shall be stored in a covered box or refrigerator. Such box or refrigerator shall be properly drained and cared for and shall be kept tightly closed, except during such intervals as are necessary for the introduction or removal of ice cream or ice.

SEC. 23. Every person engaged in the manufacture, storage, transportation, sale, or distribution of milk, cream, or ice cream, immediately on the occurrence of any case or cases of infectious disease, either in himself or in his family, or amongst his employees, or within the building or premises where milk, cream, or ice cream is manufactured, stored, sold, or distributed shall notify the health officer, and at the same time shall suspend the sale and distribution thereof until authorized to resume the same by the said health officer. No vessels which have been handled by persons suffering from such disease shall be used to hold or convey the same until they have been thoroughly sterilized.

SEC. 24. No person, firm, or corporation shall sell or deliver or have in his or their possession for sale in the city of Aberdeen any milk which has been watered or adulterated, or which contains any preservative or unhealthful ingredient, constituent, or substance, or which has been transported or stored in an unclean manner, or which has been kept at a temperature above 60° F., or which is produced from cows which are kept or stabled under unhealthful conditions, or which may be diseased, nor shall any milk be sold or delivered in said city which is procured from any farm or dairy where any contagious, infectious, or communicable disease may exist.

SEC. 25. No person, firm, or corporation shall sell, deliver, or have in his or their possession any so-called "special milk," "baby milk," or "guaranteed milk" purporting to be especially adapted for infant feeding which shall be shown upon analysis to contain more than 10,000 bacteria per cubic centimeter.

SEC. 26. No person shall have in his possession, with intent to sell, offer, or expose for sale, or sell or deliver for sale or consumption in any store or place of business, or from any wagon, motor vehicle, or other vehicle, or in any can or package, any milk commonly known as skim milk or buttermilk, without marking the can or package containing said skim milk or buttermilk from which such milk is delivered to the customer or purchaser, with the words "skim milk," or "buttermilk," according to which is offered for sale, in large, plain, black letters. Said words to be in English, and on top or side of the can in such a position as to be easily seen when said milk is delivered to the customer.

SEC. 27. Any person, firm, or corporation violating any of the provisions of this ordinance shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not to exceed \$300, or by imprisonment in the city jail not to exceed 60 days, or by both such fine and imprisonment.

SEC. 28. That the city health officer of the city of Aberdeen is hereby empowered to make such examinations and inspections as may be proper to enforce the provisions of this ordinance.

[Ordinance No. 1264, adopted Sept. 25, 1912.]

CINCINNATI, OHIO.

MILK TO BE PASTEURIZED UNLESS FROM HERDS FOUND FREE FROM TUBERCULOSIS BY THE TUBERCULIN TEST APPLIED UNDER THE SUPERVISION OF THE BOARD OF HEALTH.

SECTION 1. It shall be unlawful for any person, firm, or corporation to sell, offer to sell, or have in his possession for the purpose of selling or giving to any person or persons in the city of Cincinnati, county of Hamilton, State of Ohio, milk or cream which has not been pasteurized as hereinafter required.

SEC. 2. Milk and cream shall be deemed pasteurized within the meaning of this regulation if the same shall have been heated to a temperature of not less than 140° **F**, and held at that temperature for not less than 30 minutes. The health officer of the board of health or his assistants shall be empowered to inspect the process of pasteurization, and the premises, apparatus, and conditions under which same is done. The pasteurization of milk or cream otherwise than according to the methods and processes approved by the city health officer shall not be deemed a compliance within the provisions of this regulation.

SEC. 3. The above-described pasteurization shall be required in all cases except where such milk and cream is obtained from dairies in which all the animals have been proved free from tuberculosis by the tuberculin test and physical examination, and have been branded and the tuberculous animals removed as hereinafter provided.

SEC. 4. That all tuberculin testing be done under the direct supervision of the board of health and the same be performed only by a recognized veterinarian or State or Federal authorities; all test sheets to be forwarded immediately to the health officer of the city of Cincinnati for approval.

SEC. 5. Tested cattle to be branded by a burnt brand on the hoof or a tattoo on the inner surface of the ear or a self-retaining button in the ear.

SEC. 6. All animals proved to be tuberculous by the tuberculin test to be immediately removed from the herd and the premises properly disinfected; and no cattle are to be added to the herd until they have passed a satisfactory tuberculin test.

SEC. 7. No milk or its by-products of any cow showing clinical symptoms of tuberculosis or other communicable diseases shall be sold as human food in any form in the city of Cincinnati.

[Resolution, Board of Health, adopted Sept. 11, 1912.]

LOS ANGELES, CAL.

DRUGS AND MEDICINES-SALE OF ON STREETS OR FROM HOUSE TO HOUSE OR DISTRIBU-TION OF SAMPLES PROHIBITED.

SEC. 61. It shall be unlawful for any person, firm, or corporation to distribute, or to cause to be distributed, to or among pedestrians, or to throw or place, or to cause to be thrown or placed, into or upon any car, vehicle, or other conveyance along or upon any public street or other public place, or to throw, place, or leave, or to cause to be thrown, placed, or left, in or upon any private building or premises, any drug, physic, or patent medicine, or any sample thereof.

medicine, or any sample thereof. SEC. 62. It shall be unlawful for any person to sell or peddle from house to house, or in or upon any public street or other public place, any medicine or drug unless such person shall have first registered his name and address in the office of the health department and shall have furnished the said health commissioner with a sample and the formula of such medicine or drug, and shall have received a permit, in writing, from the health commissioner to sell or peddle the same: *Provided, however*, That the provisions of this section shall not apply to traveling salesmen dealing directly with physicians, surgeons, dentists, or druggists doing business in the city of Los Angeles. Each such permit and each such registration shall expire one year from and after the date thereof, unless sooner revoked by the health commissioner.

[Ordinance adopted May 1, 1912.]

NEW ORLEANS, LA.

MEAT-INFLATION OF CARCASSES PROHIBITED.

SECTION 1. Be it ordained by the council of the city of New Orleans, That from and after the passage of this ordinance, it shall be unlawful for any corporation, firm, or person, himself or by his servant, agent, or employee, or as the servant, agent, or employee of another to inflate or blow the carcass or any part thereof of any meat of any animal whose flesh may be offered to the public for human consumption.

SEC. 2. Be it further ordained, etc., That it shall be unlawful for any corporation, firm, or person, himself or by his servant, agent, or employee, or as the servant, agent, or employee of another to sell, offer or expose for sale, or have in its, their, or his possession for sale any such inflated or blown carcass or part thereof or any such inflated or blown meat of any animal whose flesh may be offered to the public for human consumption.

SEC. 3. Be it further ordained, etc., That whoever shall violate any of the provisions of this ordinance shall, on conviction, be punished by a fine of not less than \$10 nor more than \$25, or in default of payment of such fine, by imprisonment in the parish prison for not more than 30 days, or both, at the discretion of the court having jurisdiction.

SEC. 4. Be it further ordained, etc., That ordinances 421, Council Series; 4967, Council Series; 8387, New Council Series; and all other ordinances or parts of ordinances in conflict with this ordinance be and the same are hereby repealed.

[Ordinance No. 8617, adopted May 9, 1912.]

OCCURRENCE AND GEOGRAPHIC DISTRIBUTION OF DISEASE AS SHOWN BY MORBIDITY REPORTS.

The State morbidity reports, which follow, are those made pursuant to the resolution adopted by the Tenth Annual Conference of State and Territorial Health Authorities with the Public Health Service June 1, 1912. Blanks for the making of these reports have only recently been prepared and distributed, and the reports now published are those made to this time. The State department of health of Minnesota began these reports with the month of June, 1912. The other States that have made reports began with the month of October.

SMALLPOX.

MINNESOTA REPORTS FOR JUNE, JULY, AUGUST, AND SEPTEMBER, 1912.

			Va	Vaccination history of cases.				
Places.	New cases reported during month.	Deaths.	Vacci- nated within 7 years pre- ceding attack.	Last vac- cinated more than 7 years pre- ceding attack.	Never success- fully	Vacci- nation history not ob- tained or uncer- tain.		
June:								
Aitkin County—								
Aitkin.	1				1			
Farm Island Township	1				. 1			
Carlton County— Moose Lake	2				2			
Crow Wing County-					-			
Crosby	2			1	1	1		
Dakota County-						1		
Inver Grove	2			1	1			
Hennepin County— Minneapolis	46		1			46		
Isanti County—	. ±0	••••						
Isanti Townsip	1 1		1			1		
Lincoln County—			-	-				
Lake Benton	1			1				
Lyon County—								
Custer Township	15	• • • • • • • •		15		•••••		
Mower County— Austin	4				2	2		
Austin Township	i		1					
Murray County—			-					
Lake Sarah Township	1				1			
Otter Tail County—	_				1			
Fergus Falls Polk County-	5	•••••				5		
Crookston	1				1			
Ramsey County-	-	•••••		•••••	-			
St. Paul	99		9	6	81	3		
Red Lake County-								
Lake Pleasant Township Redwood County—	1	•••••		• • • • • • • • • • •	1	•••••		
Charlestown Township	1				1			
Rice County—			•••••	•••••	•	•••••		
Cannon City Township	2			1	1			
Northfield	5				4	1		
Wells Township.	3	• • • • • • • • •		•••••	3	•••••		
Wolcott Township St. Louis County—	I	•••••	••••	•••••	1	•••••		
Duluth	1				1			
Todd County-					•			
Staples	1				1	••••••		
Traverse County—				.				
Monson Township	2	•••••	•••••	1	1	•••••		
Total	199		11	26	105	57		
- VVCA								

SMALLPOX—Continued.

