

Public Health Reports

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

VOL. XIV.

WASHINGTON, D. C., JANUARY 6, 1899.

No. 1.

UNITED STATES.

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

Influenza (la grippe).

This disease is reported by newspapers present in epidemic form in many places. In Philadelphia it is stated that 20 per cent of the school children have the disease. It is also reported as attacking many persons in New York, Washington, and of other cities. The health officials of New York and Philadelphia have taken the ground that la grippe is contagious, and recommend isolation of persons suffering with the disease, fumigation of rooms, and public vehicles—in a word, the usual precautions observed in the treatment of infectious and contagious diseases. As in the pandemic of 1889-90, la grippe seems to have started in the East, having been reported in Turkey about the middle of November, and has spread westward, following the established lines of travel.

In another part of this number of the PUBLIC HEALTH REPORTS may be found abstracts from the reports of medical officers of the Marine-Hospital Service and State boards of health.

GRIPPE.

Circular letter addressed to medical officers, acting assistant surgeons, and sanitary inspectors of the Marine-Hospital Service, and secretaries State boards of health.

WASHINGTON, D. C., December 24, 1898.

SIR: You are requested to report, as soon as practicable, whether influenza or la grippe is prevalent in your locality, giving the type of

the disease, the mortality (severity), and the treatment, sanitary and medicinal, with full statistics as far as possible.

By direction of Supervising Surgeon-General, U. S. M. H. S.

Respectfully, yours,

PRESTON H. BAILBACHE,
Surgeon, U. S. M. H. S.

ABSTRACT OF REPLIES RECEIVED.

Alexandria, Va.—Grippe has been prevalent for about three weeks. It is unusually contagious and generally of catarrhal type, but, except in persons of advanced years, or in neglected cases, it is not severe. Cases of croupous pneumonia with typical bronchopneumonia symptoms are quite frequent and invariably fatal.

Berlin, Md.—Grippe is moderately prevalent in this locality, about 20 persons in a population of 1,500 being affected. It is of mild type, with no mortality.

Boston, Mass.—Grippe is very prevalent in Boston and vicinity, and may be said to be epidemic. The number of cases can not be stated as reports are not required by the board of health except in case of death. Since December 1, 8 deaths have been reported, 7 of which were complicated with other diseases. During the same period, 7 cases have been admitted to the Marine Hospital for treatment and 10 have developed in the wards. The type of the disease in cases seen by myself have been mild. It appears to be mildly contagious.

Brunswick, Ga.—Influenza prevails in this locality in a mild type, with no mortality so far.

Cairo, Ill.—Grippe is prevalent, though not yet epidemic.

Cambridge, Md.—Grippe is generally prevalent in this locality in two distinct types, the neuralgic and the catarrhal. The mortality from the disease has been very slight. In my opinion the disease is of a highly infectious type.

Concord, N. H.—There are very few cases at this date, and no deaths have resulted.

Delaware Breakwater Quarantine, Del.—No influenza or grippe in this locality.

Dubuque, Iowa.—A few cases are reported of what is believed to be epidemic or contagious grippe. All are of a mild form, and the diagnosis is questionable.

Fredericksburg, Va.—No cases discovered in the town or vicinity.

Georgetown, S. C.—A few cases of a mild type have occurred in this city within the past two months.

Jackson, Miss.—A few cases have occurred, but there is no epidemic.

Louisville, Ky.—There has been an extensive epidemic of influenza throughout the State of Kentucky. It has been exceedingly mild in character, no deaths having resulted.

Mobile, Ala.—No cases of epidemic influenza have been reported to the health officer up to this time.

Newbern, N. C.—A few cases have been observed in this city. There have been no deaths. Severe colds and some cases of catarrhal pneumonia are noted.

Philadelphia, Pa.—The total number of deaths for the week ended December 24 was 650, an increase of 169 over the number for the previous week, and 284 over the corresponding week in the preceding year. Of these, 29 were reported as influenza and 123 as pneumonia, being an increase of influenza of 26 and of pneumonia of 47 over the previous week. For the week ended December 29 the total number of deaths is 607, of which 59 are attributed to influenza and 115 to pneumonia. Physicians are generally overworked, and whole families are prostrated. The manifestations of the disease are so varied that it has to be treated symptomatically.

Portsmouth, N. H.—Grippe exists in sporadic form and is of mild type, being generally neuralgic. Catarrh is slight or absent.

Providence, R. I.—A form of epidemic cold exists. Whether it is true epidemic influenza or grippe can not be stated. A few cases which appear to be typical are reported. There has been no perceptible increase of deaths from pulmonary diseases.

Richmond, Va.—A few cases in very mild form.

Rockland, Me.—No genuine cases of grippe. Pneumonia and bronchitis are prevalent.

Springfield, Ill.—There are quite a number of cases of grippe, most of them being of mild type. A few are of the most severe type. Several deaths are reported. Severe colds are prevalent.

