

PUBLIC HEALTH REPORTS.

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

Permanent organization of public health commission of California.

SAN FRANCISCO, CAL., April 30, 1904.

Joint conference met to-day this laboratory and effected permanent organization under name of public health commission of California. Members of commission: Officers Marine-Hospital Service, members and officers State and municipal boards of health, medical officers merchant marine and inland transportation companies, president and secretary merchants' joint committee, finance committee of city board supervisors, and ex-presidents State and municipal boards of health; governor and mayor members ex officio. Following officers elected: Officer in command service, president; one vice-president each from State and municipal boards; secretary municipal board to be secretary commission. Object, general supervision of State sanitary affairs. Present at meeting: Doctors Regensburger, Foster, Ainsworth, Ward, Stinson, Poheim, Hughes, Ragan, Hassler, Levy, Blue, Cumming, Currie, Trotter, Woolsey, Dickie, Mathewson, O'Neill, Medros, and Messrs. Symmes and King.

BLUE.

WYMAN, Washington.

Summary of work in Chinatown, San Francisco, for the week ended April 30, 1904.

The following is received from Passed Assistant Surgeon Blue, under date of May 2:

Week ended April 30.

Buildings reinspected.....	177
Rooms	1,032
Persons inspected	1,255
Sick	14
Sick prescribed for at Oriental Dispensary	10
Dead examined	3
Necropsies	1
Rats examined bacteriologically	36
Number showing plague infection	None.
Places lined and disinfected	810
Times streets swept.....	3
Sewers flushed	17
Notices sent to abate plumbing nuisances	10
Plumbing nuisances abated	3
Plumbing nuisances undergoing abatement	18
Total number plumbing inspections	173
Sewers baited with phosphorous poison	24
Blocks baited with Danyz virus	10

Smallpox in Marine Hospital at Port Townsend, Wash.

Passed Assistant Surgeon Foster reports, April 22, as follows:

Relative to my telegram of April 12, stating that a case of smallpox had developed in the wards, I have the honor to make the following report:

The patient was transferred from Seattle on April 8 for contusion of lower extremity. He developed a fever on the 9th, was isolated on the 11th, and the diagnosis of smallpox was positively made on the 12th. Pending arrangements with the local authorities, he was isolated in a tent in the hospital yard, where he remained until the morning of the 20th, when he was removed to the isolation hospital by the county health officer. The entire personnel of the hospital was vaccinated, and all possible precautionary measures in the way of disinfection have been taken.

There is at present one case isolated in the hospital with symptoms somewhat suspicious of the disease, but a positive diagnosis can not be made for a day or two.

Smallpox on steamship Senator at Seattle, Wash.

Assistant Surgeon Amesse reports, April 14, as follows:

I have the honor to report a case of smallpox in the person of a fireman of the steamer *Senator*, who applied for relief at the out-patient office of the Service April 13, 1904. The patient was held until arrangements could be made with the city health officer for his removal to the county pesthouse. The crew of the vessel, numbering 84 persons, were carefully inspected, but no further cases were found. All showing no evidence of recent successful vaccination were vaccinated, and the forecastle of the vessel was fumigated with sulphur.

The officer in command at Port Townsend quarantine was advised of my action by wire, and pursuant to his instructions the vessel was allowed to proceed to-day on her voyage.

*Transactions on account of smallpox in northern Maine, Canadian border.**Report from Lowelltown, Me.*

Acting Assistant Surgeon Boothby reports as follows:

April 19. Persons from Quebec for Maine lumber camps inspected, 137; vaccinated, 39; disinfected, 8.

Acting Assistant Surgeon Hammond, at Van Buren, reports April 23, through Surgeon Kalloch, as follows:

Sanitary work in Madawaska region week ended April 23, 1904. Number cases smallpox under supervision, none; of these, previously reported, none; new cases, none; houses under quarantine, none; persons vaccinated, 1; miles of territory covered, 24.

Transactions on account of yellow fever at Laredo, Tex.

*Correspondence with President Superior Board of Health, Mexico,
relative to notification of yellow fever cases.*

WASHINGTON, April 25, 1904.

Doctor LICEAGA, *Superior Board of Health, Mexico City:*

Please wire; first, if you have knowledge of yellow fever at any point in Mexico since January 1, outside of Vera Cruz; second, will you be informed immediately of any case, particularly at places where yellow fever existed last year; third, will you wire me promptly on learning of any case north of Mexico City? * * *

WYMAN.

[Translation of telegram.]

MEXICO CITY, April 26, 1904.

Dr. WALTER WYMAN,

President Committee of American Republics, Washington:

In reply to your message of to-day, no case of yellow fever has existed since January 1 in any part of Mexico except at Vera Cruz and Merida. If one case of yellow fever should occur, especially in those localities where the disease appeared last year, I should immediately be informed of it. If I have notice of any case north of the City of Mexico I will telegraph you immediately. You may be assured that you will receive immediate notice of any new case.

* * * * *

LICEAGA.

Disinfection and inspection at Nuevo Laredo, Mexico, since December 1, 1903.

WASHINGTON, April 25, 1904.

RICHARDSON, *Laredo, Tex.:*

Referring your telegram April 23, concerning Nuevo Laredo, Bureau wishes full statement, as follows: First, How many houses were disinfected there since 1st of December? Second, Is any inspection being carried on to detect possible cases now? If so, describe it. Third, Has any rule been promulgated requiring all cases fever to be covered by mosquito netting till proved not to be yellow fever? Fourth, Are systematic measures in operation for destruction of mosquitoes? Fifth, Is there, in Nuevo Laredo at present time, a representative of the Superior Board of Health, or has one been there?

WYMAN.

LAREDO, TEX., April 26, 1904.

WYMAN, *Washington:*

Replying Bureau telegram April 25, concerning data from New Laredo following information from Doctor Garza: First, 742 houses disinfected December 1 to February 28. Second, Yes; paid inspectors make canvass city, reporting all sick to Garza for investigation. Third, No. Fourth, None. Fifth, Yes; Doctor Garza resident representative, Doctor Del Rio there for few days recently.

RICHARDSON.

WASHINGTON, April 27, 1904.

DOCTOR LICEAGA, *Mexico City, Mexico:*

I have some apprehension regarding Laredo, Mexico. Disinfection there has been well done and regular inspection is going on, but fever cases are not covered with mosquito netting and systematic measures are not being enforced for destruction of mosquitoes. Can you not order use of mosquito netting immediately over all cases of fever until proven not to be yellow fever, and at same time require destruction of mosquitoes and their larvæ? These measures have been in operation in Laredo, Tex., for more than a month and will be continued, and it is desirable that the same operations should be carried on in your city which stands at our front door. The low altitude of Laredo, Mexico, and its proximity to our border make this place one of more concern than any other.

WYMAN.

[Reply.]

MEXICO, April 29, 1904.

WYMAN, *Washington:*

In reply your message, nonimmune persons in Laredo are visited daily. If one is found with fever, from any cause whatever, he is not isolated in his house by means of flag, but is taken to the hospital, which has a ward screened with copper wire. This practice is better than that of protecting with mosquito netting. Disinfection of all houses is systematically made, with the destruction of mosquitoes and their larvæ. All these operations have been carried out since December notwithstanding that the sanitary personnel has to be increased and the precautionary measures reenforced, since it is my desire that this work should be executed with the greatest possible perfection. I may add that the passage of the river is not permitted to any sick or suspect person, and that I order disinfection of all railway coaches before crossing the frontier.

LICEAGA.

WASHINGTON, April 27, 1904.

RICHARDSON, *Laredo, Tex.:*

Referring to your telegram, April 26, concerning Laredo, Mexico, can you not see the mayor and arrange with him so that every case of fever shall be covered with mosquito netting immediately and until proved negative, and also for the systematic destruction of mosquitoes and larvæ? Have wired Liceaga, requesting him to bring his influence to bear to this end, but believe you should put it before the mayor at once. The bureau would be very glad to have a joint cooperation between health authorities, both national and local, both sides of Rio Grande at the two Laredos. You may present this suggestion or not, as you deem advisable.

WYMAN.

LAREDO, TEX., April 30, 1904.

SIR: Referring to Bureau telegram of April 27, 1904, concerning New Laredo, I have the honor to report that I have taken up with the mayor of that city the matter therein detailed, and that he states he

has, since my last visit to him, required the screening of all fever cases of any character, and that at the present time there are at work 8 inspectors of water containers, who cover the city every three days, besides 20 house-to-house inspectors, who ferret out sick.

The mayor further stated that he heartily agreed with me that every effort should be bent in the two Laredos toward making them noninfectible, and destroying mosquitoes, their larvæ, and breeding places.

Respectfully,

T. F. RICHARDSON,
Passed Assistant Surgeon.

SURGEON-GENERAL, *Washington.*

Inspection of Dilley, Millett, and Cotulla.

Temporary Acting Assistant Surgeon Cock reports April 21 and 22, through Passed Assistant Surgeon Richardson, as follows:

Cotulla, Tex., April 21, 1904. The towns of Dilley, Millett, and Cotulla are free from contagious diseases. There is no evidence that either Dilley or Millett had yellow fever last fall.

The county physician at Cotulla reports that there were six well marked cases of yellow fever here last December. He also reports some twenty cases of dengue in the past thirty days. Some jaundice was present, but none exists at the present time.

The county authorities here request fumigation.

Inspection of Pearsall.

Pearsall, Tex., April 22, 1904. My investigations at this point show the sanitary conditions to be good at present. I am unable to get any history of infection in 1903 from the local physicians. Doctor Orr states that several Mexicans died under suspicious circumstances last season, but no doctor was in attendance.

The community desire mosquito work done, and the doctors promise to report at once to your office any suspicious cases.

Inspection of Rockport and vicinity and Aransas Pass.

Acting Assistant Surgeon Purnell reports as follows:

Rockport, April 22, 1904. I reached here evening before last and have inspected this town and vicinity. This is a town of about a thousand inhabitants. Doctor McMullens is the only physician, and is the health officer. He is abreast of the times and looks well after the sanitation of the place. His practice extends as far north as Skidmore, and he informs me that the country is very healthy and that he has discovered nothing that could be considered at all suspicious. It being impossible for me to leave here before to-morrow morning, I visited Aransas Pass with Doctor McMullens. The pass is about 12 miles across the bay from Rockport and is of very little importance at present except as a fishing place. Only about a hundred or two hundred people live there. The State quarantine station is situated on the bay at a point about 5 miles from the pass. It has not yet commenced operations.

Inspection of Beeville, Kennedy, and Floresville—Malarial fever—Mosquitoes.

Acting Assistant Surgeon Purnell reports as follows:

Floresville, April 25, 1904. I visited the towns of Kennedy and Beeville on yesterday. Kennedy is a place of about 600 inhabitants, while in Beeville there are about 3,500 people. In neither place could I learn of any sickness that could be considered at all suspicious, nor had there been any this year. Malarial fever is and has been quite prevalent during the past few months. I found mosquitoes more numerous in Beeville than in any place that I have visited, and nothing is being done looking to their destruction. The same conditions prevail in this place. I reached here at 12 o'clock, and have called on Doctor Blake, who is the State health officer of this county. He informs me that there is a great deal of malarial fever in the town and vicinity, and that it is of an intermittent type. He tells me that the mosquitoes are more numerous this season than has been the case heretofore and nothing is being done to destroy them.

Inspection of localities along the San Antonio and Aransas Pass Railway.

Acting Assistant Surgeon Purnell reports as follows:

San Antonio, April 26, 1904: I returned to San Antonio last night from an inspection trip over the San Antonio and Aransas Pass Railway. This covered the territory between here, Corpus Christi, and Rockport. I was cordially met and courteously treated by the physicians and people at all places visited. The work which is being done by the Service is seemingly appreciated and the physicians promise to make known the occurrence of any sickness of a suspicious nature. I was unable to learn of any sickness that could in any way be considered suspicious.

The health along the coast is particularly good, but away from the coast malarial fever is quite prevalent. This is distinctly intermittent in character, and yields readily to quinine. I found that very little attention has been given to sanitation, and the mosquito propagates unmolested. Wherever possible I have endeavored to arouse an interest in sanitary matters, and have directed attention to the destruction of the mosquito. I visited Runge, Corpus Christi, Gregory, Rockport, Aransas Pass, Kennedy, Beeville, and Floresville. I met the physician from Karnes City at Kennedy, and he furnished me with all the information that I could have procured by visiting the town. The remainder of the stations noted along the road are little more than sidetracks, and I gained all information concerning them from physicians located in the larger places whose practice extends to these places. I feel satisfied that there is nothing in that territory to cause concern at present.

FLORESVILLE, TEX., April 25, 1904.

WYMAN, Washington:

Leave here 6 o'clock for San Antonio, Bexar Hotel.

PURNELL.

SAN ANTONIO, TEX., April 28, 1904.

WYMAN, Washington:

Going to Sutherland Springs to investigate this morning.

PURNELL.

Inspection of Sutherland Springs.

SAN ANTONIO, TEX., April 28, 1904.

I visited Sutherland Springs this morning as the result of a rumor having reached me to the effect that there was a sickness prevailing at that place which was similar to that which prevailed there last fall. I found nothing in the least suspicious, but, like the other parts of the country, intermittent malarial fever is quite extensive.

PURNELL.

Malarial fever at Southland Springs.

SAN ANTONIO, TEX., April 28, 1904.

WYMAN, Washington.

Returned to San Antonio. Clearly malarial at Southland Springs.

PURNELL.

Inspection at Monclova and other places.

WASHINGTON, April 27, 1904.

HUME, Eagle Pass, Tex.:

Lane's nomination approved beginning April 28. Actual railroad and Pullman fare only will be allowed. Direct him proceed immediately to points as indicated in your telegram 26th. Have him report to you from each place and you forward such reports to Bureau.

WYMAN.

EAGLE PASS, TEX., April 30, 1904.

WYMAN, Washington:

Lane reports Monclova station and town free any contagious diseases. Station in perfect sanitary condition. Monclova proper, houses infected last year disinfected with sulphur twice. Superior Board Health Mexico doing all in its power, but old town has barrels for water supply and many mosquitoes. Expect to oil all barrels. My opinion, no danger from Monclova. Ordered Lane Reata, consult all Mexican health authorities and note conditions between Reata and Diaz, stopping at all towns. Mexican railroad allows me use of wire at no cost. Will wire you daily.

HUME.

Conditions along Mexican International Railroad.

EAGLE PASS, TEX., May 2, 1904.

WYMAN, Washington:

Lane returned to-day; reports all points along Mexican International Railroad in comparatively healthy condition; no contagious diseases; very few mosquitoes; no measures taken by Mexican authorities to eliminate mosquitoes; much stagnant water from irrigation. * * *

HUME.

Inspection between Monterey and Monclova.

WASHINGTON, May 3, 1904.

PURNELL, *Hotel Bexar, San Antonio, Tex.:*

Proceed immediately via Laredo to Monterey. Confer with Goldberger if you meet him, and inform him of your orders. Unless duplicating his work, you will inspect places between Monterey and Monclova, including both branches of road between Monterey and International. Mail report from each place visited, and, if necessary, wire. Will give you an assistant soon as possible, who will accompany you on this trip and who will remain on this duty. Expect to return you to San Antonio, but wire your return to Monterey, when orders will probably be given you to inspect places between Monterey and Laredo en route to San Antonio.

WYMAN.

[Reply.]

SAN ANTONIO, TEX., May 4, 1904.

WYMAN, *Washington:*

Leave for Monterey at 9.50 this morning.

PURNELL.

Inspection on railway lines in Mexico.

WASHINGTON, May 3, 1904.

TABOR, *State Health Officer, Austin, Tex.:*

For your information, have had Goldberger in Monterey and other places for past two weeks on line between Tampico and Monterey, with instructions to wire if finding any yellow fever. Have also had the line of International Road from Eagle Pass to Monclova and vicinity inspected. Will continue these inspections. No yellow fever reported. Have also directed Purnell to inspect towns between Monterey and Monclova and again from Monterey to Laredo. Bureau will maintain all these observations throughout the summer. Please recommend competent physician for appointment as acting assistant surgeon to go with Purnell, and, on completion of Purnell's detail at Monterey, to remain in that section permanently. Purnell will eventually return to San Antonio.

WYMAN.

WASHINGTON, May 3, 1904.

Dr. BISMARCK FERGUSON,

*Physicians and Surgeons Hospital,**San Antonio, Tex.:*

In accordance with your application and recommendation, State Health Officer Tabor desires your services as acting assistant. Your duty will be to join Purnell soon as possible and with him inspect places infected or suspected of being infected with yellow fever last year in Mexico. If you accept, wire acceptance and proceed immediately to join Purnell, who departed this morning for Monterey to inspect places between Monterey and Monclova, including both branches of the road between Monterey and International. On return to Monterey wire Bureau and await further orders. Purnell is to return to San Antonio. On joining Purnell report to him for duty.

WYMAN.

TAMPICO, MEXICO, May 3, 1904.

WYMAN, Washington:

Returned last night. No yellow fever Victoria, Linares, Monterey, New Laredo. Mail report to-day.

GOLDBERGER.

WASHINGTON, May 5, 1904.

GOLDBERGER, American Consulate, Tampico, Mexico:

Make Monterey your headquarters and keep me informed as to conditions between Tampico and New Laredo.

WYMAN.

Observation of larvæ of anopheles mosquito at Laredo.

Passed Assistant Surgeon Richardson reports, April 25, as follows:

Referring to my letter of April 16, 1904, concerning larvæ of anopheles having been found in Laredo, I have the honor to state that several larvæ kept under observation in this office have developed into anopheles pseudo puncti pennis (Theobald).

Mosquito destruction at railway watering stations.

WASHINGTON, April 30, 1904.

RICHARDSON, Laredo, Tex.:

Are your forces under Cock paying especial attention to mosquito destruction and prevention at railway watering stations?

WYMAN.

LAREDO, TEX., April 30, 1904.

WYMAN, Washington.:

Replying Bureau telegram, will instruct Cock pay special attention railway watering stations. This matter already taken up with railroads.

RICHARDSON.

Passed Assistant Surgeon Richardson telegraphs the following reports of daily inspection at Laredo:

APRIL 26, 1904.

Inspected to-day 1,443 premises and treated 578 water containers. Seven sick investigated.

APRIL 27, 1904.

Inspected to-day 1,447 premises and treated 495 water containers. Nine sick investigated.

APRIL 28, 1904.

Inspected to-day 1,395 premises and treated 489 water containers. Three sick investigated.

APRIL 29, 1904.

Inspected to-day 1,500 premises and treated 547 water containers.

APRIL 30, 1904.

Inspected to-day 1,402 premises and treated 540 water containers. Four sick investigated.

MAY 1, 1904.

Inspected to-day 1,348 premises and treated 441 water containers. Seven sick investigated. Am sending Sauvignet to Minera and Cannel. * * *

MAY 2, 1904.

Inspected to-day 1,362 premises and treated 564 water containers.

MAY 3, 1904.

Inspected to-day 1,360 premises and treated 464 water containers; 4 sick investigated. Request 300 vaccine points—use Minera and Cannel.

NOTE: Vaccine virus supplied by mail.

MAY 4, 1904.

Inspected to-day 1,351 premises and treated 450 water containers; 2 sick investigated.

INSPECTION SERVICE, MEXICAN BORDER.

Inspection at El Paso, Tex.

Acting Assistant Surgeon Alexander reports, April 23, as follows:

Week ended April 23, 1904: Mexican Central passengers inspected, 236; private Pullman passengers inspected, 15; Mexican immigrants inspected, 65; inspection certificate cause of death corpse transferred in hermetically sealed coffin, 1; disinfection soiled linen imported for laundry, 417 pieces; fumigation of private Pullman arriving from Aguas Calientes, Mexico, 1; vaccination of passengers, American, 3; vaccination of immigrants and their children, 12.

Inspection at Laredo, Tex.

Acting Assistant Surgeon Hamilton reports, through Passed Assistant Surgeon Richardson, April 25, as follows:

Week ended April 23, 1904: Passenger trains from Mexico inspected, 14; persons on trains from Mexico inspected, 605; immigrants inspected and passed, 20; persons vaccinated upon entry, 17; Pullman coaches disinfected, 14; private coaches disinfected, 1.

April 17, 2 persons three days out from Tampico refused entry. April 19, 1 person two and one-half days out from Veracruz refused entry. April 20, 2 persons two and one-half days out from Veracruz refused entry.

Mortality in Nuevo Laredo, March 1-31 and April 1-22, 1904.

The following is received from Passed Assistant Surgeon Richardson, under date of April 25:

March, 1904.

Broncho-pneumonia	1	Pneumonia	5
Dropsey	2	Tuberculosis	4
Stillborn	2	Measles	2
Enteric fever	1	Remittent cerebral fever	1
Diarrhea	1	Convulsions (infant)	2
Asphyxia (drowned)	2	Apoplexy	1
Thrush (muguet)	1		—
Gastro-enteritis	1	Total	30
Meningitis	4		

April, 1904 (1st to 22d, inclusive).

Meningitis	1	Dentition	2
Hemorrhage, complicated with paralysis, "Potts disease"	1	Scarlatina	3
Uræmia (mal de orina)	1	Stillborn	1
Cerebral fever	1	Congenital debility	1
Enteritis (muguet)	1	Diphtheria	1
Pneumonia	3	Pulmonary tuberculosis	1
Septicemia	1	Rheumatism	1
Cause unknown (age 2 years)	1	Total	20

Estimated population, 6,000.

Statistical reports of States and cities of the United States—yearly and monthly.

CONNECTICUT—*New Haven.*—Month of January, 1904. Estimated population, 115,000. Total number of deaths, 192, including diphtheria 4, enteric fever 3, measles 2, and 27 from tuberculosis.

Month of February, 1904. Total number of deaths, 164, including diphtheria 1, enteric fever 2, measles 1, scarlet fever 1, whooping cough 2, and 15 from tuberculosis.

Month of March, 1904. Total number of deaths, 219, including diphtheria 2, enteric fever 3, measles 6, whooping cough 2, and 17 from tuberculosis.

MARYLAND—*Baltimore.*—Month of March, 1904. Estimated population, 541,000; white 457,000, colored 84,000. Total number of deaths, 1,075; white 781, colored 294, including diphtheria 8, enteric fever 9, scarlet fever 10, whooping cough 4, and 148 from tuberculosis.