Minnesota reports for June, July, August, and September, 1912-Continued.

	1		Va	Vaccination history of cases.				
Places.	New cases reported during month.	Deaths.	Vacci- nated within 7 years pre- ceding attack.	Last vac- cinated more than 7 years pre ceding attack.	Never success- fully	Vacci- nation history not ob- tained or uncer- tain.		
July:								
Aitkin County— Unorganized township	1	.	.		1			
Big Stone County— Clinton Township	1		.			1		
Goodhue County— Vasa Township	2					2		
Hennepin County— Minneapalis	24					24		
Lyon County— Custer Township	14				14			
Murray County— Lake Sarah Township					6			
Ramsey County- St. Paul.	39			1	38			
St. Louis County—				1		·····		
Duluth Washington County—					8			
Stillwater	2	·····			1	1		
Total	97			1	68	28		
August: Blue Earth County—								
Mankato	1					1		
Carlton County— Moose Lake	1					1		
Skelton Township Fillmore County—	1				1	·····		
Bristol Township Hennepin County—	1			1				
Minneapolis	11			1	10			
Itasca County— Bovey	1	. .		1				
Lyon County— Monroe Township	1				1			
Tracy	1				1			
Ramsey County— St. Paul Rice County—	3	•••••		1	2			
Walcott Township	2		2					
Rock County— Martin Township	2				2			
St. Louis County— Duluth	6				6			
Scott County— Belle Plaine Township	1				1			
Total	32		2	4	24	2		
September: Aitkin County—	0				9			
Nordland Township Hennepin County—	2	•••••	•••••		2	•••••		
Minneapolis Mower County—	13			•••••	13	•••••		
Lansing Township Olmsted County—	4	••••••			4	•••••		
Oronoco Township	1		••••••		1			
St. Louis County— Duluth.	5			1	4	· · · · · · · · · · · · · ·		
Steele County— Summit Township	1].				1			
Winona County— Fremont Township	6					6		
Fremont Township Yellow Medicine County— Echo Township	3				3			
				1		6		
Total	30			-	20	0		

SMALLPOX—Continued.

STATE REPORTS FOR OCTOBER, 1912.

			V	Vaccination history of cases.			
Places.	New cases reported during month.	Deaths.	Vacci- nated within 7 years pre- ceding attack.		Never success- fully	Vacci- nation history not ob- tained o uncer- tain.	
Alabama:							
Bibb County Montgomery County	2			• • • • • • • • • • •			
Pickens County	. 8						
Tuscaloosa County	. 16			• • • • • • • • • •	.		
Total	. 27						
Kansas:				=		= ===	
Coffey County	. 4			.			
Geary County	3			-			
Total	7						
Massachusetts:						= ===:	
Essex County—	10			1 .	9		
Newburyport Worcester County—	10			. 1	9	•••••	
Lancaster	18	1	[14		
Total	28	1		1	23		
Minnesota:							
Aitkin County—							
Farm Island Township Nordland Township	5 12	· · · · · · · · ·			5 12		
Brown County-						•••••	
Sleepy Eye Hennepin County—	1			1			
Minneapolis	17		1		16		
Kandiyohi County—			-			•••••	
Willmar Meeker County—	1	••••			1		
Dassel	3				3		
Dassel Township	1				1		
Mower County— Austin	1			1			
Lansing Township				ī			
Olmsted County— New Haven Township	1				1		
Ramsey County—					-	•••••	
St. Paul St. Louis County—	4				4	•••••	
Duluth	1				1		
Scott County-							
Jordan Sand Creek Township	2 1	•••••			2 1	•••••	
Steele County-	_				_		
Blooming Prairie Washington County—	1	• • • • • • • • •	• • • • • • • • • • • •		1	•••••	
Stillwater	1				1		
Total	53		1				
lew York:			1	3			
Essex County-							
Moriah Township	3			1	2		
Ticonderoga Township Franklin County—	1	• • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • •	1	•••••	
Bombay Township	27			8	19		
Constable Township Fort Covington Township	1			••••••	1 2		
Fort Covington	1			1	4	. . .	
Niagara County— Lockport							
Niagara Falls	1					1	
North Tonawanda	2			1	1	،	
St. Lawrence County— Massena Township	1					1	
Stockholm Township	i				1	ر · · · · · · · · · ·	
Steuben County— Bath							
Washington County—	1		•••••	•••••	1	•••••	
Greenwich Township	2					2	
Saratoga County— Saratoga	1				1		
Total	46 .			12	29	5	

SMALLPOX-Continued.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED NOV. 16, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md Cincinnati, Ohio Cumberland, Md Detroit, Mich Duluth, Minn Evansville, Ind Kansas City, Kans Knoxville, Tenn La Crosse, Wis	1 7 1 11 2 1		Spokane, Wash	1 1 9 1 2	.

TYPHOID FEVER.

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MINNESOTA REPORTS FOR JUNE, JULY, AUGUST, AND SEPTEMBER, 1912.

1312.							
Place.	New cases reported during month.	Place.	New cases reported during month.				
June:		July-Continued.					
Anoka County-		Nicollet County—					
Anoka	4	Lake Prairie Township	1				
Beltrami County-	1	Olmsted County-					
Blackduck	7	Rochester	5				
Summit Township	2	Ramsey County-	10				
Tenstrike	1	St. Paul North St. Paul	10				
Chippewa County— Granite Falls	2	St. Louis County—	-				
Granite Falls Township	1	Duluth	19				
Crow Wing County-	-	Stearns County-					
Crow Wing County— Brainerd	4	Albany Township	1				
Freeborn County-	-	Wabasha ('ounty					
Albert Lea	1	Wabasha	1				
Hennepin County—		Washington County-					
Minneapolis	21	Stillwater	6				
St. Louis Park	1	Total	57				
Itasca County—			57				
Ardenhurst Township	1	August: Becker County—					
Kandiyohi County— Willmar	1	Detroit					
Koochiching County—	-	Clay County—	1				
Englewood Township	1	Hawley	1				
Northome	2	Douglas County-	-				
McLeod County-	1	Alexandria	1				
Helen Township	1	Freeborn County-					
Mille Lees County-	1	Alden	1				
Milaca	1	Goodhue County-					
Olmsted County—		Red Wing	1				
Rochester	4	Hennepin County-	22				
Otter Tail County—		Minneapolis.	22				
Fergus Falls.	1	Nobles County Ellsworth	1				
Pipestone County— Woodstock	1	Olmsted County-	•				
Ramsey County-	-	Olmsted County— Elmira Township	1				
St. Paul	3	Rochester	1				
Redwood County-	1	Otter Tail County-					
Redwood Falls	1	Fergus Falls	3				
St Louis County-		Ramsey County-					
Duluth	11	St. Paul	22				
Stearns County		St. Louis County-	5				
Kimball	1	Duluth Virginia	2				
Total	73	Stearns County-					
10081	13	Stearns county	2				
July:		Steele County					
Chippewa County—		Owatonna	5				
Granite Falls	2	Stevens County-	1				
Clay County-		Hancock	1				
Hawley	3						
Goodhije Collinty	1 1	Long Prairie Yellow Medicine County-	1				
Red Wing	1	Yellow Medicine County-					
Hennepin County—		Granite Falls	1				
Minneapolis	6	Total	72				
Itasca County		1081	. 14				
Nashwauk	•						

TYPHOID FEVER-Continued.

Minnesota reports for June, July, August, and September, 1912-Continued.

Place.	New cases reported during month.	Place.	New cases reported during month.
September:		September—Continued.	
Becker County—		Olmsted County-	
Lake View Township	1	Kalmar Township	1 1
Blue Earth County-	-	Oronoco Township	
Mankato	2	Rochester	1 ī
Crow Wing County-	-	Otter Tail County—	-
Brainerd	1	Fergus Falls	2
Dakota County	-	Ramsey County— St. Paul	-
Hastings	1	St. Paul	20
Freeborn County-		Red Lake County-	
Alden	1	Lambert Township	1
Hennepin County—	i	Redwood County	
Excelsior	1	Redwood Falls	1
Minneapolis	35	Rice County—	1
Itasca County— Nashwauk		Northfield	1
Nashwauk	1	Rock County	
Lac Qui Parle County—	1	Luverne	1
Lake Shore Township	1	St. Louis County-	
Marshall County—	1	Duluth	17
Stephen	1	Hibbing	3
Mille Lacs County—		Steele County—	1
Milo Township	1	Owatonna	1
Mower County—		Wright County—	
Austin	3	Rockford Township	1
Le Roy Township	1		
Murray County-		Total	106
Chandler	1		
Nicollet County—	الم		
St. Peter	3		

STATE REPORTS FOR OCTOBER, 1912.