Smallpox in Detroit, Mich.

DETROIT, MICH., *January 1, 1899.*

SIR: I have the honor to report 4 cases of smallpox in this city. I would request that 50 vaccine points be sent as soon as possible.

Respectfully, yours,

JOHN GODFREY,
Surgeon, U. S. M. H. S.

Smallpox in Minnesota.

ST. PAUL, MINN., *December 19, 1898.*

SIR: It becomes my duty to inform you that John Noberger, aged 27, arrived at Minneapolis, Minn., December 8, 1898, where he developed a mild case of varioloid. Came from Montana where he had been working on the railroads. Supposed origin: One of the railroad crew sick for three days, when taken suddenly from camp and information as to the nature of sickness refused to the rest of the crew.

Very truly,

H. M. BRACKEN, *Secretary.*

Smallpox in Oklahoma Territory.

GUTHRIE, OKLA., *December 30, 1898.*

SIR: I have to report the following additional cases of smallpox, all of which exist near the original point of infection, at Stroud: Two

cases near Sac and Fox Agency in country; 1 case at Daggett; 1 case near Parkland in country; 1 case in Chandler. The original cases were of a malignant type, 3 deaths occurring in the first family at Stroud. Total cases to date, 15; total deaths, 3.

Very truly, yours, L. HAYNES BUXTON,
Superintendent of Public Health for Oklahoma.

Smallpox in Pennsylvania.

PHILADELPHIA, PA., *December 31, 1898.*

SIR: Since my last report of December 20, 1898, smallpox has been reported in Pennsylvania as follows: Ball Hill, Bedford County, 1 case; Everett, Bedford County, 3 cases; Charlesville, Bedford County, two families, number not reported; Hopewell, Bedford County, 3 cases; in and near Steeltown, Bedford County, 11 cases; Hustontown, Fulton County, 4 cases; New Grenada, Fulton County, 7 cases; Waterfall, Fulton County, 1 case. The disease is also reported at Libonia, Franklin County, Warfordsburg and Wells Tannery, Fulton County. Diagnosis not yet confirmed. East Vincent Township, Chester County, 1 case; Pittsburg, Allegheny County, 1 case, removed to municipal hospital; origin, Bedford; Homer City, Indiana County, 2 cases. No fatal case has yet occurred.

Yours, very truly, BENJ'N LEE,
Secretary Pennsylvania State Board of Health.

Smallpox in North Carolina.

RALEIGH, N. C., *December 30, 1898.*

SIR: You are hereby informed that 1 case of smallpox has been reported to this office as existing in McDowell, New Hanover, and Tyrrell counties. The origin of the disease is (1) California (?); (2) (?); (3) Norfolk. Precautions taken, as usual.

R. H. LEWIS,
Secretary of State Board of Health of North Carolina.

Smallpox in Biggeville, Ill.

SPRINGFIELD, ILL., *December 30, 1898.*

SIR: I have the honor to report the existence of 8 cases of smallpox in Biggeville, Henderson County, this State. Source of contagion, case previously reported. All patients are quarantined under the direction of this board, and every effort is being made to prevent the spread of the disease.

Very respectfully, J. A. EGAN, M. D.,
Secretary of Illinois State Board of Health.

OHIO.

The smallpox situation.

[Memorandum of cases of smallpox reported from January 1, 1898, to December 22, 1898.—From the Ohio Sanitary Bulletin, November and December, 1898.]

Wapakoneta.—The first case appeared at Wapakoneta May 7, and is traced to an Uncle Tom's Cabin show which appeared there April 26. There have been reported to date 75 cases in Wapakoneta. The following cases have been traced to this outbreak: Vicinity of Wapakoneta,

25 cases, 1 death ; Buckland and vicinity, 53 cases ; * New Hampshire, 17 cases ; Geyers, 11 cases ; St. Marys and vicinity, 7 cases ; Uniopolis, 1 case ; Botkins, 1 case, doubtful ; Wayne Township, Auglaize County, 2 cases ; West Newton, 5 cases ; *Stokes Township, Logan County, 11 cases ; *Sandusky, 6 cases ; New Paris, 1 case ; Dayton, 1 case ; *Washington Township, Auglaize County, 2 cases ; *Celina, 1 case ; *near St. Johns, Auglaize County, 5 cases.

Delphos and Van Wert.—The first cases appeared at Delphos and Van Wert in May. Origin is not positively known, but is suspected to be Uncle Tom's Cabin show, which was at Van Wert April 18 and Delphos April 25 ; 17 cases appeared at Van Wert, and 17 cases at Delphos and vicinity.

Carroll.—Smallpox appeared at Carroll, Fairfield County, on March 7, in the person of Solomon Smith, who came from Way Cross, Ga., on March 2 and died on March 13. Twelve cases and 1 death at Carroll. One case developed at Columbus, traceable to this outbreak.