MICHIGAN.—Reports to the State Board of Health, Lansing, for the week ended April 23, 1904, from 80 observers, indicate that measles, inflammation of bowels, remittent fever, and cholera morbus were more prevalent, and enteric fever, pleuritis, cancer, scarlet fever, intermittent fever, diphtheria, dysentery, and whooping cough were less prevalent than in the preceding week.

Meningitis was reported present at 2, whooping cough at 14, diphtheria at 28, entric fever at 44, pneumonia at 61, scarlet fever at 67, measles at 88, smallpox at 97, and phthisis pulmonalis at 242 places.

MINNESOTA—*Duluth*.—Month of March, 1904. Estimated population, 70,000. Total number of deaths, 62, including 8 from tuberculosis.

WISCONSIN—*Milwaukee*.—Month of March, 1904. Estimated population, 325,000. Total number of deaths, 439, including diphtheria 7, enteric fever 5, measles 8, scarlet fever 4, smallpox 1, and 45 from tuberculosis.

Report of immigration at Baltimore for the week ended April 30, 1904.

OFFICE OF THE COMMISSIONER OF IMMIGRATION,
Baltimore, Md., April 30, 1904.

Number of alien immigrants who arrived at this port during the week ended April 30, 1904; also name of vessel and port from which they came.

Date of arrival.	Vessel.	Where from.	Number of aliens.
Apr. 25	Rhein	Bremen	764

LOUIS T. WEIS, *Commissioner.*

Report of immigration at Boston.

OFFICE OF THE COMMISSIONER OF IMMIGRATION,
Boston, Mass., April 25, 1904.

Number of alien immigrants who arrived at this port during the week ended April 23, 1904; also names of vessels and ports from which they came.

Date of arrival.	Vessel.	Where from.	Number of immigrants.
Apr. 17	Boston.....	Yarmouth, Nova Scotia	143
17	Cymric	Liverpool, England	438
18	Lillie	Puerto Plata, Santo Domingo	4
18	Siberian	Glasgow, Scotland	64
18	Columbian	London, England	1
19	Admiral Farragut	Port Antonio, Jamaica	11
19	Winifredian	Liverpool, England	9
21	Halifax	Halifax, Nova Scotia	66
21	Boston	Yarmouth, Nova Scotia	143
21	Canopic	Italian ports	1,684
22	Saxonia	Liverpool, England	1,732
23	Pomeranian	Glasgow, Scotland	43
	Total .....	.....	4,338

GEORGE B. BILLINGS, *Commissioner.*

*Report of immigration at Key West, Fla.*OFFICE OF THE COMMISSIONER OF IMMIGRATION,
Key West, Fla., April 25, 1904.

Report of arrivals of alien steerage passengers at Key West during the week ended April 23, 1904.

Date of arrival.	Vessel.	Where from.	Number of aliens.
Apr. 19	Mascotte	Habana	12
21	Olivette	do	14
23	Hattie Darling	Nassau, New Providence	26
Do.	Mascotte	Habana	20
	Total		72

JULIUS OTTO, *Inspector in Charge.**Inspection of immigrants.*

MONTHLY.

Place.	Month.	Number of immigrants passed.	Number of immigrants rejected.
Jolo, P. I.	Feb.....	20	0
Malone, N. Y.	Apr.....	53	0
San Francisco, Cal	Mar.....	928	13

Number.	Name of station.	Week ended—	Name of vessel.	Date of arrival.	Port of departure.
1	UNITED STATES: Alexandria, Va	Apr. 30			
2	Beaufort, N. C.	do			
3	Biscayne Bay, Fla.	Apr. 23			
4	Bocagrande, Fla.— Punta Gorda	do			
5	Puntarasa	do			
6	Brunswick, Ga.	do			
7	Cape Charles, Va.	Apr. 30			
8	Cape Fear, N. C.	Apr. 23			
9	Cedar Keys, Fla.	Apr. 30			
10	Columbia River, Oreg.	Apr. 23	Br. ss. Ching Wo	Apr. 20	Hongkong
11	Cumberland Sound, Fla.	do	Swed. bk. Robertfors	Apr. 17	Cape Town, via Tybee.
12	Delaware Breakwater quarantine, Lewes, Del.	do	It. bk. San Gaetano	Apr. 23	Habana
13	Dutch Harbor, Alaska	Apr. 9			
14	Eastport, Me.	Apr. 28			
15	Eureka, Cal.	Apr. 23			
16	Grays Harbor, Wash.	do			
17	Gulf quarantine, Ship Island, Miss.	do	Br. ss. Tugela ^a	Apr. 14	Veracruz
			Br. bk. Austria	Apr. 20	Port Elizabeth
			Swed. ss. Atlanten	Apr. 22	Limon
			Rus. bkttn. Feodor	do	Pernambuco
18	Key West, Fla.	do			
19	Los Angeles, Cal.	do			
20	Newbern, N. C.	do			
21	Nome, Alaska.	Apr. 16			
22	Pascagoula, Miss.	Apr. 23			
23	Port Angeles, Wash.	Apr. 16			
24	Portland, Me.	Apr. 23			
25	Port Townsend, Wash.	Apr. 16	Am. schr. Prospera ^a	Apr. 9	Manila
		Apr. 23			
26	Reedy Island, Del.	do			
	St. Georges Sound, Fla.— East Pass	Apr. 21			
27	West Pass	Apr. 23			
28	St. Johns River, Fla.	do			
30	San Diego, Cal.	do			
31	San Francisco, Cal.	do	Ger. ss. Hermonthis	Apr. 22	Hamburg

^a Previously reported.

and inspection stations.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No transactions.	
2				No report.	
3				do.	
4				do.	
5				do.	
6				No transactions.	
7					4
8					1
9				No report.	
10	Portland	Disinfected		9 cases of smallpox en route. Crew bathed and vaccinated, and effects disinfected. Held in temporary barracks. 100 dead rats found in hold after opening hatches. The smallpox cases had been isolated on board, and removed to hospital at Salina Cruz. Glandular examination Br. s. s. Indrasamha from Hongkong. 9 coastwise vessels spoken and passed.	3
11	Fernandina	Held for discharge of ballast and disinfection. Held to discharge ballast.			4
	do				
12					2
13				No report.	
14					16
15				No report.	
16					2
17	Gulfport	Disinfected and held.	Apr. 19		6
	do	Disinfected for rats.	Apr. 21		
	do	Disinfected and held.			
18	Pascagoula	do			9
19				No report.	
20				No transactions.	
21				No report.	
22					2
23				No report.	
24					1
25	Port Townsend	Partial disinfection	Apr. 11	Crew bathed and dunnage disinfected. Glandular examination, Am. ss. Victoria, from Hongkong, and Fr. bark Marguerite Dolifus, from Hull. Glandular examination, Am. schr. Gamble, from Manila.	5
					19
26				No transactions.	
27				do.	
28				4 steamships passed without inspection; 13 vessels spoken and passed.	
29					
30					1
31	Seattle	Held for fumigation	Apr. 23	Glandular examination Br. ss. Gaelic from Hongkong. 9 cases smallpox among passengers on Br. ss. Ching Wo before transferring to Am. ss. Mongolia. Crew of Mongolia vaccinated and released. Passengers detained, bathed, and vaccinated, and effects disinfected. Temperature of all on Am. ss. City of Panama from Panama taken. 2 vessels boarded and passed.	12

Number.	Name of station.	Week ended—	Name of vessel.	Date of arrival.	Port of departure
32	UNITED STATES—Continued.				
32	San Pedro, Cal.	Apr. 23			
33	Santa Barbara, Cal.	do			
34	Santa Rosa, Fla.	Apr. 22	Nor. bk. Patagonia	Apr. 9	Greenock
			Nor. bk. Garibaldi	do	Bristol
			Br. ss. August Belmont	Apr. 15	Tampico
			Am. ss. Pensacola	Apr. 19	do
			Ger. ss. Euphemia	Apr. 20	Vera Cruz
			It. bk. Luigina	Apr. 22	Ayr
			Ger. ss. Euphemia ^a	Apr. 20	Vera Cruz
			It. bk. Luigina ^a	Apr. 22	Ayr
			Br. ss. Zeno	Apr. 23	New Castle
			Nor. bk. Angelo	Apr. 24	Cape Town
			Br. ship King's County	do	Rio de Janeiro
			Br. ss. E. O. Saltmarsh	Apr. 26	Tampico
35	Savannah, Ga.	Apr. 23	Br. ss. August Belmont	Apr. 29	do
36	Sitka, Alaska	Apr. 9	Am. schr. Chas. K. Schull ^a	Apr. 15	Matanzas
		Apr. 16	Br. schr. Annie M. Parker ^a	Apr. 16	Grenada
37	South Atlantic quarantine, Blackbeard Island, Ga.	Apr. 23			
38	Southbend, Wash.	do			
39	Tampa Bay, Fla.	do			
40	Washington, N. C.	do			
41	HAWAII: Hilo	Apr. 2			
42	Honolulu	Apr. 9			
		do	U. S. a. t. Sheridan	Apr. 6	Manila
43	Kahului	Apr. 16			
		Apr. 9			
		Apr. 16			
44	Kihei	Apr. 2			
		Apr. 9			
		Apr. 16			
45	Koloa	Apr. 9			
46	Lahaina	do			
		Apr. 16			
47	Meleukona	Apr. 2			
48	PHILIPPINE ISLANDS: Cebu	Mar. 12	Am. banca Bocal	Mar. 6	Palompan
49	Iloilo	do			
		Mar. 19			
50	Jolo	Mar. 5			
51	Manila	Mar. 12			
		do			
		Mar. 19	Am. sch. Nueva Zaragoza	Mar. 14	Pola
52	PORTO RICO: Ponce	Apr. 16	Am. ss. Maracaibo	Apr. 13	Maracaibo
53	San Juan	do	U. S. S. Gloucester	Apr. 12	St. Thomas

a Previously reported.

and inspection stations—Continued.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
32				No report	
33				do	
34	Pensacola	Ballast discharged. Vessel cleaned.	Apr. 14		4
	do	do	do		
	do	Fumigated and held to complete 5 days.	Apr. 17		
	do	do	Apr. 20		
	do	Held to discharge ballast			
	do	Fumigated	Apr. 27		4
	do	Discharging ballast	Apr. 23		
	do	Held to clean foul bilges			
	do	Discharging ballast			
	do	do	Apr. 30	Preliminary fumigation	
	do	Fumigated and held to complete 5 days.			
35	Savannah	Fumigated	Apr. 17		3
	do	Fumigated and held	Apr. 22		5
					1
37				No transactions	
38				No report	
39					5
40				No report	
41					1
42	Honolulu	Passed on medical officer's certificate.	Apr. 6		2
					15
43				No transactions	
44				No transactions	
				do	1
45				do	
46				do	
47				do	
48	Cebu	Disinfected and held	Mar. 11	Crew bathed. 1 missing; no satisfactory explanation. 106 bancas inspected and passed.	43
49				1 case intermittent fever on Br. ss. Recorder from Singapore.	49
				3 vessels fumigated to destroy vermin. Vessel from Saigon held for mechanical cleaning and fumigation to destroy vermin.	49
50					3
51				5 vessels fumigated to destroy vermin. Crew or members of crew on 40 vessels vaccinated. 1 case measles on Ger. ss. Singora from Singapore. Cared for by board of health. Br. ss. Rubi from Hongkong was remanded to Mariveles for fumigation to destroy vermin.	15
					98
	Manila	Held in quarantine 24 hours; disinfected.	Mar. 15	3 plague-suspect deaths en route. 3 vessels fumigated to destroy vermin. Crew or members of crew, on 53 vessels vaccinated.	88
52	New York	Held in quarantine	Apr. 13	No passengers, no cargo for Ponce.	
53	Orders	Passed on medical officer's certificate.	Apr. 12		3

Number.	Name of station.	Week ended—	Name of vessel.	Date of arrival.	Port of departure.
PORTO RICO—Continued.					
54	Subports— Aguadilla.....	Apr. 16			
55	Arreibo.....	do			
56	Arroyo.....	do			
57	Fajardo.....	do			
58	Humacao.....	do			
59	Mayaguez.....	do			

Reports from State and

Number.	Name of station.	Week ending—	Name of vessel.	Date of arrival.	Port of departure.
1	Baltimore, Md	Apr. 30			
2	Bangor, Me	do			
3	Boston, Mass	do			
4	Charleston, S. C.....	Apr. 23			
5	Elizabeth River, Va.....	Apr. 30			
6	Galveston, Tex.....	Apr. 23	Ss. Mexican..... Br. ss. Belgian.....	Apr. 18 Apr. 20	Veracruz .. Cartagena ..
7	Gardiner, Oreg	do			
8	Maroushook, Pa	Apr. 30			
9	Mobile Bay, Ala.....	Apr. 23	Nor. ss. Mt. Vernon..... Nor. ss. Telefon..... Schr. Edith and May.....	Apr. 19 Apr. 20 Apr. 22	Limon .. Frontera .. Tuxpan ..
10	New Bedford, Mass.....	Apr. 30			
11	New Orleans, La.....	Apr. 23	Dan. ss. St. Jan ^a Br. ss. Magician ^a Nor. ss. Norheim ^a Sp. ss. Santanderino..... Br. ss. Antillian..... Sp. ss. Pio IX..... Am. ss. Toledo..... Ger. ss. Baker..... Br. ss. Barrister..... Br. ss. Nicaraguian..... Nor. ss. Dagnin	Apr. 14 do Apr. 16 Apr. 18 Apr. 19 do Apr. 20 Apr. 22 do do Apr. 23	Mexican ports .. do .. Vera Cruz .. Cienfuegos .. Colon, etc., via Mexican ports .. Barcelona via Cuban ports .. Cardenas .. Colon via Bocas del Toro .. Mexican ports .. do .. Cienfuegos ..
12	Newport News, Va.....	Apr. 30			
13	Newport, R. I	do			
14	New York, N. Y.....	do			
15	Pass Cavallo, Tex.....	do			
16	Port Royal, S. C.....	Apr. 23			
17	Providence, R. I.....	do			
18	Quintana, Tex.....	Apr. 30			
19	Sabine Pass, Tex.....	do			
20	St. Helena Entrance, S. C.....	do			

^a Previously reported.

and inspection stations—Continued.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
54				No transactions.	
55				do	
56				do	
57					1
58					1
59					1

municipal quarantine stations.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No report.	
2				do	
3				do	
4				No transactions.	
5				No report.	
6	Galveston	Fumigated.	Apr. 18		20
	do	do	Apr. 20		
7				No report.	
8				do	
9	Mobile	Disinfected.			17
	do	Disinfected and held.			
	do	do			
10					1
11	New Orleans	Disinfected and held.	Apr. 18		
	do	do	do		
	do	do	Apr. 17		
	do	Disinfected.	do		
	do	Disinfected and held.			
	do	Disinfected.	Apr. 19		
	do	do			
	do	do	Apr. 20		
	do	do	Apr. 22		
	do	Disinfected and held.			
	do	do			
12		Disinfected.	Apr. 23	No report.	
13				do	
14				do	
15				do	
16				No transactions.	1
17				do	
18				No report.	
19				do	
20				do	

Smallpox in the United States as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 26, 1903, to May 6, 1904.

For reports received from June 27, 1903, to December 25, 1903, see PUBLIC HEALTH REPORTS for December 25, 1903.

Place.	Date.	Cases.	Deaths.	Remarks.
Arkansas:				
Fort Smith.....	Dec. 18-Feb. 20	6	.....
Total for State .....	.....	6	.....
Total for State, same period, 1903.	.....	.....	.....
California:				
Berkeley.....	Jan. 1-Feb. 29	2	.....
Escondido	Feb. 23.....	1	.....
Fresno	Dec. 1-31.....	1	.....
Los Angeles.....	Dec. 27-Apr. 9	5	.....
Oakland.....	Jan. 1-31.....	.....	1	
San Francisco.....	Dec. 7-Apr. 10	52	4	
Total for State .....	.....	61	5	
Total for State, same period, 1903.	.....	289	3	
Colorado:				
Bent County	Feb. 1-29.....	4	.....
Boulder County.....	Dec. 1-Mar. 31	24	.....
Chaffee County	Feb. 1-Mar. 31	6	.....
Conejos County.....	Jan. 1-Feb. 29	37	.....
Denver County (Denver)	Dec. 1-Mar. 31	44	1	
Douglas County	Mar. 1-Mar. 31	1	.....
Eagle County	Mar. 1-Mar. 31	1	.....
El Paso County (Colorado Springs included).....	Dec. 1-Feb. 29	37	.....
Huerfano County.....	Dec. 1-Mar. 31	2	.....
Kit Carson County.....	Dec. 1-Mar. 31	22	.....
Lake County	Dec. 1-Feb. 29	3	.....
Larimer County	Dec. 1-Mar. 31	77	.....
Las Animas County.....	Dec. 1-Jan. 31	4	.....
Mesa County.....	Dec. 1-31.....	1	.....
Otero County	Jan. 1-Mar. 31	47	.....
Pitkin County	Dec. 1-Jan. 31	2	.....
Pueblo County.....	Feb. 1-Mar. 31	4	.....
Rio Grande County	Dec. 1-31.....	11	.....
Routt County	Jan. 1-Feb. 29	14	.....
Washington County	Dec. 1-Jan. 31	3	.....
Weld County.....	Dec. 1-Mar. 31	109	.....
Yuma County.....	Dec. 1-31.....	1	.....
Total for State .....	.....	454	1	
Total for State, same period, 1903.	.....	575	.....
Delaware:				
Wilmington.....	Feb. 21-Apr. 30	.....	3	
Total for State .....	.....	.....	3	
Total for State, same period, 1903.	.....	.....	1	
District of Columbia:				
Washington.....	Jan. 10-Mar. 19	30	.....
Total for District .....	.....	30	.....
Total for District, same period, 1903.	.....	13	1	
Florida:				
Escambia County (Pensacola).....	Nov. 1-Jan. 16	11	.....
Dade County (Fort Lauderdale).....	Nov. 1-Dec. 31	1	.....
Duval County (Jacksonville).....	Nov. 1-Apr. 23	32	.....
Leon County (Tallahassee).....	Nov. 1-Dec. 31	2	.....
Polk County (Bartow).....	Nov. 1-Dec. 31	1	.....
Walton County	Jan. 2-16	88	.....
Total for State .....	.....	135	.....
Total for State, same period, 1903.	.....	277	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Georgia:				
Darien	Jan. 14.....	2	.....
Liberty County	Feb. 12.....	.....	7	
Total for State .....	.....	2	7	
Total for State, same period, 1903. ....	.....	120	8	
Illinois:				
Belleville	Dec. 18-Mar. 12	20	2	
Cairo.....	Jan. 1-Feb. 5	13	.....
Chicago.....	Dec. 20-Apr. 23	61	1	
Danville	Dec. 18-Apr. 16	39	.....
Evanston	Jan. 1-Dec. 31, 1903	3	.....
Fairport	Jan. 10-16.....	1	.....
Galesburg.....	Mar. 6-26.....	7	.....
Peoria	Mar. 1-31.....	10	.....
Springfield	Feb. 26-Mar. 3	3	.....
Total for State .....	.....	157	3	
Total for State, same period, 1903. ....	.....	301	14	
Indiana:				
Evansville	Dec. 13-Jan. 20	22	.....
Kokomo	Apr. 17-23.....	1	.....
South Bend	Mar. 27-Apr. 23	8	1	
Total for State .....	.....	31	1	
Total for State, same period, 1903. ....	.....	2,962	124	
Iowa:				
Des Moines	Jan. 28-Apr. 9	2	.....
Dubuque	Dec. 27-Jan. 2	1	.....
Total for State .....	.....	3	.....
Total for State, same period, 1903. ....	.....	70	.....
Kentucky:				
Burlington	Mar. 1-28.....	16	.....
Covington	Mar. 18-Apr. 23	9	.....
Louisville	Oct. 1-Apr. 14	62	16	
Springfield	Mar. 22-28.....	6	.....
Total for State .....	.....	93	16	
Total for State, same period, 1903. ....	.....	574	4	
Louisiana:				
New Orleans.....	Dec. 13-Apr. 16	48	5	Twenty-five imported
Total for State .....	.....	48	5	
Total for State, same period, 1903. ....	.....	38	2	
Maine:				
Athens.....	Dec. 31.....	.....	
Biddeford	Dec. 18-19.....	1	.....
Bradley	Mar. 18.....	2	.....
Brewer	Dec. 19.....	1	.....
Brighton	Dec. 31.....	.....	
Calais	Feb. 7-18.....	10	.....
Madawaska region	Dec. 1-Apr. 9	67	.....
Madison	Jan. 28.....	1	.....
Milford	Jan. 7.....	2	.....
Oldtown	To Dec. 24.....	9	.....
Orono	Dec. 19-Jan. 22	3	.....
Smithfield	Jan. 21.....	1	.....
Stacyville	Jan. 21.....	11	.....
Van Buren	Jan. 1-31.....	7	.....
Total for State .....	.....	115	.....
Total for State, same period, 1903. ....	.....	309	1	
Maryland:				
Baltimore	Jan. 17-Apr. 30	33	.....
Cumberland	Feb. 1-Mar. 31	4	.....
Total for State .....	.....	37	.....
Total for State, same period, 1903. ....	.....	41	1	