Alabama:		Kansas-Continued.	
Bibb County	3	Jackson County	
Fayette County		Kearney County	
Jackson County		Lincoln County	
Jefferson County	31	Linn County	
Lamar County	1	Logan County	
Lee County	8	Lyon County	
Limestone County	2	Marion County	
Madison County.		Miami County	
Marshall County		Montgomery County Coffeeville	
Mobile County		Coffeeville	
Montgomery County	5	Neosho County	
Tallapoosa County	3	Nees County	
	9	Ness County Norton County	
(T) = 4 = 1		Norton County	
Total	76	Osage County	
_		Osborne County	
Kansas:		Pawnee County	
Allen County	5	Pratt County	
Anderson County	6	Reno County-	
Atchison County	2	Hutchinson	
Atchison	1	Republic County	
Barton County	1	Rice County	
Bourbon County		Riley County	
Fort Scott	1	Rooks County	
Brown County		Rush County	
Butler County	$\frac{1}{2}$	Saline County	
Chose County	1	Sedgwick County	
Chase County			
Chautauqua County	1	Wichita.	
Coffey County		Seward County	
Comanche County	1	Shawnee County	
Cowley County	2	Topeka	
Crawford County	10	Sheridan County	
Pittsburg	2	Smith County	
Decatur County	4	Sumner County	
Doniphan County	3	Thomas County	
Douglas County.	i	Trego County	
Edwards County	3	Washington County	
Ellis County	8	Wichita County	
Ellsworth County	2	Wilson County	
Einsworth County	ĩ	Woodson County	
Finney County	1		
Franklin County		Wyandotte County-	
Gove County	5	Kansas City	
Graham County	1		-
Hamilton County	1	Total	
Hodgman County	1		-

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TYPHOID FEVER-Continued.

State reports for October, 1912—Continued.

Place.	New cases reported during month.	Place.	New case reported during month.
assachusetts:		Massachusetts-Continued.	
Barnstable County	1	Worcester County— Blackstone	
Berkshire County—	1	Clinton	
Adams	2	Gardner	
Cheshire	1	Grafton	
Lenox.	2	Hopedale	
North Adams	64	Leominster Milford	
Pittsfield Washington	1	Rutland	
Bristol County-	-	Spencer	
Acushnet	1	Webster	
Attleboro	1	Worcester	1
Fairhaven	1	(Trada)	
Fall River	15	Total	32
New Bedford Norton	22 1	Minnesota:	
Rehoboth	i	Aitkin County—	
Swansea	5	Aitkin	
Taunton	5	Spencer Township	
Essex County-		Becker County—	
Beverly	6	Detroit	
Danvers	8	Lake Eunice Township	
Gloucester Groveland	2 1	Beltrami County Baudette	
Haverhill	1	Bemidji	
Ipswich	7	Carlton County—	
Lawrence	4	Moose Lake	
Lynn	2	Carver County—	
Methuen	4	Chanhassen Township	
Newburyport	2	Chippewa County-	
Peabody	4	Montevideo Dakota County—	
Saugus Franklin County—	1	Empire Township	
Colerain	1	Faribault County-	
Greenfield	2	Blue Earth	
Shelburne	ī	Freeborn County—	
Sunderland	1	Albert Lea.	•
Hampden County-		Goodhue County	
Holyoke	3 2	Red Wing Hennepin County—	
Russell. Springfield	2 10	Champlin Township	
Hampshire County—	10	Minneapolis	2
Middlefield	1	Itasca County—	
Middlesex County—		Grand Rapids	
Arlington	2	Nashwauk	
Boxborough	3	Lyon County—	
Cambridge	5	Tracy Marshall County—	
Chelmsford	4	Argyle	
Everett	4	Stephen	
Framingham Hopkinton	3	Morrison County-	
Lowell	16	Little Falls	
Malden	4	Little Falls Township	
Medford	2	Mower County-	
Somerville	4	Austin Bennington Township	
Stoneham	1	Le Roy Township	
Waltham	2	Murray County—	
Watertown Weston	3	Chandler	
	U U	Chanaramoie Township	
Norfolk County— Avon	1	Nicollet County—	
Braintree	î I	St. Peter.	
Brookline	3	Nobles County— Worthington	
Franklin	1	Otter Tail County—	
Milton	1	Fergus Falls	
Wellesley	1	Pennington County—	•
Plymouth County-	.	Hickory Township	
Bridgewater	1	Pipestone County—	
Brockton.	6 1	Trosky	
Halifax Hanover	1	Polk County— Angus Township	1
Plymouth	3	Chester Townshin	
Suffolk County	-	Gully Township	Ì
Boston	74	Gully Township Ramsey County— St. Paul	
	4		2

TYPHOID FEVER—Continued.

State reports for October, 1912—Continued.

Place.	New cases reported during month.	Place.	New cases reported during month.
Minnesota—Continued.		New York—Continued. Cortland County—	
Renville County— Bird Island Rice County—	1	Cortland County Cortland Solon Township	
Faribault St. Louis County—	1	Delaware County— Franklin Township	
Biwabik Buyck Township	1	Middletown Township Stamford Township	1
Duluth. Eveleth.	7	Walton	
Gilbert	12	Dutchess County— Fishkill Landing	4
Hibbing Virginia	1 10	Matteawan Poughkeepsie Rhinebeck	
Sibley Čounty— Green Isle	1	Rhinebeck Erie County—	5
Stearns County— St. Cloud	1	Blasdell. Buffalo	1 29
Swift County—		Depew	1
Six Mile Grove Township Todd County—	4	East Hamburgh Township Lackawanna	
Long Prairie Washington County—	1	Tonawanda Essex County—	2
Stillwater Watonwan County—	1	North Elba Township Ticonderoga	1 2
St. James Wright County—	1	Franklin County— Waverly Township	2
Buffalo Township	2	Fulton County- Broadalbin Township	
Marysville Township	1	Gloversville	
Total New York:	138	Genesee County— Batavia	1
Albany County-		Bethany Township Darien Township Oakfield Township.	1
Albany Coeymans Township	10 2	Oakfield Township Greene County—	
Cohoes Watervliet	4 2	Athens	1
Allegany County— Almond Township	7. 1'	Catskill. Coxsackie Township	1
Bolivar Cuba	1	Greenville Township Herkimer County—	2
Richburg	1 1	Little Falls. Norway Township	1
Wirt Township Broome County—	1	Jefferson County— Watertown	
Binghamton Lestershire	16 3	Livingston County—	
Cattaraugus County— Dayton Township Ellicottville	- 1	Mount Morris Madison County—	1
Ellicottville.	3	Cazenovia Oneida	1
Farmersville Township Franklinville	1	Stockbridge Township	1
Gowanda Great Valley Township	1 2	Monroe County— Brighton Township	12
Ischua Township Little Valley	1	Gates Township Perinton Township	1
Olean Salamanca Township	2	Rochester	17 1
Cayuga County—		Webster	1
Cayuga County— Auburn. Chautauqua County— Dunkirk.	3	Montgomery County— Amsterdam Canajoharie	9 2
Falconer	5	Nassau County-	2
Jamestown	3	Hempstead Mineola	2
Chemung County— Elmira Chenango County—	19	Oyster Bay Rockville Center	1
Norwich Pitcher Township	6	New York County— New York City	390
Clinton County—	1	Niagara County—	
Beekmantown Township Mooers	1	Hartland Township La Salle	3 2
Plattsburgh Township Plattsburgh.	3	Niagara Falls North Tonawanda	15
Columbia County-		Oneida County-	3
Canaan Township Chatham Township	1	Clinton Florence Township	1
Livingston Township Stockport Township	1	Paris Township Utica	2 1

TYPHOID FEVER—Continued.

State reports for October, 1912—Continued.

Place.	New cases reported during month.	Place.	New cases reported during month.
New York-Continued.		New York—Continued.	
Onondaga County-		Saratoga County—	
DeWitt Township	1	Saratoga Springs	
East Syracuse		Schenectady County-	
Liverpool	1	Schenectady County— Rotterdam Township	1 2
Manlius		Schenectady	9
Marcellus	1	Seneca County-	
Otisco Township	1	Ovid Township] (
Syracuse	2	Seneca Falls Township	2
Tully	3	Steuben County—	
Ontario County—		Cameron Township	
Canandaigua	4	Corning	
Phelps	1.	Hornell.	
Victor	1	Painted Post.	
Orange County—	1	Rathbone Township Wayne Township	
Blooming Groove Township Chester Township	i	Suffolk County—	1 1
Crawford Township	i	Huntington Township	8
Goshen Township	1	Patchogue	l i
Goshen	i	Patchogue Riverhead Township	i
Highland Falls		Sullivan County-	-
Middletown	5	Delaware Township	1
Newburgh Township	ĭ	Monticello	
Newburgh	4	Tioga County	-
Walden		Spencer Township	1
Warwick Township	3	Tioga Township	1 1
Orleans County-	_	Tompkins County—	
Orleans County— Clarendon Township	1	Ithaca	8
Holley	1	Illaton Country	1
Medina	1	Kingston	8
Murray Township	1	Warren County	
Oswego County—		Cnester Township	1
Altmar Scriba Township	1	Glens Falls	1
Scriba Township	1	Horicon Township	
Williamstown Township	$\frac{1}{2}$	Luzerne Township	1 1
Oswego	2	Washington County— Fort Edward	
Otsego County	1	Whitehall.	Ì
Éxeter Township Hartwick Township	3	Wayne County—	
Otsego Township	1	Arcadia Township	1 1
Pittsfield Township	l î l	Savannah	i
Rensselaer County-	-	Westchester County-	-
Brunswick Township	2	Dobbs Ferry	! 1
Brunswick Township Hoosick Falls	1	Dobbs Ferry Mount Vernon	1
Pittstown Township	1	New Rochelle	1 2
Poestenkill Township	4	Ossining	4
Troy	3	Peekskill	1
Troy Rockland County—		Westchester County-	i -
Nyack Orangetown Township	1	Pound Ridge Township	1
Orangetown Township	2	White Plains	ļ
Piermont	1	Yonkers	7
St. Lawrence County-		Wyoming County—	1
Clare Township	1	Perry	
Fine Township	1	Total	812
Fowler Township	5 1	10(a)	014
Norfolk Township	1		1

EPIDEMIC CEREBROSPINAL MENINGITIS.