Goshen.—Smallpox appeared at Goshen on May 28 ; traceable to Uncle Tom's Cabin show, which was at Loveland on May 14. In Goshen and vicinity there were 27 cases.

Marysville.—Smallpox appeared at *Marysville May 13, traceable to Uncle Tom's Cabin show, which was there April 29. Thirty-six cases have been investigated, the exact number is not yet known. Five cases at *Amlin, Franklin County, and a number of cases at *Hamilton are traceable to Marysville. The exact number at Hamilton is not yet known.

New Carlisle.—Smallpox appeared at New Carlisle and *vicinity May 10, traceable to Uncle Tom's Cabin show, which was there April 28. Sixty-two cases have been traced to this source ; the exact number that developed is not yet known. There has been 1 death.

Loveland.—Smallpox appeared at Loveland the latter part of May, traced to Uncle Tom's Cabin show, which was there from May 1 to 14. In *Loveland and vicinity, 75 cases and 1 death are reported. The exact number that developed is not yet known. Three cases at Center, Montgomery County, and 21 cases at Wyoming are probably traceable to Loveland.

Miscellaneous.—Smallpox has been reported at the following places, origin unknown : *Cleveland, 16 cases ; *Cincinnati, 16 cases ; Oberlin, 1 case ; Put-in-Bay, 27 cases, 1 death ; Bays, 3 cases ; Columbus Grove, 1 case ; *Sandusky, 17 cases ; *Lancaster, 1 case ; *near Belmore, Putnam County, 2 cases ; *Antioch College, Yellow Springs, 1 case ; *Mineral Point, 1 case ; *near Selma, Madison County, 1 case ; *Newark, 1 case, traceable to Sandusky.

Case of smallpox in Pittsburg, Pa.

PITTSBURG, PA., December 28, 1898.

SIR: I have the honor to report that a case of smallpox was found in Mercy Hospital, medical ward, on Sunday, December 25. The case was sent to the pesthouse, and all proper precautions taken to prevent the development of other cases.

Very respectfully,

C. T. PECKHAM,
Surgeon, U. S. M. H. S.

* Indicates disease still present.

Case of smallpox in Alexandria, Va.

ALEXANDRIA, VA., December 27, 1898.

SIR: I have to report to you finding of 1 case of variola (confluenta) here this date. So far have been able to trace this case to infection derived from a ragpicker in a junk shop. I have reason to believe that these rags were received from Norfolk; will, however, report further to you on information which the mayor has promised me to-morrow.

Very respectfully,

HAMILTON P. HOWARD,
Sanitary Inspector, U. S. M. H. S.

ALEXANDRIA, VA., December 28, 1898.

SIR: I have to report to-day, in connection with my communication of yesterday, inclosed, that a consignment of rags, etc., from Norfolk or Portsmouth, Va., via Washington and Norfolk Steamboat Company, was received here about two weeks ago. Whether any of these found their way to dealer referred to yesterday or not, or whether ragpicker mentioned has worked for this man, I can not, as yet, state.

Very respectfully,

HAMILTON P. HOWARD,
Sanitary Inspector, U. S. M. H. S.

Smallpox in Alexandria, Va.

ALEXANDRIA, VA., January 4, 1899.

SIR: I have to report to you occurrence of 1 case of variola seen to-day, with Dr. Miller, health officer, this case making a total of 3 here; has been affected for ten days. Type of case, discrete; first 2, confluent.

Very respectfully,

HAMILTON P. HOWARD,
Sanitary Inspector.

Smallpox in Newport News, Va.

NEWPORT NEWS, VA., December 31, 1898.

SIR: I have the honor to report the existence of 4 cases of smallpox in this city. Necessary precautions to prevent the spread of this disease have been taken by the local health authorities.

Respectfully, yours,

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

Smallpox in Norfolk, Va.

NORFOLK, VA., December 31, 1898.

SIR: I have the honor to report that several cases of smallpox, the exact number I can not ascertain—probably as many as 10—have been found in the city. There are now about 70 cases, all in the pesthouse, save 2 or 3, which are quarantined in their homes. The board of health is taking vigorous and well-organized action in the matter. Medical inspectors are making a house-to-house canvass, and all cases of sickness are investigated. I have been unable to ascertain the condition of affairs relative to the disease in the county, but am of the opinion that it has improved.

Respectfully, yours,

EDWD. E. FEILD,
Acting Assistant Surgeon, U. S. M. H. S.

*Suspected smallpox at Rock Springs, Wyo.*ROCK SPRINGS, WYO., *December 24, 1898.*

SIR: I beg leave to report 1 case of suspected varioloid discovered yesterday, also 1 case of suspected smallpox, source of infection unknown, except, possibly, through an immigrant that was reported by authorities in New York as having been exposed on vessel, but was only quarantined for a few days, when he started for Rock Springs, Wyo. As we have twenty-three nationalities here at work in the mines, I was unable to locate him.