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Massachusetts:				
Brockton	Dec. 20-26	1 .....	.....
Fall River	Dec. 20-Mar. 19	2 .....	.....
Haverhill	Dec. 20-26	1 .....	.....
Lawrence	Jan. 10-16	1 .....	.....
Lowell	Mar. 13-Apr. 2	2	1	
Total for State .....	.....	7	1	
Total for State, same period, 1903.	.....	182	29	
Michigan:				
Detroit	Dec. 13-Apr. 23	28	1	
Flint	Dec. 13-Feb. 6	5 .....	.....
Grand Rapids	Jan. 2-Apr. 23	11 .....	.....
Port Huron	Dec. 16-23	4 .....	.....
Bay County	Feb. 1-29 .....	.....	1	
Lapeer County	Feb. 1-29 .....	.....	1	
Muskegon	Mar. 1-31 .....	.....	1	
Osceola County	Mar. 1-31 .....	.....	1	
St. Joseph County	Mar. 1-31 .....	.....	1	
Total for State .....	.....	48	6	
Total for State, same period, 1903.	.....	521	14	
Minnesota:				
Aitkin County	Feb. 9-29	6 .....	.....
Anoka County	Apr. 5-11	1 .....	.....
Becker County	Mar. 1-Apr. 18	48 .....	.....
Beltrami County	Jan. 5-Mar. 7	47	1	
Cass County	Jan. 26-Apr. 11	14 .....	.....
Chippewa County	Feb. 9-Apr. 18	26 .....	.....
Chisago County	Jan. 12-Apr. 4	13 .....	.....
Clay County	Dec. 22-Apr. 4	24 .....	.....
Cottonwood County	Feb. 2-15	2 .....	.....
Crow Wing County	Jan. 5-Feb. 8	5 .....	.....
Dakota County	Feb. 2-8	2 .....	.....
Dodge County	Mar. 15-Apr. 18	13 .....	.....
Douglas County	Jan. 26-Apr. 18	18 .....	.....
Fillmore County	Mar. 1-7	2 .....	.....
Freeborn County	Apr. 5-11	1 .....	.....
Grant County	Mar. 22-Apr. 18	7 .....	.....
Goodhue County	Jan. 5-11	1 .....	.....
Hennepin County	Dec. 22-Apr. 18	103	1	
Hubbard County	Jan. 19-Apr. 11	14 .....	.....
Isanti County	Dec. 22-Feb. 29	34 .....	.....
Itasca County	Dec. 15-Apr. 18	14 .....	.....
Jackson County	Jan. 5-11	1 .....	.....
Kandiyohi County	Dec. 15-Apr. 11	85 .....	.....
Kittson County	Apr. 5-18	5 .....	.....
Lesueur County	Apr. 5-11	7 .....	.....
Meeker County	Feb. 16-Mar. 21	4 .....	.....
Millelacs County	Feb. 16-Apr. 11	5 .....	.....
Morrison County	Dec. 15-Apr. 4	29 .....	.....
Mower County	Feb. 2-8	1 .....	.....
Norman County	Feb. 2-Apr. 11	7 .....	.....
Ottertail County	Dec. 15-Apr. 18	103 .....	.....
Pine County	Feb. 2-Apr. 18	5 .....	.....
Pipestone County	Mar. 15-Apr. 18	13 .....	.....
Polk County	Jan. 5-Apr. 18	6 .....	.....
Pope County	Mar. 15-21	4 .....	.....
Ramsey County	Dec. 29-Apr. 18	30 .....	.....
Redwood County	Jan. 19-Apr. 11	3 .....	.....
Renville County	Jan. 19-Apr. 18	9 .....	.....
Rice County	Jan. 19-Apr. 4	7 .....	.....
Roseau County	Jan. 12-18	10 .....	.....
St. Louis County	Jan. 12-Apr. 11	11 .....	.....
Scott County	Mar. 15-21	1 .....	.....
Sibley County	Feb. 9-15	1 .....	.....
Stearns County	Dec. 15-Apr. 18	214	1	
Steele County	Jan. 5-18	2 .....	.....
Stevens County	Mar. 15-21	2 .....	.....
Swift County	Jan. 26-Apr. 11	24 .....	.....
Todd County	Dec. 15-Apr. 18	150	1	
Wabasha County	Jan. 26-Apr. 18	27 .....	.....
Wadena County	Jan. 12-18	2 .....	.....
Washington County	Dec. 22-Apr. 11	21	1	
Wilkin County	Jan. 5-Mar. 14	16 .....	.....
Wright County	Mar. 1-7	1 .....	.....
Cases not previously reported in Hennepin County.	.....	11 .....	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Minnesota—Continued.				
Cases not previously reported in Kandiyohi County.		13		
Old cases not reported previously in Stearns County.		11		
Total for State		1,236	5	
Total for State, same period, 1903.		3,211	14	
Missouri:				
St. Louis	Dec. 20-Apr. 23	144	3	
Total for State		144	3	
Total for State, same period, 1903.		233	5	
Montana:				
Butte	Jan. 1-Feb. 29	16		
Helena	Jan. 1-31.....	1		
Total for State		17		
Total for State, same period, 1903.		14		
Nebraska:				
Omaha	Dec. 20-Apr. 23	3		
Total for State		3		
Total for State, same period, 1903.		80		
New Hampshire:				
Manchester	Dec. 13-Apr. 16	51	1	
Nashua	Jan. 3-23.....	3		
Total for State		54	1	
Total for State, same period, 1903.		171		
New Jersey:				
Camden	Dec. 27-Apr. 23	27	5	Imported.
Jersey City	Mar. 21-27.....	1		
Newark	Feb. 1-6.....	1		
Plainfield	Jan. 17-23.....	1		
Trenton	Dec. 27-Apr. 23	43	8	
Total for State		73	13	
Total for State, same period, 1903.		100	5	
New York:				
Buffalo	Dec. 20-Apr. 23	40		
Elmira	Feb. 7-13	1		
New York	Dec. 20-Apr. 23	24	4	
Niagara Falls	Feb. 14-Apr. 2	12		
Saratoga Springs	Dec. 1-31.....	1		
Total for State		78	4	
Total for State, same period, 1903.		75	7	
North Carolina:				
Alamance County	Jan. 1-31.....	122		Present.
Anson County	Jan. 1-31.....			
Bladen County	Jan. 1-31.....	1		
Buncombe County	Jan. 1-31.....	8		
Cabarrus County	Jan. 1-31.....	1		
Chowan County	Jan. 1-31.....	1		
Cleveland County	Jan. 1-31.....	4		
Cumberland County	Jan. 1-31.....	3		
Davidson County	Jan. 1-31.....	72		
Davie County	Jan. 1-31.....	2		
Durham County	Jan. 1-31.....	10		
Edgecombe County	Jan. 1-31.....	8	2	
Forsyth County	Jan. 1-31.....	17		
Gaston County	Jan. 1-31.....	17		
Guilford County	Jan. 1-31.....	8		
Harnett County	Jan. 1-31.....	3		
Henderson County	Jan. 1-31.....	3		
Iredell County	Jan. 1-31.....	8		
Jackson County	Jan. 1-31.....	25		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
North Carolina—Continued.				
Johnston County	Jan. 1-31.....	5	.....
Macon County	Jan. 1-31.....	.....	.....	Present.
Madison County	Jan. 1-31.....	.....	.....	Do.
Mecklenburg County	Jan. 1-31.....	5	.....
New Hanover County (Wilmington included)	Jan. 1-Mar. 8	11	.....
Orange County	Jan. 1-31.....	10	.....
Perquimans County	Jan. 1-31.....	32	.....
Pitt County	Jan. 1-31.....	13	.....
Richmond County	Jan. 1-31.....	7	.....
Robeson County	Jan. 1-31.....	.....	.....	Do.
Rockingham County	Jan. 1-31.....	4	.....
Scotland County	Jan. 1-31.....	20	.....
Stanly County	Jan. 1-31.....	2	.....
Union County	Jan. 1-31.....	6	.....
Vance County	Jan. 1-31.....	12	.....
Wake County	Jan. 1-31.....	1	.....
Wayne County	Jan. 1-31.....	10	.....
Wilkes County	Jan. 1-31.....	20	.....
Wilson County	Jan. 1-31.....	4	.....
Yancey County	Jan. 1-31.....	6	.....
Total for State		481	2	
Total for State, same period, 1903.		2,270	23	
North Dakota:				
Barnes County	Dec. 1-Mar. 31	19	.....
Cass County	Nov. 1-Mar. 31	13	.....
Cavalier County	Dec. 1-Feb. 29	16	.....
Eddy County	Dec. 1-31.....	1	.....
Emmons County	Feb. 1-29.....	2	.....
Grand Forks County	Nov. 1-Dec. 31	12	.....
Griggs County	Dec. 1-31.....	1	.....
McHenry County	Feb. 1-Mar. 31	8	.....
McLean County	Jan. 1-Feb. 29	3	.....
Ransom County	Nov. 1-Feb. 29	64	.....
Richland County	Feb. 1-Mar. 31	3	.....
Rolette County	Nov. 1-Mar. 31	10	.....
Stark County	Feb. 1-29.....	3	.....
Stutsman County	Dec. 1-31.....	1	.....
Towner County	Nov. 1-Mar. 31	10	.....
Truill County	Dec. 1-Mar. 31	6	.....
Walsh County	Dec. 1-Mar. 31	32	.....
Ward County	Dec. 1-Mar. 31	8	.....
Wells County	Nov. 1-Feb. 29	20	.....
Williams County	Dec. 1-Mar. 31	26	.....
Total for State		258	.....
Total for State, same period, 1903.				
Ohio:				
Allen County	Aug. 8-Apr. 9	30	.....
Ashland County	Jan. 1-Apr. 9	1	.....
Ashtabula County	Aug. 8-Apr. 9	12	.....
Athens County	Aug. 8-Apr. 9	112	1	
Auglaize County	Aug. 8-Apr. 9	40	4	
Belmont County	Aug. 8-Apr. 9	25	8	
Butler County	Aug. 8-Apr. 9	22	.....
Carroll County	Aug. 8-Apr. 9	34	.....
Champaign County	Aug. 8-Apr. 9	19	.....
Clark County	Jan. 1-Apr. 9	4	.....
Clermont County	Jan. 1-Apr. 9	1	.....
Columbiana County	Aug. 8-Apr. 9	60	1	
Coshocton County	Aug. 8-Apr. 9	66	.....
Crawford County	Aug. 8-Apr. 9	69	.....
Cuyahoga County	Aug. 8-Apr. 29	46	6	
Darke County	Aug. 8-Dec. 26	1	.....
Delaware County	Aug. 8-Dec. 26	13	.....
Erie County	Aug. 8-Apr. 9	17	.....
Fairfield County	Aug. 8-Apr. 9	9	.....
Franklin County	Aug. 8-Apr. 9	174	5	
Gallia County	Aug. 8-Apr. 9	74	5	
Greene County	Jan. 1-Apr. 9	1	.....
Guernsey County	Aug. 8-Apr. 9	132	1	
Hamilton County	Aug. 8-Apr. 15	131	8	
Hancock County	Aug. 8-Apr. 9	31	.....
Hardin County	Jan. 1-Apr. 9	1	.....
Harrison County	Aug. 8-Apr. 9	26	4	
Hocking County	Jan. 1-Apr. 9	81	.....
Holmes County	Jan. 1-Apr. 9	44	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ohio—Continued.				
Jackson County.....	Aug. 8-Apr. 9	31		
Jefferson County.....	Aug. 8-Apr. 9	60		
Knox County.....	Aug. 8-Dec. 26	1		
Lake County.....	Aug. 8-Dec. 26	1		
Lawrence County.....	Aug. 8-Apr. 9	242	16	
Licking County.....	Aug. 8-Apr. 9	49	1	
Lorain County.....	Aug. 8-Apr. 9	4	1	
Lucas County.....	Aug. 8-Apr. 9	4		
Madison County.....	Jan. 1-Apr. 9	1		
Mahoning County.....	Aug. 8-Apr. 9	239	5	
Marion County.....	Aug. 8-Apr. 9	258	1	
Miami County.....	Aug. 8-Apr. 9	32	2	
Montgomery County.....	Aug. 8-Apr. 30	182	13	
Morgan County.....	Jan. 1-Apr. 9	2		
Morrow County.....	Aug. 8-Apr. 9	9		
Muskingum County.....	Aug. 8-Apr. 9	34		
Noble County.....	Jan. 1-Apr. 9	4		
Ottawa County.....	Aug. 8-Apr. 9	15		
Paulding County.....	Aug. 8-Dec. 26	2		
Perry County.....	Aug. 8-Apr. 9	71		
Pickaway County.....	Jan. 1-Apr. 9	1		
Portage County.....	Aug. 8-Apr. 9	6		
Preble County.....	Jan. 1-Apr. 9	4		
Putnam County.....	Aug. 8-Apr. 9	45		
Richland County.....	Aug. 8-Apr. 9	27	1	
Ross County.....	Jan. 1-Apr. 9	4		
Scioto County.....	Aug. 8-Apr. 9	20		
Seneca County.....	Aug. 8-Dec. 26	1		
Stark County.....	Aug. 8-Apr. 9	144		
Summit County.....	Aug. 8-Apr. 9	41		
Trumbull County.....	Aug. 8-Apr. 9	44		
Tuscarawas County.....	Aug. 8-Apr. 9	35	1	
Union County.....	Aug. 8-Apr. 9	30		
Van Wert County.....	Jan. 1-Apr. 9	12	1	
Vinton County.....	Aug. 8-Apr. 9	13		
Washington County.....	Aug. 8-Apr. 9	76	1	
Wayne County.....	Aug. 8-Apr. 9	9		
Williams County.....	Jan. 1-Apr. 9	30		
Wood County.....	Aug. 8-Dec. 26	31		
Wyandot County.....	Aug. 8-Apr. 9	18		
Total for State.....		3,108	86	
Total for State, same period, 1903.		579	53	
Pennsylvania:				
Allegheny County.....	Dec. 13-Apr. 23	167	33	Twelve cases imported at Pittsburg.
Beaver County.....	Dec. 1-Jan. 31	5	1	
Berks County.....	Dec. 1-Mar. 4	41		
Blair County.....	Dec. 1-Mar. 12	20	3	One case imported.
Bradford County.....	Dec. 1-Jan. 31	10		
Bucks County.....	Dec. 1-Jan. 31	4		
Butler County.....	Feb. 1-13.....	2		
Cambria County.....	Dec. 1-Apr. 23	50	4	Do.
Clearfield County.....	Dec. 1-Jan. 31	20		
Columbia County.....	Dec. 1-Jan. 31	8		
Center County.....	Dec. 1-Jan. 31	4		
Chester County.....	Dec. 1-Jan. 31	1		
Crawford County.....	Apr. 17-30.....	23		
Cumberland County.....	Dec. 1-Jan. 31	2		
Dauphin County.....	Dec. 1-Jan. 31	2		
Delaware County.....	Dec. 1-Jan. 31	8		
Erie County.....	Dec. 1-Apr. 2	111	1	
Fayette County.....	Dec. 1-Jan. 31	28	1	
Greene County.....	Dec. 1-Jan. 31	40		
Indiana County.....	Dec. 1-Jan. 31	10		
Jefferson County.....	Dec. 1-Jan. 31	8	3	
Lackawanna County.....	Dec. 1-Mar. 31	12		
Lancaster County.....	Dec. 1-Jan. 31	1		
Lebanon County.....	Dec. 1-Jan. 31	11	1	
Lehigh County.....	Dec. 1-Apr. 23	120		
Luzerne County.....	Dec. 1-Jan. 31	4		
Lycoming County.....	Jan. 3-Apr. 23	16	3	
Monroe County.....	Dec. 1-Jan. 31	5		
Montgomery County.....	Dec. 1-Jan. 31	8	1	
Northampton County.....	Dec. 1-Jan. 31	235		
Northumberland County.....	Dec. 1-Jan. 31	3		
Perry County.....	Dec. 1-Jan. 31	1		
Philadelphia County.....	Dec. 20-Apr. 30	827	200	
Schuylkill County.....	Dec. 1-Jan. 31	16		
Somerset County.....	Dec. 1-Jan. 31	9		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Pennsylvania—Continued.				
Susquehanna County.....	Dec. 1-Jan. 31	2	.....
Warren County.....	Jan. 1-Jan. 31	10	3	
Washington County.....	Dec. 1-Jan. 31	18	.....
Wayne County.....	Dec. 1-Jan. 31	92	.....
Westmoreland County.....	Dec. 1-Jan. 31	43	.....
Total for State.....	.....	1,997	254	
Total for State, same period, 1903.	.....	1,759	152	
South Carolina:				
Charleston.....	Dec. 20-Apr. 9	35	3	
Georgetown.....	Mar. 27.....	1	.....
Greenville.....	Feb. 21-Apr. 16	19	.....
Total for State.....	.....	55	3	
Total for State, same period, 1903.	.....	223	9	
Tennessee:				
Memphis.....	Dec. 13-Apr. 30	279	8	
Nashville.....	Dec. 27-Apr. 30	111	.....
Total for State.....	.....	490	8	
Total for State, same period, 1903.	.....	108	1	
Texas:				
San Antonio.....	Dec. 1-Feb. 29	43	.....
Total for State.....	.....	43	.....
Total for State, same period, 1903.	.....	11	.....
Utah:				
Ogden.....	Jan. 1-Mar. 31	3	.....
Salt Lake City.....	Dec. 27-Feb. 13	14	.....
Total for State.....	.....	17	.....
Total for State, same period, 1903.	.....	316	2	
Virginia:				
Danville.....	Feb. 7-13.....	2	.....
Pocahontas.....	Jan. 1-Mar. 31	21	5	
Total for State.....	.....	23	5	
Total for State, same period, 1903.	.....	9	1	
Washington:				
Adams County.....	Dec. 1-Mar. 31	3	.....
Chehalis County.....	Dec. 1-31.....	3	.....
Chelan County.....	Mar. 1-31.....	4	.....
Clallam County.....	Mar. 1-31.....	1	.....
Clarke County.....	Feb. 1-29.....	1	.....
Columbia County.....	Jan. 1-31.....	1	.....
Franklin County.....	Mar. 1-31.....	1	.....
Jefferson County (Port Town- send).	Apr. 12.....	1	.....	5
King County (Seattle included)	Dec. 1-Apr. 13	49	.....
Kittitas County.....	Dec. 1-31.....	1	.....
Klickitat County.....	Dec. 1-Mar. 31	21	.....
Lewis County.....	Feb. 1-29.....	1	.....
Lincoln County.....	Dec. 1-31.....	2	.....
Mason County.....	Mar. 1-31.....	1	.....
Pacific County.....	Jan. 1-Feb. 29	2	.....
Pierce County (Tacoma in- cluded).	Feb. 1-Mar. 31	7	.....
Skagit County.....	Feb. 1-29.....	1	.....
Spokane County (Spokane in- cluded).	Dec. 1-Mar. 31	21	3	
Thurston County.....	Feb. 1-29.....	2	.....
Wallawalla County.....	Dec. 1-Jan. 31	9	.....
Whatcom County.....	Dec. 1-Feb. 29	18	.....
Whitman County.....	Dec. 1-Mar. 31	4	.....
Yakima County.....	Jan. 1-Mar. 31	9	.....
Total for State.....	.....	163	3	
Total for State, same period, 1903.	.....	75	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Wisconsin:				
Milwaukee	Dec. 18-Apr. 23	153		
Total for State		153		
Total for State, same period, 1903.		1,285	6	
Grand total		9,620	435	
Grand total, same period, 1903.		16,937	482	

Plague in the United States, as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 26, 1903, to May 6, 1904.

Place.	Number since March, 1900.	Number since January 1, 1904.	Reported.	Died.	Bacteriologically confirmed.	Remarks.
California:						
San Francisco	111	1	Jan. 10	Jan. 10	Jan. 25	
Do	112	2	Jan. 12	Jan. 11	Jan. 27	
Do	113	3	Jan. 13	Jan. 13	Jan. 22	
Do	114	4	Feb. 7	.....	Feb. 17	Recovered.
Do	115	5	Feb. 9	Feb. 8	Feb. 27	
Do	116	6	Feb. 12	Feb. 12	Feb. 24	
Do	117	7	Feb. 15	Feb. 14	....do ...	
Do	118	8	Feb. 17	Feb. 19	Mar. 8	
Concord	a 119	9	Mar. 1	Feb. 29	Mar. 12	

^a Cases 119 and 120 not having been bacteriologically confirmed, case 121 has been numbered 119.

Summary: Calendar year, 1900, 22 cases, 22 deaths; 1901, 30 cases, 25 deaths; 1902, 41 cases, 41 deaths; 1903, 17 cases, 17 deaths.

Yellow fever in the United States, as reported to the Surgeon-General, Public Health and Marine-Hospital Service, December 26, 1903, to May 6, 1904.

Place.	Date.	Cases.	Deaths.	Remarks.
Texas: Laredo	Dec. 26-Mar. 18	6		One case imported from Minera.

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

Weekly mortality table, cities of the United States.