MINNESOTA REPORTS FOR JUNE, JULY, AUGUST, AND SEPTEMBER, 1912.

Place.	New cases reported during month.	Place.	New cases reported during month.
Minnesota: June July—	None.	Minnesota—Continued. September— Stearns County—	2
St. Louis County— Mesaba Township August	1 None.	Freeport	3

EPIDEMIC CEREBROSPINAL MENINGITIS-Continued.

Place.	New cases reported during month.	Place.	New cases reported during month.
Alabama: Lauderdale County Jefferson County		New York: Albany County— Albany	1
Total		Broome County— Binghamton	1
Kansas: Harvey County	1	Erie County— Hamburg Township Herkimer County—	1
Total		Danube Township Monroe County Rochester	
Minnesota	None.	New York County	
Massachusetts: Boston	5	Orange County – Newburgh	1
Brockton Fall River	1 1	St. Lawrence County— Piercefield Township	1
Haverhill Lawrence Somerville	ĩ	Schenectady County— Rotterdam Township Steuben County—	1
Waltham Worcester	1	Pultney Township	1
Total	13	Total	26

STATE REPORTS FOR OCTOBER, 1912.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED NOV. 16, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston. Mass. Chicago, Ill. Cincinnati, Ohio Cleveland, Ohio Lexington, Ky. Los Angeles, Cal.	1 2 2	1 3 2 1 1	Lynn, Mass. Nashville, Tenn. New Bedford, Mass. New York, N. Y. Omaha, Nebr. Worcester, Mass.	2 1 11	1 1 9 1

POLIOMYELITIS (INFANTILE PARALYSIS).

MINNESOTA REPORTS FOR JUNE, JULY, AUGUST, AND SEPTEMBER, 1912.

Place.	New cases reported during month.	Place.	New cases reported during month.
Minnesota: June. July—	<u>None.</u>	Minnesota—Continued. August—Continued. St. Louis County— Duluth	1
Beltrami County— Blackduck Hennepin County—	1	Total	4
Minneapolis	1 2	September— Stearns County— Freeport. Ramsey County—	1
August Carlton County Skelton Township	1	St. Paul Hennepin County— Minneapolis	1 4
Goodhue County— Zumbrota	2		6

POLIOMYELITIS (INFANTILE PARALYSIS)-Continued.

STATE REPORTS FOR OCTOBER, 1912.

Place.	New cases reported during month.	Place.	New cases reported during month.
Kansas:		New York—Continued.	
Bourbon County	23	Cortland County-	
Crawford County		Cortland Dutchess County—	2
Lyon County Marshall County		Milan Township	2
Montgomery County	4	Milan Township Union Vale Township	1
Neosho County	2	Erie County	
Scott County Washington County	1	Buffalo. Colden Township	30
wasnington County	1	Concord Township	1
Total	18	Concord Township East Hamburgh Township	
Massachusetts:		Lancaster Township	1
Berkshire County-		Lancaster	1
Chesshire	1	West Seneca Township Genesee County—	1
Bristol County—	1	Alahama Townshin	2
Taunton Essex County	1 I	Batavia Township	2 1 3
Rockport	1	Batavia	3
Franklin County—		Bergen.	1
Deerfield	$\frac{1}{2}$	Elba Township Jefferson County—	. 1
Greenfield Whateley		Watertown	1
Hampden County—	-	Livingston County—	-
Westfield	3	Livonia	1
Hampshire County Amherst		Monroe County— Gates Township	2
Amherst Northampton	$\frac{1}{2}$	Rochester	7
Middlesex County—		Montgomery County-	-
Cambridge	2	Amsterdam	1
Plymouth County—		Nassau County—	1
Brockton	1	Floral Park Hempstead Township	1
Suffolk County— Boston	2	New York County—	•
Worcester County—	-	New York County— New York City. Niagara County— Lockport. Newfane Township. Niagara Falls.	75
Gardner	1	Niagara County—	1
Worcester	2	Newfane Townshin	3
Total	21		1
Minnesota:		North Tonawanda	$\frac{1}{2}$
Goodhue County—		Royalton Township Wilson Township	1
Roscoe Township	1]	Onondaga County—	1
Stearns County— Freeport	1	Cicero Township	1
Freeport		Ontario County-	
Total	2	Seneca Township Victor Township	1
New York:		Steuben County—	1
Allegany County-	_	Dansville Township	1
Belmont	1	Hornell	1
New Hudson Township Broome County-	1	Wayne County— Walworth Township	3
Binghamton	1	Westchester County-	3
Cattaraugus County-	_	Dobbs Ferry Greenburgh Township	1
Randolph Township	1	Greenburgh Township	2
Randolph Chautauqua County—	1	Mount Vernon New Rochelle	1
Cherry Creek	۹ (North Tarrytown	1
Cherry Creek Ellicott Township	2	Yonkers.	3
Harmony Township	1		
Jamestown Binlay Township		Total	176
Harmony Township Jamestown. Ripley Township	1 2 1	Total	1

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED NOV. 16, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Buffalo, N. Y. Cambridge, Ohio Chicago, Ill. Cumberland, Md Erie, Pa Los Angeles, Cal. Milwaukee, Wis	4 1 1	1 1 2 1	New Bedford, Mass. New York, N. Y. Oakland, Cal. Omaha, Nebr. Pittsburgh, Pa. Springfield, Mass. Worcester, Mass.	23 1 2 17 1	3 1 29 1

SCARLET FEVER, MEASLES, AND DIPHTHERIA.

STATE REPORTS.

	Scarlet fever.	Measles.	Diph- theria.
June: Minnesota	139	50	98
July: Minnesota	92	20	105
August: Minnesota	63	12	94
September: Minnesota	69	3	99
October: Alabama. Kansas Massachusetts. Minnesota	37 188 446 121	(¹) 6 570 34	106 88 549 166
New York	659	1,200	1, 614

¹ Not notifiable in the State.

Diphtheria-Unusual Prevalence.

Pursuant to the resolution adopted by the conference of State and Territorial health authorities with the Public Health Service June 1, 1912, the secretary of the Iowa State Board of Health, reports that an unusual number of cases of diphtheria have been reported in Des Moines and Vinton, Iowa; that 149 cases of diphtheria were reported during the latter part of the month of November in Des Moines; that at Vinton there had been 15 cases of diphtheria reported during October and 15 additional cases to November 22; that during the latter part of November the outbreak at Des Moines was subsiding.

PLAGUE.

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: Citles—				
San Francisco	Jan. 30, 1908		None	398 rats.
Oakland	Aug. 9, 1911	Dec. 1, 1908	do	
Berkeley	Aug. 28, 1907	None	do	None.
Los Angeles Counties—	Aug. 11, 1908	do	Aug. 21, 1908	1 squirrel.
Alameda (exclusive of Oakland and Berke- ley).	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	Aug. 6, 1911	6 squirrels.
San Benito		do		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.
		•		

RECORD OF PLAGUE INFECTION.

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PLAGUE-Continued.

RATS COLLECTED AND EXAMINED FOR PLAGUE INFECTION.

Places.	Week ended—	Found dead.	Total col- lected.	Exam- ined.	Found infected
California: Cities— Berkeley Oakiand San Francisco		4 13 28	¹ 192 ² 660 ³ 1,750	146 558 1,465	

Identified: Mus norvegicus, 157; Mus musculus, 35.
 Identified: Mus norvegicus, 585; Mus musculus, 75.
 Identified: Mus norvegicus, 1,036; Mus musculus, 236; Mus alexandrinus, 221; Mus rattus, 257.

Nore.—Rats taken from steamers, not included in above statement:	
NOTE.—Rats taken from steamers, not included in above statement: Chiyo Maru (alexandrinus). Nile:	39
Nilė: Alexandrinus	17
Rattus.	12

Total 68

SQUIRRELS COLLECTED AND EXAMINED FOR PLAGUE INFECTION. CALIFORNIA.

During the week ended November 16, 1912, there were examined for plague infection 128 ground squirrels from San Joaquin County and 47 from Santa Clara County. No plague-infected squirrel was found.

ERYSIPELAS.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED NOV. 16, 1912.

Place.	ases.	Deaths.	Place.	Cases.	Deaths.
Binghamton, N. Y. Buffalo, N. Y. Cincinnati, Ohio. Cleveland, Ohio. Duluth, Minn Erie, Pa. Kalamazoo, Mich. Jersey City, N. J. Lawrence, Mass. Los Angeles, Cal.	5 1 1 1 1	······ ····· ····· 1 ·····	Milwaukee, Wis. Morristown, N. J. New York, N. Y. Oakland, Cal. Philadelphia, Pa. Pittsburgh, Pa. Reading, Pa. St. Louis, Mo. San Francisco, Cal. Wheeling, W. Va.	7 1 7 1 10	3

PELLAGRA.