I am, sir, very respectfully, yours,
R. HARVEY REED,
Surgeon-General, Wyoming National Guards.

*Resolutions concerning inspection fees by the Jackson County, Miss., board of health.*GULF QUARANTINE STATION, *December 23, 1898.*

SIR: I have the honor to forward herewith a copy of a resolution passed by the Jackson County, Miss., board of health, in which the inspection fee on vessels bound for the port of Pascagoula, after receiving the pratique of this station, is done away with. The copy was sent me by Mr. F. H. Lewis, president of the Pascagoula Commercial Club.

Respectfully, yours,
A. C. SMITH,
Passed Assistant Surgeon, U. S. M. H. S.

[Inclosure—Copy.]

Regular meeting of the board of health of Jackson County, Miss., held the second Monday of December, 1898. Present, P. K. Mayers, president; M. M. Evans, Volney Browne, and J. P. Delmas, members; and Dr. B. F. Duke, quarantine physician.

At said meeting the following order was adopted:

Resolved, That hereafter no inspection fee be charged any vessel entering the port of Pascagoula which has reported to the national quarantine station at Ship Island, Miss., and undergone and complied with the regulations of the Marine-Hospital Service, and have a pratique therefrom.

J. P. DELMAS, *Secretary.*

Smallpox in the United States as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to January 6, 1899.

Places.	Date.	Cases.	Deaths.	Remarks.
Michigan :				
Detroit.....	Jan. 1.....	4	.....
Minnesota :				
Minneapolis	Dec. 8.....	1	.....
Oklahoma :				
Chandler.....	Dec. 30.....	1	.....
Doggett.....	.....do.....	1	.....
Parkland.....	.....do.....	1	.....
Sax and Fox Agency .....	.....do.....	2	.....
Stroud.....	.....do.....		3	
Pennsylvania :				
Ball Hill.....	Dec. 31.....	1	.....
Charlesville.....	.....do.....		.....	Smallpox reported.
East Vincent Township.....	.....do.....	1	.....
Everett.....	.....do.....	3	.....
Homer City.....	.....do.....	2	.....
Hopewell.....	.....do.....	3	.....
Hustontown.....	.....do.....	4	.....
New Granada.....	.....do.....	7	.....
Pittsburg.....	.....do.....	1	.....
Steeltown.....	.....do.....	11	.....
Waterfall.....	.....do.....	1	.....
Virginia :				
Alexandria.....	Jan. 4.....	3	.....
Newport News.....	Dec. 31.....	4	.....
Norfolk.....	.....do.....	10	.....
Wyoming :				
Rock Springs.....	Dec. 24.....	1	.....

Report of immigrants inspected at port of Baltimore during the month of December, 1898.

BALTIMORE, MD., *December 31, 1898.*

SIR : I have the honor to report that there were 752 steerage passengers and 10 cabin passengers inspected at this port during the month of December, 1898. One case was rejected for diphtheria and 1 case on account of smallpox. Both cases were sent to hospital.

Respectfully, yours,

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

Report of immigration at Boston for the week ended December 24, 1898.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of Boston, December 25, 1898.

Number of alien immigrants who arrived at this port during the week ended December 24, 1898; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of im- migrants.
Dec. 18	Steamship Boston.....	Yarmouth, Nova Scotia.....	35
Dec. 19	Steamship Catalonia.....	Liverpool, England.....	37
Do...	Steamship Beverly.....	Port Morant, Jamaica.....	1
Dec. 21	Steamship Prince George.....	Yarmouth, Nova Scotia.....	57
Dec. 22	Steamship Halifax.....	Halifax, Nova Scotia.....	23
Do...	Steamship Boston.....	Yarmouth, Nova Scotia.....	52
Do...	Steamship Michigan.....	Liverpool, England.....	11
Do...	Steamship Irishman.....	do.....	22
Do...	Steamship Victorian.....	do.....	26
Do...	Steamship Columbian.....	London, England.....	28
Do...	Steamship Manitoban.....	Glasgow, Scotland.....	2
Dec. 23	Steamship Sylvania.....	Liverpool, England.....	9
Dec. 24	Steamship Prince George.....	Yarmouth, Nova Scotia.....	74
	Total.....		377

GEORGE B. BILLINGS,
Commissioner.

Report of immigration at Philadelphia for the week ended December 31, 1898.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of Philadelphia, December 31, 1898.

*Number of alien immigrants who arrived at this port during the week ended December 31, 1898;
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of im- migrants.
Dec. 25	Steamship Admiral Sampson.....	Jamaica.....	3
Dec. 26	Steamship Rhyndland.....	Liverpool and Queenstown.....	39
	Total		42

JNO. J. S. RODGERS,
Commissioner.

