# Public Health Reports

Treasury Department, United States Marine-Hospital Service. Published in accordance with act of Congress approved February 15, 1893.

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WASHINGTON, D. C., APRIL 20, 1900.

No. 16.

#### UNITED STATES.

#### PLAGUE.

Oircular of instructions in regard to plague; prepared by a committee appointed by the Department of Health for the consideration of plague measures—Berlin, September 28, 1899.

[Translated in this Bureau from supplement to the "Veröffentlichungen des Kaiserlichen Gesundheitsamtes." No. 49, 1899.]

When an epidemic invasion is apprehended, it is of the utmost

importance to recognize the first case.

The following information is intended to instruct physicians in the symptomotology of plague and thus enable them to care intelligently for the public health:

# Clinical symptoms of plague.

In all epidemics it has been found that even skilled physicians fail to recognize the disease, mistaking it for common carbuncle, infection of the lymph glands, typhus, intermittent fever, or anthrax.

The disease attacks persons of all ages and social conditions and

both sexes.

The condition of declared illness is preceded by warning symptoms, sometimes of an hour's and sometimes of a day's duration. These are pallor, depression, pains, headache, thirst, loss of appetite. The onset of the disease is frequently sudden, with sharp, burning, or dull pains on the spot on which later the glandular inflammation, or carbuncle, or the pneumonic manifestation appears. This is followed by a sensation of cold, culminating in a severe, shaking chill, succeeded by fever. The fever may last an hour or a day before the local symptoms appear.

The onset of the disease is almost invariably accompanied by a feeling of dizziness in the head. This may increase to a painful roaring, accompanied by indications of great weakness and failing power to control the limbs. Nausea and vomiting frequently accompany this condition,

and not infrequently weakness of heart to the point of collapse.

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When the patient comes into the physician's hands, the disease is usually well developed. The staring gaze, the bloated, languid, and expressionless face, the injected cornea, the thick, stammering speech, the uncertain gait, give the patient the aspect of a drunken man. This appearance is heightened by the outbreak of bloody boils. The tongue is red and lumpy or else coated with white. The skin is generally hot and burning, especially about the face and trunk, while the pulseless limbs are cold and covered with a slimy sweat.

The breathing is painful and labored, the heart action weak, the arteries are relaxed, the pulse of the radials is dicrotic and approaches

extinction, while the heart action is still good.

After taking to his bed the patient lies in a condition of great weakness and tendency to sleep, murmuring softly and disconnectedly, or throws himself about restlessly, talking deliriously, imagining that he must return to his home or his business, or quench his thirst, and he will try to escape if his attendants do not hold him down in bed.

With careful examination in the early stage of the disease the local focus of infection may be found in the majority of cases and the diagnosis made with accuracy. A freshly developed glandular swelling or skin pustule or the inception of an inflammation of the lungs belong to the complete picture of plague infection. The disease presents itself under one of three forms—glandular, skin, or lung plague. Abdominal

plague has been verified only in the case of animals.

In grandular or bubonic plague the most frequent form of the disease is characterized by the appearance of a bubo, which, sooner or later and to a greater or less degree, develops into an inflamed swelling and affects the surrounding tissues. Any external lymphgland may be the first seat of the disease. In most cases the bubo appears in the region of the thigh or groin, frequently under the arm, or, especially in children, on the neck. In isolated cases the buboes appear on the back of the head, at the elbow joint, the knee caps, the outer or inner ear glands, the hyoid bone, etc.

The external lymph glands are often found to be in a minor state of inflammation or appear to have escaped the influence of the germ, while the concealed glands have developed buboes of the third or fourth order, so that, for example, the thigh glands may remain free while a large iliac bubo or lumbar bubo may form that may be perceived as a perityphlitic swelling of the abdominal covering; or the neck glands may be only slightly swellen while there are evidences of the formation

of a bubo in the upper chest cavity.

The bubo may appear as a separate enlarged gland, or there may be an inflammation of the connective tissue, which is hard-packed and is frequently accompanied by a doughy cedema diffused about it. The bubo is generally not painful in itself, but on pressure, and the patient may lie in a position in which he suffers no pain. A small bubo is often not observed by the patient or his attendants, so that it must be sought for by the physician by pressure of suspected parts.

Plague pustules and plague carbuncles are not frequent as compared with plague buboes. They begin with a spot about the size of a flea bite or a pea on some part of the skin. From this very painful spot there develops a blister filled with cloudy matter. It then either retains the character of a pustule, or the surrounding tissue becomes hard and thick, later developing into a deep carbuncle and then into a burning swelling. Inflamed lymph vessels may convey the infection to the nearest layer of glands, in which then a bubo may grow. A bubo may also make its appearance in the neighborhood of a carbuncle.

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Pneumonic plague, which is the prevailing form in some plague epidemics, generally follows the course of an ordinary violent catarrhal or croupous pneumonia. When the general symptoms are very severe there may be difficulty in differentiating it from other inflammations of the lungs without bacteriological examination.

Bubo, plague, pustule, or inflammation of lungs appears at the beginning of the disease, sometimes even before the fever, or developes clearly a few hours or days after. Their appearance is seldom deferred

till the third day.

In all forms of plague the early appearance of heart weakness is noted, together with irritation of stomach and abdomen, extreme sensitiveness to pressure in the region of the epigastrium and the cæcum, violent nausea, later, also, the expulsion of black fæcal matter. A slight degree of swelling of the abdomen is the rule; soft swelling of the spleen and traces of nucleo-albumen and serum albumen in the urine, bloody vomit or blood in urine are less frequent. A diphtheritic affection of the tonsils is often found in the early stages. Almost universally there is observed a greater or less degree of irritation of the connective tissue, with which is frequently associated an inflammation of the cornea, which comes on suddenly and may lead to general suppuration of the eye. Hæmorrhagic points or streaks in the skin or mucous membrane are much more frequently observed. In the course of the disease buboes develop in the vicinity of the lymph glands and

in different parts of the body.

The course of the disease varies, many a case of skin and gland plague proving to be fairly mild and benignant, while pneumonic plague may terminate rapidly in death. In the bubonic form the neck buboes appear to be a condition of the gravest cases, frequently causing death by suffocation. There are also cases in which death occurs before any appearance whatever of localization, before the patient is even made aware, by pain, of his condition. The third, or at most the fourth day, brings a reduction of the fever and very frequently death. patient passes the third or fourth day he may remain free from fever and in the end recover, or the fever may come on again and again run its course. On the sixth or ninth day a marked lowering of the temperature and pulse curve almost invariably occurs, so that a prolongation of the disease, even into the second week, may occur, apparently as the result of supplemental infection due to the formation of secondary The temperature of the body is usually 30 or 40° C., but may An increase to 41° C. may occur in the beginning or at be much less. the exacerbation of the disease. Before death the fall in the temperature of the body corresponds with the decline in strength, or it may fall suddenly. It may also rise and even in the dead body be 42° C. and more.

The progress of the disease as here traced may be diverted by other infections. More frequently the accompanying infections are due to streptococci, staphylococci, pneumococci, or the bacilli of influenza.

Death may occur at any point of the disease. In cases in which recovery occurs the decline of all the symptoms may take place suddenly or by degrees. When not due to suffocation, caused by neck buboes or pneumonia, death is usually caused by a general failure of the circulation.

Recovery occurs in 10 and often in 40 per cent of cases. It follows in bubonic plague on the decline of the fever or the disposal of the bubo—in cases of carbuncle, on the sloughing of the inflamed tissue.

In severe cases recovery is slow. A sudden failure of the heart may

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attack a convalescent. Many patients die of septic fever; some, of plague meningitis. Secondary infection of the respiratory passages, favored by want of proper care or unfavorable environment, causes the death of numbers of convalescents. Even after weeks or months many languish and die from prolonged suppuration, progressive degeneration of the organs or impoverishment of the blood. Among the after effects paralysis plays a large part.

Prognosis of the disease is difficult. It may be stated that when the patient is free from fever on the third or sixth day he will probably

recover should no complication occur.

The early appearance of the buboes is relatively favorable. Unfavorable symptoms are bloody vomit, bloody urine, petechiæ, the formation of boils or carbuncles, and diphtheria of the tonsils. Hiccough is the immediate precursor of death. Recovery from pneumonic plague is rare. Previously existing diseases of the lungs and other internal organs remove almost all hope of recovery. Mortality is extraordinarily

great among the consumptive, the syphilitic, and infants.

A second attack of plague is rare. The second attack is generally fatal. The diagnosis of plague during an epidemic is generally rendered easy by the severe and febrile general symptoms, by the formation of local foci in the lymphatic glands, on the skin or in the lungs, by the unconscious condition of the patient, the unsteady gait, the extraordinarily weak pulse, the injection of the eyes, and the white tongue. When no epidemic prevails the disease may present, even in pronounced cases, an assemblage of symptoms resembling those of anthrax, typhus, or pneumonia. The light cases with less severe local and general symptoms, and the gravest cases, in which death occurs before the manifestation of any local product of disease, escape diagnosis unless bacteriological examination is made, on the patient or in necropsy.

# Bacteriology of plague.

The evidence of the specific organism is especially important in pre-

venting wrong diagnosis.

The specific organism of plague is a bacillus without voluntary motion which in form and size shows considerable variations according to the conditions of development, the nature of the culture media. etc. It usually appears as a short rod, with rounded ends, and two or three times as long as it is wide. Not infrequently the difference between length and breath is so slight as scarcely to preserve the rod shape.

The plague bacillus takes aniline coloration well in streaked preparations. The outer portions of the bacillus, and notably the ends, take coloration four times more strongly than the middle (polar staining), a peculiarity which is especially noticeable in careful methylen

blue coloration.

The culture of the plague bacillus succeeds well at air temperature and in the usual culture media and culture fluids (agar-agar, solidified blood serum, gelatin, bouillon, etc). When air is excluded the growth ceases. In culture media, containing sugar, the plague bacillus does not produce fermentation with development of gas. Its growth is good at a temperature of 25° to 37° C. Between 10° and 15° C. it is slow, but still strong, and even at 5° C. it is not completely arrested. When the material for planting is taken from a plague patient or a plague cadaver the development, even at a favorable temperature, is slow. On the surface of thick agar, for example, which has been kept at a temperature of 37° C., the beginning of the formation of colonies can be seen

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with the naked eye only after the lapse of twenty-four hours, and for full development a period twice or three times as long is required.

Superficial cultures then appear on microscopic examination as transparent, small, drop-shaped colonies which have little tendency to coalesce. Cultivated in bouillon, the plague bacilli grow in chains like streptococci. On very dry agar, to which from 2 to 3 per cent of cooking salt has been added, the plague bacilli grow abundantly in from one to two days in involution forms, being large, ball-shaped or irregularly formed masses, which are deficient in their capacity to take coloration.

Resistant forms of the plague bacillus are not known. In fluid media the bacilli die in ten minutes at a temperature of 55° or 60° C. At the boiling point they are killed immediately. Dried on linen and the like

they remain alive in the climate of Europe many weeks.

The plague bacilli are found in all the morbid products of the living patient and generally throughout a plague cadaver. The fluid and tissue of fresh buboes and carbuncles, the exudation of inflamed lungs contain bacilli in enormous quantities. In the contents of the bubo, released either by spontaneous breaking down or by treatment, they are only exceptionally found, so that in cases of bubonic plague ending in recovery they must be obtained by incision of the fresh bubo. Yet these cases occasion error in diagnosis. Blisters and carbuncles readily

yield, on puncture, material for bacteriological diagnosis.

In the much more numerous cases of pneumonic plague the sputum, which always contains numerous bacilli, furnishes the most reliable diagnostic material. In the absence of sputum, section or puncture of the lung of a plague cadaver decides the diagnosis, if this decision has not already been arrived at by bacteriological examination of the blood. Examination should not be neglected in any plague case, since it is always easily practiced and is often decisive. In the majority of plague cases which end fatally the bacilli are found, either sparingly or in quantities in drops of blood drawn by a needle prick in the skin, made either during the last hours of life or several days previously. In the normal secretions they are not often found and are more difficult to obtain. They always appear in numbers in terminal lung ædema.

If the bacteriological examination of a patient is for any reason unsatisfactory, it is always easy and reliable in the case of material from plague cadavers. Beside the primary localizations in the skin, lungs, and glands, the blood, spleen, lung hypostasis, gall, cerebro-spinal fluid furnish especially good objects for the identification of the bacillus.

Necropsy undoubtedly demonstrates the fact of plague cases which during life were obscure. Anatomical findings are more uniform, and, therefore, more reliable than clinical symptoms. Beside the primary lesions, i. e., the fatty or warty swellings of the lymph glands, juicy and often bloody permeation into the surrounding tissue, deep infiltration from carbuncular swelling, and lobular or lobar thickening of the lungs, almost every cadaver shows a soft, swollen spleen, shellac-colored blood, and almost always bloody effusions into various organs, especially the stomach, small intestines, and execum, the basin of the kidneys, etc.; also here and there foci of necrosis and highly developed parenchymatous degeneration of the intestines, especially the liver.

In the treatment of plague it is of the highest importance to secure a comfortable location, fresh air, and cool lotions. The great thirst from which the patient suffers should be unsparingly gratified. Fresh water, acidulated drinks, and milk are the most acceptable. The use of effervescent drinks is discouraged by many physicians when there

is marked depression of the brain or other vital centers.

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Cleansing of the digestive organs by means of castor oil, or similar mild medicament, is recommended by many physicians, and appears from necropsic findings to be efficacious. These often show inflamed and packed bowels, with bloody effusions. Physicians are not agreed as to heart stimulants.

Cauterization of the pustules and the application of mercuric or carbolic washes or salves to the buboes or inflamed glands appear advisable. The further treatment of the buboes is surgical. In pneumonic plague the inhalation of a 1 per cent carbolic and lime-water spray is desirable.

The best protection for physicians and attendants is absolute cleanliness. The great danger of infection through the sputum of living plague patients and the cedematous exudation from the lungs of the dying are to be especially guarded against.

Disinfection must be applied to all excreta of the patient and to all articles that come in contact with him. For chemical disinfection, solutions of sublimate (1-1000) carbolic solution (3 per cent) cresol soap and chloride of lime solutions are especially to be recommended.

As a prophylactic agent, for the protection of physicians and attendants may be mentioned inoculation with dead plague culture, which constitutes the so called active immunizing process. This plague protective inoculation has been shown, by extensive use in India, to be harmless and to confer protection against infection which if not absolute is yet unmistakable. As far as animal experimentation shows, the inoculation loses its protective power after seven days.

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Epidemiology.—It has been demonstrated that plague spreads slowly after its introduction. In many instances it has been found to be confined to the family in which the first case occurred and to persons who have come in contact with the plague patient. It will then make its appearance in neighboring houses or in a distant quarter to which it has been conveyed by persons who have been in contact with the plague patient. In this manner the disease fixes itself when it has found a favorable soil and remains unnoticed during weeks and months, when it often develops quite rapidly and reaches its maximum at first by quick and then by slow degrees. Its extinction is often only apparent. After a period of suspension lasting weeks or months a fresh epidemic not infrequently begins and this may also have still further developments.

Epidemics of sudden development, such as Asiatic cholera and abdominal typhus, which result from the long persistence of the germ in drinking water and water for domestic uses, are not observed in plague.

An important feature in the conditions affecting plague is the disposition of the disease to confine itself to separate dwellings and to discriminate among the persons resident there. When the persons affected are removed from the house further infection may by care be prevented.

In the propagation of plague the transference of the germ from man to man is in the first line of importance. This transference may occur directly or by means of contact with articles of clothing and laundry,

or in general any articles of use.

The manner in which the cause of disease leaves the body has already been shown. The danger of infection is generally slight in mild cases of the disease where the plague germ is confined to the swollen gland. The conditions are scarcely altered when the bubo becomes soft or breaks down, since in that case the plague bacillus is, as a rule, already dead. The facility of infection is much greater in severe types of septicæmic

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cases of bubonic plague, in which the disease germ may be discharged, living, with the several secretions of the body, or found in quantities shortly before death in pulmonary ædema. The most dangerous cases are of pneumonic plague on account of the quantities of the bacilli which may be contained in the sputum and which are thrown into the air by coughing, or even in the act of speaking.

The plague germ is received into the lymphatic system of a healthy organism by small unobserved injuries to the epidermis, slight scratches, flea-bites, and the like. In other cases it may be taken in by way of the mucous of the mouth or throat, the conjunctival sack, or the nostrils, or may be taken into the bronchial tubes by way of the respiratory

passages.

That these various means of infection from man to man constitute an open door for transmission when an unclean people live in close, dark, and crowded houses is apparent. Where light and air are freely admitted and cleanliness

prevails plague finds no soil for an epidemic spread.

Direct or indirect transmission of infection from man to man is not the only means of the spread of plague. Many circumstances in the outbreak and spread of this disease are explained by the fact that animals living in the vicinity of men are attacked by fatal epidemics. Of these animals rats are the most important, they being in the highest degree susceptible to infection by the abdominal canal. As they have the habit of gnawing their sick or dead fellows, plague is easily spread among them when it has once broken out.

Plague-infected rats are dangerous not only to their own kind. Their excreta, which contain great numbers of plague bacilli, may easily infect human dwellings, as plague-infected rats generally lose their fear of man and not infrequently die in houses Mice may play a similar part, if not one as apparent or pronounced.

Subterranean and entirely uncontrollable conditions explain to some extent the apparently spontaneous outbreak of plague, together with its disposition to fix itself in crowded quarters and to persist even after

a period of cessation.

If the foregoing considerations meet the demand for an understanding of the nature and propogation of plague, their object will have been obtained. They may be especially useful in demonstrating the first cases of a plague outbreak. It need not be added that the final diagnosis of a plague case should be made only with corroborative statement of medical authorities and on the ground of reliable bacteriological examination.

[Reports to the Surgeon-General United States Marine-Hospital Service.]