During the week ended November 16, 1912, pellagra was reported as follows: Baltimore, Md., 1 death; Providence, R. I., 1 death.

PNEUMONIA.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED NOV. 16, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y. Baltimore, Md.	2		Chicago, Ill Chicopee. Mass		88
Bayonne, N. J. Binghamton, N. Y. Boston, Mass.	3	2 1	Cincinnati, Ohio Cleveland, Ohio Clinton. Mass	23	7 10
Braddock, Pa Brockton, Mass	1	·····i	Cumberland, Md Danville, Ill		2 1
Buffalo, N. Y Butte, Mont Cambridge, Mass		42	Dayton, Ohio Duluth, Minn Elmira, N. Y	1	1 1
Chelsea, Mass		2	Erie, Pa		1

PNEUMONIA—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Evansville, Ind		29	Passaic, N. J Pawtucket, R. I		1
Evansville, Ind Jersey City, N. J Kalamazoo, Mich Knoxville, Tenn	3	32	Peoria, Ill Philadelphia. Pa	. 21	2
La Crosse, W15 La Fayette, Ind		i	Pittsburgh, Pa Pittsfield, Mass Plainfield, N. J	. 17	
Lexington, Ky Lima, Ohio Logansport, Ind	•••		Portsmouth, Va. Providence, R. I.	·	33
Los Angeles, Cal Lowell. Mass		83	Reading, Pa Richmond, Va Rockford, Ill		1 2
Lynn, Mass. Malden, Mass.		2	Rockford, Ill St. Joseph, Mo San Diego, Cal		
Manchester, N. H Marinette, Wis Melrose, Mass	1		San Francisco Cal	12	
Moline, Ill Montgomery, Ala Montclair, N. J	}	2	Saratoga Springs, N. Y. South Bethlehem, Pa Spokane, Wash.	1	
Montclair, N. J Nashville, Tenn Newark, N. J		2	Springfield, Mass. Superior, Wis Toledo, Ohio		3
New Redford Mass		1	Waltham Mass		1
New borlord, Mass. New Castle, Pa. New York, N. Y. Niagara Falls, N. Y.	1		Washington, D. C. Wilkes-Barre, Pa. Wilkinsburg, Pa. Williamsport, Pa. Yonkers, N. Y		2
Niagara Fálls, N. Y North Adams, Mass Oakland, Cal		1	Williamsport, Pa Yonkers, N. Y		1
Oakland, Cal Omaha, Nebr		3 3	Zanesville, Ohio		2

Cases and deaths reported by city health authorities for the week ended Nov. 16, 1912— Continued.

RABIES.

During the week ended November 16, 1912, a case of rabies was reported at Cleveland, Ohio.

TETANUS.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR THE WEEK ENDED NOV. 16, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa. Dayton, Ohio. Elmira, N. Y. Lowell, Mass.	1	1 1 1 1	Montgomery, Ala. Norristown, Pa. Pittsburgh, Pa.	1 1	·····i

FOREIGN AND INSULAR.

BRAZIL.

Para-Typhus Fever.

During the week ended October 25, 1912, 1 case of typhus fever with 1 death was reported at Para.

CANADA.

Halifax-Typhus Fever.

During the week ended October 19, 1912, 1 case of typhus fever was reported at Halifax.

CHINA.

Amoy-Dengue.

Acting Asst. Surg. Bonthius reports October 11: Dengue is very prevalent at Amoy.

Hongkong-Examination of Rats.

Surg. Brown reports: During the week ended October 12, 1912, there were examined at Hongkong for plague infection 1,498 rats. No plague-infected rat was found.

Quarantine Against Hongkong Withdrawn.

The restrictions enforced by the governments of Burmah and Ningpo against Hongkong on account of plague were withdrawn October 11, 1912.

Tientsin-Typhus Fever.

During the week ended October 25, 1912, a case of typhus fever was reported at Tientsin.

CUBA.

Habana-Examination of Rats for Plague Infection.

The following statement was issued by the chief of the service of deratization at Habana:

Week ended Nov. 9, 1912.

City blocks worked over	2, 339
Rat traps used	408
Rats found dead	7
Rats trapped Total number of rats taken	742
Total number of rats taken	749
Total number of rats taken from July 6 to Nov. 9, 1912	24, 543

No plague-infected rat was found during the week under report.

(2059)

Habana-Transmissible Diseases.

The following statement of transmissible diseases in Habana was transmitted by Acting Asst. Surg. Wilson:

Nov.	1 to	10,	<i>1912</i> .
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Diseases.	New cases.	Deaths.	Under treat- ment.
Leprosy Malaria Typhoid fever Diphtheria. Scarlet fever Measles	1 22 8 17 1	2 1 1	244 1 36 2 19 2
Varicella Paratyphoid Staphylococcia		1	1 3 1

NOTE.-The case of malaria reported came from Ciego, Province of Puerto Principe.

GREAT BRITAIN.

Glasgow-Typhus Fever.

During the week ended November 15, 1912, a case of typhus fever was reported at Glasgow.

ITALY.

Typhus Fever.

Typhus fever has been reported in Italy as follows: Catania, week ended November 15, 1912, 3 deaths; Palermo, two weeks ended November 9, 11 cases, with 3 deaths.

JAPAN.

Seoul, Chosen (Korea)-Typhus Fever.

During the period from October 10 to 20, 1912, there were reported at Seoul 2 cases of typhus fever.

JAVA.

Batavia-Typhus Fever.

During the week ended October 5, 1912, 1 case of typhus fever, with 1 death, was reported at Batavia, and during the week ended October 19, 3 cases, with 2 deaths, were reported.

PORTO RICO.

Plague Situation.

Passed Asst. Surg. Creel reports:

Rats examined Nov. 9 to 16, 1912.

Place.	Rats ex- amined.	Rats found infected.
All Porto Rico. San Juan municipality: San Juan. Puerta de Tierra. Santurce.	1, 473 57 21 142	

A summary of the plague situation to November 16, 1912, including human and rodent cases, was as follows: Rats examined, 28,971; rats found infected, 66; human cases, 56; deaths, 36.

RUSSIA.

Typhus Fever.

Typhus fever has been reported in Russia as follows: Moscow, week ended October 12, 1912, 24 cases with 2 deaths; Riga, month of August, 1912, 3 cases.

SPAIN.

Seville-Smallpox.

On October 31, 1912, smallpox was reported epidemic at Seville, but diminishing. During the month of October there were reported 32 deaths from the disease.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

REPORTS RECEIVED DURING WEEK ENDED DEC. 6, 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.
Dutch East Indies: Java- Batavia India: Bombay Madras Rangoon Straits Settlements: Singapore	Oct. 13–19 Oct. 20–26 do Sept. 1–30 Oct. 6–12	42 6 2 4 3	33 4 3 4 3	6 cases and 3 deaths among Europeans.

YELLOW FEVER.

Brazil: Manoas	Oct. 27-Nov. 2	2	2	
Mexico:		-	-	
Tobasco— Comalcalco Sitio Grande	Oct. 31-Nov. 3	1	3	
Sitio Grande Yucatan—	Oct. 27-Nov. 2	1	1	
Merida	Nov. 17-23	1	1	
				l

PLAGUE.

Chile: Iquique	
D_0	
India:	
Bombay	
Rangoon	
Peru:	
Trujillo Oct. 15–Nov. 11 10 2	
Russia:	
Astrakhan Government—	
Rachinka	
Lbischtschensk district Oct. 24-Nov. 9 1 8	

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

Reports Received During Week Ended Dec. 6, 1912.

SMALLPOX.

Places.	Date.	Cases.	Deaths.	Remarks.
Brazil: Para Canada: Provinces—	Oct. 27–Nov. 9	2		
	Nov. 17-23	1		
Ontario— Hamilton	do	9		
Quebec-	1	l i		
	do	10		
China: Shanghai	Oct. 14-20		5	Deaths all among natives.
France:			Ů	Pouris un uniong nutivos.
Paris	Nov. 3-9	3		
India: Bombay	Oct. 20-26			
Madras	do	1	1	
Rangoon			2	
Italy:	-		-	
Naples	Nov. 3-9	2	1	
Mexico:				
Chihuahua	Nov. 10-17		1	
Mazatlan	Nov. 13–19 Nov. 10–16			
Salina Cruz	NOV. 10-16	1		
Russia: St. Petersburg	Oct. 27-Nov. 2	3	1	
Spain:	061. 27-1100. 2	0	1	
Barcelona	Nov. 9-15		8	
Gibraltar	Nov. 3-9	1	0	
Valencia.	do	6	2	
Straits Settlements:		Ů	-	
Singapore	Oct. 6–19	3	1	
Switzerland:			-	
Basel	Oct. 27-Nov. 2	1		
Turkey in Europe:		-		
Constantinople	Nov. 3-9		22	

REPORTS RECEIVED FROM JUNE 29 TO NOV. 29, 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.

	1	1	1	
Austria-Hungary: Hungary—				
Čsongrad, district Mindszent.	July 17–22	1	1	
Ceylon:				T
Colombo	May 19-25	1 1		In the port.
China:				
Amoy		12	60	June 1–20, present in vicinity.
Dalny				Aug. 23-29, 3 cases on s. s. Nitsu-
				sho Maru and 1 case on s. s. Kobe Maru from Shanghai.
Hankow	Sept. 15-Oct. 12	6	2	
Hoihow				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 na- tives increasing to end of Au- gust.
Swatow	July 20–Aug. 5	•••••	41	July 20-25, 3 cases, 1 death among Europeans. Among Europe- ans June 1-22, sporadic cases occurring in the port.