Cities.	Week ended—	Population, United States census of 1900.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Brucic fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Allentown, Pa.	Apr. 23	35,416	23	4	...	...	...	...	...	...	...	1	...	...
Altoona, Pa.	Apr. 30	38,973	19	1	...	...	...	...	...	1	...	...	...	...
Ashtabula, Ohio	do	12,949	2	...	...	...	...	...	...	...	...	...	...	...
Baltimore, Md.	do	508,957	202	35	...	...	...	...	...	3	5	2	...	1
Berkeley, Cal.	Apr. 23	13,214	5	...	...	...	...	...	...	...	...	...	...	...
Binghamton, N. Y.	Apr. 30	38,647	15	2	...	...	...	...	...	3	5	1	5	4
Boston, Mass.	do	560,892	255	35	...	...	...	...	...	1	...	...	...	...
Brockton, Mass.	Apr. 23	40,063	13	...	...	...	...	...	...	...	...	...	...	...
Cambridge, Mass.	Apr. 30	91,886	24	5	...	...	...	...	...	...	...	...	...	...
Camden, N. J.	do	73,935	25	...	...	...	...	...	...	...	1	...	...	...
Charleston, S. C.	Apr. 23	55,807	38	6	...	...	...	...	...	1	...	...	...	...
Chelsea, Mass.	do	34,072	16	1	...	...	...	...	...	...	...	...	...	...
Chicago, Ill.	Apr. 30	1,698,575	561	62	...	...	...	...	...	12	7	8	1	1
Cincinnati, Ohio	Apr. 22	325,902	157	29	...	...	...	...	...	4	...	...	...	...
Cleveland, Ohio	Apr. 29	381,766	152	19	...	...	...	...	...	5	1	3	1	1
Clinton, Mass.	Apr. 30	13,667	5	...	...	...	...	...	...	...	...	...	...	...
Covington, Ky.	Apr. 23	42,938	27	2	...	...	...	...	...	...	...	...	...	...
Danville, Ill.	Apr. 30	16,354	10	1	...	...	...	...	...	...	...	...	...	...
Dayton, Ohio	do	85,333	34	5	2	...	...	...	...	1	...	...	...	...
Denver, Col.	Mar. 5	133,859	51	13	...	...	...	...	...	1	...	...	...	...
Do	Mar. 12	133,859	59	13	...	...	...	...	...	3	3	3	...	...
Do	Mar. 19	133,859	69	14	...	...	...	...	...	1	3	1	...	...
Do	Mar. 26	133,859	49	16	...	...	...	...	...	1	3	1	...	...
Do	Apr. 2	133,859	50	12	...	...	...	...	...	1	3	1	...	...
Do	Apr. 9	133,859	41	11	...	...	...	...	...	1	3	1	...	...
Do	Apr. 16	133,859	55	15	...	...	...	...	...	1	3	1	...	...
Des Moines, Iowa	Apr. 24	62,139	64	11	...	...	...	...	...	2	...	...	...	...
Detroit, Mich.	Apr. 23	285,704	112	...	...	...	...	...	1	4	...	...	...	...
Do	Apr. 30	285,704	108	...	...	...	...	...	2	...	...	...	...	...
Dunkirk, N. Y.	do	11,616	8	1	...	...	...	...	1	2	...	...	...	...
Elmira, N. Y.	do	35,672	8	1	...	...	...	...	2	...	...	...	...	...
Erie, Pa.	do	52,733	20	2	...	...	...	...	1	...	...	...	...	...
Everett, Mass.	do	24,336	7	2	...	...	...	...	1	...	...	...	...	...
Fall River, Mass.	Apr. 30	104,863	37	2	...	...	...	...	1	...	...	...	...	...
Fort Smith, Ark.	Apr. 23	11,587	5	3	...	...	...	...	2	...	...	...	...	...
Galesburg, Ill.	do	18,607	5	...	...	...	...	...	1	...	...	...	...	...
Hyde Park, Mass.	do	13,244	6	...	...	...	...	...	2	...	...	...	...	...
Jacksonville, Fla.	do	28,429	18	3	...	...	...	...	2	...	...	...	...	...
Jersey City, N. J.	do	206,433	90	14	...	...	...	...	4	2	...	2	...	...
Johnstown, Pa.	do	35,936	15	...	...	...	...	...	2	2	...	2	...	...
Do	Apr. 30	35,936	8	...	...	...	...	...	2	2	...	2	...	...
Kokomo, Ind.	Apr. 23	10,609	3	...	...	...	...	...	...	...	...	...	...	...
Do	Apr. 30	10,609	4	...	...	...	...	...	...	...	...	...	...	...
Lawrence, Mass.	Apr. 23	62,559	15	2	...	...	...	...	1	...	...	...	...	...
Lexington, Ky.	do	26,369	25	1	...	...	...	...	1	...	...	...	...	...
Lowell, Mass.	Apr. 30	94,969	31	4	...	...	...	...	1	...	...	...	...	...
McKeesport, Pa.	Apr. 23	34,227	15	1	...	...	...	...	1	...	...	...	...	...
Malden, Mass.	do	33,664	8	...	...	...	...	...	1	...	...	...	...	...
Manchester, N. H.	do	56,987	29	2	...	...	...	...	1	...	...	...	...	...
Marlboro, Mass.	do	13,609	7	1	...	...	...	...	1	...	...	...	...	...
Medford, Mass.	Apr. 30	18,244	6	...	...	...	...	...	1	...	...	...	...	...
Melrose, Mass.	do	12,962	2	...	...	...	...	...	1	...	...	...	...	...
Milwaukee, Wis.	Apr. 23	285,315	81	...	...	...	...	...	2	...	...	...	...	...
Mount Vernon, N. Y.	Apr. 30	21,228	6	...	...	...	...	...	1	1	1	3	...	...
Nashville, Tenn.	do	80,865	46	8	...	...	...	...	1	1	1	3	...	...
Newark, N. J.	do	246,070	113	17	...	...	...	...	5	1	4	4	...	...
New Bedford, Mass.	do	62,442	17	1	...	...	...	...	1	...	...	...	...	...
Newburyport, Mass.	Apr. 23	14,478	3	...	...	...	...	...	1	...	...	...	...	...
New Orleans, La.	do	287,104	147	21	...	...	...	...	3	...	...	2	...	...
Newport, Ky.	do	28,301	7	2	...	...	...	...	1	...	...	...	...	...
Do	Apr. 30	28,301	9	1	...	...	...	...	1	...	...	...	...	...
Newport, R. I.	Apr. 23	22,034	5	...	...	...	...	...	1	1	1	3	...	...
Newton, Mass.	Apr. 30	33,587	7	...	...	...	...	...	1	5	1	4	...	...
New York, N. Y.	Apr. 23	3,437,292	1,831	202	...	...	...	...	5	32	53	37	5	5
Niagara Falls, N. Y.	do	19,457	...	...	...	...	...	...	1	1	1	1	...	...
North Adams, Mass.	Apr. 29	24,200	8	...	...	...	...	...	1	...	...	...	...	...
Northampton, Mass.	Apr. 23	18,643	6	...	...	...	...	...	1	...	...	1	...	...
Omaha, Nebr.	do	102,555	25	...	...	...	...	...	1	...	...	...	...	...
Oneonta, N. Y.	do	7,147	6	...	...	...	...	...	1	...	...	...	...	...
Do	Apr. 30	7,147	1	...	...	...	...	...	1	...	...	...	...	...
Philadelphia, Pa.	do	1,293,697	591	73	8	...	...	...	45	6	8	2	...	...
Pittsburg, Pa.	Apr. 23	321,616	124	...	...	...	...	...	1	...	...	...	...	...
Plainfield, N. J.	Apr. 30	15,369	6	1	...	...	...	...	1	...	...	...	...	...
Portland, Me.	Apr. 23	50,145	17	4	...	...	...	...	1	1	1	1	...	...
Providence, R. I.	Apr. 30	175,597	72	6	...	...	...	...	1	3	1	1	1	1

FOREIGN AND INSULAR.

AFRICA.

Report from Cape Colony—Examination for plague and plague-infected rodents.

Report of the medical officer of health on the state of plague in Cape Colony during week ended March 26, 1904.

Port Elizabeth.—No case of plague was discovered during the week. At the plague hospital 6 cases remain under treatment. Plague-infected rodents continued to be found in the town.

East London.—No case of plague was discovered during the week. Plague-infected rodents continued to be found in the town.

Other places.—At Uitenhage, Queenstown, King Williams Town, and Knysna no case of plague was discovered in man or animal during the week.

Cape Town and harbor board area.—Three hundred and two rats were examined during the week. None were found affected with plague.

A. JOHN GREGORY,
Medical Officer of Health for the Colony.

AUSTRALIA.

Report from Brisbane—Plague—Examination of rodents for plague infection.

Consul-General Bray, at Melbourne, forwards the following, received under date of March 18 and 25, from Alfred Deakin, department of external affairs:

DEPARTMENT OF PUBLIC HEALTH, QUEENSLAND,
Brisbane, March 5, 1904.

Plague bulletin No. 4, for week ending 12 o'clock noon, Saturday, March 5, 1904.

No case of plague has occurred in this State since the 18th February ultimo (16 days), and the 5 patients at the plague hospital are now convalescent.

The last plague-infected rat was found yesterday.

RATS.

Report for week ending March 4, 1904.

Rats examined at bacteriological institute.....	465
Plague-infected	4
Total number of rats destroyed.....	2,204
Total number mice destroyed	202

BRISBANE, *March 12, 1904.*

Plague bulletin No. 5 for week ending 12 o'clock noon, Saturday, March 12, 1904.

Twenty-three days have elapsed since the last case of plague occurred in this State.

The 5 patients in the plague hospital who were reported in last week's bulletin to be convalescent will be discharged on Monday next, the 14th instant.

The last plague-infected rat was found in Brisbane on the 9th instant, and the previous one on the 7th instant.

RATS.

Report for week ending March 11, 1904.

Rats examined at bacteriological institute.....	460
Plague-infected rats	3
Mice examined at bacteriological institute.....	9
Infected mice	0
Total number of rats destroyed during the week.....	2,214
Total number of mice destroyed during the week.....	1,261

BRISBANE, *March 19, 1904.*

Bulletin No. 6, for week ending 12 o'clock noon, Saturday, March 19, 1904.

A period of thirty days has elapsed since the last case of plague occurred in this State. The whole of the patients have been discharged from the plague hospital, and that institution has been closed.

The last plague-infected rats (2) were found in Brisbane on the 18th instant, and the previous 1 on the 16th instant.

Cairns.—The health officer for Cairns has reported some 8 cases of suspected plague during the last few weeks. From the evidence submitted to me (smear preparations) I am satisfied that at least one of these cases, viz, a schoolboy, aged 8 years, who died on February 16 last, was a case of true bubonic plague; but in the cases (4) kept under observation and now convalescent, the bacteriological evidence was negative. The case of a Chinaman and another patient reported by the local press here on March 9 as cases of true plague have since proved not to be plague, and these cases were never reported to me by the Cairns health officer as even suspicious.

Doctor O'Brien, the health officer of the department of public health, is at present making searching inquiry at Cairns into the alleged outbreak.

Destruction of rats, Brisbane. Report for week ending March 18, 1904.

Rats examined at bacteriological institute.....	399
Plague-infected rats	4
Mice examined at the bacteriological institute.....	36
Infected mice	Nil.
Total number of rats destroyed during the week	1,441
Total number of mice destroyed during the week	1,844

B. BURNETT HAM, M. D.,
Commissioner of Public Health.

P. S.—An additional case of plague occurred at Cairns, and was reported on March 22. The patient, a black gin, died the same evening.

Report from Sydney—Plague—Examination of rodents for plague infection.

SYDNEY, March 14, 1904.

Summary.—The last preceding case of plague was notified in this State on April 7, 1903. The last preceding plague rodent was identified on August 15, 1903.

Rodents averaging about 2,000 a week have been regularly destroyed since June 30, 1903. Rodents averaging about 600 a week have been examined in the laboratories.

Bulletin No. 1, for the week ending March 5, 1904.

	Rats.	Mice.
Rodents destroyed.....	1,691	689
Rodents examined in laboratories.....	477	314
Rodents, plague-infected.....	0	a 1

a A mouse trapped alive presented suspicious signs, and plague was identified March 7.

Bulletin No. 8, for week ending March 12, 1904.

	Rats.	Mice.
Rodents destroyed.....	1,737	962
Rodents examined in laboratories.....	539	371
Rodents, plague-infected.....	3	0

On March 9 a plague rat was found in premises on Darling Harbor. On March 11 two more were brought in from same locality.

Cases in man.

Male, age 15, attacked March 9, notified March 10, midday. Removed to hospital 3 p. m. Employed at store from which two plague rats were taken on March 11.

G. H. KING, *Secretary.*

SYDNEY, March 21, 1904.

Bulletin No. 3, for week ending March 19, 1904.

	Rats.	Mice
Rodents destroyed.....	1,890	1,407
Rodents examined in laboratories.....	680	822
Rodents plague infected.....	0	0

No case or suspected case of plague in man has occurred since March 10. Cases to date, 1.

G. H. KING, *Secretary.*

BRITISH HONDURAS.

Reports from Belize, fruit port.

Acting Assistant Surgeon Carson reports as follows: Four days ended April 14, 1904. Present officially estimated population, 8,500; number of deaths, 3; prevailing disease, mild type of malarial fever; general sanitary condition of this port and the surrounding country, good.

Bill of health was issued to the following-named vessel:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage.
Apr. 14	Spero.....	16	0	0	0

Week ended April 21, 1904. Number of deaths, 2; prevailing disease, mild type of malarial fever; general sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage.
Apr. 15 21	Anselm..... Belize	42 17	1 2	26 2	5 4

CHINA.

Report from Hongkong—Plague in Formosa—Rabies and leprosy in Tonkin—Infected rats—Smallpox.

Passed Assistant Surgeon White reports, March 28, as follows:

During the week ended March 26, it was officially reported from Auping, Formosa, that plague was prevalent in Tainan district but not in Auping, and that medical inspection of passengers leaving Auping for Japan had been enforced only from March 10.

This colony has ordered the exclusion of dogs from Hanai, Tonkin, for six months, on account of rabies there. In the legislative council, March 21, it was moved, "That in view of the letter which was recently addressed by Mr. Jonathan Hutchinson, F. R. S., to the Times newspaper, on the subject of leprosy being caused by tainted fish, it is desirable that the Hongkong government shall cause some inquiry to be made into the question by its medical officers." The motion was lost by a vote of 8 to 7.

In the week ended March 14, 366 rats were captured, 8 being infected with plague, and during the following week 521 were captured, 7 being infected. During the week ended March 26, there were 3 cases of variola, of which 2 were fatal. There were no cases of plague.

Emigrants recommended for rejection.

Number of emigrants per steamship *Gaelic* recommended, March 19, for rejection: For Honolulu, 4; for San Francisco, 14.

COLOMBIA.

Report from Bocas del Toro, fruit port.

Acting Assistant Surgeon Osterhout reports as follows, week ended April 21, 1904: No deaths. Prevailing diseases, malarial fever and an epidemic of whooping cough. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected
Apr. 17	Baker	New Orleans	42	0	0	0
18	Admiral Dewey	Boston, via Limon, Costa Rica.	57	0	0	0
20	Hispania	Mobile	22	2	0	0
21	Fort Morgan	do	25	0	0	0

COSTA RICA.

Reports from Limon, fruit port—Yellow fever at Alajuela.

Acting Assistant Surgeon Goodman reports as follows: Week ended April 16, 1904. Estimated population, 4,000; number of deaths, 10; prevailing diseases, tuberculosis and malarial fever.

From inspections of the inmates and records of the three hospitals, and from frequent inquiries made of the practicing physicians here, I am unable to find any evidence of quarantinable or infectious diseases in this port or immediate vicinity.

The last case of yellow fever on record was discharged, cured, from the hospital of the United Fruit Company March 25, 1904.

Yellow fever exists at Alajuela, an interior village, a few miles west of San José, Costa Rica.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 9	Venus	34	0	0	0
10	Preston	31	0	0	0
11	Siberia	55	20	9	0
12	Admiral Farragut	54	13	0	0
14	Mount Vernon	21	0	0	0
15	Atlanten	22	0	0	0
16	Alps	25	0	0	0

Week ended April 24, 1904.

Prevailing diseases malarial fever and intestinal affections of children. Last week I reported the presence of yellow fever in Alajuela, Costa Rica. This village is the western terminus of the Costa Rican Railroad, this port being the eastern terminus, 120 miles apart. There is very little traffic between the two places. Alajuela is over 3,000 feet above sea level, and four years ago had a similar outbreak of yellow fever. To date, 11 cases have been reported with 6 deaths. I have not been able to find any case of yellow fever in Limon.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 18	Altai.....	46	10	15	.....
18	Hero.....	20			
19	Admiral Dewey	57			
19	Bradford	43			
22	Miami	45	2		
23	Venus	32			

CUBA.

Report from Cienfuegos.

Acting Assistant Surgeon McMahon reports, April 26, as follows:

Week ended April 23, 1904: Vessels inspected and bills of health issued, 5; crews inspected, 78. No passengers. All of the vessels were in good sanitary condition and no sickness on any of them.

Mortuary report, April 10 to 20, 1904: Tuberculosis, 2; pneumonia, 1; entero-colitis, 4; meningitis, 1; tetanus, infantile, 1; other causes, 18; total, 27.

Report from Habana.

Acting Assistant Surgeon Echemendia reports, April 28, as follows:
Week ended April 23, 1904:

Vessels inspected and bills of health issued	32
Crew of outgoing vessels inspected	1,456
Passengers of outgoing vessels inspected	517
Pieces of freight inspected	350

Mortuary report of Habana for the week ended April 23, 1904.

Disease.	Number of deaths.
Pneumonia.....	7
Enteritis.....	2
Tuberculosis.....	24
Gangrene	1
Cancer.....	3
Enteric fever.....	4
Meningitis	7
Bronchitis.....	6
Scarlet fever.....	1
Pernicious malarial fever.....	2
Eclampsia.....	1
Arterio-sclerosis.....	1

Total deaths from all causes, 123.

Report from Matanzas—Enteric fever—Return of British steamship City of Gloucester, to complete cargo—Quarantine of vessels from Tampico.

Acting Assistant Surgeon Nuñez reports, April 25, as follows:

During the week ended April 23, 1904, nine bills of health were issued to vessels bound for United States ports.

The British steamship *City of Gloucester*, which was disinfected on April 8, on account of coming from Para, Brazil, returned to this

port from Cardenas to complete her cargo before proceeding for the United States. As the result of the disinfection here 10 dead rats were found in the holds on opening the hatches, which prove the efficiency of the process. Up to April 18, when this vessel cleared for New York direct, no sickness had occurred on board. The Norwegian steamship *Hermod*, the British steamship *Hathor*, and the American steamship *Matanzas*, originally from Tampico, Mexico, were held in quarantine while in port as a precautionary measure against yellow fever. They have all left during the week for different ports in the United States in good sanitary condition.

It appears that enteric fever has taken the place of diphtheria in this city, judging from the reports of infectious diseases lately given out. During the week 2 new cases of that disease have been reported and are now undergoing treatment, and, at the same time, 1 death from an infectious fever, in all probability also enteric, has been added to the mortuary report hereby inclosed.

Mortuary statistics of the city of Matanzas, April 10-20, 1904.

Causes of death.	Number of deaths.	Bertillon number.
Athrepsia.....	1	105
Meningitis.....	2	61
Senility.....	2	154
Enteritis, tuberculous.....	1	29
Tuberculosis.....	6	27
Fever, infectious.....	1	55
Pneumonia.....	1	93
Tetanus.....	2	72
Encephalitis.....	1	60
Lesion of the heart, organic, unclassified.....	1	79
Enteritis.....	1	105
Aortitis.....	1	81
Hemorrhage, cerebral.....	1	64
Myelitis.....	1	63
Total.....	22	

Estimated population, 48,000; annual rate of mortality per 1,000, 14.43.

Report from Santiago.

Acting Assistant Surgeon Wilson reports, April 19, as follows:

During the week ended April 23, 1904, bills of health were issued to 4 vessels bound for the United States.

No quarantinable disease has been reported.

Mortuary report for the week ended April 23, 1904.

Causes of death.	Number of deaths.	Bertillon number.
Pernicious fever.....	6	4
Tubercle of lungs.....	1	27
Cancer of uterus.....	1	42
Meningitis, cerebral.....	1	61
Pleuro-pneumonia.....	1	93
Gastro-enteritis, over 2 years.....	1	106
Uraemia.....	1	120
Senility.....	1	154
Ill defined or unspecified.....	2	179
Total.....	15	

Annual rate of mortality for the week, 17.14 per 1,000. Estimated population, 45,500.

DANISH WEST INDIES.

Quarantine against Demerara replaced by quarantine inspection.

The following is received from Minister Swenson, at Copenhagen, under date of April 18:

Quarantine by the Danish West Indies against Demerara, reported in my dispatch of May 29, 1903, was raised on March 9. Ships arriving from that place must, however, submit to a quarantine inspection.

Quarantine against the Grenadines raised.

The following is received from minister at Copenhagen under date of April 27:

The quarantine against the Grenadines, which formed the subject of my dispatch of May 6, 1903, was raised on February 25, 1904.

ECUADOR.

Report from Guayaquil—Inspection of vessels—Yellow fever—Mortality statistics.

Acting Assistant Surgeon Gruver reports, April 4 and 9, as follows:

During the week ended April 2, 1904, a total of 67 deaths were recorded as follows: Yellow fever 7, tuberculosis 7, pernicious fever 11, infectious fever 1, fevers without classification 12, from all other diseases 29.

The steamship *Manavi*, a coasting steamer, cleared from this port on April 2, for Panama, via other ports. There were on board 6 officers, 39 crew, 27 cabin, and 8 steerage passengers; all told 80.

During the month ended March 31, 1904, the total mortality in this city was 312, of which 39 deaths were from yellow fever and 28 from tuberculosis. For the same period last year there were 358 deaths recorded, of which 47 were from yellow fever and 35 from tuberculosis.

Present officially estimated population, 60,000.

Extracts from cable messages received by the governor of this province from the Ecuadorean diplomatic representatives in Chile and Peru relative to bubonic plague.

Lima—April 4, last two days, 4 cases, 2 deaths; April 4, yesterday, one case in city, other on farm near; rumor from Santiago says 3 cases in Iquique; April 4, actually existing in hospital, 33; of these, 9 serious; April 4, 7 mild and 16 convalescent; April 6, last two days, 4 cases.

Santiago de Chile—April 7, suspicious epidemic Antofogasta, believed to be plague; April 7, yesterday, 2 cases, 1 suspicious, 2 dead; notice from Antofogasta, 40 cases of plague officially reported there. Confirmed also in Iquique.

Health and sanitary condition of Guayaquil and vicinity—Yellow fever epidemics.

The following is received from Acting Assistant Surgeon Gruver under date of April 4, 1904:

The certainty of the completion of the isthmian canal gives to Guayaquil a position, from a sanitary standpoint, not possessed a few

years ago. She becomes an important factor in all that concerns the sanitation of the canal zone and one which must be dealt with intelligently in order to obtain the desired results on the Isthmus. Her commercial importance, which brings her in frequent communication with the Isthmus, only 700 miles distant, is already great and with the opening of the canal will rank her of first importance among the cities on the Pacific side of South America, among which she now ranks third after Valparaiso and Callao.

Guayaquil has a harbor thoroughly protected from storms, where the deepest draft vessels can safely anchor. It is the gateway to a vast expanse of fertile territory, which produces cocoa, rubber, ivory nuts, coffee, sugar, hides, and Panama hats, which by an excellent system of rivers and natural canals is brought into easy communication. It exports 30 per cent of the world's supply of cocoa; is the terminus of the Guayaquil and Quito Railroad, an American corporation, which is now operated over 112 miles of territory to Guamoto, and when completed will open up 240 miles of rich and fertile upland territory, entirely cultivated and thickly populated by natives and foreigners who, with improved facilities of communication and transportation, will become large consumers of foreign manufactures and producers of food stuffs, wool, etc., and finally Guayaquil, under the most adverse conditions of repeated visitations of great epidemics and fires, has increased her population over 80 per cent within the past twenty years.

For this reason I have studied very carefully the health and sanitary conditions of this city and the surrounding territory, that this report might be complete and convey a true picture of the conditions which exist here. With this object in view I have studied the history of this section in so far as it influences the present condition; the commerce and commercial intercourse with the surrounding territory and neighboring Republics, with the consequent effects on the sanitary history of the Ecuadorian coast; the diseases which have prevailed and those which do prevail at present throughout this territory; together with an investigation of the river system and railroad and steamship lines here. In all, I have merely stated facts without attempting to draw deductions.