#### Report from San Francisco.

SAN FRANCISCO, CAL., April 10, 1900.

SIR: All proceedings in Chinatown discontinued except ordinary inspections. No suspicious cases. \* \* \*

GASSAWAY, Surgeon, U. S. M. H. S.

# Smallpox in New Jersey—Statement of cases of smallpox which occurred in the State of New Jersey from April 1, 1899, to April 1, 1900.

	TRENTON,	. N.	J.,	April	12,	1900
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Date.	Place.	County.	Cases.	Deaths.
	Hackensack	Bergen	4	
Do				
April, 1899	Newark	do	7	
May, 1899	do	do	5	
June, 1899	do	do	1	
July, 1899	do	do	1	
November, 1899	do	do		
December, 1899	do	do	1	
April, 1899	Orange	do	7	
Do	Jersey City	Hudson	1	
February, 1900	do	do	1	
January, 1900	Piscataway Township	Middlesex	1	
December, 1899	Woodbridge Township	do	5	1
November, 1899	Dover	Morris	8	l
December, 1899	Morristown			1
January, 1900	do		3	
February, 1900	do		1	
March, 1900	do			
November, 1899	Rockaway Borough			
December, 1899	Rockaway Township	do	5	
June. 1899	Manchester Township			
September, 1899	Paterson	Paggaio	ī	
March. 1900	Rahway	Union	2	
December, 1899	Hackettstown		ĭ	
	Total		69	

HENRY MITCHELL, Secretary.

No smallpox on steamship Reese Lee, at Memphis.

MEMPHIS, TENN., April 10, 1900.

SIR: Referring to my telegram of the 4th, and Bureau telegram of the 5th instant with reference to smallpox on steamer *Reese Lee*, I have the honor to report that the vessel arrived at this port to day and was boarded and inspected by me. It was found that there has been no sickness of any kind on board the steamer, and that the report of smallpox existing among her crew was unfounded.

Respectfully, D. E. Robinson,

Assistant Surgeon, U. S. M. H. S., In Command.

Reports of States and yearly and monthly reports of cities of the United States.

ALABAMA—Mobile.—Month of January, 1900. Estimated population, 37,817. Total number of deaths, 100, including enteric fever, 1, and 11 from tuberculosis.

Month of February, 1900. Total number of deaths, 96, including 13 from tuberculosis.

California—Los Angeles.—Month of March, 1900. Estimated population, 103,000. Total number of deaths, 171, including diphtheria, 2; enteric fever, 3; whooping cough, 3, and 44 from tuberculosis.

Oakland.—Month of March, 1900. Estimated population, 75,000. Total number of deaths, 89, including 14 from tuberculosis.

Sacramento. - Month of March, 1900. Estimated population, 30,000.

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Total number of deaths, 32, including enteric fever, 1, and 7 from phthisis pulmonalis.

San Francisco.—Month of February, 1900. Estimated population, 360,000. Total number of deaths, 664, including diphtheria, 5; enteric fever, 11, and 132 from phthisis pulmonalis.

Ten days ended March 10, 1900. Total number of deaths, 178, including diphtheria, 1; enteric fever, 1; scarlet fever, 1, and 27 from tuberculosis.

CONNECTICUT.—Reports to the State board of health, for the month of March, 1900, from 165 towns having an aggregate estimated population of 909,720, show a total of 1,691 deaths, including diphtheria, 33; enteric fever, 16; measles, 32; scarlet fever, 7; whooping cough, 5, and 144 from phthisis pulmonalis.

Hartford.—Month of March, 1900. Estimated population, 76,000. Total number of deaths, 122, including diphtheria, 6; enteric fever, 5; whooping cough, 1, and 17 from phthisis pulmonalis.

ILLINOIS—Springfield.—Month of March, 1900. Estimated population, 35,000. Total number of deaths, 53, including scarlet fever, 1, and 3 from phthisis pulmonalis.

IOWA—Davenport.—Month of March, 1900. Estimated population, 42,000. Total number of deaths, 38, including enteric fever, 2, and 6 from tuberculosis.

Des Moines.—Month of March, 1900. Estimated population, 78,000. Total number of deaths, 95, including 6 from tuberculosis.

LOUISIANA—New Orleans.—Month of March, 1900. Estimated population, 300,000—white, 210,000; colored, 90,000. Total number of deaths, 692—white, 395; colored, 297, including diphtheria, 2; enteric fever, 6; measles, 8; scarlet fever, 2; smallpox, 83, and 100 from tuberculosis.

MASSACHUSETTS — Lawrence.—Month of March, 1900. Estimated population, 59,072. Total number of deaths, 112, including diphtheria, 4; enteric fever, 1, and 9 from tuberculosis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended April 7, 1900, from 79 observers indicate that pneumonia and pleuritis were less prevalent than in the preceding week. Phthisis pulmonalis was reported present at 160, measles at 110, scarlet fever at 59, enteric fever at 31, diphtheria at 20, whooping cough at 15, smallpox at 8, and cerebro spinal meningitis at 3 places.

MINNESOTA—Winona.—Month of March, 1900. Estimated population, 24,000. Total number of deaths, 28, including 3 from phthisis pulmonalis.

NEW HAMPSHIRE—Manchester.—Month of March, 1900. Estimated population, 60,000. Total number of deaths, 100, including diphtheria, 2; scarlet fever, 1, and 11 from phthisis pulmonalis.

NEW YORK.—Reports to the State board of health, Albany, for the month of February, 1900, from 156 cities, towns, and villages having an aggregate estimated population of 7,400,000, show a total of 10,796

deaths, including diphtheria, 352; enteric fever, 122; measles, 206; scarlet fever, 119; whooping cough, 91, and 1,131 from phthisis pulmonalis.

The Monthly Bulletin says:

In addition to cases of smallpox referred to in the January Bulletin as existing at Mount Vernon, New Rochelle, and Fort Edward, cases have

been reported from Otego, Niagara Falls, and Stockton.

As the origin of the disease in the different localities can not be traced, it is urged that the health officers of the different municipalities of the State be on the alert for any outbreak of the disease, being careful to treat with suspicion cases claimed to be chicken pox, as it has been the experience of the State board of health during the past two years that many cases of smallpox were wrongfully diagnosed as chicken pox, with the result that the disease became epidemic in many localities of the State.

It is advised that all local boards of health adopt and enforce rules requiring that all cases of supposed chicken pox be reported promptly to them by the attending physicians, in order that the cases may be kept under observation, if necessary, quarantined, until all doubt is at

rest as to the true nature of the disease.

As an aid in diagnosing a case of smallpox, note these data: If an adult; if the initial fever was marked and lasted three days; if the eruption came first on the face and is most abundant there; and if there is any induration of the lesion, as of a papule having become vesicular, all these or any modification of them are quite conclusive of smallpox. No adult should be allowed at large with an eruption thought to be varicella; no case of vesicular exanthem preceded by marked fever, though the fever may have no characteristics differing from that of a severe cold; no vesicular eruption so starting and coming mostly on the face, wrists (and frequently on the palms), is likely to be anything but smallpox; and if there is any induration of the base of the vesicular lesions, all of these are held to be conclusive symptoms. In every case give the public the benefit of the doubt by taking all necessary precautionary measures.

A case of smallpox should be quarantined as absolutely and remotely as possible, as infection from this disease goes a considerable distance—

much further than that of any other infectious disease.

Manage this by placing the patient not only in an upper room, or in a detached building, but by keeping the windows closed or covered with sheets damp with a bichloride solution on the side toward which exposure may take place. Persons caring for the patient must not mingle with others at all, nor must articles be taken from the room until disinfected.

Vaccinate with fresh virus everyone exposed or anywhere about the neighborhood. Vaccinate in two places on the arm, scarifying the size of a split pea till there is a little oozing at insertion of the deltoid, and 2 inches above on either edge of the muscle; let it dry and cover with nothing. First clean the skin well with soap and water.

Auburn.—Month of March, 1900. Estimated population, 35,000. Total number of deaths, 40, including diphtheria, 1; enteric fever, 1; whooping cough, 2, and 4 from phthisis pulmonalis.

Kingston.—Month of March, 1900. Estimated population, 26,000.

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Total number of deaths, 38, including scarlet fever, 1; measles, 1, and 5 from phthisis pulmonalis.

NORTH CAROLINA—Charlotte.—Month of March, 1900. Estimated population, 29,000. Total number of deaths, 32, including 4 from phthisis pulmonalis.

OHIO—Cleveland.—Month of March, 1900. Estimated population, 395,000. Total number of deaths, 623, including diphtheria, 12; enteric fever, 29; scarlet fever, 6; whooping cough, 2; smallpox, 2, and 51 from phthisis pulmonalis.

Findlay.—Month of March, 1900. Estimated population, 20,000. Total number of deaths, 31, including diphtheria, 1; enteric fever, 1, and 3 from phthisis pulmonalis.

OREGON—Portland.—Month of March, 1900. Estimated population, 96,600. Total number of deaths, 82, including enteric fever, 3; scarlet fever, 1, and 10 from tuberculosis.

RHODE ISLAND—Newport.—Month of March, 1900. Estimated population, 21,500. Total number of deaths, 36, including scarlet fever, 1, and 6 from tuberculosis.

TENNESSEE—Chattanooga.—Month of March, 1900. Estimated population, 40,000. Total number of deaths, 58, including whooping cough, 2, and 12 from phthisis pulmonalis.

Nashville.—Month of March, 1900. Estimated population, 110,834—white, 69,389; colored, 41,445. Total number of deaths, 192—white, 96; colored, 96, including diphtheria, 4; enteric fever, 5; measles, 3; whooping cough, 3, and 34 from phthisis pulmonalis.

UTAH—Ogden.—Month of March, 1900. Estimated population, 20,000. Total number of deaths, 40, including diphtheria, 1; scarlet fever, 1, and 1 from smallpox.

West Virginia—Wheeling.—Three months ended March 31, 1900. Census population, 35,013. Total number of deaths, 158, including diphtheria, 3; enteric fever, 15, and 14 from phthisis pulmonalis.

#### Report of immigration at Boston for the week ended April 7, 1900.

#### OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of Boston, April 8, 1900.

Number of alien immigrants who arrived at this port during the week ended April 7, 1900; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Apr. 1 Do Apr. 2 Apr. 3 Apr. 5 Do Do Apr. 6	Schooner Lizzie Dyas	Liverpool, England Yarmouth, Nova Scotia	28 112 178

GEORGE B. BILLINGS, Commissioner.

Report of immigration at New York for the week ended April 7, 1900.

Office of U.S. Commissioner of Immigration, Port of New York, April 9, 1900.

Number of alien immigrants who arrived at this port during the week ended April 7, 1900; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of im migrants.
	Steamship La Bretagne	Havre	877
Do	Steamship Rotterdam	Rotterdam	78- 64
Apr. 8	Steamship Auguste Victoria	do	
Apr. 4 Do	Steamship Ethiopia	Glasgow	200
Do		Bremen	. 58
Apr. 5	Steamship Hesperia	Naples	
Do	Steamship Southwark	Antwerp	778
Do	Steamship Ems	Genoa and Naples	87
Apr. 6	Steamship Manila	do	1, 28
<u>D</u> o	Steamship Assyria	Hamburg	656 628
Do	Steamship Munchen	Bremen	
Apr. 7	Steamship Pennsylvania	Hamburg	1,0/
D0	Steamship Kaiser Friederich	uy	10
•	Total		11.039
Do	Steamship Kaiser Friederich	do	

THOMAS FITCHIE,

Commissioner.

#### Report of immigration at Philadelphia for the week ended April 7, 1900.

#### OFFICE OF U. S. COMMISSIONER OF IMMIGRATION, Port of Philadelphia, April 9, 1900.

Number of alien immigrants who arrived at this port during the week ended April 7, 1900; also names of vessels and ports from which they came.

Date.	Veasel.	Where from.	No. of immigrants.	
Apr. 2 Apr. 7 Do		Glasgow	215 210 210 427	

J. L. HUGHES, Commissioner.

Report of immigration at Philadelphia for the week ended April 14, 1900.

Office of U.S. Commissioner of Immigration, Port of Philadelphia, April 14, 1900.

April 10, steamship Rhynland, from Liverpool and Queenstown; 169 immigrants.

J. L. Hughes,

Acting Commissioner.

Report of immigrants inspected at the port of Portland, Me., during the month of March, 1900.

Total number of immigrants inspected, 486; number passed, 479; number certified for deportation on account of dangerous contagious

or loathsome diseases, or for other physical causes, 7.

Disposition of immigrants certified for deportation.—Number of cases pending at beginning of month, none; number cases certified for deportation during month, 7; total to be accounted for, 7; number cases deported, none; number cases admitted, none; number cases pending at close of month, 7.

> S. D. Brooks, Surgeon, U.S. M. H. S.

Report of immigrants inspected at the port of Baltimore, Md., during the month of March, 1900.

Total number of immigrants inspected, 3,206; number passed, 3,206; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

GEO. PURVIANCE, Surgeon, U.S. M. H.S.

Report of immigrants inspected at the port of Port Townsend, Wash., during the month of March, 1900.

Total number of immigrants inspected, 1,018; number passed, 1,018; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

M. H. FOSTER. Assistant Surgeon, U.S.M. H.S.

Report of immigrants inspected at the port of Ponce, Porto Rico, during the month of March, 1900.

Total number of immigrants inspected, 22; number passed, 22; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

W. W. KING. Assistant Surgeon, U.S. M. H.S.

Arrival af alien steerage passengers at Cienfuegos during the week ended April 7, 1900.

CIENFUEGOS, CUBA, April 9, 1900.

SIR: I herewith submit report of alien steerage passengers at this port during the week ended April 7, 1900: April 6, steamship Senior, from Cartagena, with 1 immigrant.

Respectfully,

J. M. LINDSLEY, Acting Assistant Surgeon, U.S. M. H. S.

# Arrival of alien steerage passengers at Havana during the week ended April 7, 1900.

HAVANA, CUBA, April 7, 1900.

SIR: I herewith submit report of alien steerage passengers at this port during the week ended April 7, 1900:

Date.	Vessel.	Where from.	No. of immigrants.
Apr. 1  Apr. 2  Do  Do  Apr. 4  Apr. 6	Steamship Aransas	Barcelona, Malaga, Cadiz, Canary Islands, and Porto Rico. Vera Cruz and Progreso	24 295 2 166 128
	Total		700

Respectfully,

H. R. CARTER, Surgeon, U. S. M. H. S.

Arrival of alien steerage passengers at Santiago during the week ended March 24, 1900.

SANTIAGO DE CUBA, March 24, 1900.

SIR: I hereby submit report of alien steerage passengers at this port during the week ended March 24, 1900: March 22, Haitian schooner *Euphise*, from Cape Haitian, Haiti, 4 immigrants.

Respectfully,

HERMAN B. PARKER,

Assistant Surgeon, U.S. M. H. S.

# REPORTS FROM NATIONAL QUARANTINE

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Portof departure
1 2 8 4 5 6 7 8 9 10	United States: Alexandria, Va. Beaufort, N. C. Brunswick, Ga Cape Charles, Va. Cape Fear, N. C. Columbia River, Oreg.  Delaware Break water Quarantine, Lewes, Del. Eureka, Cal Grays Harbor, Wash Guif Quarantine, Ship Island, Miss.  Los Angeles, Cal Newbern, N. C. Pascagoula, Miss Port Townsend, Wash Port Townsend, Wash	Apr. 14 Apr. 7 do	Nor. bk. Sodwig Am. sc. Jessie Minor	Mar. 29 Apr. 4 Apr. 2do Apr. 3 Apr. 6 Apr. 7	Honolulu
18 14	Port Townsend, Wash  Reedy Island Quarantine, Del.		Am. sc. Roy Somers Am. sc. Fred. E. Sanders. Am. sc. F. M. Redfield Am. sc. Endeavor  Am. sc. Carrier Dove  Bg. Geneva	Apr. 2 Apr. 5 Apr. 2 Apr. 6 Apr. 7do	Hilo
17	San Diego, CalSan Francisco, Cal		Br. ss, Belgian King  Am. ss, China  Am. brig Harriet G  Am. ss, Sheridan	Mar. 31	Hongkong via Moji, Kobe, and Yokohama.  Hongkong  Honolulu  Manila
			Am. bktn. Planter	Apr. 8	Honolulu

#### AND INSPECTION STATIONS.

1 2 8 4 5 6	***************************************				passed.
2 8 4 5 6 7 8	***************************************			No report	
3 4 5 6 7 8			***************************************	do	
4 5 6 7 8					
5 6 7 8	1			No report	
6 7 8				No transactions	
8	Portland	Partial disinfection	Apr. 5	488 pieces of baggage and bedding disinfected.	
		i			
	Eureka	Helddo		·····	•••••
1 9	do	ao		No transactions	
10		Disinfected and held			
ļ	do	do	Apr. 9		
	Pascagoula	dodo	Apr. 8	••••••	•••••
	do	do		••••••••••••	••••••
	Hanaboro	I			
1 17	••••••			No transactions	
12	***************************************			ATO MAILBACHOUS	2
1	l i	Partial disinfection	l I	uisiniecieu.	ŀ
ļ	do	do	Apr. 7	do	
l	do	do	do	ao	*************
1	do	Being disinfected		***************************************	
	do	Disinfected dunnage of 5	Apr. 7	•••••••	•••••
ı	;	of crew from Honekone		•••••••••••••••••••••••••••••••••••••••	
l	do	Being disinfected		•••••	
15				HEALTH REPORTS, No. 13, page 713, the bk. Nellie M. Slade, from Rosario, was sent in quarantine in charge of Assistant Surgeon White from Reedy Is- land to Philadelphia, where her cargo of bone dust was dis- charged by means of lighters, a disinfection of the crew surface exposed being made every night during the process of unlading. She was then disin- fected throughout and given pratique March 31, 1900.	20
16	San Francisco via San Diego.	Inspected and held for removal of 227 Asiatic steerage passengers and effects to quarantine.	Apr. 3	Asiatic steerage passen- gers bathed and effects disinfected.	1
17	San Francisco	Held for observation	Apr. 1	Death en route due to malarial fever. 1 case on board. 457 oriental steerage passengers and crew on ss. China bathed and baggage disin- fected.	
	do	Disinfected	Apr. 3	Crew bathed and bag- gage disinfected on brig Harriet G.	•••••••
	do	do	Apr. 8	1 death on ss. Sheridan en route due to dysen- tery. 381 steerage pas- sengers bathed and baggage disinfected. Baggage of 57 cabin passengers and 130 crew disinfected. Crew bathed and bag- gage disinfected.	