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

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

CHOLERA-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Java-				0
Batavia	June 16-Oct. 12	290	231	Sept. 28-Oct. 12, 54 cases and 19 deaths among Europeans.
Rembang, Province	May 31-June 6	1	2	
Samarang	Sept. 23 Mar. 28-June 18	14	8	Present.
Surabaya Sumatra—	Mai. 20-June 10	14	°	
Padangsche, Upper-	May 26-June 22	37	35	Present Sept. 16.
land Section Agam. Tapanoeli, Province	July 11			Present.
India:	July 11			Tresent.
Bassein	May 5-July 20	35	26	
Bombay Calcutta	May 19-Oct. 19 May 5-Aug. 31	1,911	1,490 501	Apr. 21-27, 87 deaths. Received
				out of date.
Cocanada			2	Benert of deaths incompletes
Karachi	Aug. 14-Sept. 14	140	65	Report of deaths incomplete; nearly all cases fatal.
Madras	May 19-Oct. 19	226	165	Madras Presidency, May 1-Sept.
Maulmain	Mar 5 Aug 17	22	22	30; cases, 62,299; deaths, 33,459.
Rangoon	May 5-Aug. 17 Apr. 1-Aug. 31		71	
Indo-China:				
Saigon	May 14-Aug. 19	634	514	
Italy: Sardinia—				
Cagliari			20	
Japan Chiba ken		•••••		Total to Oct. 13: Cases, 1,098. To Nov. 1, 66 cases.
Ehime ken	Sept. 21-Nov. 1	12		To Oct. 13, 49.
Formosa				Total June 16-Aug. 31: 65 cases,
Kalung	June 97			34 deaths. Epidemic.
Kelung Fukuoka ken	June 27 Sept. 1-Nov. 1 Sept. 21-Nov. 1	164		To Oct. 13, 537.
Hiroshima ken	Sept. 21-Nov. 1	19		To Oct. 13, 537. To Sept. 27, 7. To Sept. 27, 7, including Kobe.
Hyogo ken	0CL. 12-NOV. 1	40	14	To Sept. 27, 7, including Kobe.
Kobe	Sept. 15-Oct. 27	23	14	Aug. 28, 3 cases on s. s. Nitsusho Maru, Sept. 12-18, 2 cases, 1
				Maru, Sept. 12-18, 2 cases, 1 death in the suburbs.
Kagawa ken	Oct. 12-18			
Kagosnima ken	Oct. 19-Nov. 1			
Kagoshima ken Kanagawa ken Daishi-kawara Hira-tsuka	Sept. 25-Oct. 21	10		
Hira-tsuka	do	$\frac{1}{2}$		
Hodo-gaya Kawasaki	do			
Nama-mugi	do	8		
Sumiyoshi-mura	do	1		
Tajima-mura Tsurumi	do			
Yokohoma	do	15	15	
Kiushiu Kuchinotsu		• • • • • • • •	•••••	Aug. 21-29, 1 case on s. s. Otaru
Kuchinotsu				Maru from Shanghai.
Miike Mitsui coal mines	Sept. 1-15	20	13	Decemt
Mitsui coal mines Moji	Sept. 23 Sept. 1–7	7	2	Present. Aug. 21–29, 2 cases on s. s. Yoko-
MOJ1		•	2	hama Maru, and 4 cases on s. s.
				Mexico Maru from Shanghai.
Shimabara	To Sept. 15	3	1	Total to Sept. 23, 141 cases.
Wakamatsu	do	68	21	
Kochi ken	Oct. 19-Nov. 1	16		
Kumamoto ken Kyoto fu	Sept. 21-Nov. 1 do	11 6	•••••	
Kyoto	Sept. 10-19	4	2	
Miyako Islands	July 10			
Nagasaki ken Nagasaki	Sept. 21-Nov. 1 Oct. 6-20	87 2	2	Aug, 10-13. 2 cases among the per-
1.0000000000000000000000000000000000000		-	-	sonnel of vessel of the Russian
				volunteer fleet. Aug. 21-29, 1 case on s. s. Penza, 4 cases on
				case on s. s. Penza, 4 cases on s. s. Seiun Maru, and 1 case on
	a			s.s. Otaru Maru from Shanghai.
Oita ken	Sept. 21-Nov. 1	34 23	•••••	
Okayama ken Osaka fu	do	36		To Sept. 28, 85, including Osaka
			22	for same period.
	Sept. 11-Oct. 11	32		

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

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

CHOLERA-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Japan-Continued.				
Saga ken	Sept. 21-Nov. 1	62		
Saitama ken	Oct. 12-18	1		
Shidzuokaken	Oct. 19-Nov. 1			
Shimonoseki	Sept. 23 Oct. 12-Nov. 1	40	13	
Tokushima ken Tokyo fu	Sept. 23-Nov. 1			To Oct 12 157
Tokyo	Sept. 24-30	24		To Oct. 13, 157.
Do	Oct. 2-4	2		
Wakayama ken	Oct. 19-Nov. 1	2		
Yamaguchi ken	Sept. 21-Nov. 1	81		To Oct. 13, 242.
Other districts				To Oct. 13, 161 cases.
Russian Empire:	-			
Astrakhan	June 11-July 27	6	2	
siam:		Į		
Bangkok.	Apr. 21-Sept. 14		1,026	
straits Settlements:	Mar 19 Oct 5	109	01	
Singapore	May 12–Oct. 5	102	91	
Curkey in Asia:	Aug. 6-Sept. 22	15	9	
Beirut Bitilis	Oct. 1-9	11	14	
Cesaree	do	1		
Damascus	July 18-Oct. 13	327	262	And vicinity.
Provinces—	- ary 10 000 10	0.0	202	same vacanavj.
Adana—			1	
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		7	4	
Djihan	May 28-July 27	14	11	
Dorach Bache	do	4	5	
Nigde	June 15-Aug. 24	72	80	
Oula Kichia	May 28-July 6	5	10	
Sis	May 28-June 15	5	5	
Tarsus	May 28–July 9	21	9	
Aleppo-	Mar 10 Nov 9	200	070	
Aleppo	May 19-Nov. 2	322 8	278	
Alexandretta Amk	May 28-Aug. 1	5	3 4	
Aintab	July 1–6 July 1–Oct. 9	23	30	
Antioch.	Apr. 17-Oct. 9	28	31	
Arka	Apr. 17	10	4	
Bilan	Sept. 8-15	7	•	
Bierdjik	Sept. 23-30	1	2	
Djisri-Chougour	June 23-Sept. 7	17	5	
Delbeston	July 23-Sept. 15 Sept. 23-Oct. 9	11	2	
Elbistan	Sept. 23-Oct. 9	8	4	
Gisser	July 7–13	13	6	
Harem	June 23–July 22	47	33	
Hersem	July 1-6	5	4	
Idlb	June 23–July 8	6	5	
Keudige	June 23–29 June 16–Oct. 9	4 45		
Killis	July 14-22	2	21 2	
Kiriqui Marach	June 15-Sept. 7	212	103	
Ourfa	Aug. 20-Oct. 9	69	64	
Reca	Aug. 23-Sept. 30	19	13	
Sarenda	July 1-6	7	Ğ	
	do	3	3	
Angora-				
Chehissar	June 10-July 29	3	8	
Iskilib	Aug. 26-Sept. 7	4		
Nehie-Tomarza	July 29-Oct. 9	20	10	
Sandal	June 28–July 5	4	9	
Ufkure	Sept. 9–22	13	13	
Bagdad— Digr.el-Zor	Sent 30_Oct 16	922	107	
Dier-el-Zor Diarbekir	Sept. 30-Oct. 16 Aug. 21-Oct. 9	233 27	187 41	
Viran-Chehir	Aug. 21–Oct. 9	15	13	
Erzeroum-	1146. 21-Dept. 00			
Hassan-Mansour	July 31-Sept. 7	25	11	
Heiaz—	and or septer to the	~	**	
Medina	Oct. 1-9		32	
Mekka			4	Present among troops and Ipil
		-	-	grims, Sept. 26.
Konia-	Inla 14 07	,		
	July 14-27	1	1	
Freel				
	June 18-Sept. 15 July 30-Sept. 30	98 117	55 75	

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

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

CHOLERA-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asis—Continued. Provinces—Continued. Mersina. Severek. Sivas— Darende. Smyrna— Smyrna. Syria. Latakia. Tarsus. Zor. Turkey in Europe: Constantinople. Zanzibar.	June 9-July 28 Aug. 14-17 Sept. 23-30 Sept. 1-15 July 19-Oct. 9 Aug. 31-Sept. 7 June 25-July 9 Oct. 1-9 Nov. 20 Aug. 5-Sept. 30	40 3 5 	1 Deatins. 333 8 4 1 76 3 16 4 	Present. Outbreak in the native prison. Only 1 case in the city. In- cluding Aug. 5-Sept. 7, 15 cases at Mwera, 4 at Bububu, 1 at Mtoni, 6 among prisoners, 2 at Ki-
				N'Gambo district, 9 at Ki- bonde-Mzungo, 2 in Fuoni, and 4 in Walezo.

YELLOW FEVER.