REPORTS FROM NATIONAL QUARANTINE

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Alexandria, Va.....	Dec. 31	.....	.....	.....
Beaufort, N. C.....	do.....	.....	.....	.....
Brunswick, Ga.....	do.....	Br. bk. Geo. Thompson (a)	Dec. 21	Rio.....
Cape Charles, Va.....	do.....	.....	.....	.....
Cape Fear, N. C.....	do.....	.....	.....	.....
Delaware Breakwater Quarantine, Del.	do.....	.....	.....	.....
Eureka, Cal.....	Dec. 17	.....	.....	.....
Grays Harbor, Wash.....	Dec. 24	.....	.....	.....
Gulf Quarantine, Miss.....	do.....	U. S. sc. James Slater.....	Dec. 21	Habana.....
Honolulu, Hawaiian Islands.....	Dec. 10	.....	.....	.....
Newbern, N. C.....	Dec. 31	.....	.....	.....
Port Townsend, Wash.....	Dec. 24	.....	.....	.....
Reedy Island Quarantine, Del ..	Dec. 17	.....	.....	.....
.....	Dec. 24	.....	.....	.....
.....	Dec. 31	.....	.....	.....
San Diego, Cal.....	Dec. 22	.....	.....	.....
San Francisco Quarantine, Cal.....	Dec. 24	.....	.....	.....
South Atlantic Quarantine, Blackbeard Island, Ga.	do.....	Br. sc. John S. Parker.....	Dec. 20	Habana.....
Tortugas Quarantine, Key West, Fla.	do.....	.....	.....	.....
Washington, N. C.....	Dec. 31	.....	.....	.....

a Previously reported.

REPORTS FROM STATE AND

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Anclote, Fla.....	Dec. 31	.....	.....	.....
Baltimore, Md.....	do.....	.....	.....	.....
Bangor, Me.....	do.....	.....	.....	.....
Boston, Mass.....	do.....	.....	.....	.....
Carabelle, Fla.....	do.....	.....	.....	.....
Charleston, S. C.....	do.....	.....	.....	.....
Charlotte Harbor, Fla.....	Dec. 24	.....	.....	.....
.....	Dec. 31	.....	.....	.....
Elizabeth River, Va.....	do.....	.....	.....	.....
Galveston, Tex.....	do.....	.....	.....	.....
Gardiner, Oreg.....	do.....	.....	.....	.....
Key West, Fla.....	Dec. 24	.....	.....	.....
.....	Dec. 31	.....	.....	.....
Los Angeles, Cal.....	Dec. 24	.....	.....	.....
Mobile, Ala.....	do.....	.....	.....	.....
New Bedford, Mass.....	Nov. 12	.....	.....	.....
Newport News, Va.....	Dec. 31	.....	.....	.....
Newport, R. I.....	do.....	.....	.....	.....
Pas Cavallo, Tex.....	do.....	.....	.....	.....
Providence, R. I.....	do.....	.....	.....	.....
Round Island, Miss.....	Dec. 24	.....	.....	.....
San Pedro, Cal.....	do.....	.....	.....	.....
Savannah, Ga.....	do.....	.....	.....	.....
.....	Dec. 31	.....	.....	.....
Tampa Bay, Fla.....	Dec. 31	.....	.....	.....

AND INSPECTION STATIONS.

Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
			No transactions.....	
			No report.....	
Brunswick.....	Ballast discharged and hold washed.	Dec. 29		7
			No report.....	1
				7
			No transactions.....	
				2
Pascagoula.....	Disinfected and held.....		One case yellow fever in port of departure.	2
				4
			No transactions.....	9
				18
				30
				15
				2
			No report.....	
Jacksonville.....	Disinfected and held.....		Remanded from Jacksonville; 2 cases intermittent fever.	5
			No transactions.....	
				1

MUNICIPAL QUARANTINE STATIONS.

Destination.	Treatment of vessels, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
			No report.....	
				26
			No report.....	
			do.....	
			do.....	5
			No report.....	
			do.....	1
			No report.....	
			do.....	18
				7
			No transactions.....	
				21
			No report.....	
				4
			No report.....	
			do.....	1
				3
			No report.....	
				21
				13
			U. S. transport <i>Chester</i> arrived on Dec. 26, two days out from Habana. One death on board, a soldier, from dysentery.	
			No report.....	

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

COLORADO—Denver.—Month of November, 1898. Estimated population, 167,000. Total number of deaths, 180, including diphtheria, 1; enteric fever, 8, and 41 from phthisis pulmonalis.

IOWA—Boone.—Month of November, 1898. Estimated population, 3,330. Total number of deaths, 12.

Burlington.—Estimated population, 30,000. Total number of deaths, 25, including 2 from phthisis pulmonalis.

Davenport.—Estimated population, 36,000. Total number of deaths, 27, including 3 from phthisis pulmonalis.