# REPORTS FROM NATIONAL QUARANTINE

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure,
	UNITED STATES—Continued. San Francisco, Cal	Apr. 7	Hawiian bk. Santiago  Hawiian bk. Mauna Ala  Am. sc. Aloha  Am. sc. A. M. Baxter  Am. bktn. S. N. Castle	do do	do do Hilo
-			Am. bktn. Archer Am. sc. Jennie Wand Am. sc. Dora Bluhm	do do Apr. 4	do Mahukona Kahului
18	Savannah, Ga	do	U.S. A. transport Terry	Apr. 5 Apr. 6 Apr. 7do Apr. 4	Sidney
19	South Atlantic Quaran- tine, Blackbeard Island, Ga.	do	Am. st. yt. Marjorie Sp. bk. Josefa Formosa(a)	Apr. 7 Mar. 17	do Santos
20	Tortugas Quarantine, Key West, Fla.	Mar. 31	Am. sc. E. D. White	Apr. 3	Cardenas
21 22 28 24 25 26 27 28	DaiquiriGibaraGuantanamo	Apr. 14 Apr. 7do Mar. 31do	Br. sc. St. Maurice	do	do
29 80 81	Isabela de Sagua Manzanillo Matanzas	do Mar. 31 Apr. 7	Ger. ss. Hermann	Apr. 1	Caibarien
32 33 34 35	PORTO RICO: Ponce	do			
36 37 38 39 40	Arroyo Humacao	do do			

a Previously reported.

# AND INSPECTION STATIONS—Continued.

Number	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
•••••	San Francisco		-	Crew bathed and baggage disinfected.	1
•••••	do	Held for disinfection	Apr. 6	do	
•••••	do	do			
•••••	do	do		5 Japanese and 1 Chinese steerage passengers on Am. ss. Walla Walla from Victoria bathed and baggage disin- fected.	
•••••	do	dodo	••••••		
•••••		do			
•••••		do		5 Japanese steerage pas- sengers on Am. ss. Umatilla bathed and baggage disinfected.	
•••••		do			
•••••		do			
	do	do			
	do	do			
18		Allowed to overhaul in quarantine. Detained under quaran-	-		2
· • • • • • • • • • • • • • • • • • • •	do	tine restrictions.	ł		1
19	Fernandina	Disinfected		***************************************	4
20		•••••••••••		No transactions	
•••••		Disinfected and held		With certificates of dis- infection.	
21	Pascagoula	do	do	No report	
21				210 10p011	
22					12
23 24					17 15
24 25		••••••		No report	
26				do	
27		***************************************		do	
28			••••••	<ol> <li>case malaria on ss. Reina Cristina Maria, from Bilbao, convales- cent.</li> </ol>	12
30 31	Matanzas		Apr. 1	No report. U. S. ss. Sedgwick from New York, Ger. ss. Curytiba from Caibar- ien, and brig Olive T. Whittier, from Car- denas, passed without inspection.	2
32 33	••••••			No report	8
		İ			10
34 85	••••••			••••••••••	10 12
86				No report	
87				do	
88				do	•••••
				do	
89 40				do	

#### REPORTS FROM STATE AND

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
1 2 8 4 5 6 7 8 9	Anclote, Fla	do do Apr. 7 do			
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	Gardiner, Oreg	Apr. 14do			

# MUNICIPAL QUARANTINE STATIONS.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of depar- ture.	Remarks.	Vessels inspected and passed.
1 2 3					
5 6 7	······································			do	18
8 9 10	Galveston	Vessel fumigated thor-		do	
		oughly; forecastle twice fumigated; cargo being unloaded by lighters and fumigated.		•	
11	do	Fumigateddo	Apr. 7	No report.:	
12 13 14		••••••		No reportdo	
15 16 17				dododo	
18 19 20			•••••••	dodododododododododododododo	······
21 22 23		······································		do do do	
24 25 26			•••••••	do	••••••••••••

Smallpox in the United States as reported to the Surgeon-General United States Marine-Hospital Service, December 29, 1899, to April 20, 1900.

[For reports received from June 30, to December 29, 1899, see Public Health Reports for December 29.]

Places.	Date.	Cases.	Deaths.	Remarks.
Alabama:				
Huntsville,	Apr. 4	19	0	į
Jefferson County	Jan. 1-Feb. 5			
Mobile			1	[
Whistler	Jan. 1-Feb. 3			
w disher	Jan. 1-1-cb. C			
Total for State		158	1	
Total for State, same period,		133	2	
1899.	1			
Arkansas:	77-1-0	Į		Consilinger remembed
Arkansas County  Benton County  Columbia County	ren. z		••••••	Smallpox reported.
Benton County	do	***************************************	••••••	Do. Do.
Columbia County	qo		•••••	
Conway County	do	***************************************		Do.
Crittenden County	do		•••	Do.
Drew County	do			Do.
Foulkner County	do			Do.
Fulton County	do			Do.
Omen County	do	1 .		Do.
Independence County	do			Do.
Jackson County	do			Do.
Jefferson County	do			Do.
Independence County  Jackson County  Jefferson County  Lawrence County	do			Do.
Lincoln County	do			Do.
Logan County	do			Do.
Perry County	do	· <b>···</b>		Do. Do.
Phillips County	d-			Do.
Phillips County	uo	•••••		
Prairie CountyPulaski County (Little Rock) Saline County	ao			Do.
Pulaski County (Little Rock)	Oct. 1-Feb. 2	60	8	-
Saline County	Feb. 2			Do.
Scott County	ao			Do.
White County (Searcy) Woodruff County	Feb. 2-Feb. 21	40		Do.
Woodruff County	do			Do.
·				
Total for State		100	8	
Total for State, same period,		8	1	
1899.				
California:				
Los Angeles	Jan. 18	3		
Total for State, same period,		87	15	
1899.				
Colorado:				
Arapahoe County	Jan 7-Mar 28	20	l	
El Pago County	Feb 12-Mar 25			
Huarfana County	Dec 20-Ion 26			
Take County	Ion 17-Feb 98			
Tag Animag County	Fob 4 Mon 21	2		
Huerfano County  Lake County  Las Animas County  Lincoln County	Dog 15 Tom 1	2	•••••	
Die Grande Counter	Fob 97_Mo= 10	17	2	
Rio Grande County Sagnache County	Dec 09	14	2	
bagnache County	Dec. 25	1		
Weld County	reb. 23-Mar. 11	3	•••••	
m + 1 f - 04-4-				
Total for State	•••••	63	2	
m 4 16 04 4	·	100		
Total for State, same period,	••••••	136	9	
1899.				
Delaware:			_	
Wilmington	Jan. 7-Jan. 13		1	
	• • • • • • • • • • • • • • • • • • • •	0	0	
1899.				
District of Columbia:	_			
Washington	Jan. 12-Apr. 7	14		
		79		
period, 1899.				
lorida:				
Jacksonville	Jan. 7-Mar. 31	21		
Pensacola	Jan. 16-Feb. 9	2		
Total for State		23		
TOWN TOT DAME	***************************************			
Matal for State same marie 3		00		
Total for State, same period,	•••••	23		
1899.	i			
leorgia:		_	i	
Appling County Blackshear	Jan. 20	1		
Blackshear	Jan. 11	16		
Brunswick		112	2	

Places.	Date.	Cases.	Deaths.	Remarks.
Boorgia—Continued.				
Darien	Jan. 17	. 2	1	
Jesup	Jan. 20	. 2		.
Liberty	ao	. 8		.1
McIntosh County	do			. Several cases.
Savannah	do	. 1		
Wayne County	do	3		•
Waycross	.: Jan. l-Feb. 18	23		-1
	1	140	i	-[
Total for State		168	2	}
The Acad San State comes married	· ·	210		=
Total for State, same period,		312		<u>: </u>
1899. llinois :				1
A	Feb. 11-Mar. 31	33	l	
Cairo	Dec. 24-Apr. 14	67	4	
Chicago	Dec. 27-Apr. 7	15		
Danville	Feb. 4-Feb. 10	1		
Rockford	Feb. 11-Feb. 17	2		]
SpringfieldAlexander County	Jan. 21-Apr. 13	3		
Alexander County	Dec. 1-Feb. 28		.	Smallpox reported.
Bond County	do			Do.
Boone County	do	ļ		Do.
Bureau County	do			Do.
Christian County	do			Do.
Clinton County	do			Do.
Cook County Cumberland County DeWitt County	do	•••••		Do.
Cumberland County	do			Do.
Dewitt County	do			Do.
Douglas CountyFulton County	oo	•••••		Do.
Calledia County	do	••••••		Do.
Gallatin County Hamilton County	do		••••••	Do.
Hardin County	do	***************************************		Do. Do.
Henderson County	do	***************************************		Do.
Henry County	do	• • • • • • • • • • • • • • • • • • • •		Do.
Iroquois County	do		***************************************	Do.
Jackson County	do			Do.
Jefferson County	do			Do.
Johnson County	do			Do.
Lee County	do	•••••••		Do.
Livingston County	do			Do.
Macon County	do			Do.
Macoupin County	do			Do.
Madison County	do			Do.
Massac County	do	•••••		Do.
McHenry County	do			Do.
McLean County	do	• • • • • • • • • • • • • • • • • • • •		Do.
Morgan County Ogle County Perry County	do	•••••		Do.
Ogle County	do	••••••		Do.
Perry County	do	••••••	•••••	Do.
Piatt County	do	••••	•••••	Do.
Pope County	do	•••••	••••••	Do.
Pulaski County Randolph County	do	••••••		Do. Do.
Rock Island County	do	••••••	•••••	Do. Do.
Saline County	do	••••••		Do. Do.
Sangamon County	do			Do. Do.
St. Clair County	do			Do.
St. Clair County	do			Do.
Shelby County	do			Do.
Union County	do			Do.
Whiteside County	do			Do.
Williamson County				Do.
Winnebago County	do			Do.
	ļ-			
Total for State	-	121		
Total for State, same period, 1899.		42		
dian Territory:				
Choctaw Nation	Dec. 18	75		
Total for same period, 1899		0	45	
	ļ			
diana:	Dec. 1-Dec. 31			
Adams County	Dec. 1-Dec. 31 Jan. 17	1		Many cases.
Clay County Dearborn County	Dec. 1-Dec. 31	1	•••••••••••••••••••••••••••••••••••••••	many cases.
Evansville	Dec. 24-Apr. 13	77	••••••	
Gibson County	Mar. 31		•••••••	Smallpox reported.
	do			Do.
Indianapolis	Jan. 15-Jan. 21			20.

Places.		Date.	Cases.	Deaths.	Remarks.
ndiana—Continued.					
Jennings County		1-Dec. 31			.
Madison County	d	0			
Marion County	Mar.	31			. Smallpox reported.
Posey County	Dec.	1-Dec. 31	. 26		· D-
Washington County	Mar.	o1	• •••••••		. Do.
Total for State			. 124		February 28, 750 cases in the State. March 31
Total for State, same period, 1899.			64	1	56 cases in the State.
owa:					
Des Moines	Feb.	1-Feb. 28			
Polk County	İ	8			
Total for State		••••••			
Total for same period, 1899	·•••••		13	2	· ·
ansas: Anthony	Jan.	1-Jan. 31	. 2		]
Arkansas City	de		. 9	1	
Atchison County		29-Feb. 28			
Barber County	Feb.	1-Mar. 31	67	1	
Burlingame		1-Mar. 31			
Burns, Marion County	Jan.				
Butler County		1-Mar. 31			•
Centralia	Jan.	1-Mar. 31 1-Mar. 31		4	4
Cherokee County Chautauqua County	Feb.		2	-	•
Douglas County		1-Mar. 31	35		
Emporia		1-Mar. 31			
Florence	Mar.	1-Mar. 31	i		
Franklin County	de	·····	9		l .
Galena and Cherokee County	Feb.	1-Mar. 31	81		
Grantville	dc		1		
Greenwood County		1-Mar. 31	6		
Hartford		) 1 Wow 21	2 8		
Harvey County				•••••	
Holliday Hutchinson		1-Mar. 31		***************************************	
Jefferson County			29	1	
Junction City		1-Mar. 31	8	ļ	
Kansas City		·	35		
Kingman County	Jan.	1-Mar. 31	27	2	
Labette County		1-Feb. 28	7		
Lawrence County			98 100		
Lyon County Marshall County	do	· · · · · · · · · · · · · · · · · · ·	100	•••••	
McCune	Mar	1-Mar. 31	9		
McPherson			i		
Montgomery County	Jan.	1-Feb. 28	5		
Mound City	Mar.	1-Mar. 31	2		
Nemaha County	Jan.	1-Mar. 31	59		
Newton.	Jan.	1-Feb. 28	3		
Neosho		1-Mar. 31	5		
Osawatomie		l-Mar. 31	10 8		
Osage County Oswego, Labette County	Nov	5-Feb. 8	17	0	
Ottawa		1-Mar. 31	2		
Paola	Jan.	1-Jan. 31	ī		
Parsons County	Feb.	I-Mar. 31	9	2	
Pittsburg		1-Mar. 31	10		
Reno County		1-Feb. 28	1		
Salina		1-Mar. 31	16		
Sedgwick County	Feb.	1-Mar. 31	18		
Seneca	Mar.	1-Mar. 31	2 67		
Summer County	Jan.	1-Mar. 31	86	••••••	
Summerfield	Mar	1-Mer 31	ű	•••••	•
Tonganoxie	Jan.	1-Jan. 31	64	1	
Shawnee County	Jan.	1-Mar. 31	61	4	Many cases.
Wabaunsee County	Jan.	1-Feb. 28	29		
** ************************************		- mini or	2		
White Water, Butler County	Jan.	<u>ı-Jan. 31</u>	_1		
Wichita	Jan.	1-Apr. 7	74	1	
Woodson County	op	•••••	7 44	•••••	
Kansas City).		•••••			
Yale	Mar.	1-Mar. 31	33		
Total for State	•••••		795	17	

Places.	Date.	Cases.	Deaths.	Remarks.
Kentucky:				
Covington	Jan. 14-Apr. 14	73	1	!
Lexington	Mar. 25-Apr. 7	8		.]
Louisville	Jan. 12-Feb. 22	10		
Paducah	Mar. 25-Apr. 7 Jan. 12-Feb. 22 Jan. 21	18		
			1	
Total for State	•••••••••••••••••••••••••••••••••••••••	104	1	
Total for State, same period, 1899.	***************************************	843	6	
Louisiana :			İ	
Ascension	Jan. 29-Feb. 3	5		
Assumption	do	· 8	4	1
Avoyelles	Jan. 21-Jan. 27	7		
Caddo	Jan. 21-Apr. 7	227	26	1
Calcasieu	Jan. 7-Apr. 7 Jan. 29-Feb. 8	29	3	1
Concordia	Jan. 29-Feb. 8			Several cases.
De Soto	Jan. 14-Jan. 20 Jan. 29-Feb. 3	1		4
E. Baton Rogue East Carroll Parish	Jan. 29-Feb. 3	5	ļ	d .
East Carroll Parish	Feb. 4-Feb. 10 Jan. 13	1	•••••	{
East Feliciana	Jan. 13	50		
Iberia	Dec. 20-Jan. 27	9	ļ	!
Iberville	Dec. 31-Feb. 3	26	2	
Lafayette	do	130	i	
Lincoln	Jan. 21-Jan. 27	1	ļ	
Livingston	Jan. 13		l	Do.
Madison	Jan. 29-Mar. 3	12	1	
New Orleans	Dec. 31 Apr 7	844	245	1
Ouachita	Dec. 31 Apr 7 Jan. 29-Feb. 3	i		
Plaquemine	Jan. 21-Jan. 27	î		
Point Coupée	Dec 31-Feb 3	7		
Rapides	Ian 91-Ian 97	5		
Richland	Dec. 31-Feb. 3 Jan. 21-Jan. 27 Feb. 11-Feb. 17	5	•••••	
Shreveport	Dec. 24-Apr. 7	221	15	
St. Charles		3	10	
St. James	Jan. 29–Feb. 3 Dec. 24–Jan. 17	21		
		2		
St. John	Jan. 29-Feb. 17			
St. Mary Parish	Apr. 1-Feb. 6 Sept. 1-Feb. 6	50		
St. Landry Parish	Sept. 1-Feb. 6	782	27	
Tangipahoa	Jan. 14-Feb. 24	11		
Tensas	Jan. 29-Feb. 3	35		
Vermilion	Jan. 21-Mar. 3	17	····	
Webster	Mar. 18-Mar. 24	2	•••••	
Total for State		2,518	325	
	į:	120		
Total for State, same period,		172	2	
1899.	j.			
Maine:	<b>35 30 4</b>			
Portland	Mar. 18-Apr. 14	2	•••••	
Total for State, same period,		135		
1899.	į:			
faryland:		_		
Baltimore	Apr. 8-Apr. 14	1		
Massachusetts:	_			
Boston	Dec. 30-Mar. 31	4		
Chelsea	Dec. 25-Dec. 31		1	•
Lawrence	Jan. 28-Feb. 3	1		
	Dec. 24-Dec. 30		1	
Malden	Jan. 14-Jan. 27	8		
	-			
Total for State		8	2	
	.  =			
(ichigan :				
	Feb. 18-Apr. 7	22	1	
Grand Rapids	Mar. 4-Apr. 7	2	•••••	
	ļ <del>-</del>			
Total for State		24	1	
Total for State, same period, .		22	1	
	=			
1899.		!	i	
1899. finnesota:	1	18	0	City.
1899. finnesota : Albert Lea	Jan. 1-Mar. 31			
1899. finnesota : Albert Lea	Mar. 1-Mar. 31	20	. <b></b>	·
1899. finnesota: Albert LeaAnoka County		20 6	0	Village.
1899. finnesota: Albert Lea Anoka County Butterfield Duluth	Mar. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 31	20	0	Village.
1899. finnesota: Albert Lea Anoka County Butterfield Duluth Paribault County	Mar. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 31	20 6 9	0	·
1899. finnesota: Albert Lea Anoka County Butterfield Duluth Faribault County Fergus Falls	Mar. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 31 do	20 6	0	Village. City.
1899. finnesota: Albert Lea Anoka County Butterfield Duluth Faribault County Fergus Falls	Mar. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 31 do	20 6 9 1 1	0	Village.
1899. finnesota: Albert Lea Anoka County Butterfield Duluth Faribault County Fergus Falls	Mar. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 31 do	20 6 9 1 1 28	0 0 0	Village. City. Do.
1899. finnesota: Albert Lea Anoka County Butterfield Duluth Paribault County	Mar. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 31do Jan. 1-Mar. 31 Jan. 1-Mar. 31 Jan. 1-Mar. 1	20 6 9 1 1	0	Village. City.