Much space has been given to the sanitary history of the river villages tributary to this city, the climate, humidity, rainfall, and prevailing winds of this section, because they all form integers in the consideration of Guayaquil's sanitary condition which can not be ignored. Finally I have, in mentioning the diseases, devoted a great part of this report to a study of the history of yellow fever in Ecuador, because in it is traced an exotic disease brought in by commercial intercourse, appearing for a time in epidemic form and then becoming endemic.

Throughout I have received valuable information and assistance from the various government officials here, and to Dr. Cesar Borja, president of the municipality, Señor Antonio Gil, chief of police, who is also the official registrar, and Col. Francisco Fernandez Madrid, captain of the port, I am especially indebted for assistance and information, without which this report would be incomplete.

Guayaquil is situated on a peninsula, $82^{\circ} 11' 33''$ west longitude (Paris) and $2^{\circ} 11' 25''$ south latitude, in an extensive bottom of marshy formation, with the Guayas River on the east and the Estero Salado (Salt Creek) on the west. It is about 50 miles from the ocean.

A series of hills extends from east to west and limits the growth of the city on the north. On the east it is about 2 feet above the level of the sea, while on the west many parts are either on a level with the Estero Salado, or lower. In this way vast expanses of inundated and marshy swamps exist right at the edge, while a luxuriant and rank growth of mangroves almost hedges in the city on the south and west. The area of the city is about 3 miles from Las Peñas, the extreme northern part, to the southern extremity, and 2 miles from the Guayas River to Estero Salado, along the Calle Nueve de Octubre.

From its position, its altitude and latitude, we should expect a very warm, uncomfortable climate, but many things unite to make it otherwise.

The seasons.—There are two very definitely marked—the wet and the dry. What is spoken of as winter is really the hot season, and extends from the middle of December to May. It is more correctly the wet season, while summer is the cool and dry season, and extends from May to December. Doctor Wolf, in his history of Ecuador, gives the mean yearly temperature at 27° C. This, however, varies considerably during the wet (winter) and dry (summer) seasons.

Only once in the history of Guayaquil has the thermometer registered less than 19° C. That was in October, 1892, when grippe was epidemic here, when at 4 o'clock in the morning the thermometer registered 18° C. In the wet (winter) season as high as 35° C. is registered, but very rarely. It frequently, however, reaches 33° C. between 3 and 4 o'clock in the afternoon. This is the hottest hour of the twenty-four.

In June, July, and August, the coolest months (midsummer), the mean temperature is 25.5° C., while in December, January, and February (midwinter) it is 28° C.

The river water registers in summer (dry season) 27° C., in winter (wet season) 28° C.

The temperature of Guayaquil is influenced by the sea breezes and by what are known here as the Chanduy winds. These winds come from the direction of a little village of that name, and are very cool. The prevailing winds for the seven months of the dry (summer) season are from southwest to northeast. They commence about 3 p. m. and continue to midnight. From the middle of December to May the winds are from the north. During the wet (winter) season it rains almost continuously. It is then that yellow fever increases, as well as malaria. This does not bear out the observation made in Vera Cruz by working party No. 1 of the Public Health and Marine-Hospital Service, that when malaria increases yellow fever decreases. During this season the streets in four-fifths of the city and all the surrounding territory are veritable slush ponds.

The yards become lakes and water is everywhere. Mosquitoes become a veritable pest. When this season closes and the rains stop, these pools, subjected to the direct rays of a hot tropical sun, become stagnant, and are converted into excellent breeding places for mosquitoes. They were so when I first arrived, about the end of the wet season this year. It is a fact very generally commented on here that this has been the shortest wet season (winter) known, the rains having ceased about the middle of February. During the dry or summer season no rain falls, and the city becomes dry again within six weeks or two months. From January to April the sky is generally cloudy;

May and June are much clearer, but a thick cloud rests on the horizon at sunrise and sunset. From July to December the days and nights are perfectly clear.

It has been observed here that the years of greatest sickness always follow the severest wet (winter) seasons.

Barometric pressure is almost invariable. The daily amplitude difference between maximum and minimum is never over four millimeters, and rarely that. Storms and hurricanes are unknown, also cyclones.

Guayaquil of to-day is not the same as Guayaquil of ten years ago. Successive great fires have visited the city and changed its appearance. Contrasting the unburned district with the new or rebuilt section, it can not be denied that the visitation of fire has done much to improve this city in every way.

Thus the city presents the appearance of two distinct towns in one. The new or rebuilt section with broad, raised streets, for the most part well paved and partially drained; the houses large, well built, and with excellent accommodations for light and ventilation, and supplied with water-closets and baths.

The old part, with crooked, narrow, and ill-paved streets, is, for the greater part, without sewers. The houses are poorly ventilated and overcrowded, and offer every facility for the propagation of disease. In these there is almost a total absence of modern water-closets.

Again there is another part of Guayaquil which is altogether unhealthful, insanitary, and filthy. This third section is on the outskirts of the city. The streets are low, without an attempt at sewerage, and with many stagnant pools. The houses are poorly built, insanitary, and in great part overcrowded and dirty. The roofs are covered with cadi, a kind of palm which becomes the abiding place of various insects. The lots are all below the street level.

In this section most of the houses are built on piles about 6 feet from the ground. Under these, pigs, horses, cows, and fowls are kept. The principle of construction of the houses is the same throughout the city. The framework is covered on the outside with split bamboo instead of boards, used very much as laths are used in the United States. Over this is spread a coat of quincha, a kind of mortar made of stable manure, straw, and clay. In the better class of houses this is covered by a coating of lime, but in the greater number nothing is added. In a large majority of the houses of the unburned territory, and all in that section of which I have spoken as the outskirts of the city, even the quincha is left off and the bamboo strips alone are used.

The houses are built with patios in the center and piazzas on the street. These piazzas are inclosed, but supplied with large double latticed doors. Thus no house is protected from the ingress of mosquitoes. In the better class of houses modern water-closets are used, connected with a sewerage system, which I shall describe under the head of sewers. By far the greater number of houses have no such accommodations. The excreta is collected in barrels. These are conveyed by flat cars, over the "carros urbanos" (street railway) to the Malecon and loaded on canoes, by which they are conveyed down the Guayas River, into which they are dumped when the tide is running out. This is a private enterprise, working under municipal regulations. I do not believe that even this is done in the outskirts of

the city, and from appearances would judge that the yards, streets, and neighboring unsettled territory serve as a dumping ground.

The population is variously estimated at from 60,000 to 70,000. The former I believe to be a safe estimate. The last census taken was in 1890, when it was about 55,000. Of these there are about 100 French, 100 Germans, 75 English, and 50 Americans. Italians form the greater part of the foreign population, followed very closely by Spaniards, Colombians, Chileans, and Peruvians, in the order named. There are very few negroes here and only 73 Chinese.

The people are hard working, sober, industrious, and cleanly.

Sewers.—It can almost be said that Guayaquil has no sewerage system. It is true that many years ago a kind of sewer was laid. This consisted principally of subsoil drains, inclosed with rock and stone. In some instances the four sides were thus incased, but in the majority the soil itself served as the floor, and the sides and top were inclosed. To-day no one seems to know just exactly where these are, nor through what streets they run. Where they are known to exist, the houses supplied with modern water-closets connect, except on the Malecon (the street fronting the river), where the houses connect directly with the river by means of iron pipes. The present sewerage system is a menace to the health of the city. During the wet season, when there is a heavy rainfall, the sewers are continually flushed by the waste water and kept clean, but during the dry season, when there is no rain, and when consequently there is insufficient water to flush them, the odors which arise often through the water-closets are very foul and obnoxious.

During this season the traps are cemented, in order to prevent these odors from pervading the city. However, as all of the drains empty directly into the river in front of the city onto a mud bank, this precaution is not attended with very satisfactory results.

Water supply.—Until 1891 the water used for every purpose was obtained from the river thus polluted. The deaths among children and the number of enteric disorders among all classes prior to that time were, I understand, appalling. However, Guayaquil has now an excellent water supply. This was installed in 1891.

The water comes from a mountain fall at the extreme south of the mountains of Chimbo, about 92 kilometers east of Guayaquil, and 300 meters above the level of the sea. It is far removed from human habitation and free from any possible infection.

It is conducted from Agua Clara, its source, to Guayaquil in large iron pipes, and gives a daily average supply of 79 liters per capita. By a chemical analysis at the municipal laboratory of Paris, it is classed as "first quality." All the houses are not supplied directly with this water. Those which are not obtain the water from public hydrants and keep it in tanks or barrels.

I copy a report of deaths among children under 5 years of age for one year preceding the year in which it was installed and one year after the present water was used:

	1890.	1891.	1892.
Births	2,683	2,749	2,540
Deaths.....	1,443	1,114	961

ICE FACTORY.

There is a well-equipped ice factory here, which supplies ice at 5 cents (2½ gold) per pound to the public. It is situated at the foot of Las Peñas, and all waste water is drained into the river. The water used in the manufacture of the ice is the drinking water from Agua Clara, by which the city is served. The ice is pure.

The Malecon.—This is the street on the water front. It is paved from Las Peñas to Olmedo avenue. This is by far the handsomest street in Guayaquil, but the location of a mud bank along its entire length and the deposit of fecal and waste matter by pipes which lead from the houses and streets to this bank make it a rather disagreeable locality when tide is out. A low stonewall separates it from the river. Extending about 200 feet from shore is this bank of black mud or silt. It was proposed once to move the wall out and fill up the bank to the river's edge, but I understand that the residents of the Malecon, fearing the erection of houses on the new ground, which would obstruct their view of the river, objected so strenuously that the plan was abandoned. This would undoubtedly contribute very much to the health of the city, as the drains now existing would empty directly into the river.

The market is also situated on the Malecon. It is an old dirty structure, insanitary and unclean, which has strangely escaped the various big fires that have swept around it.

The fruit, vegetable, and fish markets are also on this street, and the mud bank receives contributions from each.

Santa Ana, El Carmen, and Manicomio are hills at the northern extremity of Guayaquil. It was on Santa Ana that the city was first built, but this was in later years deserted and the city built in the swamp land. These hills, really the most suitable part of this section for residences and which offer excellent advantages for drainage, are given up to a few huts of the very poor and to the location of the hospitals.

Hospitals.—The Military Hospital is a large, well equipped, well ventilated building, excellently located on the top of Cerro de Santa Ana. The waste material and waters from this building are conveyed by pipes to the river, where they empty.

Neither mosquito bars nor screens are used either in this or the general (civil) hospital, which is situated on the south side of Santa Ana, near Cerro del Carmen. This hospital is new and is not yet entirely completed. It also is well equipped and supplied with excellent ventilation, light and air space. The wards are kept very clean and neat. The sewage from this building is conducted by a square surface drain along the foot of the hill to the Malecon, where it is deposited on the mud bank. I am informed that neither yellow fever nor smallpox is treated in these buildings, while a special tuberculosis hospital is provided at the foot of the Manicomio for tuberculous patients. A new-made dirt road runs around the Manicomio, past this hospital, to the building in which yellow-fever patients are treated.

The yellow-fever hospital is a new venture. It has been put in operation since my arrival. While not perfect it is a very good beginning. The windows and doors are all screened and every precaution is taken to prevent the ingress of mosquitoes. There are booths supplied for patients and also a suspect ward at the extreme end of the building.

As soon as a patient is reported suspected he is removed to this building, and when a positive diagnosis is made, if it is yellow fever, he is placed in the yellow-fever section and his quarters are fumigated. As I have said, the arrangement is not perfect, but the local board of health is working under the very great disadvantage of being almost entirely without funds, and this attempt is at least a step in the right direction.

Fronting these last two hospitals is a wide expanse of lowland which is often overflowed by the Estero Salado. I am told that it is almost entirely covered by water during the wet (winter) season. All the sewage from the tuberculosis hospital empties into this bottom and is carried to the Estero Salado, which is used as a bathing place.

Between these two hospitals is located the new cemetery, where those who die from contagious or infectious diseases are buried. A municipal law prohibits exhumation of a corpse in less than two years from date of burial, without reference to the cause of death.

The slaughterhouse.—This is located about 3 miles south of the city, on the river bank. It is suitably located and is kept very clean. A veterinarian examines all cattle before they are killed, as well as after the meat is dressed. The beef supplied is of a superior quality.

River system.—The river Guayas is the Mississippi of Ecuador. It begins as a small mountain stream in the Andes, and takes the name of Guayas just below the city of Babahoyo, where it connects with a river of that name. Below Guayaquil its volume is increased by the Taura, Naranjal, Balao, Tenguel, Rompido, and Santa Rosa rivers. A few miles below the junction with the Santa Rosa, and about 50 miles from this city, it empties into the Gulf of Guayaquil.

Opposite this city the river is about 2 miles wide. At high tide deep-draft vessels could come alongside a wharf, were one here. The wharf in use is an old wooden one, built many years ago, and can not supply berths for large vessels. These, therefore, anchor in mid-stream, where they are comparatively free from mosquitoes. The river steamers and smaller sailing craft moor alongside this wharf and small piers at different parts of the river front. The current is distinctive. It is very rapid and very strong, and runs sometimes 6 or 7 knots an hour.

At the mouth of this river where it empties into the Gulf of Guayaquil, is the Island of Puna. This island is admirably located for a quarantine station, as it commands the entrance to the entire infectible territory of Ecuador.

The Babahoyo, navigable for about 80 miles, drains a large territory of rich and fertile land in the heart of the cocoa region. Above the city of Babahoyo, the Guayas is called the Caracol, and runs through the richest section of the Republic. It receives the waters of numerous mountain streams. From this point it is navigable in winter for about 105 miles.

The Daule River, which unites with the Guayas a few miles north of Guayaquil, rises in the northern part of the Province of Manabi, drains that entire Province, and brings the towns along its course in touch with Guayaquil. It is navigable during the winter season to Balzar.

Neighboring provinces, villages, and coast towns affected by yellow fever.—In a description of these places I shall confine myself strictly to those which show by their past history that yellow fever can be introduced and spreads.

Posorja, El Morro, Chanduy, and Santa Elena are in the province of Guayas, and have each a population of about 500. These are small villages situated on the Gulf of Guayaquil and on the coast. They are called health resorts. Residents of this city go there in order to escape the sickly (winter) season. The climate is said to be similar to that of northern Peru. These villages produce nothing, and the inhabitants earn their living by fishing and cutting wood. They are poor in agriculture and have no river systems. In February and March torrential rains occur. The water for drinking purposes is caught in very large cisterns. In these places also are very old wells which are never cleaned. These towns are connected with Guayaquil by river steamers and small craft.

Babahoyo has a population of about 3,000. It is the capital of Los Ríos province, and is about 36 miles, six hours by river steamer, northeast of Guayaquil. This is the first village on the old route from Quito, and is the center of a vast commerce which finds its way to Guayaquil. Babahoyo is built on low, swampy land, level with the sea. During the wet (winter) season it is entirely overflowed. Travel in the city is then done in canoes, which go up alongside the houses. Babahoyo is important because it is a kind of depot for the interior products, whence they are shipped to Guayaquil. From a sanitary standpoint it is important because of the continual movement of the people from the interior to this town, which has several times been visited by serious epidemics of yellow fever, of which I shall treat later. It was attempted to move the town, several years ago, to the opposite bank, which is much higher and never overflowed.

A bridge connects the old and new town, but in 1901 this new part was destroyed by fire. This is being rebuilt, however, and eventually the old site will be deserted. Malaria prevails here throughout the year. Humidity and heat are excessive. The wind is nearly always from the north. The city is without sanitation, and the houses are overcrowded. Thus with its constant supply of new material of natives from the interior it is an important factor in the spread of yellow fever once the disease has gained entrance.

Yellow fever passes over the villages and farms between Guayaquil and Babahoyo, although they are inhabited by natives who contract the fever if they come to this city during its prevalence. Machala and Santa Rosa are small towns in the province of El Oro. They have a population each of about 2,500 and are connected with Guayaquil by a line of river steamers. These places are without sanitation and have about the same situation as Guayaquil.

Manta is a small town of about 1,000 inhabitants, situated on the seacoast in the Province of Manabi. It is dry and considered very healthy, but in common with the whole Province of Manabi has suffered repeatedly from yellow fever.

Railroad system.—The Guayaquil and Quito Railroad, which is to connect this city with the capital of the Republic, is at present completed only to Guamote, a distance of about 112 miles. Along the line of this road are Yaguachi, Milagro, and Naranjito, where yellow fever can be introduced. The road runs through a fertile country and intimately connects this city with the interior.

Steamship lines: The steamship system is divided into ocean and river steamers. The principal lines of the ocean steamers are the Pacific Steam Navigation Company and the Compañía Sud Americana

de Vapores. These ply weekly between Valparaiso and Panama, stopping at all the intermediate ports on the Chilean and Peruvian coast as far as Guayaquil, which is the last stop before reaching Panama. These steamers are well equipped and in good sanitary condition. They are often subjected to a harassing and oppressive quarantine, which the authorities deem necessary in order to keep out invasion of quarantinable diseases from ports both north and south. While preparing this report I have received notice that a rigid non-intercourse quarantine has been declared by the board of health of this city against all Peruvian ports. This is because of the report by the Ecuadorian minister in Lima that bubonic plague is present there and is increasing.

The necessity for a nonintercourse quarantine is explained by the lack of facilities to disinfect vessels here. A disinfecting plant (Clayton machine) is in course of erection, but as all parts have not arrived, the work is at a standstill.

Very little cargo is brought by the steamers from Peru to this port, while hay and flour are the principal imports from Chile. Freight, however, for Panama, or in transit across the Isthmus, is more important. From Chile ore is the principal export, while hides from Callao and cotton come from other Peruvian ports.

The Pacific Steam Navigation Company has also a line of coasting steamers which ply between Panama, Guayaquil, and intermediate ports. These leave here every other Saturday and take ten days to make the trip to Panama. They take no passengers or cargo for the terminal ports, except as at present, when this city declares a non-intercourse quarantine with ports south. Then the steamers which touch at those ports go direct to Panama without touching here, and the coasting steamers carry all passengers and also cargo.

There are several lines of river steamers which ply between the various river towns of the Guayas River system and Guayaquil.

Several tramp steamship lines also operate between here and foreign countries. Among these are the Lamport and Holt Company and the Gulf Line. Both of these companies are English. The Kosmos is a German line and plies between Hamburg and San Francisco. This line runs three steamers every two months. Merchants Line, an American steamship company, flying the British flag, plies between New York and Guayaquil. All of these steamers stop at ports along the Chilean, Peruvian, and Ecuadorian coasts, and bring passengers and cargo. Sailing vessels also come to this port, and both bring and carry cargo. The following tables will show the movement of deep-sea vessels in this port from January, 1903, to the present.

TABLE A.—*Ocean steamers, 1903.*

	Arrived.		Sailed.	
	Steamers.	Passen- gers.	Steamers.	Passen- gers.
Panama.....	56	{ 424 597 }	65	{ 377 322 }
Intermediate ports.....	42	683	40	504
Valparaiso and intermediate ports.....	9	66	11	11
San Francisco.....	6	.....	6	35
New York.....	1	27	.....	.....
Los Angeles, Cal.....	22	105	16	88
All other ports.....				
Total.....	136	1,902	138	1,537

TABLE B.—*Ocean steamers, January and February, 1904.*

	Arrived.		Sailed.	
	Steamers.	Passen- gers.	Steamers.	Passen- gers.
Panama.....	9	85	8	93
Intermediate ports.....	4	278	4	215
Valparaiso and intermediate ports.....	8	213	9	220
San Francisco, Cal.....	3	12	5	9
New York.....	2	5	1	.....
All other ports.....	5	6	5	.....
Total.....	31	599	32	537

TABLE C.—*Sailing vessels, 1903-4.*

	Arrived.	Sailed.
Panama.....	3	2
San Francisco, Cal.....	1	.....
New York, 1904.....	1	.....
All other ports.....	19	17
Total.....	24	19

Imports, 1903, 36,000 tons; exports, 1903, 35,000 tons.

A study of the exports for the whole Republic during the past thirty years shows an increase of 10,000 tons for each period of ten years.

Board of health.—This is composed of 7 members, of which the chief of police and captain of the port are ex officio members. The former is chairman. It is a political body, and has full jurisdiction over municipal sanitation and port quarantine.

The regulations, a copy of which is inclosed, are models of precision, but are not enforced. Much of this is due to the impecunious condition of the board. Most of the members show a desire to accomplish some sanitary reforms, and are willing to receive suggestions and act on them as far as the funds at their command will allow.

Vital statistics.—From a comparative standpoint these are almost worthless. No reliable data can be obtained for any considerable period. The big fire is generally given as the excuse. It seems to be true that many of the records which did exist were destroyed in the great fires of 1896 and 1902; but those that have been gathered since are often useless because of vagueness. Thus we see reported daily fever, colic, violent, as causes of death, while many reports make no mention of any cause.

It is an absolute impossibility to obtain the number of cases which occur of any given disease. Only deaths are reported, though a law exists making it compulsory for the attending physician to report every case of quarantinable disease. The present chief of police has introduced many improvements and has expressed a determination to have better records kept. This is a very important office, much more so than that of chief of police in American cities. The value of vital statistic records here depends entirely on the incumbent of that office and the care he takes in their collection and preparation.

Quarantine.—This is a service of detention. No facilities exist for fumigating a vessel or cargo. Vessels arriving from any foreign port stop at Puna and are inspected by a physician before they can proceed

up the river. The inspection is of a very superficial character and with such as I saw practiced any disease could slip by. If a vessel comes from a healthy port it is allowed to proceed up the river, where it is again examined. If, however, from a port where a quarantinable disease exists it is detained a few days and then allowed to come to the city. No attempt is made at fumigation. Recently all steamers from Callao were detained seventy-two hours and then allowed to proceed to the city. When the authorities here become alarmed at the condition of any foreign port they establish a nonintercourse quarantine against that place. This is the case at present against all Peruvian ports, because of the reported existence of bubonic plague in Lima. The board of health hopes at an early date to have in operation a fumigating plant, Clayton apparatus, with which they will fumigate all vessels and cargoes coming from ports where quarantinable diseases exist. The service will then be one of fumigation instead of detention, and I am informed no notice will be taken of how recently a vessel may have left an infected port. The fumigation will be by sulphur dioxide under pressure.