Des Moines.—Estimated population, 72,000. Total number of deaths, 58, including diphtheria, 1; enteric fever, 5, and 8 from phthisis pulmonalis.

Dubuque.—Estimated population, 45,000. Total number of deaths, 39, including diphtheria, 4; enteric fever, 1, and 4 from phthisis pulmonalis.

Ottumwa.—Estimated population, 18,000. Total number of deaths, 19, including diphtheria, 3.

Sibley.—Estimated population, 1,300. Total number of deaths, 2.

Sioux City.—Month of October, 1898. Estimated population, 37,000. Total number of deaths, 35, including diphtheria, 3; enteric fever, 2, and 3 from phthisis pulmonalis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended December 24, 1898, from 51 observers, indicate that inflammation of bowels, phthisis pulmonalis, diarrhœa, and enteric fever increased, and pleuritis decreased in area of prevalence. Phthisis pulmonalis was reported present at 133, enteric fever at 46, scarlet fever at 44, measles at 20, diphtheria at 19, whooping cough at 15 places, and smallpox at 1 place—Detroit.

NEW YORK.—Reports to the State board of health, Albany, for the month of November, 1898, from 156 cities, towns, and villages, show a total of 8,709 deaths, including diphtheria, 242; enteric fever, 189; measles, 18; scarlet fever, 32; whooping cough, 52; smallpox, 1, and 1,049 from phthisis pulmonalis. The Monthly Bulletin says:

The mortality reported this month is at the average daily rate for the State of 290, and an annual rate per 1,000 population of 15.75 against 15.30 for the corresponding month of last year; there were 400 more deaths than in November, 1897, when there were likewise 400 more than in the year preceding. There has been a diminution from October of 900 deaths. The saving in mortality from last month is in zymotic diseases, which constitute now 9 per cent of the deaths against 14 per cent then, the chief decrease being in diarrheal diseases, which caused 500 fewer deaths, and typhoid fever, from which there were 90 fewer deaths, diphtheria showing a moderate increase. Of local diseases, acute respiratory diseases caused 250 more deaths, and there was an increase of 75 deaths in diseases of the circulatory system, but diseases of the digestive system are less by more than 300. The mortality of

early life was lessened by 900 deaths. This is the month of lowest mortality in the year in this State, the average daily rate of the preceding ten months of the present year being 330, which rate would have added 1,200 deaths to the mortality of the month; the diarrheal and digestive diseases of summer have subsided and respiratory diseases have not reached the winter rate. Diphtheria has not shown the usual increase from October and caused less than half the average mortality of November, 2.7 per cent of all deaths, and but 70 deaths outside the maritime district. Typhoid fever caused 100 fewer deaths than in October, and about the average for the month for the past ten years. All zymotic diseases caused 9 per cent of deaths from all causes, against the average for November of 14.5 per cent. The first death from smallpox in the State since July, 1897, is reported from New York City, where, during the year, there have been 13 cases from a source distinct from that of the western part of the State; for a period of four weeks there has been no new point of development of the disease, until recently a case appeared in Almond, Allegany County, and one in Batavia; since the first of December Canandaigua and Rochester have each reported 2 new cases.