		,,		
Places.	Date.	Cases.	Deaths.	Remarks.
Minnesota—Continued.				
Le Sauer County	Mar. 1-Mar. 20	1	0	
Minneapolis	Oct. 1-Mar. 31		4	
New Richland	Jan. 1-Mar. 1	1	0	Village.
Northfield	. Jan. 1-Mar. 20	21	1	City.
Owatonna	do	4	0	Do.
Rice County	Jan. 1-Mar. 31	6	0	
St. James	do	18	0	Village.
St. Paul	Mar. 1-Mar. 20	6	0	
Steele County	Jan. 1-Mar. 1	1	0	!
Watonwan County	Jan. 1-Mar. 31	9	0	
Wright County		5	ŏ	
Wilght County	Jan. 1 Mar. 1.			
Total for State,		387	5	
Total for State, same period, 1899.		18		
Mississippi:	į.			
Greenwood	Jan. 21-Feb. 17	303	9	1
Transfer de constant	Man 7		1	Epidemic prevails.
Hinds County	Mar. /	21	3	Epidemic prevans.
Total for same period, 1899.				
Missouri : Paris	Sept. 3-Feb. 5	37	4	
ParisSt. Louis	Dec. 19-Apr. 8	68	0	
Total for State		105	4	
Total for State, same period,		90	17	
1899.				
Montana:	73.1	100		
Butte	Feb. 7	100		1
Total for same period, 1899	********************************	2		
Nebraska:		_	_	
Dubois	Dec. 1-Feb. 15	2	2	
Guide Rock	do	7	0	
LibertyOmaha	Dec. 1-Feb. 15	13	0	ļ
Omaha	Dec. 1-Mar. 31	19	0	
				•
Total for State		41	2	
20101 101 21010				
Total for State, same period,		371	3	
1899.				
New Jersey:			1	į
Union County	Jan. 1-Apr. 1	3	l <b></b>	
Morris County	do	12		
Morris County Middlesex County	do	ī		
Hudson County	do	ī		
muson county				
Total for State		17		
Total for State, same period,		6		
1899. New Mexico:				
Folsom	Mar. 21	4	l	
New York:				
Amsterdam	Dec. 25-Dec. 30	1		
New York City	Jan. 7-Mar. 31	20		
Tion Tota Only	0444.			
Total for State		21		
Total for State, same period,		19	3	
1899.				
North Carolina:				
	Jan. 1-Jan. 31	8		•
Alamance County Beaufort	Dec. 27	ĭ		
Bertie County	Jan. 1-Jan. 31	3		
Cabarrus County		5		
Cartaret County	do	ĭ		
Charlotte	Dec 1-Mar 21	18	0	•
CharlotteChatham County	Nov 1-Inn 21	20	-	
Curritual Coulty	Dec 1-Ten 21	3 <b>3</b> 7		
Doridson County	Dec. 1-Jan. 31	2		
Davidson County	ao	27	1	
Davie County	Jan. 1-Jan. 31	7	•••••	
Edgecombe CountyGates County	do	2	•••••	
Gates County	do	13	••••••	
Greensboro	18U 15		•••••	Numerous cases.
Guilford County	Jan. 15-Dec. 31	83	•••••	
Halifax County	do		•••••••••••••••••••••••••••••••••••••••	
Hertford County	pec. 1-Jan. 3l	8	1	
Johnston County	Jan. 1-Jan. 31	1	· • • • • • • • • • • • • • • • • • • •	

Places.	Date.	Cases.	Deaths.	Remarks.
<u> </u>		1		
North Carolina—Continued.	Dec 17 55			
Mecklenburg County	Dec. 1-Jan. 31 Jan. 1-Jan. 31		•••••	
Moore County Nash County	Dec 1-Jan 31	4		
New Hanover County	Dec. 1-Jan. 31 Jan. 1-Jan. 31 Jan. 15-Jan. 31	5		
Northampton County	Jan. 15-Jan. 31	10		
Orange County	Jan. 1-Jan. 31	. 1		
Randolph County	Dec. 1-Jan. 31	. 12		
Richmond County	Jan., 1-Jan. 31	. 27		
Robeson County	Inn 15 Dec 21	. 1 54		
Rowan CountyStanley County	Jan. 1-Jan. 31	7		
Stokes County	Jan. 1-Jan. 31			
Surry County	Dec. 1-Jan. 31	84		
Union County	do	5		
Vance County	Jan. 15-Dec. 31	. 1		
Wilmington	Jan. 25-Mar. 31	. 4		
Total for State		510	2	
Total for State, same period, 1899.	••••••	83	1	
hio:			_	
Cincinnati	Dec. 23-Mar. 30	38	1	
Cleveland	Dec. 24-Apr. 14	295	4	
Hamilton Youngstown	Dec. 31-Jan. 6	2 10	0	
_				
Total for State	••••••	345	5	
Total for State, same period, 1899.		387	5	
oklahoma Territory:				
Beaver County	Jan. 10	¦ 		Smallpox reported.
Blaine County	do	1		
El Reno	Dec. 27	7	0	
<u>E</u> nid	do	4	C	
Kay County	do			Smallpox epidemic.
Logan County	Dec. 2/	10	0	Smallpox reported.
Noble CountyOklahoma CityPawnee CountyShawnee	Dec. 27	14	0	No cases at present.
Pawnee County	Jan 10	1.2		Smallpox reported.
Shawnee	do	12	0	No cases at present.
Watonga	Jan. 10	1	Ŏ	•
Yukon	do	6	0	Do.
Total for Territory	•••••	55		
Total for Territory, same		37	13	
period, 1899.	••••••••••			
regon :				
Astoria	Feb. 12	1		
Portland	Jan. 23-Mar. 23	6		
Total for State		7		
	i			
Total for State, same period, 1899.		0	0	
ennsylvania:				
Allegheny County	Dec 17-Mar 31	12	2	
Page County	200. 11 1.11111 01111	ī		
Desiver County	Jan. 1-Dec. 31			
Crawford County	Jan. 1-Dec. 31 Mar. 1-Mar. 31	2		
Beaver County Crawford County Lawrence County	do	3	1	
McKeesport	Mar. 21-Apr. 10	3		
Lawrence County McKeesport Philadelphia	Mar. 21-Apr. 10 Dec. 24-Mar. 31	3 12	1	
Lawrence County McKeesport Philadelphia	Mar. 21-Apr. 10 Dec. 24-Mar. 31	3 3 12 15	1	
Lawrence County	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 dodo	3 3 12 15 3	1	
Lawrence County  McKeesport  Philadelphia	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 dodo	3 3 12 15	1	
Lawrence County	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 dodo	3 3 12 15 3	1	
Lawrence County		3 12 15 3 51	1	
Lawrence County		3 12 15 3 51	1	
Lawrence County	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 do	3 3 12 15 3 51	1	
Lawrence County	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 do	3 3 12 15 3 51 105	4	
Lawrence County	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 do	3 3 12 15 3 51 105	4	
Lawrence County	Mar. 21-Apr. 10 Dec. 24-Mar. 31 Mar. 1-Mar. 31 do	3 3 12 15 3 51 105	4	

· Places.		Date.		Cases.	Deaths.	Remarks.
ennessee—Continued.						
Mount Pleasant	. Jan.	6	••••••	. 8		
Nashville	. Dec.	24-Mar	. 10.	. 25		
Total for State			•••••	. 576	5	
Total for State, same period,				. 123	5	1
1899.						
ras:						
Aline	Feb.	7-Feb.	13	. 1		
Angelina County	Jan.	17-Jan.	23	· 1		
Austin	Jan.	1-Feb.	28	. 15		
Bastrop County Beaumont		17-Jan. 1-Jan.				l
Belleville County		17-Jan.				Smallpox reported
Boggy Fork	Feb.	7-Feb.	20	15		Smanpoz reported
Bonham	Jan.	7-Feb. 1-Jan. 1-Feb.	16			
Bowie County	Jan.	1-Feb.	28	. 5		1
Brenham	dc		• • • • • • • • • • • • • • • • • • • •	. 5		ľ
Brookshire		)				
Caddo Mills	Jan.	17-Jan.	23	. 1		
Caldwell	Feb.	14-Feb.	20	. 2		
Carmine	Jan.	24-Jan.	30	10		
Cass County Chappel Hill	Jan.	1-Jan. 7-Feb	10	1 1		
Colmesneil	Teo.	,-ren.	10	i		
Corsicana						
Dallas	do	)		7		
Denison		1-Jan.	16			Several cases.
Direct	Jan.	17-Jan.	23	6		
El Paso		4				
Farmersville	do		•••••	25		_
Fannin County	Feb.	4-Feb. 1-Jan.	28	1	1	Do.
FloydadaFort Stockton	Jan.	ı-Jan.	16	1		
Gainesville		7–Feb.		8		
Galveston		7-Feb. 10		2		
Garrett		7-Feb.		7		
Gilmer County		22-Feb.	28	2		
Grand Saline		l4-Feb.		3		
Greenville	do			1		
Grimes County	Jan.	1-Apr.	8	195	3	
Hillsboro	Feb. 2	22- <b>F</b> eb.	28	4		
Honey Grove	Jan.	l-Feb.	28	30		
Houston	Dec. 8	l-Feb. 31-Jan. 7-Feb.	27	12		
Hunt CountyIndex	Ten.	1-reb.	10	30		
Joaquin	Fah.	7-Feb.	10	3		
Leesburg	Reb. 2	22- Feb	28	2		
Malakoff	Feb. 1	4-Feb.	20	3		
Meadow	Jan. 1	7-Jan.	23	, j		
Meridian	do		•••••	2		
Milano	Jan. 1	7-Jan.	30	8		
Mount Pleasant	Feb. 2	2-Feb.	28	10		
Navarro County Palestine	Jan.	ı-Jan.	16	3		
Paris	reb.	/-reb.	20	26		
Prairie Dell	Jan. J	7-78n.	<i>ა</i> ∪	6 13		
Port Sullivan	Jan. A	64-J&II.	ðU	3		
Silver Lake	Feb 2	2-Feb	28	4		
St. Jo	Feb. 1	4-Feb.	20	20		
San Antonio				6		
Sealey	Jan. 2	4-Jan.	30	2		
Seguin	Jan.	l-Jan.	30	3	1	
Smithville	Jan. 1	1-Jan.	30	14		
Taylor	Feb. 2	2-Feb.	28	2		
Temple	Jan. 1	ı-Feb.	28	20	1	
TylerVillage Mills	Jan. I	1-Jan. 7-17ch	ئال 12	1		
Village Mills Washington County	Feb.	1-гев. 2- <b>Г</b> ећ	10	1	2	
Whorton County	Feb. 1	4-Feb	20	•••••	2 2	
Whorton County	Feb 1	4-Feh	20	1	*	
Wolfe City	Jan. 1	7-Jan.	23	3		
Yoakum	Feb. 2	2-Feb.	28	7		
Total for State		••••		399	——————————————————————————————————————	
1						
Total for State, same period,			- 1	778	118	

Places.	Date.	Cases.	Deaths.	Remarks
itah:				
Salt Lake City	Dec. 1-Apr.	7 45		•
Ogden	Mar. 1-Mar. 3	19	1	
Total for State		61	1	
				-
Total for State, same period,		0	0	
1899.				1
rginia:	Pob 14 Man 15		1	
Alexandria Bath County	Feb. 14-Mar. 17	··· 4		·
Danville	Mar. 15	30		•
Norfolk				•
Petershuro	Dec 1-Dec 26	4		1
Portsmouth	Dec. 24-Apr. 14	94	21	
Richmond	Jan. 1-Feb 2	35	ő	1
Petersburg	Jan. 1-Mar. 31	44	ŏ	
			·	
Total for State	1	219	21	
Total for State, same period, 1899.	<b></b>	1,845	16	
shington:	!		!	1
Centralia	Feb. 26	150		
Pierce County	Feb. 7	1		
Seattle	Feb. 15	] 1	0	I
Spokane	Jan. 1-Apr. 7	179	2	
Tacoma	Feb. 12-Mar. 31	27	1	
Walla Walla	Feb. 21	2		
Total for State		360	3	
Total for State, same period,		3	0	
1899. st Virginia:				
st virginia: Calhoun County	Jan. 31	1	1	Cases reported.
Fayette County	Jan. 26	18		Cases repursed.
Gilmer County	Jan. 20 Jan. 31		ļ	Do.
Harrison County	do			20.
Lewis County	Jan 31-Mar 1	25		
McDowell County	Jan. 31-Mar. 1 Jan. 31	1		
Mingo County	do			Do.
Monongalia County	Jan. 26			
Upshur County	Dec. 1-Mar. 1	35	1	Do.
Webster County	Feb 8	10		
Total for State	********************	95	1	
			0	
Total for State, same period, 1899.	••••••••			
consin:				
Eau Claire County	Mar. 26			i
a Crosse County	Mar. 21	6		İ
afayette County	Feb. 3	1		1
emonweir	Jan. 24-Feb. 3	5	1	1
Mauston	Jan. 24	1		l
Lafayette County Lemonweir	Mar. 26	1		
Total for State		16	1	
Total for State, same period,		17	2	
1899.				
oming : Sweetwater County Uintah County	Mar. 13-Apr. 6	4		
Uintah County	Mar. 3	1		
Total for State		5		
		<del></del>		
Total for State, same period,				
Total for State, same period, 1899		8,019	408	
Total for State, same period, 1899	••••••			

#### MORTALITY TABLE, CITIES OF THE UNITED STATES.

		U. S. 1890.	Deaths from—											
Cities. Assert	Week ended.	Population, U. Census of 189	Total deaths from all causes.	Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhusfever.	Entericfever.	Scarlet fever.	Diphtheria.	Measles.	Whooping
Ashtabula, Ohio	Apr. 14	8, 338 434, 439		15						i		6		
Baltimore, Md Baton Rouge, La	Apr. 7	10,478	2											
Bay City, Mich	Apr. 14	27, 839 35, 005	10 20	1							••••	•••••		
Boston, Mass	ao	. 448,477	269	28	J					1	6	13	2	
Bristol, R. I	Apr. 7	5, 478 5, 478	1 3											
Cambridge, Mass	do	. 70,028	23	2			<b></b>							
Camden, N. J	do Apr. 7	10,832	4	1							l			
Chelses, Mass	do	27,909					ļ							
Chicopee, Mass Chillicothe, Ohio	Apr. 14 Apr. 7	14,050 11,288	11 3	i									1	
Cleveland, Ohio	Apr. 14	261, 353		1	ļ									ļ
Clinton, Mass Concord, N. H	do	10, 424 17, 044	6	1 2										
Covington Ky	do	37,371	16	3										
Dayton, Ohio Detroit. Mich	do	61, 220 205, 876	103	6						1	ī	1 2	2	••••
Detroit, Mich Dubois, Pa	Apr. 14	6, 149	5			. <b></b>								
Dunkirk, N. Y Elmira, N. Y	Apr. 7	9,416 29,708	7 16	i						2				
Erie, Pa	Apr. 1	40,634	18							1				
Everett, Mass	Apr. 7 Apr. 14	11,068 74,398	9 45	7										••••
Fitchburg, Mass	Apr. 7	22, 037	17	i										
Gloucester, Mass	Apr. 14 Apr. 8	24,651 9,069	10											
Green Bay, Wis Greenville, S. C	Apr. 7	8,607	0											
Hamilton, Ohio Haverhill, Mass	do	19,565 27,412	18	3							•••••	ļ	····	•••••
Holyoke, Mass	Apr. 7	35, 637	23	2								1	1	
Honolulu, Hawaii Indianapolis, Ind	Mar. 24 Mar. 31	44,500 105,436	a 28	6								•••••		
Jackson, Mich	Apr. 7	20,795	4											
Jacksonville, Fla Janesville, Wis	do	17, 201 10, 836	16 0	1					••••			1		
Jersey City, N. J	Apr. 1	163,003	113	13					•••••	3	1	5		]
Do	Apr. 8	163,003	79 22	12 2					•••••		1	3	<b></b> .	
Johnstown, Pa Lancaster, Pa	Apr. 14 Apr. 7	21,805 32,011	18	2								1 2		
Lawrence, Mass		44, 654 14, 661	33 8	4	•••••				•••••					••••
Lebanon, Pa Lexington, Ky	Apr. 7	21,567		4										
	do	50, 395 77, 696	32							1		1		••••
Lowell, Mass Lynchburg, Va	do.,	19,709	51								••••	2		
McKeesport, Pa	Apr. 10	20,741	14	1							1			•••••
Malden, Mass Massillon, Ohio	Apr. 14 Apr. 7	23, 031 10, 092	6 2	1						1				
Massillon, Ohio Medford, Mass Melrose, Mass	Apr. 14	11,079	6	1										
Milwaukee, Wis	do.,	8,519 204,468	75	5	•••••					1	4	1		
Mobile, Ala	do	31,076	18	7		••••								1
Do Nashville. Tenn	Apr. 14 do	31,076 76,163	17 61	1		•••••						•••••	•••••	•••••
Newark, N. J	Apr. 7	181,830	114	12							3		3	2
New Bedford, Mass Newburyport, Mass	Apr. 14 Apr. 7	40, 733 13, 947	28 13	1	••••						•••••	•••••		•••••
New Orieans, La	do	242, 039	154	22		23				2				•••••
Newton, Mass New York, N. Y	Apr. 14 do	21, 379 b 3, 654, 594	1,644	1 179		i				7	22	50	22	17
New York, N. Y	do	19, 791	9							7				
North Adams, Mass Oneonta, N. Y	do	16, 074 6, 272	9	ï						•••••	•••••	•••••	•••••	•••••
Palmer, Mass	do	6,520	4	1										
Philadelphia, Pa	do	1,046,964 238,617	691 137	53		•••••	•••••		•••••	•••	8	15 3	22	7
Pittsburg, Pa	Apr. 14	10, 302	2										3	
Plainfield, N. J	do	11, 267	6 19				!							
Dortland Ma														
Portland, Me Do Do	Apr. 7	36, 425 36, 425	39	6 1				!		1		1		