Disposal of garbage.—Generally speaking this is done by burning, under direction of the board of health. All garbage is collected in flat cars and wagons and carried to the bank of the Estero Salado, where coal oil is poured over it and ignited. During the wet (winter) season this is rather a difficult undertaking and imperfectly done. The board of health is considering the purchase of a crematory.

Health conditions.—What is the health of Guayaquil? This is an important question around which necessarily gathers much interest. The reports which have gone out concerning this section have, I am convinced, been very much exaggerated and give to this city and country a much blacker record than facts will substantiate.

Each critic has taken a few phases or items which have come to his attention as a fair example of the whole condition, and without proper investigation proceeded to disseminate abroad ideas which are as false, when applied to the whole city and section, as they are prejudicial to commercial and health interests. Thus no mention is made of the fact that the annual death rate of this city, whose population is estimated at 60,000, represents very nearly the death rate of the entire surrounding territory, with a population of nearly twice that number. People from the neighboring villages and farms in the provinces of Guayas, El Oro, and Los Ríos are sent to Guayaquil for treatment either in hospitals or with friends here, and do much to increase the mortality record.

Another very important fact which goes unmentioned is the division, I might call it, of mortality in the city proper. Within the newer or rebuilt section and in a contiguous part of the old section the health of the residents is exceptionally good and compares very favorably with that of a number of our own Southern cities; but in the outskirts of the city and in those parts of the old town bordering it, where the streets are low, the sanitary conditions foul, and the houses built without reference to hygienic principles, the mortality is very great and supplies a majority of the deaths recorded.

Remove those diseases which recent investigations prove are preventable, such as malaria, yellow fever, and some enteric diseases, and the health record would be very good. Even under the existing conditions the mortality is not, I believe, as great as, certainly no greater,

than in Progreso and Merida, Yucatan, Bocas del Toro, in the Republic of Panama, and Limon, Costa Rica. There is this advantage, too, in favor of Guayaquil—the authorities here recognize the conditions and show every desire to improve them, whereas those in the places I have named, while recognizing the condition, view it with apparent indifference. In discussing the health of a section the latitude, elevation, distance from the sea, and prevailing winds form important items. Continued high temperature and humidity change the clinical picture of diseases so that those which are very mild here are of serious consideration in other countries. For instance, scarlet fever and diphtheria are both classed as mild diseases in the Tropics. It must also be borne in mind that "the tropical zone is one vast incubator, in which the conditions of moisture and heat are perfect for the riotous growth of an enormous bacterial flora, the classification and identification of which has just begun."

Mosquitoes.—The *stegomyia fasciata* and *anopheles* are distributed throughout this section in varying numbers. Their distribution corresponds directly to the health of the city. Within the improved or new parts very few are found, although I have taken every opportunity to observe them. In the outskirts of the city they are much more numerous. The mortality among children is very great. I subjoin a table showing deaths from all causes in children under 5 years of age for the year 1903.

TABLE D.—Deaths from all causes in children under 5 years of age, 1903.

TABLE D.—*Deaths from all causes in children under 5 years of age, 1903—Continued.*

Diseases.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Grippe.....			9	4		1			1		2		17
Gastritis.....								1	1		1	3	6
Gastro-enteritis.....	1	1	3	3			1	3	2	4	4	1	23
Hepatitis.....		1	2								1		4
Hereditary syphilis.....										1			1
Infection, intestinal.....			2	1		1		1					5
Bright's disease.....						1							1
Measles.....										1			1
Meningitis.....	6	1	2	3	3	1		5	4	1	2	2	30
Marasmus.....				1									1
Nephritis.....											1		1
Pneumonia.....	3	6	2		2	3	1	1	3	5	2	5	35
Paludism.....	1					3	1	1					6
Rachitis.....	2	1	2		2		1			2			10
Scurvy		1								1			2
Stomach obstruction.....			1					1			1	2	5
Serofulsa.....	1							1					2
Tuberculosis.....		1	1	5	2	7	8			1	1	2	28
Tetanus.....	13	14	8	8	4	4	2	5	2	6	7	7	80
Traumatism.....												1	1
Ulcers.....							4	1			1		1
Variola.....													5
Worms.....			3					2	1		1	4	8
Unnamed.....	2			4		1					1		11
Total	133	164	160	141	108	106	113	88	78	78	84	91	1,344

The diseases which prevail here are malarial affections, yellow fever, tuberculosis, and enteric disorders in the order named.

Malaria.—Under this head I include the diseases reported as paludic, paludic cachexia, pernicious fever, and paludism, and from conversation with several physicians I believe that most of those reported "fevers" may also be included. No one can live here a month without recognizing the cause of these. The numerous breeding places offered mosquitoes by the abundance of water around the city furnish an explanation, intimately associated with which is the indifference of the people of the poorer classes in the outskirts of the city, which furnish by far the greater percentage of the deaths, to taking any precautions against these insects.

Pernicious fever, as the name implies, is by far the gravest type of this disease. It is attended by continued hyperpyrexia, anorexia and nausea. Cephalgia is often present. The pulse is very quick and feeble. This disease is rapid in its course. In the very young it is frequently attended with convulsions. Quinine hypodermatically is the sine qua non. The attack terminates in twenty-four to forty-eight hours.

Tuberculosis: This is very common and here tends to chronicity. The precautions taken to eradicate it or prevent its spread are very inadequate. The ease with which perspiration is produced, the rapid evaporation, and the opportunities for the bacilli to spread because of the total absence of sanitary regulations, are causative factors.

Enteric diseases: In this list I include those reported as intestinal colic, dysentery, enteritis, intestinal fever, gastric fever, and gastro-enterocolitis. The insanitary condition of the places where these prevail, the possible infection of the water kept in barrels or tanks, and the general uncleanly condition of the outskirts of the city explain their prevalence.

Smallpox: This is now of very rare occurrence here. Time was when it swept this section, but in no country that I have visited have I seen such thorough education of the masses to the efficacy of vaccination. Even among the most ignorant classes this preventive is recognized, and children are brought to the municipality to be vaccinated.

Yellow fever: I mention this disease last, although from an international sanitary standpoint it is of prime importance.

In preparing this section of the report I am indebted to Dr. Cesar Borja, president of the municipality, who has furnished me with records and notes of very great interest.

It is remarkable with what unanimity the people and records agree in giving to Panama the blame for having introduced this disease here. Although the first authentic record of yellow fever is in 1740, Padre Juan de Velasco refers to a general pest which "cruelly punished the towns of the Guayas" in 1589 and notes that in consequence of this disease the strong race of the Huancavilcas, whom Pizarro found here when he founded the city of Santiago de Guayaquil in 1530-37, was almost entirely extinguished. He does not say what was the character of this disease. It may have been yellow fever. Commercial intercourse was already at that time established between Guayaquil and Panama, as well as indirectly with the West Indian Islands, and it is possible that yellow fever, which eighty years before had spread over those islands, was introduced by the Spaniards. That it was not smallpox is certain, because he refers to that later on and speaks of several epidemics which occurred in Guayaquil and the neighboring territory.

The first historic epidemic of yellow fever in this town, however, occurred in 1740. Of that epidemic we have the account of La Condamine and others. Don Jorje Juan and Don Antonio de Velo mention it in the following paragraph: "Vomito Prieto (black vomit) was also experienced in Guayaquil for the first time in 1740, when the navy arrived, having left Panama on account of the war and to secure the treasure of the interior provinces. Many people of the navy died, among the foreigners, and some natives, although very few. The occasion and circumstances of this accident force the belief that it was introduced by the same navy having been infected in Panama." From that date it is reasonable to suppose that yellow fever has existed here, where the conditions for its growth were so admirable, more or less ever since, although the records at my command show only repeated epidemics at varying periods.

That very few natives were affected with this epidemic is significant. If the disease were not already endemic their immunity is inexplicable. It would rather indicate that the pest referred to as having been here in 1589 was yellow fever.

In 1842 occurred the first great epidemic, of which many records remain. There is nothing left to show that yellow fever occurred or remained between 1742 and 1842, a period of one hundred years.

Even the memory of the first invasion seems to have disappeared. In this second invasion natives and foreigners were attacked alike. The press of that time and many official documents now extant furnish abundant data. Doctor Mascote, who died at a very advanced age a few years ago, records that the vessel *Reina Victoria* arrived here August 31, 1840, from Panama, with a case of yellow fever on board.

This disease did not spread at once. During September a few cases occurred in the extreme southern part of the city and remained undiscovered for several weeks.

In October it began to invade the central part of the city and it is recorded that between October 1 and 26 thirty-six members of the most prominent families in Guayaquil died. From that time it spread like wildfire over the city and the neighboring provinces. In the Province of Guayas, with a population at that time of about 50,000, fully 5,000 people died. Guayaquil furnished nearly 85 per cent of this number. It was also remarked at this time that nearly all negroes and drunkards, many women, young children, and old people were immune. The Province of Esmeraldas was the only seacoast section which escaped nor has yellow fever ever occurred there. This province is in the extreme northern part of Ecuador on a line with Colombia.

From the western part of the Pichincha to the ocean it is covered with dense woods. It lacks high mountains and is not very elevated. The climate and vegetation are similar to that of the Amazon region of Ecuador; the houses are not overcrowded; the air space is plentiful; the villages are widely separated, and the traffic between them is small. But the traffic with Guayaquil and the outside world has increased in late years, and it is a question how long this apparent immunity will last. The intercourse with Panama is much greater and more direct than with Guayaquil. It is even claimed that yellow-fever patients from Panama have been taken on shore at Esmeraldas, and have either recovered or died without others contracting the disease.

The rivers of this province run in very deep beds, between high banks, over sand and gravel bottoms. They rise in the Andes, always run to the sea, and their currents are very strong. The waters are sweet and clear. No stagnant waters remain anywhere on land. Malaria, however, is endemic along the coast. The interior is considered very healthy.

No exact data can be obtained as to the mortality in Manabi, but in proportion to its population, I understand, it was much greater than in Guayas. The records of that time now obtainable mention as a remarkable fact that patients who contracted yellow fever in the coast towns fled to the elevated interior villages, but that the disease did not spread.

One of the cities which suffered most during the epidemic of 1842 was Babahoyo, while along the entire navigable length of the Daule River the infection spread with great intensity.

In the Gulf of Guayaquil and along the coast, the villages of Posorja, El Morro, Chanduy, Santa Elena, Manta, and others suffered greatly, as well as the provinces of El Oro and Los Ríos, the principal towns of which are Machala, Santa Rosa, and Babahoyo.

For two years, from 1842 to 1844, yellow fever raged throughout the entire coast section of Ecuador, and gradually died out toward the end of 1844. It reappeared in 1853. Dr. Juan Capello, in a paper published in Lima in 1870, says that this fever was imported in 1853 from Guayaquil to Callao, where it spread over Lima and places on the Peruvian coast till 1854, and that sporadic cases occurred till 1856. The epidemic of 1842-1844 had the effect of reducing travel to Guayaquil of foreigners and people of the interior, and yellow fever seems to

have skipped over a period of eight years, to 1852. This visitation lasted through almost all of the year of 1853. Fourteen years later, in September, 1867, it reappeared.

In the archives of the municipality the records of September 26, 1867, state that yellow fever "has appeared with great malignity." This time again Panama is blamed. It is claimed that the disease was introduced from there in a steamer belonging to an English company. A panic ensued, as many of the best-known people in the province, both natives and foreigners, died. The infection spread throughout the provinces of Guayaquil and Manabi, and was again imported to Callao and Lima, where it prevailed in epidemic form throughout the year 1868. I am told by an old resident who lived here during that epidemic that the mortality among the Italian colonies in Callao and Lima was very great, and that every steamer going north was crowded with passengers, especially Italians, leaving Peru. In the early part of 1869 the epidemic had disappeared from Ecuador. In 1877 a few cases of a very grave type appeared here, but did not spread epidemically. It was carried to the coast towns of Posorja, El Morro, and Santa Elena, however, where it did spread as a very malignant epidemic. The governor of Guayas, on May 10, 1878, requested that physicians and supplies should be immediately sent to El Morro, where yellow fever was causing great havoc.

A period of two years is supposed then to have intervened before the next visitation in 1880. From that time yellow fever has certainly been endemic here and has remained continuously. At times it has occurred with great malignity. In this endemic period the fires which have partly destroyed Guayaquil have marked the beginning of the more severe epidemics. Just before the epidemic of 1880 a disease occurred here which was called "la fiebre de la aduana" (the custom-house fever). Some believed this to be yellow fever, and attributed the cause to merchandise which arrived from the Isthmus wet and in bad condition. Toward the end of 1879 the wharves at Colon were destroyed by a cyclone, and vessels arriving from the United States and Europe were detained a long time. When railroad communication was reestablished between Colon and Panama, the merchandise referred to above was shipped to Guayaquil; shortly after the fever of the custom-house occurred. This is described as a very grave infectious fever which made violent progress. The temperature, at the onset 39° to 40° C., remaining between 38.5° and 38° C., was continuous, and generally ended in death within fifteen days.

One patient died on the twenty-first day of illness, while many died on the fourth or the sixth day. In all there was a hyperæmia of the skin, cephalalgia, vertigo, insomnia, epigastric tenderness and burning, bilious vomit, in some of a dark leek-green color, hyperuria, one case anuria, albuminuria, and toward the end hemorrhage from the nose, great agony, and more or less marked jaundice. In some cases there were false remissions of temperature within the first few days.

Quinine was tried, and, I am told, was found useless. A short time after the occurrence of this fever it was discovered that the sewers under the custom-house, into which the pipes from all the houses in the neighborhood emptied, were broken and altogether filthy. Doctor Borja, who contended that the disease was yellow fever, thus sums it up: "Perhaps the exhalations from that infectious focus itself

produced the epidemic which I mentioned and not the damaged merchandise."

A few months later, in September, 1880, an epidemic of yellow fever appeared and continued with great force till June, 1884.

In July, 1880, the steamship *Puno* arrived from Panama with a case of yellow fever on board, in the person of a novitiate of the Society of Jesus, who came from France to enter the seminary at Quito. He developed the fever the day the *Puno* left Panama, and died in the general (civil) hospital in this city. The month previous, however, the records show that a Colonel Vascones died here of yellow fever. He came from the interior. Preceding this epidemic of 1880-1884, a disease existed very generally, called dengue, and it is probable that yellow fever had been here since the epidemic of 1877-78. It did not spread until September, 1880, and apparently wore itself out about June, 1884. In the first few months of this epidemic there were 1,000 cases recorded in the general (civil) hospital. It is impossible to obtain a record of the number of cases which occurred in the provinces of Los Ríos, El Oro, and Manabi.

From June, 1884, to the end of the year 1886, yellow fever remained as an endemic, although I understand that the wet (winter) seasons were severe. In January, 1887, the disease broke out in epidemic form and claimed nearly 1,000 victims during that year.

From then till January, 1889, yellow fever remained endemic, when it apparently disappeared until July, 1891. No trace of the origin of the infection of that year can be obtained. It appeared among newcomers to this city. At that time, according to an official statement from Panama, no fever existed there and we are left to suppose that yellow fever either existed here and remained unrecognized or was introduced from some other port. From that date it increased steadily, and in 1894 there were over 800 cases. From this year to 1903 no records exist. From interviews with several physicians and old residents, however, it appears that until the early part of 1897 very few cases occurred. Officially only three occurred during 1896.

In October of that year about one-fifth of the city was destroyed by fire and many people were left homeless and exposed to the inclemency of the weather. The winter (wet) season which followed was very severe. In December one case of yellow fever is known to have existed. From then it increased, and 1897 is reckoned as one of the great epidemic years, although no records exist, those of the period between 1896 and August, 1902, having been lost in another fire which occurred in July of the latter year. In 1898 yellow fever seems to have subsided and sporadic cases occurred. This condition continued till November, 1902, when it appeared again as an epidemic. It is said that a young lady living in Quito arrived here from Panama in July with yellow fever. In the same month Guayaquil was again almost destroyed by fire, and the same conditions existed as after the previous fire. It was in December of this year that Hon. Thomas Nast, United States consul-general, died of yellow fever. This and the following year are spoken of as epidemic years. In 1902, from August to December, 88 deaths were recorded.

A study of Table F will show that 1897, 1900, and 1903 were the years of greatest mortality. The causes in the first two are impossible to obtain. The principal causes of death in the latter year will be found in Table G.

TABLE E.—*Cases of yellow fever treated in the general hospital in Guayaquil from January, 1881, to the same month, 1895.*

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1881.....	45	41	7	10	40	32	64	62	39	48	117	142	647
1882.....	47	42	33	35	34	17	25	16	12	70	146	262	739
1883.....	174	55	19	11	11	7	19	2	12	46	100	53	509
1884.....	25	104	80	54	46	8	.....	2	1	.....	.....	.....	320
1885.....	69	36	32	12	23	16	19	15	2	2	.....	.....	226
1886.....	8	15	.....	.....	.....	2	10	14	20	21	9	84	183
1887.....	214	205	167	105	40	24	8	1	.....	.....	4	62	830
1888.....	84	60	43	40	35	23	21	16	11	.....	10	21	364
1889.....	57	69	39	19	2	.....	8	10	.....	.....	.....	1	205
1890.....	.....	.....	.....	.....	.....	.....	18	28	40	52	85	120	343
1891.....	124	93	57	35	25	18	12	9	.....	10	1	19	403
1892.....	14	9	5	18	17	30	27	24	35	54	84	103	420
1894.....	117	67	84	74	64	76	39	40	45	44	70	98	818
Total	978	796	566	413	337	253	270	239	217	347	626	965	6,007

This table was furnished by Doctor Borja. Records for later years were destroyed, and it is impossible to find further records for these years. These were treated in one hospital and represent only a part of the cases which did occur. Of this number 2,475, or 41 per cent, died. A study of this table will show that the months of greatest severity are from November to April, with December and January in the lead, while June, July, August, and September are the healthiest months.

TABLE F.—*Total mortality from October, 1896, to April, 1904.*

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
1896.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	231	204	235	670
1897.....	257	375	507	339	337	403	292	265	224	195	185	196	3,575
1898.....	136	156	303	256	268	228	210	230	188	184	178	190	2,527
1899.....	243	300	345	222	234	276	225	197	182	203	173	150	2,750
1900.....	236	264	325	303	573	335	245	226	194	221	248	191	3,361
1901.....	222	289	333	381	338	225	306	281	229	252	190	.....	2,946
1902.....	382	411	358	313	258	241	246	216	203	184	212	213	3,232
1903.....	230	298	312	.....	.....	.....	.....	.....	.....	.....	.....	.....	840
Totals	1,706	2,093	2,483	1,814	2,003	1,708	1,524	1,588	1,415	1,697	1,584	1,309	20,924

I compiled the preceding table from information gathered from several sources, and it may not be absolutely correct. It is, however, the only table in existence covering this period.

The data from October 6, 1896, to December, 1901, was found in a book in the United States consulate. Under date of October, that year, this note is made: "All previous records destroyed by fire."

There is no way to verify these figures for the above period, as the records in the city were apparently all destroyed in the fire of July, 1902. For the period from December, 1901, to August, 1902, no records can be obtained anywhere, and no mention is made in the books referred to above in the United States consulate as to the reason, but it is probably attributed to the same fire.

From January, 1903, to April, 1904, is copied from the books of the police. It is likewise impossible to classify the causes of the deaths from 1896 to 1901, as the consulate book, which is an abstract of the weekly sanitary reports, merely registers the total mortality for each week with such remarks under prevailing diseases as paludic fever, yellow fever, grippe, etc.

TABLE G.—*Mortality, with principal causes, for the year 1903.*

Disease.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Whooping cough ..	11	15	26	9	3	.....	2	6	4	5	4	4	89
Fevers.....	25	45	61	55	50	48	29	29	31	41	44	47	505
Yellow fever	105	66	47	4	8	2	.....	.....	.....	1	1	1	234
Pernicious	19	33	20	26	12	9	16	13	5	6	2	9	170
Infectious	10	21	10	17	9	7	6	7	2	.....	.....	1	90
Paludic fever.....	6	4	6	5	4	3	3	6	12	.....	.....	1	50
Cerebral fever	6	3	.....	3	4	3	.....	.....	1	.....	.....	.....	20
Gastric fever	6	.....	2	2	1	4	5	.....	.....	.....	1	.....	21
Enteric fever	4	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	8
Meningitis	7	2	4	5	3	1	.....	.....	5	1	6	3	37
Smallpox	2	.....	2	.....	1	6	1	.....	.....	1	1	1	15
Tuberculosis.....	32	36	35	47	41	38	30	20	32	27	30	33	401
Tetanus	18	18	6	10	7	5	.....	6	2	8	8	7	95
All other causes	137	192	139	128	111	119	148	128	109	95	116	75	1,497
Total	382	411	358	313	253	241	246	216	203	184	212	213	3,232

Of the total number of deaths 1,344, or 41.5 per cent, were among children under 5 years of age.

What is being done.—In this respect I might say very little were it not that I have been reliably informed of the financial condition of the board of health. Viewed from this latter standpoint, the board is doing a great deal. Since my arrival a special building has been established in which yellow fever patients are treated; houses in which cases occur are fumigated; suspicious cases are reported, and a general attempt, on a modified scale, is being made to destroy mosquitoes. Several thousand pamphlets on "Prophylaxis Against Yellow Fever," have been printed for general distribution in this city and contiguous territory. This is the extract published in the Public Health Reports of July 31, 1903, from a paper read by Dr. John Guiteras, before the first International Sanitary Congress, held in Washington, D. C., December 2-5, 1902. In order that it might reach a larger class it is also being published serially in *El Grito del Pueblo*. Everybody is requested to follow the suggestions in their respective neighborhood. This is a good beginning for popular education. If the people can be convinced that malaria and its allied diseases are preventable much good will result. I say malaria because, unfortunately, yellow fever is a subject of very small concern to the vast majority of natives.

Within the past fifteen years Guayaquil has somewhat improved. The houses are better built and have more air space and ventilation; the streets are broader, higher, and in the newer part of the city, well paved and clean, and a supply of pure water has been obtained. In all other respects the city is at a standstill. No improvement has been made in the sewers and no attempt to fill up the large territory of surrounding swamp land.