The mean average temperature during the month was 1° below the normal, winter weather with general fall of snow having set in on the 24th; the precipitation was 1 inch in excess, and the wind variable but generally westerly.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—									
				Pneumonia.	Yellow fever.	Smallpox.	Varicella.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Ann Arbor, Mich.....	Dec. 24.....	9,431	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashland, Wis.....	do.....	9,956	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashtabula, Ohio.....	do.....	8,383	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aurora, Ill.....	do.....	19,688	8	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Binghamton, N. Y.....	Dec. 31.....	35,005	20	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boston, Mass.....	do.....	448,477	220	27	.....	.....	.....	.....	2	.....	3	.....	1
Brockton, Mass.....	Dec. 24.....	27,294	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge, Mass.....	do.....	70,028	23	3	.....	.....	.....	.....	1	.....	1	.....	.....
Do.....	Dec. 31.....	70,028	24	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charleston, S. C.....	Dec. 24.....	54,955	37	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland, Ohio.....	do.....	261,353	102	4	.....	.....	.....	.....	4	1	3	.....	.....
Concord, N. H.....	do.....	17,044	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denver, Colo.....	Dec. 17.....	106,713	37	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dubois, Pa.....	do.....	6,149	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 24.....	6,149	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dunkirk, N. Y.....	do.....	9,416	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Erie, Pa.....	do.....	40,634	25	4	.....	.....	.....	.....	1	.....	.....	.....	.....
Everett, Mass.....	Dec. 17.....	11,068	6	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Fall River, Mass.....	Dec. 31.....	74,398	32	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg, Mass.....	Dec. 24.....	22,037	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint, Mich.....	do.....	9,803	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Green Bay, Wis.....	do.....	9,069	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Haverhill, Mass.....	Dec. 31.....	27,412	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke, Mass.....	do.....	35,637	14	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville, Fla.....	Dec. 24.....	17,201	17	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jersey City, N. J.....	Dec. 2.....	163,003	94	10	.....	.....	.....	.....	.....	1	1	.....	.....
Johnstown, Pa.....	Dec. 24.....	21,805	12	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kalamazoo, Mich.....	do.....	17,853	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lancaster, Pa.....	do.....	32,011	13	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lawrence, Mass.....	do.....	44,654	23	1	.....	.....	.....	.....	.....	.....	3	.....	.....
Lowell, Mass.....	Dec. 31.....	77,696	47	2	.....	.....	.....	.....	1	.....	1	.....	.....
Lynchburg, Va.....	do.....	19,709	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
McKeesport, Pa.....	Dec. 24.....	20,741	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manchester, N. H.....	do.....	44,126	20	3	.....	.....	.....	.....	1	.....	.....	.....	.....
Massillon, Ohio.....	Dec. 31.....	10,092	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Medford, Mass.....	do.....	11,079	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Melrose, Mass.....	Dec. 24.....	8,519	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan City, Ind.....	Dec. 31.....	10,776	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown, N. Y.....	Dec. 23.....	7,681	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown, Ohio.....	Nov. 19.....	11,977	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Nov. 26.....	11,977	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 3.....	11,977	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 10.....	11,977	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 17.....	11,977	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 24.....	11,977	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 31.....	11,977	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis.....	Dec. 24.....	204,468	74	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minneapolis, Minn.....	do.....	164,738	36	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nashville, Tenn.....	Dec. 31.....	76,168	34	2	.....	.....	.....	.....	1	.....	.....	.....	.....
Newburyport, Mass.....	Dec. 24.....	13,947	6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford, Mass.....	Dec. 31.....	40,733	17	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
New Orleans, La.....	Dec. 24.....	242,039	122	12	.....	.....	.....	.....	1	.....	1	.....	.....
Newport, R. I.....	Dec. 31.....	19,457	11	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norristown, Pa.....	Dec. 24.....	19,791	9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 31.....	19,791	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha, Nebr.....	Dec. 24.....	140,452	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oneonta, N. Y.....	Dec. 31.....	6,272	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia, Pa.....	do.....	1,046,964	725	63	.....	.....	.....	.....	21	2	30	1	3
Pittsburg, Pa.....	Dec. 24.....	23,617	96	3	.....	.....	.....	.....	7	2	2	1	4
Plainfield, N. J.....	Dec. 31.....	11,267	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Providence, R. I.....	do.....	132,146	57	6	.....	.....	.....	.....	.....	.....	2	.....	2
Pueblo, Colo.....	Dec. 24.....	24,558	13	.....	.....	2	.....	.....	1	.....	.....	.....	.....
Salt Lake City, Utah.....	do.....	44,843	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Santa Barbara, Cal.....	do.....	5,864	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sault Ste. Marie, Mich.....	do.....	5,760	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Savannah, Ga.....	do.....	43,189	17	3	.....	.....	.....	.....	1	.....	.....	.....	.....
Shreveport, La.....	do.....	11,979	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 31.....	11,979	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spokane, Wash.....	Dec. 24.....	19,922	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springfield, Ill.....	Dec. 26.....	24,963	20	3	.....	.....	.....	.....	1	.....	.....	.....	.....

a Estimated population, 65,165—white, 28,870; colored, 36,295. b White, 14; colored, 23.

MORTALITY TABLE, CITIES OF THE UNITED STATES—Continued.

[illegible]