# MORTALITY TABLE, CITIES OF THE UNITED STATES—Continued.

	øi.					Deaths from—								
Cities.	Week ended. Population U.	Total deaths from	Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhusfever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
Portsmouth, Ohio	Apr. 14	12, 394	11	1	<b></b> .								2	1
Portemouth, Va		13, 268	4	l	l				l					
Providence, R. I		132, 146	122	8								2	2	2
Quincy, Mass	do	31, 494	8	2	l				1	,		l	i	l
Reading, Pa	Apr 9	58, 661	20	4								2		
Do	Apr 16	58, 661	33	2								ī		
D-1-6 TII	Apr. 10	23, 584	13	-								1 *		
Rockford, Ill	Api.	30, 801	10										•••••	
Salem, Mass		44.843	13		•••••									*****
Salt Lake City, Utah	do		3											
San Diego, Cal	do	16, 159											•••••	•••••
San Jose, Cal	Mar. 31	18,060	5	1								•••••		•••••
Do	Apr. 7	18,060	6					•••••						•••••
Santa Barbara, Cal	do	5,864	3	2	•••••									
Shreveport, La	do	11, 979	5									1		1
Somerville, Mass	Apr. 14	40, 152	22	1	••••			• • • • •	•••••	•••••	1			
Spokane, Wash	Apr. 7	19, 922	8	2										ļ
Springfield, Mass		44, 179	26	3										
Steelton, Pa	do	9, 250	6							. <b></b> .				
Taunton, Mass	do	25, 448	10	1								: • • • • • • •		
Waltham, Mass	Apr. 7	18, 707	16									2		
Warren, Ohio	do	5, 973	4											
Do	Apr. 14	5, 973	5											
Washington, D. C		230, 392	169	23						2		2	1	
Wheeling, W. Va		35, 013	11											!
Wichita, Kans	do	23, 853	6	1 7		•••••			•••••		••••		•••••	
Do	Apr 14	23, 853	7	1 1	•••••	•••••								
Williamsport, Pa	11 do 14	27, 132	14	i	•••••	•••••								
Wilmington, Del	do	61, 431	30		•••••	•••••							•••••	******
Worcester, Mass		84, 655	51	2	•••••	•••••							1	
			20	2	•••••	•••••								
Yonkers, N. Y		32,033	20 12	2		•••••	•••••	•••••						•••••
Youngstown, Ohio	Apr. 14	33, 220	12		*****	•••••				1			*****	

#### FOREIGN AND INSULAR.

#### BELGIUM.

#### Report from Antwerp.

ANTWERP, BELGIUM, April 2, 1900.

SIR: I have the honor to transmit herewith weekly abstract of bills of health issued at Antwerp, Belgium, during the week ended March 31, 1900. The steamship Westernland, sailing for New York on the 31st ultimo, carried 1,087 steerage passengers, the largest number taken by any steamer from this port in seven years.

Respectfully,

E. K. SPRAGUE,

Passed Assistant Surgeon, U.S. M. H.S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

#### BRAZIL.

Anthrax among cattle in Rio de Janeiro—Yellow fever at Santos and Sorocaba.

#### Anthrax epidemic.

RIO DE JANEIRO, March 15, 1900.

SIR: Since several months, there was observed an increasing number of deaths among the beeves at the cattle yard that supplies the city of Rio de Janeiro. Here there are no scientifically instructed veterinary surgeons. Finally it was ascertained that the cause of those deaths was anthrax. It was on account of special local and personal circumstances that the question has been discussed lately, and it was in consideration of the scientific and practical importance of that question that I decided to make a trip to that cattle yard, Santa Cruz, situated about three hours' ride on the railway, and therefore I am prepared to report the following:

The private company that furnishes the cattle to be killed is obliged to have always a stock of about 5,000 animals. These animals arrive from the interior of Brazil, from the States of the south, and also from

the States of the La Plata.

Santa Cruz is noted among the surroundings of Rio de Janeiro for its extensive pasturage. On the day that I spent there 10 dead animals were transported to the boilery. The result of the necropsy and of the

microscopical examination was anthrax.

The medical control at the cattle yard is very deficient. Daily the wholesale butchers of Rio de Janeiro indicate how many carcasses are required for the market. That number is conveyed to the cattle yard from the stock of cattle. A veterinary surgeon, with practical experience but without scientific instruction, makes a superficial examination of the animals sent to be slaughtered. After the animals are slaughtered the intestines are examined by two physicians, who have obtained their knowledge of this subject exclusively from practice. The inspection is superficial and can not be otherwise. Under these circumstances it is

937 April 20, 1900

somewhat probable that animals are butchered whose disease of anthrax is very recent, and that the meat of those animals may pass as sound.

In this respect, I may add the following: On the day of my visit about 10 slaughtered animals were condemned because they showed a pathological state, called, in popular phrase, garotidea. It is a state of an inflammatory process with a colloid infiltration of the connective tissue alongside the trachea. The exact cause of that disease was unknown by the respective staff. It made the impression that the inflammation was propagated from another affected part. The trachea and the organs of the mouth seemed to be healthy.

The result of special investigations was that this morbid state, recognized in practice, is also in consequence of anthrax. Dr. Cerni, the Italian bacteriologist, who stays here and whom I have already mentioned on occasion of my plague reports, has made the following

investigation:

The oral cavities of two oxen have been rubbed into vigorously with food infected with the carbuncle bacillus. A few days after the development of that, "garotidea" was apparent, and it was similar to a long extended parotitis, and finally the animals perished from a general infection. From all these facts it seemed to be evident that the propagation of anthrax is not unimportant. The infection of the animals results from infected pasturage.

Diseases of persons resulting from anthrax have not yet been observed. It is moreover known that the human body has a comparative immunity from infection resulting from the eating of meat infected with anthrax,

notwithstanding accidents may also occur.

An interesting experiment was made with a buzzard. These birds flock in great numbers to the cattle yard and it was consequently possible to find the carbuncle bacillus in great numbers in the contents of the stomach of the buzzard. There the microorganism is digested and its existence has disappeared in the small intestines. Such a state of the cattle-yard animals is naturally not to be tolerated for the city of Rio de Janeiro.

I possess a preparation of a trichina spiralis, that I made five years ago from a fresh piece of pork, and that I have seen occasionally. At that time I showed the preparation to a competent person, but this medical officer neither paid any attention to the infected piece of pork that I offered to him, nor has he ever taken any action in this question.

As a removal of the cattle yard is impossible on account of the expense, a proper inspection, scientifically controlled, of all the live animals and carcasses will be necessary; \* \* \* that it is also necessary for a complete change of pasturage, and the temporary abandonment of the present pasturage for a considerable period.

#### Sanitary report from Rio de Janeiro.

The returns relating to the sanitary state of Rio de Janeiro show, at present, an increase in the number of deaths from yellow fever and a decrease in those from smallpox. Yellow fever is very far from being epidemic. Other infectious diseases are scarcely observed.

On ships arriving from Buenos Ayres, a strict quarantine is executed in regard to the suspected cases, which are generally considered plague; however, no official decision has yet been published. Among the ship-

ping the sanitary state is very satisfactory.

I have the honor to transmit to you the official sanitary report for the week ended March 2. There were 261 deaths from all causes, an April 20, 1900 938

increase of 18, as compared with the foregoing week; 12 deaths from accesso pernicioso, an increase of 3; 18 deaths from yellow fever, a decrease of 3; 15 deaths from smallpox, an increase of 2; 4 deaths from typhoid fever, none before; 1 death from beriberi, a decrease of 1, and 56 deaths from tuberculosis, an increase of 4.

#### Yellow fever at Santos and Sorocaba.

It is reported that yellow fever at Santos is increasing.

The epidemic at Sorocaba has made considerable progress, as I have already reported. The number of cases is still increasing and also the number of deaths. According to a report that has been received, there were on the 14th instant, 77 patients in the hospital, and there entered on the same day, 11; there were discharged, 7, and there died, 4.

#### Bills of health.

Since last report the following-named ships have been inspected and received bills of health of this office: March 10, steamship *Cyprian Prince*, British, for New York; March 12, steamship *Velleda*, British, for Philadelphia; March 13, steamship *Vala*, British, for New York; March 15, steamship *Parahyba*, French, for New Orleans.

Respectfully,

W. HAVELBURG, M. D., Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine Hospital Service.

#### COSTA RICA.

### Condition of the cities with regard to yellow fever.

PORT LIMON, COSTA RICA, April 7, 1900.

SIR: I have the honor to inform you that I have completed the inspection of the ports of Colombia and the cities of Costa Rica. Barranquilla, and Cartagena in Colombia, I consider infected and dangerous; not so much on their own account as the tributary country. The Magdalena River, from Honda down to the mouth, is subject to outbreaks of yellow fever. Barranquilla and Cartagena are the ports or outlets for all of the traffic from the interior. Santa Marta, a port to the east of Barranquilla, is also infected, and the fever becomes epidemic whenever there is any nonimmune material to work on.

There are weekly steamers from Colon, and weekly steamers go

direct to Port Limon or via Greytown.

Port Limon, in Costa Rica, is the cleanest town south of the Rio Grande on the seacoast, but I consider it the most dangerous.

I think that yellow fever is endemic in the port, and will become epidemic in case that there is any immigration of nonimmunes.

Yellow fever is endemic in Punta Arenas, and is epidemic at present

in that place and along the line of the railroad and in Esparta.

There is no yellow fever at present in Alajuela; the last case was reported sometime in January. The Costa Rican Government used every means to stamp out the fever in Alajuela, and it remains to be seen whether the post epidemic disinfection has been thorough. Many of the infected houses were burned, and those that could be disinfected with less radical means were thoroughly cleansed.

Port Limon is within twenty-five hours of Punta Arenas and eight

hours of Alajuela without any quarantine restrictions.

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Passengers can come from Colon and Panama in twenty-four hours,

and from Barranquilla and Cartagena in two days.

A coast steamer has been put on to-day to run between Bluefields and Colon, touching at Greytown, Port Limon, and Bocas del Toro. Unless this steamer is carefully watched and quarantined at each port, some radical changes should be made in the rules and regulations governing the fruit traffic. I would suggest that all passenger traffic between Port Limon and United States southern ports be stopped during the summer season. Immunes without baggage could be carried with safety, but I would bar all nonimmunes from noninfected localities. The noninfected localities of Costa Rica are hard to define.

This is the first opportunity that I have had at a typewriter since leaving Colon, and now have only a few hours to catch a tramp steamer to Vera Cruz. Upon reaching Vera Cruz I will send in a complete report of my trip, with maps and charts of the possible routes of yellow

fever.

Respectfully,

SAML. H. HODGSON,

Acting Assistant Surgeon, U.S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine Hospital Service.

CUBA.

Reports from Cienfuegos, Casilda, and Santa Cruz del Sur.

CIENFUEGOS, CUBA, April 9, 1900.

SIR: I have the honor to report that during the week ended April 7, 1900, 18 deaths have occurred in this city—tuberculosis, 5; malaria, 2; intestinal diseases, 2; no contagious diseases reported. Two deaths occurred in the civil hospital. Death rate for the week is 23.50.

Fifteen foreign vessels have entered this port, and 8 have received bills of health during the week. I was requested by the agent of the Spanish steamship J. Jover Serra, from Barcelona, to disinfect the vessel previous to departure for the port of New Orleans. This was done. As this is the last port for many vessels previous to leaving for the United States, and being disinfected here saves them at least two days, and most of these vessels being too large to come to the wharf, I would suggest that the disinfecting barge be sent to this station as soon as

possible, for the season is now here when it is needed.

At present the city is undergoing the opening of 4 miles of streets for the laying of gas pipes, after four months of cool weather, from November to April, during which time no such work was done, but as the summer is approaching the city is being torn up. Some of the older citizens say there is no danger of yellow fever from this source, but that it produces a great amount of malaria of a pernicious type. Some say that opening the street to a depth of two or three feet will not produce yellow fever, but that if opened to a depth of five or six it will. The cause and history of yellow fever in Santiago last season should warn them not to open the streets so late in the season. If this work is finished by June 1, as they say it will, there might not be much danger in it, but if extended later in the season we might repeat the history of Santiago.

In a previous report I stated that, in my opinion, we stood little chance of infection from importation, but a greater one from the tearing down of old buildings and opening of streets. Last October they commenced cleaning the warehouses on the harbor front and piling the

refuse in the streets, and upon protest from this office to the mayor it was stopped and postponed until cooler weather. Last season not a case of yellow fever occurred in this city, and by taking every precaution we should not have a case this season.

Casilda.—Dr. Alejandero Cantero reports 4 deaths in the city of Trinidad during the week; no contagious diseases. Inspected 2 foreign

vessels during the week.

Santa Cruz del Sur.—Dr. Juan R. Xiques reports no deaths and no contagious diseases during the week. Inspected 1 foreign vessel during the week.

Respectfully,

J. M. LINDSLEY,

Acting Assistant Surgeon, U.S.M. H.S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

#### Report from Havana.

HAVANA, CUBA, April 9, 1900.

SIR: I have the honor to forward herewith report for the week

ended April 7, 1900.

The general health of the town continues good, the death rate being low. The weather has been unusually cool and there has been no increase, rather a diminution of yellow fever. The number of passengers leaving for the United States has markedly diminished; that by New York lines has undergone some increase; that by way of southern ports has practically ceased, 9 only having gone this week, in 6 steamships. The work of the station is going on fairly well, though things naturally do not go smoothly the first ten or fourteen days of quarantine. There have been 2 cases of yellow fever reported this week—1 American and 1 Spaniard. I inclose herewith mortuary report and report of work of outdoor department.

Respectfully,

H. R. CARTER, Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

#### [Inclosure.]

Mortuary report for the week ended April 7, 1900.	
1	Deaths.
Tuberculosis,	18
Enteritis	9
Pneumonia	6
Enteric fever	3
Malarial fever	
La grippe	4
Total deaths from all causes	
For outdoor department—	
Examined	352
Vaccinated	53
Alien steerage passengers entered	700
Vessels inspected and cleared	
Vessels inspected and entered	12
Vessels disinfected	3

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Reports from Nuevitas, Gibara, and Puerto Padre.

NUEVITAS, CUBA, April 2, 1900.

SIR: I have the honor to submit the following report for the week ended March 31, 1900:

The weather during this week has been very unsettled; hard winds and stifling calmness, cool days and very hot ones in succession. During this week 5 vessels have arrived and 6 bills of health have been issued. Only 1 death has occurred; but malaria is again reported to exist extensively, this fact owing its cause as already reported, to the excavations in the streets.

Gibara.—Eight vessels arrived, 8 bills of health issued, and no death. Puerto Padre.—Five vessels arrived, 10 bills of health issued, and 6 deaths, none of a quarantinable disease.

Respectfully,

OWEN W. STONE,

Acting Assistant Surgeon, U.S. M. H.S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Reports from Santiago, Manzanillo, Guantanamo, and Daiquiri.

SANTIAGO DE CUBA, March 28, 1900.

SIR: I have the honor to make the following report of the sanitary condition of the fourth district of the island of Cuba for the week ended March 24, 1900:

Santiago.—There was a total of 24 deaths in the civil population of this city, an increase of 3 over the previous week. The following were the principal causes: Tuberculosis, 1; malarial fever, 4; intestinal diseases, 4; pneumonia, 1; tetanus, 1; elephantiasis, 1; other causes, 12; total, 24. Population, 43,000; mortality, 29. No yellow fever or smallpox reported. There are, however, quite a number of cases of varicella, the orphan asylum being the central focus; this building was temporarily evacuated until the epidemic disappeared. Forty-one certificates were issued to passengers bound to the States.

Manzanillo.—Acting Asst. Surg. R. de Socarras reports 5 deaths for this period, the causes being tuberculosis, 2; malarial fever, 1; meningitis, 1, and pulmonary gangrene, 1. No contagious diseases are

reported.

Guantanamo.—Acting Asst. Surg. Luis Espin reports for the period ended March 17, 1900, a total of 11 deaths from the following causes: Malarial fever, 3; pneumonia, 1; tuberculosis, 2; intestinal diseases, 2; other causes, 3; total. 11. For the period ended March 24, 1900, he reports 12 deaths at this port, the following being the causes: Pneumonia, 1; intestinal diseases, 2; tuberculosis, 1; malarial fever, 3; pleurisy, 1; other causes, 4; total, 12. No contagious diseases are reported.