	1	,	1	
Brazil:				
Ceara	July 1-31	1	1	
Manaos			32	
Pernambuco	Apr. 16-July 15		12	
Chile:				
Toco district	May 1-16	62	17	
Tocopilla		502		Total Jan. 28-June 17: Cases.
1000pma	may 1-June 17	502	100	1,072; deaths, 374, including
				report, p. 1058, Pt. I.
O. Low bin				report, p. 1008, 1 t. 1.
Colombia:	July 14-20			From up Magdalana Divar
Barranquilla	July 14-20		1	From up Magdalena River.
Dahomey:				
Abomey	May 25-June 5	6		
Porto Novo	June 13		1	
Ecuador:			1	
Bucay	June 1–15			
Chobo	June 15-30			
Duran	May 1-June 30		1	
Guayaquil	May 1-Sept. 30	59	39	
Milagro	May 16-Sept. 30	11	6	
Maranjito		16	7	
Yaguachi	May 16-June 30		1	
Mexico:		-		
		1		
Campeche— Carmen	Sept. 6-29	2	2	The fatal case Sept. 6 on s. vs.
001110111111111111111111111111111111111		-	-	Puebla, from Vera Cruz and
				other Mexican ports.
Tabasco	Oct. 11		2	other means perus.
Cardenas			-	Present.
Comalcalco		4		110000
Cunduacan		i		
Huimanguillo	Oct. 11	i		
Frontera	Aug. 31-Oct. 11		3	Aug. 19-21, 2 cases and 1 death
From dera	Aug. 31-000. 11	10		on the Swedish schooner Val-
				kyrien.
Talama	0-+ 11 No- 18	2		Kylich.
Jalapa San Juan Bautista	Oct. 11-Nov. 16 June 23-Nov. 3			Total Mar 4 Nor 2: Canon 59:
san Juan Bautista	June 23-Nov. 3	36	10	Total May 4-Nov. 3: Cases, 58;
				deaths, 25, including previous
				reports.
Yucatan	· · · · · · · · · · · · · · · · · · ·			Aug. 1, 1911, to Nov. 9, 1912, 73
				cases, 34 deaths.
Espita	Aug. 25–30 July 14–Nov. 9	1		
Merida	July 14-Nov. 9	6	3	Total Aug. 1 to Sept. 22, 1911:
				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	
	-			s. s. Chile, from Guayaquil.
				· · ·

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

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

YELLOW FEVER-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
			-	
Peru: Iquitos				Endemic. Year 1908, deaths, 11 1910, 1; 1911, 76.
Do	July 1-31		. 1	
Venezuela: Caracas	May 1-Aug. 31		. 10	case from Villa de Cura, abou 29 miles distant; and to July 31, 2 other cases; Caracas, Nov 2, 2 cases. Total Jan. 1-Nov 2: Cases, 44; deaths, 19, in
La Guaira Cua	Oct. 20-26 July 20	1		childing previous reports. Sept. 26, 24, 1 case from Cua; Sept. 26, case from Ocumare. Year 1911 Cases, 172; deaths, 107. May 1, 1 case.
Macuto.	June 1	1	· · · · · · · · · · · · · · · · · · ·	Endemic. July 20, present.
La Victoria. Macuto. Maiquetia. Victoria.	June 17–Oct. 5 Oct. 1	12	5	Present.
	PLA	GUE.		
Algeria: Algiers	T-1- 10		.	
Aigiers	July 12 July 9–13	1		In Hospital El Kettar, in vicin- ity. Pneumonic. 4 miles from Algiers. Pneu-
				monic.
Arabia: Aden Oman—	July 1		1	From s. s. India.
Maskat	June 1-22	1		
Argentina: Buenos Aires	Oct. 7		3	Outbreak occurred in cancer sec- tion, clinical hospital.
Austria-Hungary: Trieste	July 14–25	2		In isolation hospital from s. s. Amphitrite from Messina via Port Said and Alexandria.
Azores: Terceira	Sept. 11-Oct. 31	35	21	In Praia da Victoria and Angra do Heroismo.
Brazil: Nictheroy Pernambuco	Mar. 25. Aug. 16-Sept. 30		2 3	
Rio de Janeiro British East Africa:	June 23-Oct. 5	3		
Mombasa Nairobi	Sept. 1–15 do	4 2		Oct. 27, present.
Chile: Iquique China	May 26-Sept. 21	26		May 18-June 15, present in the magistracies of Fungshun, Ca-
Amoy Ampo Canton	May 20-Aug. 24 May 18-June 29		307	yung, and Puning. May 20-June 1, 46 cases. Present.
	1			May 18, present. 45 cases daily. Mainly among children.
	June 2–8			2 deaths on s. s. Cheongshing be- tween Tientsin and Taku.
	July 6			Present. 100 miles inland from Amoy, and prevalent in the surrounding country.
Packhoi	May 12-Sept. 14 May 1-29 Nov. 2-11	1, 393 13	1, 144 35	
Tientsin	June 2–8	1	1	From s. s. Cheongshing from
Ç.	June 4			Hongkong. On the island of Hainan, 10 to 20 cases daily.
utch East Indies:	July 4-27	· 3	2	-
Java— Pasoeroean Residency Provinces—	May 12-Aug. 3	203	198	
Kediri	Mar. 31–July 31 Mar. 31–Aug. 3	8 37	5 37	

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

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

PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Ecuador:	March South 20		05	
Guyaquil Egypt	May 1–Sept. 30	. 63	25	Total, Jan. 1-Sept. 15: Cases, 813 deaths, 406, including report p. 1059, Pt. I.
	1			p. 1059, Pt. I.
Alexandria	May 27-Oct. 6	. 24		
Port Said Provinces—	May 29-Aug. 26	. 8	2	
Assiout	May 25-Aug. 27.	. 16	7	
Behera	May 25-Aug. 27 July 31-Oct. 7	5	l i	
Beni Souef	Mov 20_1111v 98	1 12		
Charkeih	Apr. 28-Sept. 2	1 12		
Dakahlia	Aug. 8	1 50		
Fayoum Galioubeh	Apr. 23-Sept. 15	4	20	
Garbieb	Aug. 27-Oct. 9	19	3	
Girgeh	May 26-Aug. 6	52	42	
Menouf Minieh	Aug. 31-Sept. 30 May 27-Sept. 9	5	1	
	May 27-Sept. 9	40	12	
ermany:				Sept. 2-5, 2 cases on s. s. Bellailsa
Hamburg				from Rosario, via Cape Verde Islands.
reat Britain:			1	
Liverpool	July 26	1		
River Tyne Port Sanitary	Sept. 10-16	1	1	From s. s. Bellailsa from Rosario,
District.				via Hamburg.
lawaii: Pepeekeo	Sept. 13	1	1	
ndia:	-	1	-	
Bombay	May 19-Oct. 19 Apr. 21-Aug. 31 Apr. 1-Oct. 12	410	337	
Calcutta	Apr. 21-Aug. 31		475	
Karachi	Apr. 1-Oct. 12	65	64	
Rangoon	Apr. 1-Aug. 31	458	431	
Bombay Presidency and Sind.	Apr. 21-Aug. 31	4,116	3,053	
Madras Presidency	do	609	452	
Bengal	do	621	611	
Bihar and Orissa	do	5,563 7,594	4,828	
United Provinces	do	7,594	7,061	
Punjab Burma	do	16,016	13,117	
Burma Central Provinces		284	238	
Mysore State	do	1,088	772	
Hyderabad State	do	356	263	
Central India	do Apr. 21–May 25 Apr. 21–June 29	276	227	
Rajputana and Ajmere	Apr. 21-June 29	570	474	
Merwara. Kashmir	Apr. 21–Aug. 3	290	172	Total for India, Apr. 21-Aug. 30: Cases, 38,347; deaths, 32,179.
do-China: Saigon	May 14-Aug. 19	77	50	
pan:		97	69	
Formosa	Apr. 22–Aug. 17 Apr. 7–Aug. 29	97 71	32	
orocco:		••		
Casablanca	Sept. 12-29	11	1	To Sept. 29, 5 cases were among Europeans.
ersia: 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
e ru				route to Shiras, 4 fatal cases. Year 1911: Cases, 879; deaths, 426.
Callao	• • • • • • • • • • • • • • • • • • • •	•••••		July 6, 1 fatal case.
Trujillo.	Oct. 1	2		· _ j · ,
nilippine Islands:				
มโอเปือ	July 5-Sept. 21	9	9	
Manila	July 5-Sept. 21 June 14-Oct. 19 Apr. 30-May 7	13	12 1	From s. s. Taisan from Amoy.
Mariveles guarantine sta- tion.	Арг. 30-мау /	1	1	FIOM 5. 5. Laisan nom Amoy.
orto Rico				Total June 14-Sept. 14: Cases, 57;
····				deaths, 36.
Аггоуо	June 22	1		On the schooner Guillermito,
-				from San Juan.
Carolina	June 25-July 19	2	2	•
Dorado Loiza	July 15 June 28	1	I	