What will be done.—This is thoroughly problematical. The municipality has an income of about \$200,000 (gold) for the specific purpose of sanitation and protection against fire. This is derived from a special tax on cocoa. All the money on hand has been invested in a plant for water to be used against fires.

What should be done.—Within Guayaquil is the best answer to this question. In the new or rebuilt section where improvements have been made in houses and streets and the containers for water are all protected the health is very good. In much of the old section and all of the outskirts of the city where the conditions are poor the mortality is very large. The whole city can be made healthy. To be kept so will be at the price of unremitting vigilance.

However good the sanitary condition of tropical cities, the introduction of infection and supply of new material, coupled with carelessness on the part of the local health boards, are alone necessary to induce an epidemic of yellow fever. What should be done then can briefly be stated thus:

(1) Enact and enforce rigid sanitary regulations. This can be done without any additional expense with the recommendations contained in "Prophylaxis against yellow fever" as the base.

(2) Sewer the city. This is both a financial and engineering problem, the former apparently by far the more difficult. The authorities here are very anxious to raise money and, if obtained, to build sewers. They say that they can guarantee an income of between \$250,000 and \$300,000 gold a year, and would place all kinds of legislative safeguards around it to secure the immediate commencement of the work. The engineering feature is one which received much attention many years ago. Monsieur Camilo Coiret, a French engineer, has furnished me with plans which he made for this purpose. There are two plans proposed. Both provide for a receiving reservoir on one of the hills of the northern end of the city, from which the water would be distributed to flush the sewers. The plans differ only as to the manner of securing the water. One plan provides for a canal to connect the Estero Salado and the Guayas River, with a dam at the narrowest part of the Salado, while the other pumps the water directly from the river.

In both the main sewer empties several miles below the city.

(3) Fill the low streets and lots. All plans and estimates to sewer the city have also been made in connection with paving the streets. The streets can, however, be very acceptably filled, not paved, at very little cost. The hills which surround Guayaquil on the north and west furnish a material, called cascajo (gravel), which makes an excellent filling. It is brittle, is secured with very little labor, becomes hard, and makes a very good street. If a coating of tar (procured at Santa Elena) and sand were placed over this and rolled the streets would become compact and impermeable. The lots could also be filled with cascajo.

(4) Drain and fill the swamps at the city's edge. This is a more difficult problem than the preceding one, but the cascajo will also answer admirably for filling.

(5) Establish a quarantine station at the entrance to the Guayas River where vessels, passengers, and cargo can be inspected, disinfected, or detained. Puna is excellently situated for such a station and it could be established with very little expense. It has a well-protected harbor where vessels can lie at anchor, while there is ample room on the island for the erection of a hospital, thoroughly isolated, to which the sick could be removed for treatment.

The history of yellow fever in Ecuador proves conclusively that it is Guayaquil from which the infection spreads to the surrounding territory because of the intimate communication between these places. The same observation would hold in all other infections. Therefore to establish such a station is an essential part of any intelligent sanitary effort.

The area of the city is 3,655,900 square meters, 987.65 acres, without counting the Quintas Pareja and Luque. The streets contain 94,418 square meters. There are eight sewers, kind described under

separate caption, known to exist. I have indicated their location and extent by a heavy blue line on a plan of the city which is forwarded with this report.

GERMANY.

Report from Berlin—Plague and cholera in various countries.

Consul-General Mason reports, April 16, as follows:

Plague.

Egypt.—During the period from March 26 to April 2 there were registered in the whole of Egypt 62 plague cases (and 43 deaths), viz: In Suez, 1 case (1 death); in Dechneh, 1 case (1 death); in the district of Baliana, 22 cases (14 deaths); in Nag Hamadi, 13 cases (12 deaths); in Tahta, 11 cases (8 deaths); Samallut, 9 cases (6 deaths); Bibeh, 3 cases (no deaths); Girgeh, 1 case (1 death); Kuesna, 1 case (no deaths).

British India.—During the week ended March 19 there were registered in the Bombay Presidency 11,903 cases of plague (and 8,840 deaths), of which 943 cases (849 deaths) occurred in the city of Bombay; 184 cases (157 deaths) in Karachi; 85 cases (73 deaths) in Jamnagar; 33 cases (21 deaths) in Veraval, and 3 cases (3 deaths) in Broach.

British South Africa.—In Cape Colony during the week ended March 12, 3 cases of plague occurred in Port Elizabeth and 3 cases in Uitenhage.

Plague and cholera.

British India.—In Calcutta during the week ended March 12, 230 persons died of plague and 45 persons died of cholera.

Cholera.

Turkey.—According to Bulletins Nos. 10 and 11, there were registered in Bagdad between March 21 and April 3, 15 cases of cholera (and 17 deaths); in Bassorah, between March 20 and 31, 57 cases (and 56 deaths).

Death rate of Berlin and other cities.

The death rate of Berlin for the week ended April 2 was higher than it has been since the middle of January, amounting, calculated on the year, to 16.9 per 1,000 of the population, this being also considerably higher than the rate for the corresponding week of last year, in which it amounted to 13.8. In spite of this increase, however, one-half of the large German towns and cities showed more unfavorable conditions than Berlin—namely, Munich, Nuremberg, Stuttgart, Frankfort-on-the-Main, Cologne, Magdeburg, Breslau. On the other hand, the following cities showed more favorable figures than Berlin—viz, Hamburg, Leipzig, Dresden, Hanover, Rixdorf (with 14.8), Charlottenburg (with 14), Schöneberg (with 7.4). The mortality rate among infants rose from 3.4 per year and mille to 4.4, this being higher than the Hamburg rate, but considerably lower than the Munich figure. Acute intestinal diseases and acute diseases of the respiratory organs showed no important change, the former causing 35, the latter 83 deaths. Furthermore, the following figures were published: Influenza

4 deaths, phthisis pulmonalis 83 deaths, cancer 44 deaths, diphtheria 7 deaths, scarlet fever 6 deaths, measles 5 deaths, and finally, 21 persons died by violence.

GUATEMALA.

Report from Livingston, fruit port.

Acting Assistant Surgeon Peters reports as follows: Week ended April 18, 1904: Present officially estimated population, 3,500; number of deaths, 4; prevailing diseases, malarial; general sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 12	Spero	New Orleans	16	.....	.....	.....
12	Anselm ^a.....	.....do	42	11	.....	.....

^a The steamer Anselm sailed from Puerto Barrios.

HONDURAS.

Report from Ceiba, fruit port.

Acting Assistant Surgeon Robertson reports as follows: Week ended April 23, 1904. Present officially estimated population, about 4,000; 1 death. Prevailing diseases, malarial. General sanitary conditions of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 18	Geo. Dumois.....	16	0	0	0
18	Katie.....	23	6	0	0
20	Origen.....	24	0	0	0
20	Alliance.....	16	0	0	0
23	Harald	20	0	0	0

Report from Puerto Cortez, fruit port.

Acting Assistant Surgeon Carter reports as follows: Week ended April 19, 1904. Present officially estimated population, 2,125; no deaths. Prevailing disease, malarial fever of mild form. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 14	Anselm.....	42	15	15	0
14	Geo. Dumois	16	0	0	0
15	Helen	21	4	0	0
15	Gyller	13	1	0	0
16	Espana	14	0	3	0

Number of aliens for the week, 8.

INDIA.

Report from Bombay—Bill of health issued to U. S. S. Isla de Cuba—Plague mortality.

Acting Asst. Surg. Edward H. Hume reports, April 9, as follows:

It has not been customary to issue bills of health to American naval vessels leaving this port, but in accordance with Department letter dated Washington, February 9, 1904, on request of Assistant Surgeon Murphy, of the U. S. S. *Isla de Cuba*, en route from Manila to Pensacola, a supplemental bill of health was issued. * * *

The plague mortality is very high this week, amounting to 1,135, giving a death rate of 76.05 per mille per annum from this cause alone. The total number of deaths for the week ended April 5 was 1,785, with a death rate of 119.61. This is better than in the same week last year, when plague deaths numbered 1,827, total deaths numbered 2,604, and the death rate was 174.49.

Reports from Calcutta—Inspection of vessel—Plague.

Passed Assistant Surgeon Sprague reports, April 7, as follows:

During the week ended April 2, 1904, bill of health was issued to one vessel, the steamship *M. S. Dollar*, bound for San Francisco with a total crew of 53, of which 42 were Chinese. The effects of the latter were disinfected. There was one rejection. The vessel was controlled by an agency recently established in this city and was the first of their boats bound for America. When it was learned that she was bound for one of our ports she was partially loaded and fumigation was not attempted. She did not touch at dock during her stay in port. The captain informed me that she would stop at six other ports before reaching San Francisco, about July 1, 1904, and it is quite probable that the good effects of fumigation here would have been overcome at some or all of those places.

A copy of the letter of instructions was forwarded to the agency, and they have agreed to follow them in the future.

PLAQUE.

There were 5,481 cases of plague and 4,736 deaths in the Presidency of Bengal for the week ended March 26, 1904. The statement of deaths in Calcutta for the week ended April 2, 1904, places the number of deaths from cholera at 101 and now rates the disease as epidemic. All the cases are confined to native population.

The deaths from plague have increased to 544 with 590 cases, but there is no evidence of infection in the European part of the city.

JAPAN.

Reports from Yokohama—Inspection of vessels.

Assistant Surgeon Moore reports, April 1 and 9, as follows:

During the week ended March 26, 1904, bills of health were issued to 4 vessels having an aggregate personnel of 511 crew and 1,227 passengers; 498 steerage passengers were bathed, and 663 pieces of baggage were disinfected.

For the week ended March 26 infectious diseases were reported in Yokohama, as follows: Enteric fever, 2 cases, 1 death; diphtheria, 1 case, 1 death.

Smallpox in Nagasaki Ken—Plague in Formosa—Cholera on vessel at Hakodate.

During the week ended April 2, 1904, 3 steamers, having an aggregate personnel of 275 crew and 777 passengers, were inspected, 3 crew and 433 steerage passengers were bathed, and 510 pieces of baggage were disinfected.

For the above period infectious diseases were reported in Yokohama as follows: Enteric fever, 5 cases, 1 death; diphtheria, 1 case, 0 deaths; dysentery, 1 case, 0 deaths. During the present year no grave quarantinable disease has been reported in this city save one case of smallpox. Elsewhere in Japan, especially in Nagasaki Ken, smallpox now exists to a limited extent. Plague continues quite prevalent in Formosa, the total number of cases for the present year being 834, of which 589 have proved fatal.

Press reports of April 3 stated that a case of cholera had been recently discovered on board a French sailing vessel at Hakodate.

Emigrants recommended for rejection.

Number of emigrants per steamship *Gaelic* recommended, March 30, for rejection: For Honolulu, 6; for San Francisco, 5.

Number of emigrants per steamship *America Maru* recommended, April 7, for rejection: For Honolulu, 5; for San Francisco, 3.

Report from Nagasaki.—Emigrants recommended for rejection.

Sanitary Inspector Bowie reports, March 28, as follows:

Number of emigrants for Manila recommended, March 28, for rejection, 25.

MALTA.

Government notice.

His excellency the governor, acting on the advice of the council of health, has been pleased to repeal government notice No. 240 of the 21st October, 1903, and to direct that the following regulations be observed as regards vessels and passengers, viz:

INFECTED PLACES.

1. The following countries and ports are declared to be infected: (a) Arabia (excluding Perim and Aden); (b) China; (c) India; (d) Alexandria (Egypt); (e) All ports in the Persian Gulf.

INFECTED VESSELS.

2. Infected vessels are vessels which have, or have had, on board, during the voyage or the preceding twenty days, cases of cholera, yellow fever, plague, or any disease with symptoms which, in the opinion of the chief government medical officer, resemble the symptoms of the said diseases.

VESSELS WHICH ARE NOT ALLOWED TO ENTER THE HARBOR, BUT ARE ALLOWED TO COMMUNICATE WITH QUARANTINE ESTABLISHMENTS.

3. Infected vessels.
4. Vessels with pilgrims from the East which do not carry a recognized medical officer.

VESSELS ALLOWED TO LOAD IN QUARANTINE.

5. Infected vessels carrying a recognized medical officer, and not having on board an actual case of any of the diseases mentioned in clause 2 on board.
6. Vessels with pilgrims from the East which carry a recognized medical officer.
7. Vessels from infected places not having on board an actual case of any of the diseases mentioned in clause 2, when arriving within ten days from date of departure.
8. Vessels arriving at Malta without a clean bill of health.

VESSELS FROM INFECTED PLACES ADMITTED TO PRATIQUE.

9. Vessels without a clean bill of health, or from infected places, will be admitted to pratique after ten days from date of departure.

PILOTS ALLOWED TO BOARD VESSELS.

10. Pilots will be allowed to board the vessels referred to in clauses 5, 6, 7, and 8 for the purpose of taking them into the quarantine harbor, subject to the following conditions:
 - (a) The pilot shall go direct from his boat to the bridge without holding communication with any person except the officers and crew of the vessel; and after the vessel is moored, shall be taken in one of her boats to the lazaretto, where his clothes and person shall be disinfected.
 - (b) To prevent communication or contact with passengers, the master of the vessel shall cause the portion of the deck over which the pilot has to pass to be roped off, and shall exclude from such space and from the bridge all persons except the officers and crew of the vessel so long as the pilot is on board.

MEDICAL INSPECTION.

11. All vessels and passengers are subject to medical inspection on arrival.

PASSENGERS.

12. Passengers before landing must declare on oath before a marine police officer that they have not been in or have not communicated with an infected place within the last ten days. Otherwise they shall remain in quarantine till the expiration of ten days from the date of departure.
13. Passengers arriving on board vessels without a clean bill of health and the officers of such vessels will be permitted to land after medical inspection, but will not be permitted to land any of their luggage or effects until the same shall have been thoroughly disinfected. This clause does not apply to deck passengers.

14. Passengers not otherwise provided for are subjected to the restrictions applicable to the vessels on which they arrive.

15. When twenty days have elapsed from the last case of plague, cholera, or other disease against which restrictions have been in force with regard to a country or place declared to be an infected place, a notice will be issued by the collector of customs to the effect that the place or port is no longer to be dealt with as infected.

The word "passengers," as used in this notice, except in clause 14, includes the officers and crew of vessels.

By command.

E. M. MEREWETHER,

Lieutenant-Governor and Chief Secretary to Government.

The PALACE, VALLETTA, March 23, 1904.

N. B.—Alexandria has been included among infected places.

MEXICO.

Report from Progreso and Merida—Yellow fever in Merida.

Acting Assistant Surgeon Harrison reports as follows:

Week ended April 23, 1904: Present officially estimated population, 8,000. Number of deaths, 2. No prevailing diseases of any importance. General sanitary condition of this port and the surrounding country during the week, good. Merida: There are three or four cases of yellow fever, probably, at this time.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 16	Antillian	New Orleans	51	.....	4	.....
16	Dorisbrook	New York	27	.....	.....	.....
17	Monterey	do	96	{ ^a 5 _b 33 }	47	.....
17	Thurland Castle ^c	Pensacola	30	.....	.....	.....
19	Barrister ^d	New Orleans	42	.....	.....	.....
21	King Frederick	New York	27	.....	.....	.....

^aHabana.

^cVia Coatzacoalcos.

^bNew York.

^dTwo hours' exposure of living quarters to sulphur dioxide.

Yellow fever in lazaretto at Progreso.

PROGRESO, MEXICO, April 29, 1904.

WYMAN, Washington:

One yellow fever lazaretto April 28.

HARRISON.

Report from Veracruz—Mortality.

Passed Assistant Surgeon Lumsden reports, April 25, as follows:

During the week ended April 23, 1904, there were recorded in the city of Veracruz 36 deaths (57.6 per 1,000, annual death rate) from all causes, of which 4 were reported caused by pernicious fever and 7 by tuberculosis. No cases of yellow fever, smallpox, or other quarantinable diseases were reported.

NICARAGUA.

Report from Bluefields, fruit port.

Acting Assistant Surgeon Reilly reports as follows: Week ended April 17, 1904. Present officially estimated population, 4,000; number of deaths, 3; prevailing diseases, malarial fever, tuberculosis, and dysentery; general sanitary condition of this port and the surrounding country during the week, good.

Bills of health were issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
Apr. 13	Utstein	15	3	.....	.....
16	John Wilson	18	19	.....	.....
17	Ometepe	23	.....	27	.....

PANAMA.

Report from Colon—Mortality during March, 1904.

Surgeon Perry reports, April 19, as follows:

For the month of March, 1904, the deaths, classified as to cause, were: Fevers, 11; dysentery, 1; pneumonia, 2; whooping cough, 1; apoplexy, 1; heart disease, 1; bronchitis, 3; diarrhea, 1; dropsy, 1; internal diseases, 2; cause not given, 1; total, 25.

The total number of deaths gives in the estimated population of 6,000 an annual death rate of 50 per thousand, which may be considered approximately normal for this town.

A further classification shows that 10 were Jaimaicans or other West Indian negroes, and that 15 were Colombians.

According to age, the deaths are divided as follows: Under 1 year, 4; over 1 year and under 5 years, 2; between 5 and 15 years, 1; between 15 and 20 years, 1; 20 to 30 years, 3; 30 to 40 years, 8; between 40 and 50 years, 5; and over 60 years, 1.

The general morbidity during the month specified was about normal, and during that period and to date no quarantinable diseases have prevailed, so far as I have been able to ascertain. Several cases that were rumored as suspicious were traced and examined, but the cases were those of malarial fever of severe form.

Report from Panama—Inspection of vessels—Mortality statistics.

Assistant Surgeon Pierce reports, April 18, as follows:

Owing to the strike among the dock laborers no vessels of the Pacific Mail Company cleared for San Francisco during the week ended April 17, 1904.

The following vessels of the United States Navy were given bills of health without inspection: *Marblehead, Concord, New York, and Bennington.*

During the week there were from all causes 13 deaths, none of which were caused by quarantinable diseases. The causes given were as

follows: Fever, 2; dropsy, 2; dysentery, 2; malarial cachexia, 1; syphilis, 1; pneumonia, 1; beriberi, 1; stillborn, 1; hernia, 1; liver disease, 1.

Government of Panama instructs consuls at Callao, Valparaiso, and Guayaquil relative to clearance of vessels.

Cablegram from Minister Russell, at Panama, dated April 25, is received, stating that the Panama Government had cabled instructions to its consuls at Callao, Valparaiso, and Guayaquil to cooperate with our health officers in the matter of clearance of vessels to ports in the Republic of Panama, and instructions will be sent to the consul at La Guaira.

PHILIPPINE ISLANDS.

Report from Manila—Quarantinable diseases—Fumigation of vessel—Cholera in the provinces.

Chief Quarantine Officer Heiser reports, March 17, as follows:
During the week ended March 12, 1904, the quarantinable diseases reported in Manila were as follows:

	Cases.	Deaths.
Cholera.....	0	0
Smallpox.....	1	0
Plague.....	3	3

Fumigation of vessel.

One vessel departed for the United States during the week, namely, the schooner *Snow & Burgess*, which cleared for Port Townsend, March 10, 1904. She was fumigated with sulphur and the personnel was inspected on board prior to sailing.

Report of cholera occurring in provincial towns in the Philippine Islands for the week ended March 12, 1904.

Place.	Province.	Cases.	Deaths.
Calivo.....	Island of Panay, province of Capiz	22	9

PORTO RICO.

Report from Ponce—Mortality, month of March, 1904.

Acting Assistant Surgeon Torres reports, April 18, through Chief Quarantine Officer King, as follows:

Number and causes of deaths in Ponce jurisdiction, city, playa, and surrounding country, during the month of March, 1904.

Diseases of—	Grippe	6	
Digestive system	22	Congenital malformation	4
Nervous system	6	Convulsions	4
Circulatory system	12	Puerperal fever	1
Respiratory system	26	Ascaris lumbricoides	1
Malarial fever	11	Without official data	10
Tuberculosis	16		
Hydraemia	3	Total	147
Anæmia, inanition	13		==
Nephritis	1	March, 1903:	
Old age	1	Deaths	91
Metritis	3	Births	125
Rhachitis	3	March, 1904:	
Accidents	3	Deaths	147
Cancer	1	Births	377

TURKEY.

Report from Bagdad—Cholera at Bagdad and Bassorah.

Vice-Consul Hürner reports, March 17, as follows:

In pursuance of my dispatch of February 18, 1904, announcing the outbreak of cholera at Bassorah and the establishment of a quarantine of five days at Kirmet Ali, I have to report the appearance of the epidemic at Bagdad.

[Inclosure.]

SANITARY BULLETIN, MARCH 13, 1904.

	Bagdad.		Bassora.	
	Cases.	Deaths.	Cases.	Deaths.
March 5			1	4
March 6				
March 7	2			
March 8	3			
March 9	3	3	1	2
March 10	1			
March 11	4	1		
March 12	3	3	4	

Return of the pilgrimage of 1904.

[Translated in this Bureau from the Bulletin Quarantenaire, Alexandria, April 7, 1904.]

Pilgrim vessels at Tor, from Yambo.

April 3.—Minich: 1491 Egyptian pilgrims.

April 5.—Fayoum: 819 Egyptian pilgrims. Missir: 506 Egyptian pilgrims; 1 death and 1 case sickness during voyage.

April 6.—Africa: 400 Russian pilgrims; 2 deaths during voyage.
April 7.—Rahmanieh: 661 Egyptian pilgrims; 1 case sickness.
Alba: 425 Turkish pilgrims; 2 cases of sickness. *Seyar:* 479 Egyptian and Turkish pilgrims; 1 death.

Vessels leaving Tor.

April 3.—Galioubieh: 97 pilgrims; destination, Suez.
April 5.—St. George: 1,031 pilgrims, mixed nationalities; destination, Beirut and Constantinople.
April 7.—Minieh: 1,511 Egyptian pilgrims; destination, Suez.

Vessels arrived at Suez.

Galioubieh, admitted to pratique after medical visit; *St. George*, transit in quarantine after medical visit; *Minieh*, pratique after medical visit.

Foreign and insular statistical reports of countries and cities—Yearly and monthly.

AFRICA—*Lourenço Marquez*.—Month of February, 1904. Estimated population, 7,000. Total number of deaths, 47. No contagious diseases.