Daiquiri.—Acting Asst. Surg. Juan J. de Jongh reports 1 death from gangrene for this period.

Respectfully,

HERMAN B. PARKER, Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

#### ENGLAND.

# Report from Liverpool.

LIVERPOOL, ENGLAND, April 2, 1900.

SIR: I have the honor to make the following report concerning the transactions of the Service at this port during the week ended March 31, 1900:

Five cases of typhus fever and 2 cases of smallpox are reported for the week ended March 29, 1900; otherwise the health of Liverpool

remains good.

Eighteen vessels cleared for United States ports during the week; of these, 3 were not inspected. Sixteen hundred and eighty-three emigrants were inspected and passed; 47 packages, the baggage of 30 Russian and Spanish emigrants, were disinfected and labeled. The situation in regard to freight from suspected localities remains unchanged.

I subjoin for the information of the Bureau certain facts concerning

the steamship New England, arrived at this port March 30, 1900.

The New England left Boston the last of January with about 600 cabin passengers bound for a winter cruise in the Mediterranean. She left Jaffa about March 7, and smallpox appeared on board before the vessel reached Naples, 1 member of the crew dying en route. The vessel escaped quarantine at Naples, landed all of her passengers but 8, who were ill, and sailed for Liverpool March 24; she arrived here March 28 with 19 cases of smallpox aboard. The vessel was quarantined here and is at present being disinfected. The New England is billed to sail from here for Boston on April 12 with a large number of passengers. Owing to the general infection of the vessel, I would recommend that the quarantine officer at Boston be advised of the facts of the case in order that especial precautions may be taken upon her arrival to prevent the possible introduction of the disease at Boston.

Respectfully,

H. S. MATHEWSON, Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U.S. Marine-Hospital Service.

# Report from Southampton.

SOUTHAMPTON, ENGLAND, April 2, 1900.

SIR: I have the honor to report the following transactions at this port

during the week ended March 31, 1900:

Wednesday, March 28, steamship Kaiser Wilhelm der Grosse, of the North German Lloyd Line, bound for New York with passengers and cargo. There were inspected and passed 6 steerage, 10 second-cabin, and 115 first-cabin passengers and 10 large and 6 small pieces of luggage.

Friday, March 30, steamship Kaiser Friederich, of the Hamburg-American Line, bound for New York with passengers and cargo. There were inspected and passed 1 second and 9 first cabin passengers and no

luggage.

Saturday, March 31, steamship Saint Paul, of the American Line, bound for New York with passengers and cargo. There were inspected and passed 410 steerage, 147 second-cabin, and 61 first cabin passengers and 222 large and 341 small pieces of luggage. For this ship I disinfected 7 pieces of luggage.

Respectfully,

W. C. HOBDY, Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

#### GERMANY.

# Regulations against plague adopted at Stettin.

STETTIN, March 23, 1900.

SIR: In reply to a letter addressed by this consulate to the local police president, I have received a copy of the local regulations for prevention of the introduction of bubonic plague, of which a translation is inclosed.

All ships entering Swinemunde from ports in any of the following countries, India, Mozambique, Lorenzo Marques, Madagascar, all harbors of the Suez Canal, Mediterranean Sea, and Portugal, likewise the harbors of Spain north from Portugal, and the harbors of the east coast of South America between the twenty fifth and fortieth degrees of latitude, including Brazil, are subject to the inclosed quarantine regulations.

Although this port has been free of any semblance of the plague, it is

provided with an isolated house, with accommodations for 16.

Harbor employees have been instructed to bring dead rats, found at the water front, to the Bacteriological Institute.

Respectfully,

JOHN E. KEHL, United States Consul.

Hon. Assistant Secretary of State.

#### [Inclosure.]

## PARAGRAPH 14, B.

STETTIN, March 23, 1900.

If a ship has a case of bubonic plague on board, or has had a case within twelve days previous to the date of arrival, the ship is considered as infected and subject to the following quarantine regulations:

1. The plague infected are brought on land and conveyed to an isolated house which is especially fitted for the admission and treatment of such patients, or they can be conveyed to a hospital ship. Persons having the plague are to be entirely isolated from those suspected. Suspected cases are to be held under close surveillance until every atom of suspicion is removed.

2. If there are any dead on board they must be interred as soon as possible with

every precaution.

3. All other persons (passengers or crew) are to be held under observation, the duration of which depends upon the sanitary condition of the vessel, and the time which has elapsed since the last case, the quarantine, however, not to exceed ten days.

At the discretion of the harbor authorities passengers or crew can be detained under

At the discretion of the harbor authorities passengers or crew can be detained under observation on board ship or on land. Travelers who can prove that they did not come in contact with those affected, can, at the discretion of the examining physician, be released after a thorough examination, the release to be immediately reported to the police, who, in turn, notify the police at the point of destination of said passenger, where he can be kept under a secondary observation. If the observation of the crew takes place on board, the leaving of the ship can be granted by the health officer, and then only in such cases as are absolutely necessary.

4. All linens, wearing apparel, etc., belonging to the ship, passengers or crew, if considered infected with the contagious germs, must be disinfected, likewise the different compartments of the ship. The mode and thoroughness of any further disinfection rests

with the health officer.

All sweepings must be burned.

The transmitting of the plague through the escape of rats and mice from infected ships must be prevented.

5. Bilge water considered as infected must be disinfected and pumped out of the ship

as soon as practicable.

6. Water ballast taken on at an infected port must be disinfected before same is pumped out; if it is impossible to disinfect same, then the discharging of such water ballast is to take place upon the high seas.

7. Water for drinking and other use, when suspected of being infected, is to be dis-

infected before being pumped out and to be replaced by wholesome water.

## PARAGRAPH 14, C.

A ship having had a case of plague during her voyage, but not within twelve days from the date of arrival, is regarded as suspicious. After an inspection, if the examining physician deems it advisable, the crew can be put under a ten-day observation. Passengers are permitted to land and continue their journey, the police authorities at the point of destination of said passengers are advised in advance of their arrival, when, at the discretion of the board of health they can be subjected to an examination and treated according to paragraph 14, B, clauses 1-3-4-7.

## PARAGRAPH 14, D.

If a ship previous to her departure or during her voyage has not had a case of plague, the vessel can be considered free from contagious diseases, although the port of departure was infected, and after an inspection can be admitted to entry. If the result of the medical inspection has not been satisfactory, or if the ship has been less than ten days under way, then the passengers and crew can be held under observation until the expiration of the ten days.

## PARAGRAPH 14, E.

Ships carring emigrants, and having unfavorable sanitary conditions, can be subjected to additional precautions other than those mentioned in paragraph 14, B, and paragraph 14, D.

## PARAGRAPH 14, F.

The landing and forwarding of merchandise or used articles from an infected ship are subject to restriction only so far as the decrees of the officials of the empire or provinces may affect them. Merchandise or articles supposed to be infected must be disinfected before leaving the ship.

## Report from Bremen.

BREMEN, GERMANY, April 2, 1900.

SIR: During the past week 4 steamers, carrying emigrants, sailed from this port for America. In all they carried 3,691 passengers, the largest in any single week during the present year.

It is reported that the governments of Russia and Hungary are to take steps to prevent such extensive emigration, as certain districts are fast becoming almost depopulated. It remains to be seen what effect the government action will have on restraining this emigration.

On Saturday last the new steamer *Frankfurt* sailed for Baltimore. This being her first trip, I inspected carefully as regards her ventilation for the steerage and also the hospital facilities. Both seemed to be well provided for.

There were 9 detentions, as follows: Trachoma, 2; fever (cause unknown), 2; conjunctivitis, severe, 2; blephoritis, 1, and psoriosis, 1.

There were 30 other cases recommended for detention for causes under the immigration laws, but were taken at the risk of the steamship company. A complete list of such cases was furnished to the immigration authorities at the destined ports.

During the past week 5 cases of scarlet fever and 2 of diphtheria occurred in the city of Bremen.

Respectfully,

JOSEPH B. GREENE.

Passed Assistant Surgeon, U.S. M. H.S.

The Surgeon-General.

U. S. Marine-Hospital Service.

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## HAWAIIAN ISLANDS.

# Prohibiting the introduction of certain food stuffs into Hawaii.

[Proclamation by the president of the Republic of Hawaii.]

Whereas, It hath been shown to my satisfaction, that, by reason of the existence of an infectious or contagious disease known and designated as plague, in certain foreign countries, there is serious and continuing danger of the introduction of the same into the Hawaiian Islands, and that, notwithstanding the quarantine defense, this danger is so increased by the introduction of certain food stuffs from such countries, that a suspension of the right to introduce the same is demanded in the interest of the public health.

Now, therefore, by virtue of the power in me vested by law, I do hereby prohibit the introduction into the Hawaiian Islands from all foreign ports and places infected with bubonic plague, and more particuly from the port of Hongkong, China, all or any of the following

described food stuffs, to wit:

Cuttlefish and other dried fish, lily flower, oranges, dates, lichees, nuts, fungus, ducks, pork, sausage, dried meats, dried vegetables, cabbage, olives, birds' nests, eggs, hizo (cooked rice and beans), sea weed, mushrooms.

Said prohibition to continue as to each of said ports or places until after the expiration of sixty days from the time said disease known and designated as plague shall cease to exist in said port or place.

This proclamation to take effect from and after the date hereof.

Given under my hand and the seal of the Republic this 21st day of March, in the year of our Lord one thousand nine hundred.

[SEAL.]

SANFORD B. DOLE.

By the President:

ALEX. YOUNG,

Minister of the Interior.

No more plague.

Hawaiian Star, March 20, 1900, says:

Herman M. Levy has no plague.

The Chinaman, Seu Kam, has been injected with ten doses of plague serum and is improving. The fault in the past seems to have been that not enough of the serum was given.

No plague to-day.

The rat campaign.

Hawaiian Star, March 26, 1900, says:

Dr. Carmichael's reasons for keeping up the strict quarantine are not local, but general. His object is to protect the sugar cargoes on their arrival at the ports of the mainland. To this there can be no argument. The doctor knows the feeling on the coast and at New York, and he thoroughly understands the rules and regulations.

During the period when only sporadic cases are occurring the board of health might, however, spend its time in a rat campaign, so that when the quarantine is at last lifted there will be no fresh danger from this source. The danger from rats is not exaggerated. President Wood has expressed himself as fully alive to it. So has Dr. Emerson, of the board of health. So has Professor Maxwell, who has given careful

study to plague conditions abroad. As for opinions away from here

their name is legion.

There is a unanimous consensus of opinion upon the danger from rats, and a clear idea that a place can not be considered plague proof unless the rats are exterminated. On the other hand there is an apparent unwillingness on the part of our health authorities to enter upon the campaign of extermination, the ridicule which fell upon the abortive effort of wholesale poisoning seems to have paralyzed the members as far as rats are concerned. But is a little wholesome and not undeserved ridicule to stand in the way of making the city and islands perfectly plague proof? This attitude is neither dignified nor logical.

The Maui News has the following on this very subject:

There seems but one thing left to Honolulu, in order to rid herself of plague, and that is to rid herself of rats. A bounty of \$1 for every rat caught or killed in Honolulu, with \$5 added if the rodent proves to be infected with plague, will stimulate the industry so as to give some hope of clearing them out of the city. Of course it is an expensive method of getting rid of them, but it will prove more expensive still to leave any plague-infected rats alive in Honolulu to propagate the plague indefinitely. Such a bounty would be the Pied Piper of Hamelin which would clear Honolulu of the rats, and with them the plague. But as long as sick rats are left to run along the telephone wires from one end of Honolulu to the other, just so long will the yellow flag fly on her housetops.

And again it says:

The fight against the plague pest on Maui is now simply a war of extermination against the Kahului rat.

Honolulu, H. I., April 9, 1900, via San Francisco, April 17, 1900.

SIR: One new fatal case of plague March 31. None, other islands. Prospects good.

CARMICHAEL, Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

#### HUNGARY.

Annulment of quarantine provisions against Egypt, Greece, Turkey, and North Africa.

BUDAPEST, HUNGARY, March 21, 1900.

SIR: I beg to transmit herewith my translation into English of circular ordinance No. 1843, 1900 of the royal Hungarian maritime governor received to day from the United States acting consular agent at Fiume, Hungary.

Respectfully,

FRANK DYER CHESTER, United States Consul.

Hon. Assistant Secretary of State.

## [Inclosure-Translation from Hungarian.]

[Royal Hungarian Maritime Government, No. 1843, 1900.]

Circular of the royal Hungarian maritime government to all the officers of the port and their subordinates, as well as to the marine hospital at Martins: luzza.

FIUME, March 14, 1900.

In conformity with the dispatch of his excellency the royal Hungarian minister of commerce, under No. 15547 and date of the 1st instant, the provisions hitherto enforced concerning arrivals from Egypt, contained in the circular of this government under No. 8162 and date of December 9, as well as the provisions concerning arrivals from Greece, Turkey, and North Africa, set forth in its circular under No. 7926 and date of November 30, are hereby annulled.

Published herewith for direction and guidance.

SZÁPÁRY,

Royal Hungarian Maritime Governor.

#### IRELAND.

## Report from Queenstown.

QUEENSTOWN, IRELAND, April 7, 1900.

SIR: I have the honor to report on the transactions at this port, including passengers, crews, and cargoes inspected, for the week ended to-day as follows:

			F	Passengei	·8.	!	
Date.	Vessel.	Destination.	Saloon.	Second cabin.	Steer- age.	Crew.	Cargo.
Apr. 1 Apr. 4 Apr. 5	Steamship Etruria Steamship Ultonia Steamship Oceanic Total	Boston New York	4 0 9 13	23 0 46 69	303 347 578 1,228	0 2 0	0 0 0

One case lupus vulgaras (woman) refused passage on Ultonia. Respectfully, J. H. OAKLEY,

Passed Assistant Surgeon, U. S. M. H. S.

The Surgeon-General,

U. S. Marine-Hospital Service.

#### ITALY.

# Modification of quarantine orders.

## [Translation.]

WASHINGTON, D. C., April 8, 1900.

Following my note of March 19 last, I have the honor to forward below two telegrams received to-day from the royal ministry of the interior, both relating to the sanitary orders against bubonic plague.

Italian Embassy, Washington:

By to-day's order, Order No. 9 of August 17, 1899, that declared ports of Portugal infected, is revoked.

BERTOLINI.

Italian Embassy, Washington:

By to-day's order, the prohibition against raw wools from countries stricken by the plague, which was established by article 4 and order of May 8, 1897, No. 3, is revoked.

Bertolini.

Please accept, Mr. Secretary of State, the assurances of my highest consideration.

FAVA.

Hon. SECRETARY OF STATE.

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#### JAPAN.

# Report from Yokohama.

YOKOHAMA, JAPAN, March 18, 1900.

SIR: I have the honor to report the continued absence of epidemic quarantinable disease in Japan still with the exception of Formosa, where a few cases of plague continue persistently to appear.

The arrangement with the steamship companies recently effected, and which I report fully elsewhere, will, I trust, enable me more efficiently to carry out the laws as to treatment of passengers prior to embarkation.

Respectfully, STUART ELDRIDGE, M. D.,

Acting Assistant Surgeon, U. S. M. H. S., Sanitary Inspector.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

# Arrangements for detention of passengers.

YOKOHAMA, JAPAN, March 18, 1900.

SIR: I have the honor to report that I have, at length, been able to arrange with the various steamship companies carrying passengers from here, that they shall supply the facilities necessary for the anteembarkation treatment of dangerous passengers, required by the laws of the United States.

The companies have taken over the plant I had already established under the emergency of the outbreak of plague last winter, and it will be immediately completed and fitted to provide for detention under isolation, as well as for disinfection only.

The buildings are well adapted for the purposes required, and will probably accommodate all passengers likely to require treatment, now that the rush for Hawaii is over. Should further buildings be needed there is ground enough for the erection of temporary or additional houses for detention.

I have not insisted upon the furnishing of a steam disinfecting plant at present for three reasons—first, that I doubted the possibility of getting it out of the companies until time shall show the advantages and necessity of the new arrangement; secondly, because such plant could not be imported or built in time to be of use in connection with the dreaded outbreak of plague within the next two months; and, thirdly, because we can obtain but a six months' lease of the present premises, though with the probability of a much longer extension.

I shall continue to use the large formaldehyd apparatus which I have recently been employing, and supplement it by another, in case of breakdown or sudden pressure of work.

All expenses of every kind are assumed by the companies concerned, but the appointment of staff and the supervision of the work will be in my hands.

I go to Kobe to-morrow for the purpose of investigating the question of the shipment of rags, to get matters generally in more satisfactory form, and to endeavor to establish the same or a similar arrangement with the steamship companies there as that just made at this port.

The steerage travel from Nagasaki is, practically, nil, and, in the case of the outbreak of plague or cholera there, I should advise the steamship companies to refuse all natives from that port, but allowing them to go by rail to Kobe or Yokohama, there to embark, after due treatment.

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I may add that, unless you disapprove, I shall hereafter disinfect all steerage passengers for United States ports, irrespective of the actual presence of the graver epidemic diseases; for dysentery, likely to be, annually, long present with us, may be a more serious danger than is generally supposed. To this routine disinfection the steamer men have agreed.

Respectfully, STUART ELDRIDGE, M. D.,

Acting Assistant Surgeon, U.S. M. H.S., Sanitary Inspector.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

# Plague in Osaka.

Yоконама, April 16, 1900.

SIR: Plague is now present in Osaka. Will reimpose quarantine. Send prophylactic self and staff directions.

ELDRIDGE,
Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

#### NETHERLANDS.

## Report from Rotterdam.

ROTTERDAM, NETHERLANDS, April 2, 1900.