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

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

PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Porto Rico-Continued.				
San Juan	June 21-Sept. 11	26	17	Total June 14-Sept. 11: Cases, 38; deaths, 17.
Santurce Russian Empire:	June 22-Aug. 5	13	3	,,
Astrakhan Government				Total July 4-Sept. 8: Cases, 55; deaths, 41.
Rachinka.	Oct. 20-26	1	1	,
Libistchensky district Balaptubek	May 15-June 2		2	Sept. 16, free.
Karabas Kudeymula	May 15-June 16 May 27-June 16	13 5	12	
Tchernoyarsk	July 1-Sept. 8	32	24	Including previous report.
Tsarevsk district Djanibek	July 29–Sept. 8 Aug. 21–Sept. 8	17 6	13	
Ural— Tschelirtinsky	May 20-June 16	13	11	
Siam:	•		2	
Bangkok South Africa:		• • • • • • • • •	2	
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 Jiddah	May 20 May 18	1	1	
West Indies:	-	•		Matal Ame 1 Tama 19: Game 11.
171111080		•••••		Total Apr. 1-June 13: Cases, 11; deaths, 7, including report, p. 1060, Pt. 1; 3 of these cases were in Tunapuna.
	July 2-11	2		ш тапарана.
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			1	1	
Algeria: Departments Jan. 1-July 13					
Algeria: Departments Algiers Jan. 1-July 13	Adis Ababa	Sept. 7			Prevalent.
Departments- Algiers	Algeria:	-			
Algiers Jan. 1-July 13 33 Constantine Apr. 1-Aug. 31 87 Arabia: May 1-Aug. 31 31 Arabia: June 18-24 1 Argentina: June 1-30 1 Buenos Aires	Departments-		1		
Constantine Apr. 1-Aug. 31 87 Oran	Algiers	Jan. 1–July 13	33	1	
Oran.May 1-Aug. 3131Arabia: Aden.June 18-24.1Argentina: Buenos Aires.June 1-30.1Australia: Fremantle quarantine sta- tion. Townsville.June 1-30.1Australia: Townsville.June 1-30.1Australia: 	Constantine				
Arabia: June 18-24					
Argentina: Buenos Aires June 1-30					
Argentina: Buenos Aires June 1-30		June 18-24		1 1	
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CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX-Continued.

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

SMALLPOX-Continued.

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Messina. July 1-31. 1 Naples June 2-Oct. 12 28 4 Palermo. May 26-Sept. 7 9 3 Rome. Mar. 31-Apr. 6 1 1 Turin June 3-9 1 1 Venice. Jan. 1-Apr. 30 40 10 apan: June 3-9 3	talv:		i							
Naples	Leghorn	June 9-July 6								
Palermo May 26-Sept. 7 9 3 Rome Mar. 31-Apr. 6 1 1 Turin June 3-9 1 1 Venice Jan. 1-Apr. 30 40 10 apan: Kobe June 3-23 3 Aguascalientes June 9-Nov. 3 15 Chihuahua Mar. 4-Nov. 10 112 72 Durango June 9-Oct. 31 2 4 Frontera July 7-11 1 Guadalajara July 1-20 7 4	Messina									
Rome	Palarmo									
Turin June 3-9	Rome	Mar. 31-Apr. 6								
apan: June 3-23	Turin	June 3-9	1							
apan: June 3-23	Venice	Jan. 1–Apr. 30	40	10						
Mexico: June 9-Nov. 3	apan:	Tune 3-23	2							
Aguascalientes June 9-Nov. 3 15 Chihuahua		June J-20								
Chihuahua	Aguascalientes	June 9-Nov. 3								
Durango June 1-Oct. 31 2 4 Frontera July 7-11 1 Guadalajara June 9-Aug. 31 7 4 Guaymas July 14-20 Present in small towns in vi	Chihuahua	Mar. 4–Nov. 10	112							
Guadalajara		June 1–Oct. 31	2	4						
Guaymas		July /-11		A						
				· · · · · · · · · · · · · · · · · · ·	Present in small towns in vicin					
Ity.	~				ity.					

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

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

SMALLPOX-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Mexico-Continued.	-	-	-	
Juarez	June 16-Oct. 19		. 3	
Mazatlan				
Minatitlan		2		Aug. 21, still present.
Mexico.		407		
Monterey	Nov. 4-10			
Monterey Piedras Negras	Sept. 1-7		ī	32 miles from Vera Cruz, on th Vera Cruz & Pacific R. R.
Puerto Mexico	July 11-Aug. 31	. 5	3	
Salina Cruz	. June 29-Aug. 31	. 23	5	1
San Geronimo				Present.
San Luis Potosi	Apr. 7-Aug. 24	. 8	10	
Tampico	. Sept. 10-20		. 1	
Tehuantepec	. Aug. 1–21	.		. Do.
Newfoundland:		-		
St. Johns	July 14–Aug. 7	7		
Peru:	1 10 1 00			
Callao	May 19-June 29			Do.
Portugal: Lisbon	Man 07 Man 0	00		
				(Data) Man 1 Turne 20. Cases 20
Roumania				Total Mar. 1-June 30: Cases, 38.
Bucharest				Aug. 1-31: 67 cases, 2 deaths.
Russia: Batoum	T.abr 1 91	1		
Libau			1	
Do	May 14-Aug. 4		1 1	
Moscow		21	4	
Odessa	May 13-Nov. 2	20	5	
Reval	June 1–30	- 20	1	
Riga	June 1-30	8		May 1-Aug. 31, 4 deaths.
St. Petersburg	May 27_Oat 26	103	31	may 1-rug. or, 4 doums.
Warsaw	June 9–29 May 27–Oct. 26 Apr. 21–Sept. 7	71	28	
liam:	Арг. 21-берг. 1			
Bangkok	Apr. 21-Sept. 14		77	
liberia:				
Vladivostok	May 17-June 28	2		
pain:] -			
Almeria	June 1-Sept. 30		34	
Barcelona	July 1–Nov. 9		40	
Cadiz	June 1–Sept. 30 July 1–Nov. 9 May 1–Sept. 30		9	
Madrid	July 1–Aug. 31		7	
Malaga			3	
Seville	June 1-Sept. 30		69	
Valencia	June 2-Nov. 2		6	
traits Settlements	July 14-20	2	2	
Penang	June 23–July 20	4	1	
Singapore	May 5-Oct. 5	22	12	
witzerland:	~			
Basel	Sept. 22-Oct. 12	5		
Berne	May 5-11	2		
Geneva	do	1	•••••	
Lucerne	May 12-18	1	•••••	
Neuchatel	do	1	• • • • • • • • • • •	
urkey in Asia:	No	101		
Beirut	May 26-Oct. 26	161	2	Samt 14 1 ages
Dardanelles	June 23-Oct. 12		15	Sept. 14, 1 case.
urkey in Europe:	Mar 07 Mar 0	1	201	
Constantinople	May 27-Nov. 2	•••••	301	
nion of South Africa:	Ame 00 Tel= 07			
Durban	Apr. 28-July 27	21	4	
Johannesburg	July 22-Aug. 31	73	••••••	
ruguay:	Mar. 1 21	,	1	
Montevideo	May 1-31	1	••••••	
enezuela:	Tuno 6	.		
La Guaira anzibar	June 6 Sept. 15-Oct. 7	12	2	

MORTALITY.

WEEKLY MORTALITY TABLE, FOREIGN AND INSULAR CITIES.

		Deaths from—												
(ities.	Week ended—	Estimated population.	Total deaths from all causes.	Cerebrospinal meningitis.	Cholera.	Diphtheria.	Plague.	Poliomyelitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Typhus fever.	Yellow fever.
Aguascalientes. Amsterdam. Antserdam. Attens. Barcelona. Batavia. Belfast. Berlin. Berlin. Bombay. Bradford. Brussels. Budapest. Do. Catania. Chituahua. Colombo. Cologne. Constantinople. Copenhagen. Dundee. Edinburgh. Erfurt. Georgetown.	Nov. 17 Nov. 9 Nov. 12 Nov. 2 Nov. 15 Oct. 19 Nov. 2 Oct. 26 Oct. 26 Nov. 9 Nov. 16 Nov. 9 Nov. 17 Oct. 19 Nov. 17 Oct. 19 Nov. 9 Nov. 17 Oct. 20 Nov. 9 Nov. 17 Oct. 10 Nov. 9 Nov. 17 Oct. 10 Nov. 2 Nov. 17 Oct. 10 Nov. 2 Nov.	40,000 584,979 308,618 250,010 591,2732 217,630 391,974 2,080,212 850,947 379,445 289,618 745,380 881,600 207,000 36,000 408,855 165,300 408,855 165,300 207,577	78 117 77 8 274 35 126 499 297 270 2270 2270 2270 2270 2270 2270		33	5 1 19 1 4 3 2 4 3 4 3 4 3 4 1 3	4		3 1 1 2 10 1 4 3 2 3 2 	8 1 1 1 22	$\begin{array}{c} 3 \\ 16 \\ 7 \\ 13 \\ 36 \\ \\ 23 \\ 71 \\ 20 \\ 14 \\ 53 \\ 5 \\ 21 \\ \\ 8 \\ 4 \\ 13 \\ 12 \\ 30 \\ 8 \\ 24 \\ 2 \\ 8 \\ 2 \\ 2 \\ 2 \end{array}$	····· 1 1 3 ···· 2 5 ···· 1 ···· 1 ···· 3 ···· 2 5 ···· 1 ···· 3 ···· 2 5 ···· 1 ···· 3 ···· 1 ····· 1 ····· 1 ····· 1 ····· 1 ······ 1 ····· 1 ····· 1 ······ 1	2 	

By authority of the Secretary of the Treasury.

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