AUSTRIA-HUNGARY—*Fiume*.—Month of February, 1904. Estimated population, 38,996. Total number of deaths, 92, including 23 from tuberculosis.

BRAZIL—*Pernambuco*.—Two weeks ended March 15, 1904. Estimated population, 200,000. Total number of deaths, 364, including enteric fever 1, smallpox 20, and 37 from phthisis pulmonalis.

CANADA—*British Columbia*—*Victoria*.—Month of March, 1904. Estimated population, 21,000. Total number of deaths, 11. No contagious diseases.

DUTCH GUIANA—*Paramaribo*.—Month of March, 1904. Estimated population, 32,547. Total number of deaths, 79. No contagious diseases reported.

FRANCE—*Marseille*.—Month of March, 1904. Estimated population, 491,161. Total number of deaths, 1,063, including diphtheria 4, enteric fever 7, measles 15, whooping cough 4, smallpox 14, and 107 from tuberculosis.

St. Etienne.—Two weeks ended March 31, 1904. Estimated population, 146,671. Total number of deaths, 133, including diphtheria 2, and 26 from tuberculosis.

GERMANY—*Freiburg*.—Three months ended March 31, 1904. Estimated population, 90,106. Total number of deaths, 595, including diphtheria 7, enteric fever 1, measles 37, scarlet fever 1, whooping cough 7, and 47 from tuberculosis.

Strasburg.—Month of February, 1904. Estimated population,

162,101. Total number of deaths, 243, including diphtheria 8, measles 2, scarlet fever 4, whooping cough 3, and 36 from tuberculosis.

Weimar.—Month of March, 1904. Estimated population, 30,606. Total number of deaths, 51, including 1 from diphtheria.

GIBRALTAR.—Two weeks ended April 10, 1904. Estimated population, 27,460. Total number of deaths, 8. No deaths from contagious diseases.

GREAT BRITAIN—*England and Wales.*—The deaths registered in 76 great towns in England and Wales during the week ended April 9, 1904, correspond to an annual rate of 18.4 per 1,000 of the aggregate population, which is estimated at 15,271,281.

London.—One thousand six hundred and fifty-nine deaths were registered during the week, including measles 86, scarlet fever 8, diphtheria 17, whooping cough 64, enteric fever 4, smallpox 3, and diarrhea 21. The deaths from all causes correspond to an annual rate of 18.6 per 1,000. In Greater London 2,212 deaths were registered. In the “outer ring” the deaths included 3 from diphtheria, 19 from measles, 6 from whooping cough, and 1 from smallpox.

Ireland.—The average annual death rate represented by the deaths registered during the week ended April 9, 1904, in the 21 principal town districts of Ireland was 27 per 1,000 of the population, which is estimated at 1,093,289. The lowest rate was recorded in Tralee, viz., 5.3, and the highest in Galway, viz., 42.7 per 1,000. In Dublin and suburbs 226 deaths were registered, including diphtheria 2, enteric fever 3, measles 4, whooping cough 8, and 48 from tuberculosis.

Scotland.—The deaths registered in 8 principal towns during the week ended April 9, 1904, correspond to an annual rate of 20.3 per 1,000 of the population, which is estimated at 1,726,236. The lowest rate of mortality was recorded in Paisley, viz., 16.1, and the highest in Perth, viz., 24.6 per 1,000. The aggregate number of deaths registered from all causes was 671, including diphtheria 5, measles 14, scarlet fever 2, smallpox 7, and 19 from whooping cough.

JAMAICA—*Parish of Portland.*—Two weeks ended April 16, 1904. Estimated population, 40,000. Total number of deaths 20, including 2 from enteric fever.

Port Antonio.—Two weeks ended April 16, 1904. Estimated population not reported. No deaths reported. The health of the port is good.

JAPAN—*Nagasaki.*—Ten days ended March 31, 1904. Estimated population, 148,883. Total number of deaths not reported. One death from diphtheria and 5 deaths from smallpox reported.

JAVA—*Batavia.*—Two weeks ended March 19, 1904. Estimated population, 160,000. Total number of deaths not reported. Two deaths from smallpox reported.

MALTA.—Week ended March 13, 1904. Estimated population, 193,815. Total number of deaths 72, including diphtheria 4 and 1 from enteric fever. Week ended April 9, 1904. Total number of deaths 66, including 1 from enteric fever.

ST. HELENA.—Four weeks ended April 5, 1904. Estimated population, 4,000. Total number of deaths, 4, including 1 from tuberculosis.

Barcelona.—Ten days ended April 10, 1904. Estimated population, 600,000. Total number of deaths, 315, including diphtheria 4, enteric fever 3, measles 3, scarlet fever 1, whooping cough 4, smallpox 8, and 27 from tuberculosis.

SPAIN—*Cadiz.*—Month of March, 1904. Estimated population, 69,382. Total number of deaths, 251, including enteric fever 2, and 7 from measles.

SWITZERLAND.—Reports for the week ended March 19, 1904, from 18 cities and towns having an aggregate population of 808,000, show a total of 680 deaths, including diphtheria 10, enteric fever 1, measles 19, scarlet fever 3, whooping cough 10, and 95 from phthisis pulmonalis.

WEST INDIES—*Curaçao.*—Three weeks ended April 15, 1904. Estimated population, 31,600. Total number of deaths not reported. No contagious diseases reported.

Cholera, yellow fever, plague, and smallpox, December 26, 1903, to May 6, 1904.

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

[For reports received from June 27, 1903, to December 25, 1903, see PUBLIC HEALTH REPORTS for December 25, 1903.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Afghanistan:				
Herat.....	Dec. 12.....			Present.
China:				
Shanghai.....	Dec. 18.....	1		On Br. ss. Olivebank.
India:				
Bombay.....	Dec. 9-Mar. 8	8	2	
Calcutta.....	Nov. 15-Mar. 5	5	345	
Karachi.....	Feb. 22-Mar. 27	3	2	
Madras.....	Nov. 14-Apr. 1	1	47	
Japan:				
Nagasaki.....	Nov. 21-30.....		1	
Philippine Islands:				
Manila.....	Oct. 31-Mar. 5	51	47	
Provinces.....	Oct. 31-Mar. 12	1,677	1,354	
Straits Settlements:				
Singapore.....	Nov. 8-Dec. 19	.....	12	
Turkey:				
Bagdad—				
Bagdad.....	Mar. 8-Apr. 3	3	34	28
Hitt.....	Dec. 13-15.....		8	4
Kerbeia.....	Dec. 12-Jan. 12	12	.....	463
Mossul.....	Dec. 21-Jan. 4	4	1	1
Musseieb.....	Dec. 17-Jan. 4	4	48	35
Bassorah—				
Basma.....	Feb. 6-Mar. 31	113	103	
Beirut—				
Latakieh.....	Dec. 21-Jan. 4	4	11	7
Diarbekir—				
Diarbekir.....	Dec. 12-Jan. 9	9	64	44
Syria.....	Nov. 29-Dec. 5	5	.....	Present.

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

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Africa:				
Ivory Coast, Grand Bassam	Dec. 12.....			Present.
Brazil:				
Rio de Janeiro.....	Nov. 23-Mar. 27	60	18	
Colombia:				
Barranquilla.....	Mar. 28-Apr. 2	.....	1	
Cartagena.....	Nov. 23-Mar. 20	.....	2	
Costa Rica:				
Alajuela.....	Apr. 19-24.....	11	6	
Cuba:				
Vicinity of Niquero	Feb. 6-13.....	.....	6	From the Nor. bk. Eugen from Cardiff and La Guaira, wrecked on south coast of Cuba.
Sagua	Apr. 9.....	1	.....	From Br. ss. Wildercroft from Vera Cruz.
Ecuador:				
Guayaquil.....	Dec. 6-Mar. 31	.....	39	
Jamaica:				
Kingston.....	Dec. 27-Jan. 9	2	2	
Mexico:				
Ciudad Victoria.....	Dec. 6-19.....	4	2	
Merida.....	Dec. 6-Apr. 16	23	11	
Progreso.....	Apr. 28.....	1	.....
Salina Cruz.....	Apr. 3-9.....	1	1	
Tehuantepec.....	Dec. 6-Apr. 16	7	5	
Veracruz.....	Dec. 13-Apr. 9	18	6	
Panama:				
Panama.....	Jan. 4-Jan. 16	4	1	
Venezuela:				
La Guaira.....	Jan. 2-9.....	.....	1	
Maracaibo.....	Oct. 25-Feb. 14	3	3	

PLAQUE.

Australia:				
Brisbane	Feb. 12-17.....	5	.....
Cairns.....	Feb. 16-Mar. 22	.....	2	
Sydney.....	Mar. 10.....	1	.....
Brazil:				
Para.....	Nov. 1-Feb. 22	29	15	
Pernambuco.....	Nov. 16-Jan. 15	.....	38	
Pindamonhangaba.....	Jan. 15.....	.....	.....	Several cases.
Porto Alegre.....	Jan. 1-Feb. 28	50	.....
Rio de Janeiro.....	Nov. 16-Mar. 27	224	130	
British South Africa:				
Cape Colony (East London, King Williams Town, Port Elizabeth, Uitenhage).	Nov. 15-Mar. 15	.....	17	Three new cases.
Natal (Pietermaritzburg).	Nov. 29-Dec. 5	3	2	
Transvaal (Johannesburg, Pretoria).....	Mar. 20-30.....	.....	60	
Mar. 29.....	.....	.....	2	
Chile:				
Antofogasta	To Apr. 12.....	40	.....
Iquique	Apr. 9.....	.....	.....	Present.
China:				
Hongkong.....	Nov. 8-Dec. 12	6	6	
Tientsin.....	Nov. 29-Dec. 5	.....	1	
Egypt:				
Alexandria.....	Nov. 21-Feb. 3	3	1	
Assiout.....	Mar. 19-26.....	1	.....
Baliana district.....	Mar. 13-Apr. 2	41	34	
Beni mazar.....	Mar. 19-26.....	1	1	
Bibeh.....	Mar. 26-Apr. 2	3	.....
Dechneh.....	Mar. 19-Apr. 2	3	1	
Girgeh district.....	Mar. 13-Apr. 2	29	29	
Kuesma.....	Mar. 19-Apr. 2	2	1	
Nag-Hamadi district.....	Mar. 13-Apr. 2	28	19	
Samallut district.....	Mar. 13-Apr. 2	15	19	
Sohag.....	Mar. 13-26.....	1	.....
Tahtah district.....	Mar. 13-Apr. 2	24	17	
Suez.....	Feb. 21-Apr. 2	3	1	One from Br. ss. Knight, of the Thistle, from Bombay, and 1 from Br. transport Plaissy, from Bombay.
Minieh district	Nov. 21-Feb. 3	3	1	
Port Said	Mar. 18.....	1	.....

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

PLAQUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Formosa.....	To Dec. 15, 1903..	869	702	
	Jan. 1-Mar. 6	225	145	
Hawaii:				
Hilo.....	Mar. 4		1	
Honolulu.....	Jan. 10.....	1	1	
India:				
Bombay Presidency and Sind.....	Nov. 15-Mar. 19	186,384	122,299	
Madras Presidency	do	14,974	11,669	
Bengal	Nov. 15-Mar. 19	42,916	38,482	
United Provinces.....	do	86,956	79,100	
Punjab	do	79,898	58,799	
Central Provinces (including Berar). .	do	44,400	37,008	
Burma.....	Feb. 14-Mar. 19	1	1	Imported.
Coorg.....	Nov. 15-Mar. 19	16	6	
Mysore State.....	do	13,334	10,216	
Hyderabad State.....	do	18,146	14,933	
Central India.....	do	21,252	18,910	
Rajputana	do	6,680	5,636	
Kashmir	do	3,893	2,756	
N. W. F. Provinces.....	Nov. 21-Mar. 12	46	45	One case imported.
Baluchistan.....	Nov. 29-Mar. 12	1	.....
Grand total		518,927	399,861	
Japan:				
Yokohama	Nov. 22-Dec. 5	2	2	
Mauritius	Nov. 13-Mar. 10	529	312	
Peru:				
Callao	Feb. 24.....	4	.....
Lima	Mar. 25-Apr. 17	148	.....
San Pedro vicinity.....	Feb. 20-26.....	10	7	
Philippine Islands:				
Cebu.....	Jan. 1-31.....	2	2	
Manila	Nov. 15-Mar. 12	21	15	
Russia:				
Cronstadt	Jan. 14-20.....		1	At plague laboratory.
Straits Settlements:				
Singapore	Feb. 28-Mar. 5		2	
Turkey:				
Smyrna	Dec. 1-6		1	

SMALLPOX.

Africa:				
Cape Town.....	Dec. 1-Mar. 15	6	.....
Green and Sea Point.....	Nov. 29-Dec. 5	1	.....
Argentina:				
Buenos Ayres.....	Oct. 1-Feb. 29	.....	187	
Austria-Hungary:				
Prague	Nov. 29-Apr. 9	141	1	
Trieste	Nov. 22-Mar. 5	8	.....
Belgium:				
Antwerp	Jan. 11-Apr. 2	88	31	
Brussels	Jan. 31-Apr. 9	.....	7	
Liege	Jan. 10-Mar. 19	2	2	
Brazil:				
Bahia	Feb. 13-20.....	.....	1	
Goyaz	Feb. 16-22.....	4	.....
Pernambuco	Nov. 1-Mar. 31	.....	240	
Rio de Janeiro	Nov. 16-Mar. 26	964	565	
British Guiana:				
Demerara	Nov. 1-Dec. 26	73	.....
Canada:				
British Columbia (Tower Hill and Vancouver). .	Dec. 1-Feb. 18	14	.....
Manitoba (Winnipeg). .	Mar. 27-Apr. 16	5	.....
New Brunswick (McAdam, Newcastle). .	Jan. 9-21.....	2	.....
Nova Scotia (Sydney). .	Apr. 10-23	54	1	
Ontario.....	Dec. 1-Jan. 31	116	.....
Quebec	Feb. 7-Mar. 19	14	.....
Chile:				
Antofogasta	Nov. 1-Dec. 31 .....	.....	13	
Santiago	Feb. 1.....	.....	.....	Epidemic.

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

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Hongkong	Dec. 27-Mar. 26	9	4	
Shanghai	Nov. 15-Mar. 19	.....	105	
Tientsin	Jan. 31-Feb. 6	1	.....
Colombia:				
Barranquilla	Dec. 1-Apr. 2	.....	13	
Formosa:				
Jan. 1-Feb. 29	11	.....	
France:				
Lyon	Feb. 7-Mar. 9	.....	3	
Marseille	Dec. 1-Mar. 31	.....	98	
Nantes	Jan. 1-31	2	.....
Paris	Nov. 29-Apr. 16	414	52	
Rheims	Feb. 8-14	1	.....
Rouen	Feb. 1-29	.....	4	
Germany:				
Strasburg	Jan. 1-Dec. 31	.....	2	
Great Britain:				
Birmingham	Dec. 6-Mar. 19	5	1	
Bradford	Nov. 22-Dec. 5	1	.....
Cardiff	Mar. 13-Apr. 9	2	.....
Dundee	Mar. 13-26	6	.....
Edinburgh	Dec. 13-Apr. 16	128	11	
Glasgow	Dec. 5-Apr. 22	772	50	
Hull	Jan. 17-Apr. 16	44	2	
Leeds	Dec. 27-Apr. 9	10	.....
Leith	Jan. 10-Apr. 16	25	2	
Liverpool	Dec. 13-Apr. 16	5	1	
London	Nov. 29-Apr. 16	225	1	
Manchester	Mar. 27-Apr. 16	48	3	
Newcastle-on-Tyne	Dec. 5-Apr. 16	72	2	
Nottingham	Nov. 29-Apr. 16	179	6	
Sheffield	Dec. 27-Apr. 16	21	.....
Southampton	Dec. 27-Apr. 9	7	1	
South Shields	Jan. 3-Apr. 16	18	1	
Sunderland	Jan. 3-Feb. 6	17	2	
Hawaii:				
Honolulu	Feb. 4	1	.....	From U.S. a.t. Logan.
India:				
Bombay	Nov. 25-Apr. 5	.....	188	
Caleutta	Dec. 27-Mar. 19	.....	14	
Karachi	Dec. 21-Apr. 3	74	14	
Italy:				
Catania	Dec. 4-Apr. 7	.....	5	Three new cases.
Messina	Dec. 12-18	.....	1	
Milan	Jan. 1-Feb. 29	5	.....
Palermo	Jan. 10-Apr. 9	4	.....
Japan:				
Amakusa	Feb. 23	15	.....
Matsu Island	Feb. 15	3	.....	From Ger. ss. Batavia from Vladivostock.
Fukuoka Ken	To Mar. 14	9	.....
Nagasaki Ken	Feb. 11-Mar. 20	34	4	One case from Br.ss Kwang Ping from Tsin-hwan-tao.
Yokohama	Jan. 1-Dec. 31, 1903	2	.....
Do	Feb. 1-27	3	.....
Java:				
Batavia	Nov. 15-Mar. 27	141	39	
Malta	Dec. 6-Apr. 2	25	5	
Mexico:				
La Cananeca	Mar. 9	.....	
Magdalena	Mar. 9	8	.....
Mexico	Dec. 28-Apr. 17	82	51	
Porfirio Diaz	Jan. 9	1	.....
Tampico	Jan. 11-21	.....	12	
Torreón	Feb. 24-Apr. 23	110	16	
Vera Cruz	Dec. 19-Mar. 26	3	1	One case ss. Prince August Wilhelm from Havre.
Netherlands:				
Amsterdam	Dec. 20-Apr. 16	38	8	
Rotterdam	Dec. 6-Jan. 23	2	.....
Panama, Panama:				
Jan. 11-17	.....	3	.....
Philippine Islands:				
Cebu	Jan. 1-31	5	1	
Manila	Nov. 15-Mar. 12	5	4	
Porto Rico:				
San Juan	Dec. 1-Mar. 8	9	.....
Russia:				
Moscow	Nov. 22-Mar. 26	95	27	
Odessa	Nov. 29-Mar. 26	16	1	
St. Petersburg	Nov. 29-Apr. 2	310	49	
Warsaw	Nov. 8-Feb. 27	.....	33	

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

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain:				
Barcelona	Jan. 10—Apr. 10	.....	73	
Madrid	To Dec. 15	35,000	.....	Estimated.
Santander	Dec. 9—Apr. 4	51	15	
Straits Settlements:				
Singapore	Feb. 21—27	.....	1	
Turkey:				
Alexandretta	Mar. 6—12	1	.....
Constantinople	Jan. 18—Apr. 10	.....	66	
Smyrna	Nov. 23—Mar. 24	.....	48	
Uruguay:				
Montevideo	Sept. 6—Dec. 31	12	1	

Weekly mortality table, foreign and insular cities.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—								
				Tubercolosis.	Plague	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	
Acapulco	Apr. 16	6,000	4									
Aix la Chapelle	Mar. 26	144,619	54	6								1
Alexandretta	Apr. 9	9,000	4									
Amherstburg	Apr. 23	2,250	2									
Antwerp	Apr. 2	294,669	88					3				
Do	Apr. 9	294,669	87					11	1			3
Barmen	do	150,212	38	3								2
Barranquilla	do	42,000	23									1
Beirut	Apr. 2	80,000	18									1
Do	Apr. 9	80,000	19									
Belfast	do	358,693	180				1	1			1	12
Belize	Apr. 21	9,000	6									
Bergen	Apr. 7	73,000	23	7								
Berlin	Apr. 2	1,962,717	664	86								
Birmingham	Apr. 16	537,965	221					2	1	3	1	25
Bombay	Mar. 29	776,006	1,531	58	972		23	1				13
Bristol	Apr. 16	343,204	106					i	1		1	1
Brunswick	Apr. 9	131,422										
Brussels	do	575,896	167	19			2	1				1
Budapest	do	732,322						1	6	10	8	
Callao	Mar. 27	30,000	17									
Cardiff	Apr. 9	176,313	45									
Catania	Apr. 7	153,523	95	4			3		7		3	
Do	Apr. 14	153,523	64	2				3		2		
Christiania	Apr. 9	224,000	75									1
Coatzacoalcos	Apr. 16	3,000	3									
Coburg	Apr. 9	22,838	8									
Cognac	Apr. 2	19,483	8									
Do	Apr. 9	19,483	6									
Cologne	do	408,864	146	45					2			3
Colombo	Mar. 26	155,869	80						1			
Colon	Apr. 17	8,000	7									
Constantinople	Apr. 3	800,000	273				3	4	1		4	
Do	Apr. 10	800,000	314				3	13	1	2	3	
Copenhagen	Apr. 2	500,000	130	15								10
Do	Apr. 9	500,000	160	23								1
Corunna	do	50,000	30	4								4
Crefeld	Apr. 16	110,389	20						1			
Dublin	Apr. 15	378,994	226	48				3		2	4	8
Dundee	Apr. 2	163,535	63							1	4	5
Do	Apr. 9	163,535	75						1		2	3
Edinburgh	do	331,977	114						2	1	1	2
Fiume	Apr. 10	40,000										1
Flushing	Apr. 16	19,105	7									
Frankfort-on-the-Main	Apr. 9	313,600	90									1
Funchal	Apr. 10	44,049	25	2								
Geneva	Apr. 2	111,000	67									
Ghent	Mar. 19	163,741	67	6						1	4	
Do	Mar. 26	163,741	80	10						1	4	1
Do	Apr. 2	163,741	70	3						1	1	1

Weekly mortality table, foreign and insular cities—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Tarragona	Apr. 9	19,300	14	2	.....	.....	.....	.....	1	.....	.....	.....	1	.....
Trapani	Apr. 2	61,437	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Apr. 9	61,437	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trieste	do	190,166	94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuxpam	Apr. 19	7,000	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utilia	Apr. 9	930	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Venice	do	166,288	69	2	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Veracruz	Apr. 23	32,000	36	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vienna	Apr. 9	1,797,992	716	143	.....	.....	.....	.....	1	1	8	33	2	.....
Yokohama	Mar. 26	313,695	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
West Hartlepool	Apr. 9	63,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Windsor, N. S.	Apr. 23	3,000	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg	Apr. 16	70,000	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Zurich	Apr. 9	158,433	73	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....

By authority of the Secretary of the Treasury:

WALTER WYMAN,
Surgeon-General,
United States Public Health and Marine-Hospital Service.