SIR: I have the honor to make the following report of the transactions of the Service at this station for the week ended March 31, 1900: Six vessels were inspected and received bills of health. The Holland-America Line steamship *Maasdam* sailing for New York on the 30th instant carried both passengers and freight. She carried 24 cabin and 363 steerage passengers, also 214 pieces of baggage were inspected and labeled and 80 pieces were disinfected and labeled. The health of this port continues to be good.

Respectfully,

A. R. THOMAS,

Passed Assistant Surgeon, U.S. M. H.S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

#### NORWAY.

Quarantine against Japan, Argentina, Sandwich Islands, and New Caledonia.

CHRISTIANIA, March 20, 1900.

SIR: Inclosed I have the honor to send duplicate copies of a proclamation issued by the Norwegian Government and declaring quarantine against Japan, Argentina, the Sandwich Islands, and New Caledonia.

In the same proclamation the quarantine regulations against the ports of Egypt and Santos in Brazil are revoked. Translation follows.

Respectfully,

HENRY BORDEWICH, United States Consul.

Hon. Assistant Secretary of State.

## [Inclosure—Translation.]

Notice from the royal Norwegian Government, justice and police department.

CHRISTIANIA, March 15, 1900.

A royal proclamation was issued on the 10th instant and reads as follows: In connection with the royal proclamations of February 1, 1897, June 27, August 22, October 10 and 27, and December 5, 1899, it is hereby proclaimed that, in conformity with paragraph 2 in act of July 12, 1848, relating to quarantine, all ports in Japan, Argentina, the Sandwich Islands, and New Caledonia, shall until further orders be considered infected with the oriental plague and that the rules and regulations, contained in the above-mentioned act and in mandate of September 12, 1899, relating to quarantine, etc., in consequence of plague, shall at once as regards such ports take effect.

At the same time it is also proclaimed that the ports of Egypt and Santos, in Brazil, which, by above-mentioned proclamations of June 27 and October 27, 1899, were declared infected with plague, shall no longer be considered so infected—to which all concerned respectfully have to conform—which is hereby made public, while attention is brought to the fact that under the above-mentioned proclamations of February 1, 1897, June 27, August 22, October 10 and 27, and December 5, 1899, the city of Oporto, in Portugal, Madagascar, and the ports in Paraguay, until further orders, are considered as infected with the oriental plague.

A number of copies of this notice follow.

EINEAR LOCHEN, GEORG JOHANNESEN.

#### PHILIPPINE ISLANDS.

# Report from Manila—Plague and smallpox.

MANILA, P. I., March 7, 1900.

SIR: I have the honor to hereby inform you that during the week ended March 3, 1900, there were 7 cases of plague in Manila, and that all resulted in death. Four Chinese and 3 natives were affected.

There is little change in the situation and an increased number of

cases may be expected.

There were no cases of smallpox reported to the board of health during this period.

Respectfully,

J. C. PERRY,

Passed Assistant Surgeon, U.S. M. H. S.

The Surgeon-General.

U. S. Marine-Hospital Service.

#### PORTO RICO.

# Reports from Ponce.

PONCE, P. R., April 2, 1900.

SIR: I have the honor to transmit herewith the quarantine and abstract bills of health reports for the week ended March 31, 1900, also, monthly report of immigration and summary of transactions for the month of March, 1900. During the week 323 emigrants sailed for Daiquiri, Cuba. Influenza (la grippe) is mildly epidemic but does not seem to be severe in character. The 3 cases of smallpox previously reported are still in quarantine. Several cases of chicken pox have been reported and are always treated in the same manner as smallpox. Six cases of diphtheria were reported.

Respectfully,

W. W. KING, Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine Hospital Service.

#### [Inclosure.]

## Summary of transactions of service during the month of March, 1900.

Total number of deaths reported during March, 1900	246
Total number of deaths reported during March, 1899(a)	140
Total number of births reported during March, 1900(a)	121
Total number of births reported during March, 1899	199
Total number of vessels inspected during March, 1900	39
Total number of bills of health issued during March, 1899	34
Number of vessels in quarantine during March, 1900	1
Number of passengers whose baggage was disinfected during March, 1900	0
	324
Number of vessels inspected during March, 1899	33
Number of vessels which sailed during March, 1899	36
Number of immigrants inspected during March, 1900	22

#### SPAIN.

## Reports from Corunna.

CORUNNA, SPAIN, March 25, 1900.

SIR: I have the honor to report that during the week ended March 24, 1900, the following vessels were inspected and cleared:

On March 31, steamer Reina Maria Oristina with 19 cabin and 6 steerage passengers from Bilbao; 97 and 162, respectively, from Santander, for Havana and Vera Cruz.

The passengers taken on at this port numbered 200, viz, cabin for Cuba, 7; Mexico, 4; steerage for Cuba, 170; Mexico, 9. The passengers for Cuba were inspected and passed, with baggage. A man suffering from ringworm, tinea capitis, was rejected.

On March 24, steamer La Normandie from St. Nazaire and Santander for Havana and Vera Cruz with 41 cabin and 31 steerage passengers. At this port 11 passengers embarked for Mexico; Cuba, 158, of which 153 were steerage, inspected and passed with 188 pieces of large and small baggage inspected and labeled.

Influenza prevails. Smallpox is always present, but official reports

are probably withheld. Respectfully,

JULIO HARMONY, United States Consul.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

CORUNNA, SPAIN, April 1, 1900.

SIR: I have the honor to report that during the week ended March 31, 1900, the following vessel was inspected and cleared: On March 31, steamer Santanderino, with passengers and cargo, for Havana via Vigo. There were inspected and passed at this port 102 steerage passengers and 2 crew; 59 pieces of large and small baggage were inspected and labeled.

The sanitary condition of this port and vicinity is normal.

Infectious diseases during the last two weeks: Smallpox, 1 death; whooping cough, 2 deaths. Cases are not reported.

Respectfully,

Julio Harmony, United States Consul.

The SURGEON GENERAL,

U. S. Marine Hospital Service.

## Plague on the steamship Montevideo.

[Cablegram.]

BARCELONA, SPAIN, April 15, 1900.

Steamship Montevideo arriving from Manila. Her medical officer reports that 2 cases of plague [occurred en route].

Orders received; will depart April 17.

ANDERSON,

Assistant Surgeon, U.S. M. H.S.

The Surgeon-General,

U. S. Marine Hospital Service.

#### TURKEY.

# Bubonic plague in the Persian Kurdistan.

[Report No. 242.]

CONSTANTINOPLE, March 29, 1900.

I have the honor to report that yesterday afternoon the superior sanitary commission was convoked in an extraordinary meeting in which it was communicated that bubonic plague had broken out at Djivanro in the Persian Kurdistan. It is the sanitary physician in Bagdad that wired said news, a French copy of which I have the honor to forward to the Department. Djivanro is situated between the chain of mountains of Dallaho and Sallaho, 6,000 feet from the level of the sea, on the Turco-Persian boundary line.

There are four tribes which are enemies to each other. Said tribes are, besides the Djivanro one, that of Avraman which live on the north of the latter, the Provansir which live on the east, and the Gulamber which live on the west. Said tribes are independent and are settled in about 50 villages in which they stay during the winter, but as soon as the spring begins they leave the villages and they live on the mountains

under black tents, breeding their cattle or cultivating rice.

I must state that in Kurdistan as well as in Mesapotamia bubonic plague is an endemic disease which breaks out now and then and remains within the boundaries of the province. It is not like the China or India plague which spreads over and over. The inhabitants of Kurdistan are accustomed to it, and they know practically the effects of quarantine; therefore, at the first outbreak of said disease all the healthy inhabitants flee to the mountains and only the ill stay in the village, which is at once surrounded by a quarantine cordon. It is to be hoped that the present outbreak is an autochthonic bubonic plague and that it has not been imported from India. If it has been imported from the latter place it is to be feared that it will not be stifled on the spot, for, as above-mentioned, said tribes are independent, and the Persian or Turkish Government has no authority over them.

The superior sanitary commission has decided that a sanitary cordon will be established on the Turco-Persian boundary line, and that several sanitary physicians would be forwarded to the spot, among them the

sanitary physicians of Bagdad and Hanequin.

Respectfully.

SPIRIDION C. ZAVITZIANO, United States Sanitary Commissioner.

## FOREIGN STATISTICAL REPORTS.

BRITISH COLUMBIA—Vancouver.—Month of March, 1900. Estimated population, 30,000. Total number of deaths, 37, including enteric fever, 1, and 1 from beriberi.

British Guiana—Demerara—Georgetown.—Month of February, 1900. Estimated population, 36,567. Total number of deaths, 241. No contagious diseases reported.

CANADA—Manitoba—Winnipeg.—Month of March, 1900. Estimated population, 45,000. Total number of deaths not reported. Two deaths from enteric fever and 1 from measles reported.

CUBA—Havana.—Month of March, 1900. Estimated population, 220,000. Total number of deaths, 605, including diphtheria, 1; enteric fever, 4; yellow fever, 4, and 96 from tuberculosis.

FRANCE—Rouen.—Month of February, 1900. Estimated population, 112,657. Total number of deaths, 458, including diphtheria, 4; enteric fever, 4; measles, 1, and 55 from phthisis pulmonalis.

GERMANY—Stuttgart.—Month of October, 1899. Estimated population, 177,403. Total number of deaths, 157, including diphtheria, 2; scarlet fever, 1, and 9 from phthisis pulmonalis.

GREAT BRITAIN—England and Wales.—The deaths registered in 33 great towns in England and Wales during the week ended March 24, 1900, correspond to an annual rate of 21.6 a thousand of the aggregate population, which is estimated at 11,610,296. The highest rate was recorded in Wolverhampton, viz, 36.7, and the lowest in Burnley, viz. 10.7.

London.—One thousand eight hundred and seventeen deaths were registered during the week, including measles, 50; scarlet fever, 3; diphtheria, 36; whooping cough, 49; enteric fever, 7; and diarrhea and dysentery, 17. The deaths from all causes correspond to an annual rate of 20.6 a thousand. In Greater London 2,368 deaths were registered, corresponding to an annual rate of 18.6 a thousand of the population. In the "outer ring" the deaths included 14 from diphtheria, 8 from measles, 3 from scarlet fever, 1 from smallpox, and 15 from whooping cough.

Bradford.—Two weeks ended March 24, 1900. Estimated population, 291,535. Total number of deaths, 209, including diphtheria, 1; enteric fever, 4; measles, 6; scarlet fever, 8, and 1 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended March 24, 1900, in the 22 principal town districts of Ireland was 29.8 a thousand of the population, which is estimated at 1,062,188. The lowest rate was recorded in Ballymena, viz, 11.3, and the highest in Clonmel, viz, 107.1 a thousand. In Dublin and suburbs 236 deaths were registered, including diphtheria, 1, and 1 from scarlet fever.

Scotland.—The deaths registered in 8 principal towns during the week

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ended March 24, 1900, correspond to an annual rate of 22.2 a thousand of the population, which is estimated at 1,606,935. The lowest mortality was recorded in Perth, viz, 11.8, and the highest in Paisley, viz, 25.2 a thousand. The aggregate number of deaths registered from all causes was 686, including diphtheria, 6; measles, 19; scarlet fever, 4, and 17 from whooping cough.

JAPAN—Formosa—Tamsui.—Month of January, 1900. Estimated population, 2,797,543. Number of deaths not reported. Two deaths from typhus and 43 from plague are reported.

Month of February, 1900. Thirty-nine deaths from plague reported. *Nagasaki*.—Ten days ended March 10, 1900. Estimated population, 131,000. Total number of deaths not reported. One death from diphtheria reported.

RUSSIA—Riga.—Month of January, 1900. Estimated population, 282,000. Total number of deaths, 577, including diphtheria, 5; enteric fever, 8; measles, 9; scarlet fever, 13; whooping cough, 6; smallpox, 38, and 56 from phthisis pulmonalis.

[Reports received from United States consuls through the Department of State and from other sources.]

Cholera, yellow fever, plague, and smallpox as reported to the Surgeon-General United States Marine-Hospital Service, December 29, 1899, to April 20, 1900.

[For reports received from June 30 to December 29, 1899, see PUBLIC HEALTH REPORTS for December 29.]

## CHOLERA.

Places.	Date.	Casses.	Deaths	Remarks.
India: BombayCalcutta	Nov. 22-Mar. 13 Nov. 5-Feb. 24		65 510	
	YELLOW	FEVER.	•	
Argentina :				
Buenos Ayres	Nov. 1-Nov. 30		1	
Brazil :	Web 4 Men 9	5	2	
Bahia Rio de Janeiro	Feb. 4-Mar. 3	9	165	
Santos	Nov. 4-Mar. 2 Jan. 16-Feb. 16	61	35	
Sorocaba	Jan. 1-Jan. 31		200	•
Colombia:	oun. I oun. or			
Barranguilla	Dec. 24-Mar. 31		4	
Panama	Dec. 20-Dec. 26		1	
	Mar. 1-Apr. 10	. 17	3	
Cuba:		l _		O. A
Cienfuegos	Feb. 10	. 7		On training ship Lancaster
	D 1 D 91	70	22	quarantine.
Havana	Dec. 1-Dec. 31 Jan. 1-Mar. 31		17	No report received for wee
	Jan. 1-Mar. 31	***	1 11	ended February 24.
	Anr l-Anr 7	. 2	i	ended rebidary 21.
Matanzas	Apr. 1-Apr 7 Dec. 29	·1	1	
MENGILEON	Feb. 11-Feb. 17	1	l ī	
Santiago	Dec. 10-Dec. 30		3	
Mexico:			ļ	
Cordoba	May-Dec., 1899	730	353	
Laguna	Mar. 4		1	Several cases.
Vers Cruz	Dec 22-Mar. 31		8	
West Indies : Curaçoa	Feb. II-Mar. 3		5	
Curaços	reb. 4-reb. 10	1 .		
	PLAG	UE.		
		1	1	
Arabia:	Trab 01 Mon 91	96	16	
Aden	Feb. 21-Mar. 21	26	16	
Aden Beni-Shekir, Yemen	Feb. 21-Mar. 21 Dec. 7	26	16 15	
Aden	Dec. 7		15	
Aden	Dec. 7	46		Plague reported epidemic.
Aden	Jan. 13-Mar. 12 Jan. 25	46	15	Plague reported epidemic.
Aden	Dec. 7	46	15	Plague reported epidemic. Plague reported.
Aden	Jan. 13-Mar. 12 Jan. 25 Jan. 16	46	15 16	
Aden	Jan. 13-Mar. 12 Jan. 25 Jan. 16	46	16	
Aden	Jan. 13-Mar. 12 Jan. 25 Jan. 16	46	15	
Aden	Jan. 13-Mar. 12 Jan. 25 Jan. 16	46	15 16 	
Aden	Jan. 13-Mar. 12 Jan. 25 Jan. 16	46	15	
Aden	Dec. 7	3 3 2 39 4	15 16 1 1 15 8	
Aden	Jan. 13-Mar. 12 Jan. 25 Jan. 16	3 3 2 39 4	15 16 	
Aden	Dec. 7	3 3 2 39 4	15 16 1 1 15 8	
Aden	Dec. 7	3 2 39 4 . 11	15 16 11 15 3 10 25 88	
Aden	Dec. 7	3 2 39 4 . 11 46 124	15 16 	
Aden	Dec. 7	3 2 39 4 . 11 46 124 46	15 16 11 15 3 10 25 88	
Aden	Dec. 7	38 2 39 4 1 11 46 124 46 1	15 16 1 15 3 10 25 88 39	
Aden	Dec. 7	38 2 39 4 . 11 46 124 46 1 8	15 16 	
Aden	Dec. 7	38 2 39 4 1 11 46 124 46 1	15 16 1 15 3 10 25 88 39	
Aden	Dec. 7	38 2 39 4 . 11 46 124 46 1 8	15 16 	
Aden	Dec. 7	38 2 39 4 . 11 46 124 46 1 8	15 16 	
Aden	Dec. 7	38 2 39 4 . 11 466 124 466 1 8 70	15 16 	
Aden	Dec. 7	32 239 4 . 11 46 124 46 1 8	15 16 	

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

Places.	. Date.	Cases.	Deaths.	Remarks.
ia—Continued. Bombay Presidency and				
Bombay Presidency and Sind-Continued.		1		
Baroda State				
Belgaum District Bhor State	do			
Bijapur District	do		539	
Bombay City	do	.	5,144	
Broach District	do	· ·····	0	
Cutch State	do		1,653	
Hyderahad (Sind) District	do		68	
Dharwar District	do		. 18	
Kaira District	do		. 1	
Kanara District		.	. 13 1	
Kurrachee City Kurrachee District	do		126 85	
Kathiawar State	do		45	
Khandesh District	do	.	.] 0 ]	
Kolaha District	do		. 101	
Kolhapur State	do		1,714	
Mahi Kantha State Nasik District	do		120	
Palanpur State	do			
Panch Mahals District	do		. 0	
Poons City	do		. 19	
Poona District	do		485 198	
Ratnagiri District	do		196	
Rewakantha State	Dec. 3-Mar. 3		23	
Sachin State Satara District	Nov. 19-Mar. 3		641	
Savantvadi State	do		1 1	
Savanur State	do		33	
Shikarpur District Sholapur District	do		1,573	
Surat District	do		156	•
Thana District	do		383	
Upper Sind Frontier	do			
Outside Bombay Presidency and Sind:				
Madras Presidency—		i	i I	
Anantapur District	do	<b> </b>		
Bellary District	do		47	
Chingleput District Kurnool District	do	ļ····	2	
Madras City District	do			
North Arcot District	do		5	
Salem District	do		387	
South Canara District	Feb. 25-Mar. 3		1	
Nellore District Trichinopoly District	do		******	
Coimbatore District	do		24	
Vizagapatam	Jan. 28-Mar. 3		ï	
Mysore State—			00-	
Bangalore City	Jan. 6-Mar. 3		237	
Bangalore Civil and Military Station	do		137	
Bangalore District	do		538	
Kolar District	do		13	
Kolar Gold Fields	do		78	
Mysore City	do	•••••	125	
Mysore District Tumkur District	do	• • • • • • • • • • • • • • • • • • • •	169 131	
Chitaldrug District	do		81	
Hyderabad State-				
Gulburga District	Dec. 31-Mar. 3		103	
Lingsugur District			501	
Naldrug District Bidar District			253	
Arangabad District				
Central Provinces—	•	1	1	
Wardha District	Nov. 19-Mar. 3		10	
Nagpur City	do		321	
Nagpur District Nimar District	do	••••••	84	
Punjab—			-	
Jullundur District	do		129	
	do	1		

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

Places.	Date.	Cases.	Deaths.	Remarks.
ndia—Continued.				
Outside Bombay Presidency and Sind—Cont'd.				
Bengal—	Now 10 Man 2		1 601	
Calcutta Burdwan District		l	1,601	
Howrah District	Nov. 19-Mar. 3		11	1
Hooghly District	do	l	. 10	
24-Parganas District	do		. 3	
Nadia District	do			4
Khulana District	do	•••••	1	
Dacca District Darbhanga District	do	••••••	18	1
Midnanore District	Jan. 28-Mar. 3		5	
Midnapore District Monghyr District	Feb. 11-Mar. 3		263	i
Monghyr District Mozufferpore	Feb. 18-Mar. 3		1	
Kangoon District	NOV. 19-MBr. 3		1	Imported.
Patna	do		4,412	
Saran District	do	•••••	194	ľ
Shahabad District	do	••••••	1	
Tipperah District Singbhoom District	do	•••••		
Balasore District	do	******	1	Imported and suspected.
Rajputana				Do.
N. W. Provinces—				
Allahabad District	Jan. 1-Mar. 3		45	
apan:				
Osaka and Hiogo	Nov. 5-Jan. 26		52	1
Hiroshima	Nov. 5-Dec. 4	10	8	l
Nagasaki Kobe	Dec. 9 Nov. 11–Jan. 26	1 20	1 19	
Fukuoka Ken		20	1	
Shidzuoka Ken	do		i	
Wakayama Ken	do		ī	
adagascar:				
Tamatave		51	42	
auritius	Jan. 25-Dec. 23	3, 000	2,500	Estimated. Year 1899.
ew Caledonia:	D. 17. 1	0=	01	
Noumea	Dec. 1-Jan. 1 August-Nov. 24	37 100	21 46	
araguay:	August-110v. 24	100	40	
Asuncion	Nov. 1-Jan. 15		14	
	Jan. 22-Feb. 16		6	
ersia:				
Djivanro	Mar. 29	•••••		Plague reported.
hilippine Islands:			***	
Manila	Jan. 20-Mar. 3	126	112	
ortugal : Lisbon	Jan. 16	1		
Masan	Dec. 25	9	7	
Oporto		287	108	
Villa Nova de Gaya	Nov. 15	~j		
outh Africa:		- 1		
Cape Town	Mar. 6	4	••••	On ss. Kilburn from Rosario
pain:				
Tuy	Feb. 12	1	· • • • • • • • • • • • • • • • • • • •	

## SMALLPOX.

Argentina: Buenos Ayres Austria:	Oct.	1-Jan.	31		9
Prague	Dec.	30-Mar.	24	104	1
Belgium:	Doo	3-Mar.	17	77	28
Antwerp					10
Ghent	Jan.	14-Mar.	31		10
Brazil:	_				_ !
Pernambuco		1-Dec.			5
Rio de Janeiro	Nov.	4-Mar.	2		511
British Columbia:					
Grand Forks	Mar.	7-Mar.	28	2	0
Nakusp		28-Mar.		1	0
Nelson City		16-Mar.		1	Ō
Nelson District	Reh	8-Mar.		ī	ŏ
Rossland				5	ŏ
140001011U	1 30.	· Mai.	•••••		٠,

# ${\it Cholera, yellow fever, plague, and smallpox, etc.} \hbox{--} {\it Continued.}$

## SMALLPOX-Continued.

Piaces.		Date	) <b>.</b>	Сваеве.	Deaths.	Remarks.
China:						
Hongkong Colombia :	Dec.	. 17-D	ec <b>. 2</b> 3.	1	1	
Barranquilla	Jan.	21-Ja	n. 27.	1	1	
Cuba: Casiida	Jan.	2-Ja	ın. 22.	84	0	
_ Havana		15				On ss. Santanderino.
Egypt: Cairo	Nov	. 19-M	ar. 18.		61	
England: Birmingham.,	Mor	. 4-M:	ar 10	. 2		
Leeds	Jan.	29-Fe	b. 3.	1		
Liverpool London	Jan.	7-Ma 10-Ma	ar. 31.		2 3	
Southampton	Jan.	1-Ja	n. 27.	3		
Formosa:	Jan.	1-Ja	n. 31.	31		
Tamsui	Oct.		c. 31.			
France:	Jan.	I-Ja	n. 31	. 31		•
Lyons		17-M			16	
Marseilles Nice		. 1-Ja 19-Ma			17	
Paris	Jan.	14-M	ar. 24			
Rheims	Mar.	. g 4–Ma	ar. 10		4 4	
St. NazaireGermany:	Mar.	.8	•••••	. 82	1 3	
Hamburg	Jan.	1-Ja 17-Fe	ը. 13		1	
KönigsbergGibraltar	Dec.		or. 26		3 5	
Greece:		_			30	·
Athens	Dec.	9-ME	ar. 31	. 79	30	
Budapesth	Dec.	18-De	е. 24	. 1		·
India: Bombay	Nov.	15-Ma	ar. 13		2,319	
Calcutta						
Ceylon Madras	Jan.	10-Ja 13-Ma	n. <i>27.</i> . sr. 9		5 7	
Kurrachee	Jan.	15-Ma	ar. 11	. 117	42	
Italy: Milan	Dec.	17-Ja	n. 13	. 8		
_ Palermo	Mar.	18-M	ar. 24		1	
Japan: Nagasaki	Jan.	1-Fe	b. 10	. 2		
Yokohama	Nov.	19-Ma	ır. 3	. 2		
Korea : Seoul	Jan.	21-Fe	b. 17	. 2	1	
Mexico ·	Doo	94 Ma	<b>- 91</b>	ł	63	
Chihuahua City of Mexico	Dec.	24-Ma 18-Ap			124	
C Porfirio Diaz	Feb.	11-Ma	ar. 7	7	2	
Monclova Nuevo Laredo	mar. Jan.	17 1-De			16	
Vera Cruz	Dec.	22-Ma	r. 31		39	
New Brunswick : Campbellton	Jan.	22-Fe	b. 8	45	0	
Gloucester County	Jan.	25-Fe	b. 15	39	0	G
Moncton Northumberland County				1	0	Cases reported.
Restigouche County	Jan.	16-Fe	b. 15	73	0	
Wes moreland County Ontario:	Jan.	18-Fe	b. 15	3	0	
Amherstberg	Feb.	11-Ma				
Brant County	Jan.	27-Fe	b. 24.	239	0	
Frontenac County	Jan.	14-Fe	b. 24	1	ŏ	
Kent County	Nov.	28-Ja:	n. 14	. 2	0	
Lambton County Middlesex County		6-Fe			0	
York County		13-Fe			ŏ	
Philippine Islands : Manila	Feb.	4-Fe	b. 24	15	o	
Porto Rico:						•
Ponce Quebec:		11-Ma		ł	·····	
Bonaventure County Kamouraska County Matane County	Oct.	16-Ma	r. 29	196 288	· 0	
љашоига <del>з</del> ка Соину	vaR.	TO MIS	i. 49	200	i	

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

Places.		Date.		Cases.	Deaths.	Remarks.
Quebec-Continued.						
Montreal	Ton	16-Mar.	20	1	i	
		0		26		
Russia:		• • • • • • • • • • • • • • • • • • • •	• • • • • • •			
Moscow	Nov	26-Mar.	17	51	13	
Odessa		3-Mar.			28	
Riga		1-Nov.			15	į.
115a		l-Jan.			38	
St. Petersburg	Dec.				75	i
Vladivostock		1-Nov.				
Warsaw		26-Mar.			59	
Scotland :						
Edinburgh	Jan.	14-Jan.	20	1		
Leith	Jan.	1-Jan.	6	1		
Spain:				_	į į	
Cadiz	Oct.	1-Oct.	31	l	5	
Corunna	Dec.	3-Mar.	31		19	
Madrid	Dec.	3-Mar.	24		152	
Valencia	Mar.	18-Mar.	31		4	
Straits Settlements:						
Singapore	Nov.	5–Mar.	3		34	
witzerland:				1		
Geneva	Jan.	7–Feb.		8		
Zurich	Jan.	7–Jan.	27	2	1	
Curkey:				}	_	
Constantinople		19-Mar.			3	
Smyrna	Dec.	4–Feb.	4		11	
Uruguay:						
Montevideo	Mon.	26-Dec.	2	1		

# MORTALITY TABLE, FOREIGN CITIES.

	İ	ż	⊢ ĝ	1				Dea	ths f	rom	_			
Cities.	Week ended.	Estimated population.	Total deaths fron all causes.	Tuberculosis.	Plague.	Cholers.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Aix la Chapelle		134, 196	63	<b> </b>										
Amherstburg		2,300 524,809	159									1		8
AsuncionAthens	Feb. 15	45,000 200,000	72		6			6	1					
Barmen	Mar. 24	141,000	55						1		1	1	2	3
Barranquilla Belfast	do Mar. 31	40,000 359,000	23 176	4						6		2	2	4
Belize	Apr. 5	13,000 68,000	5 29			•••••				"ï				
Bergen Berlin	Mar. 17	1,856,221	678							1	10	10	8	
Birmingham Bremen		519, 610 145, 000	234 68							3		3	3	5
Breslau	Mar. 24	300,000	206	29					ļ	1 3			16	
Brussels	Mar. 31 Mar. 24	324, 973 551, 611	130 223							1	1	1	2	2
Budapest	Mar. 26	640,000 560,062	504	·				8	2		3	3 2	3	2
Cairo	Mar. 27	124,000	103							1				
Christiania Coburg	Mar. 31 Mar. 24	230,000 20,299	91	•••••							1	1		10
Cologne	Mar. 3	370,000	489			ļ <b></b> .					1		4	5
Do	Mar. 25 Mar. 31	370, 000 370, 000	385								1	4	1	5
Colon	Apr. 4	8,000	3										•••••	9
CorunnaCrefeld		40, 500 108, 183	30 32											
Dublin	do	349, 594	244 57							2	1	1	2	•••••
Dundee Dusseldorf		167, 584 203, 400	83						1			î	ĩ	
Edinburgh Flushing		302, 262 19, 034	147 11								2		••••	3
Frankfort-on-the-Main	Mar. 24	255,000	101								1	]	1	
FunchalGeneva	Mar. 25 Mar. 10	36, 982 95, 348	14 43		•••							2		
Gibraltar	Apr. 1	25, 900	15					1	ļ	ļ. <b></b> .				· ••••
Girgenti Do		24, 428 24, 428	9 12											
Glasgow	do	74, 969 125, 800	360 43						2	••••	4 1	7	9	13
Gothenburg Halifax	Apr. 8	45,000	19								1			2
Hamburg Hamilton, Bermuda		691, 349 16, 000	248 4								3	1	1	2
Havre	Mar. 17	119, 470	64	13									- <b></b>	
Kingston, Canada Königsberg	Apr. 6 Mar. 24	18, 300 181, 047	8								1			
La Rochelle	Mar. 25 Mar. 31	30,000	17 192									6	6	9
Leeds Leipsic	Mar. 24	423, 889 439, 200	159								3	7		
LeithLicata	Mar. 31 do	78,509 20,000	17 26						2	•••••	•••••			
Liege	Mar. 24	171, 314	80									- <b></b>	1	
Livingston, Gautemala Do	Mar. 27 Apr. 3	1,500 1,500	1 0											•••••
Lyons	Mar. 24	466, 028	219 310			•••••	•••••	<u>.</u>		2	•••••	2	17	•••••
Madras Magdeburg	Mar. 9   Feb. 24	452,518 230,008	98	12					•••••		1	3		
Manchester Mannheim	Mar. 31 Mar. 24	550, 864 132, 467	280 46		•••••	•••••	•••••	•••••	•••••	•••••	2	3 1	8	11
Matamoras	Apr. 7	16, 604		2					••••					•••••
Melbourne Do	Feb. 10 Feb. 17	475,000 475,000								2				
Do	Feb. 24	475,000								••••				
Do Messina	Mar. 3 Apr. 1	475,000 407,000	56	1										
Mexico	Mar. 25	344, 377 344, 377	419 386					11	6 5		1	•••••		1 2
Monte Cristi	Apr. 1 Mar. 17	3,000	1				••••		•••••	•••••				
Monterey	Apr. 7 Apr. 5	3,000 25,000	1 48											
Montevideo	Feb. 24	215,061	61						•••••	2				
Do Moscow		215,061 1,000,000	68 537					2		2	12	15	9	3
Munich	Mar. 24	463,000	235							1	1		26 1	3
Newcastle-on-Tyne	Mar. 31	234, 369	18	·'	•••••	•••••		•••••	•••••	•••••	•••••	1		0

# MORTALITY TABLE, FOREIGN CITIES—Continued.

		-ndod	l ä				1	Deat	hs f	rom	_			
Cities.	Week ended.  Estimated political	Total deaths from	Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
Nuremberg	Mar. 17	240, 673	104	I					1			2		
Osaka and Hiogo	do	214, 119	124											
Palermo	Mar. 24	292, 891	225		.			1	ļ					.
Do	Mar. 31	292, 891	154	ļ										·
Panama	Apr. 3	16,000			•[			·	••••				<u></u> -	· ···
Plymouth	Mar. 31 Mar. 24	100,000	46 5									ļ	5	
Port Limon Do	Mar. 31	4,000 4,000	4											1
Prague		190, 260	145	28							1	1		
Progreso		4,800	5					ļ	l. <b></b> .			ļ		ļ
Ъо	Mar. 31	4,800	6					ļ			ļ	ļ	1	ļ
Puerto Cortes		2,000	0				· ·····	ļ	· · · · · ·					
Quebec	Apr. 7	73,000		·			· ·····	·····			1		••••	···
Queenstown	do Feb. 16	9,500 779,000	261	53			11	14		******	•••••	•••••	2	
Rio de Janeiro Do	Feb. 23	779,000	243	52			-	13						l
Do	Mar. 2	779,000	261	56			18	15		4				
Botterdam	Mar. 31	320, 991	142											ļ
t. Georges, Bermuda	do	2,150		ļ						ļ				ļ
Do	Apr. 7	2,150		ļ				ļ						ļ
t. John, New Bruns-	do	45,000	11	1				••••			•••••			
wick.	35 30	75 000	٠.	1		İ	l	l				1	}	1
st. Johns, West Indies	Mar. 10	15,000 15,000	16 13			•••••		•••••	•••••	···· ·			•••••	
Do	Mar. 17 Mar. 24	15,000	lii			*****				ı			••••	ļ
st. Petersburg	Mar. 10	1, 267, 023	708					8	1	15	18	23	13	١
st. Stephen	Apr. 7	3,000	ľĭ					l	ļ <u>-</u>					l
t. Thomas	Mar. 9	12,019	6											ļ
Do	Mar. 16	12, 019	11											ļ
lingapore	Feb. 17	97, 111	144	23		·····	•••••	8				•••••		
Do	Mar. 3	07, 111	159	20	•••••	•••••		6		•••••	•••••	•••••	•••••	••••
olingen	Mar. 24	16,000	14 36			•••••	•••••	•••••	•••••	•••••	•••••	•••••	1	
louthampton Do	do Mar. 31	105, 831 105, 831	45	•••••	•••••				•••••		1	•••••	i	ı
South Shields	do	105, 677	45											l
tettin	Mar. 24	153,000	64											l
tuttgart	Mar. 29	162,934	82											
underland	Mar. 31	147, 398	58	ļ								1	2	
`ampico	Mar. 18	14,000	17				··· ·					•••••	•••••	••••
Do	Mar. 25	14,000	14								•••••		•••••	••••
Do Ceneriffe	Apr. 1 Mar. 24	14,000 33,500	16 15	•••••	•••••							•••••	•••••	••••
rapani	do	48 743	36					,						
Do	Mar. 31	48,743 48,743	32											••••
`rieste	Mar. 24	166, 499	123								1	1		•••
`uxpam	Apr. 3	10,000	4											••••
tilla	Mar. 31	800	0	•••••	•••••	•••••						••••••	•••••	•••
Zalencia	do	203, 958	112 43	•••••	•••••	•••••	2	3	2		••••	•••••		••••
era Cruz	do	25,000	9	******	•••••	******	2	9	••••••	••••••	•••••		••••••	••••
ictoria, British Colum- bia.	Mar. 10	20,000		•••••	******				•••••	*****				
Do	Mar. 17	20,000	5									l		
Do	Mar. 24	20,000	4											
Do	Mar. 31	20,000	4							1				••••
7ienna	Mar. 24	1, 639, 811	835	••••••	•••••		•••••			6	1	10	15	
Warsaw	Mar. 17	645, 848	250	•••••	•••••	•••••	•••••	1	•••••	1	1	5	1	••••
Windsor, Nova Scotia	Apr. 7	3,000	2	•••••	•••••	•••••	•••••					3	•••••	••••
Yokohama	Mar. 17 Mar. 24	189, 455 164, 149	69							. •		2	2	••••
Zurich	MINE. 49	102, 129	99	******	*****	*****	******	•••••	*****	•••••		- 1	- 1	

By authority of the Secretary of the Treasury:

WALTER WYMAN, Surgeon-General U. S. Marine-Hospital Service.