Table of temperature and rainfall, week ended December 26, 1898.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Atlantic Coast:						
Eastport, Me.....	24	8		.91		.38
Portland, Me.....	27	5		.77	.08	
Northfield, Vt.....	22	7		.70		.32
Boston, Mass.....	30	6		.73	.12	
Vineyard Haven, Mass.....	35	4		.70	1.14	
Nantucket, Mass.....	37	2		.98	.40	
Woods Hole, Mass.....	34	2		.72	1.32	
Block Island, R. I.....	36	2		.81	1.98	
New Haven, Conn.....	31	3		.76	.33	
Albany, N. Y.....	27	6		.62		.33
New York, N. Y.....	33	5		.76	.85	
Harrisburg, Pa.....	32	2		.70	.73	
Philadelphia, Pa.....	35	5		.63	1.36	
New Brunswick, N. J.....	32	4		.83	1.31	
Atlantic City, N. J.....	36	5		.91	.84	
Baltimore, Md.....	37	3		.70	.63	
Washington, D. C.....	35	2		.70	.70	
Lynchburg, Va.....	39	2		.73	1.09	
Cape Henry, Va.....	42	7		.91		.28
Norfolk, Va.....	43	9		.84	.11	
Charlotte, N. C.....	44	7		1.00		.21
Raleigh, N. C.....	46	6		.68		.07
Kittyhawk, N. C.....	44	8		.98		.33
Hatteras, N. C.....	49	5		1.26		.24
Wilmington, N. C.....	49	7		.71		.47
Columbia, S. C.....	47	7		.68		.26
Charleston, S. C.....	53	6		.76		.04
Augusta, Ga.....	48	7		.77		.28
Savannah, Ga.....	54	6		.77	.38	
Jacksonville, Fla.....	58	4		.65	1.97	
Jupiter, Fla.....	67	4		.61	.36	
Key West, Fla.....	71	4		.35	.20	
Gulf States:						
Atlanta, Ga.....	44	6		1.02	.64	
Tampa, Fla.....	62	4		.56	.38	
Pensacola, Fla.....	54	2		.91	1.26	
Mobile, Ala.....	52	2		1.05		.91
Montgomery, Ala.....	50	6		1.10		1.02
Vicksburg, Miss.....	50		2	1.12		1.12
New Orleans, La.....	55	1		.98		.97
Shreveport, La.....	48		2	1.05		1.05
Fort Smith, Ark.....	43	0		.70		.66
Little Rock, Ark.....	44		5	.98		.89
Palestine, Tex.....	52		5	.84		.84
Galveston, Tex.....	56		3	.91		.91
San Antonio, Tex.....	55		3	.42		.42
Corpus Christi, Tex.....	60		7	.28		.28
Ohio Valley and Tennessee:						
Memphis, Tenn.....	43	3		.97		.97
Nashville, Tenn.....	41	3		.88		.77
Chattanooga, Tenn.....	44	4		1.01		.56
Knoxville, Tenn.....	41	5		.91		.49
Louisville, Ky.....	38	5		.81		.24
Indianapolis, Ind.....	33	4		.70	.24	
Cincinnati, Ohio.....	36	5		.70		.31
Columbus, Ohio.....	33	6		.64		.52
Parkersburg, W. Va.....	39	3		.70		.35
Pittsburg, Pa.....	35	7		.67		.22
Lake Region:						
Oswego, N. Y.....	29	5		.77	.12	
Rochester, N. Y.....	28	5		.70		.40
Buffalo, N. Y.....	29	6		.77		.35
Erie, Pa.....	33	3		.70		.14
Cleveland, Ohio.....	31	6		.56	.15	
Sandusky, Ohio.....	33	5		.56	.42	
Toledo, Ohio.....	29	5		.52	.47	
Detroit, Mich.....	28	4		.56	.50	
Lansing, Mich.....	27	1		.42	.57	
Port Huron, Mich.....	28	3		.49	.09	
Alpena, Mich.....	25	1		.55	.28	
Sault Ste. Marie, Mich.....	24		1	.47		.21
Marquette, Mich.....	22	1		.50		.47
Green Bay, Wis.....	24		4	.56		.08
Grand Haven, Mich.....	29	0		.56	.87	

a The figures in these columns represent the average daily departure.

Table of temperature and rainfall, week ended December 26, 1898—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Lake Region—Continued.						
Milwaukee, Wis.....	24	4	.....	.43	.06	.....
Chicago, Ill.....	29	0	.....	.49	.37	.....
Duluth, Minn.....	15	5	.....	.28	.....	.22
Upper Mississippi Valley:						
St. Paul, Minn.....	17	4	.....	.28	.....	.17
La Crosse, Wis.....	23	0	.....	.29	.....	.04
Dubuque, Iowa.....	26	1	.....	.42	.....	.17
Davenport, Iowa.....	27	2	.....	.35	.16	.....
Des Moines, Iowa.....	26	2	.....	.29	.....	.25
Keokuk, Iowa.....	29	3	.....	.42	.38	.....
Hannibal, Mo.....	30	3	.....	.29	.35	.....
Springfield, Ill.....	32	0	.....	.63	.27	.....
Cairo, Ill.....	38	3	.....	.73	.....	.70
St. Louis, Mo.....	33	4	.....	.60	.....	.32
Missouri Valley:						
Columbia, Mo.....	38	.....	6	.42	.36	.....
Springfield, Mo.....	38	.....	3	.63	.....	.53
Kansas City, Mo.....	29	4	.....	.29	.....	.15
Topeka, Kans.....	33	.....	1	.21	.07	.....
Wichita, Kans.....	38	.....	5	.21	.....	.14
Concordia, Kans.....	33	.....	2	.10	.08	.....
Lincoln, Nebr.....	28	2	.....	.15	.....	.09
Omaha, Nebr.....	24	5	.....	.21	.....	.15
Sioux City, Iowa.....	26	2	.....	.24	.....	.22
Yankton, S. Dak.....	20	12	.....	.14	.....	.14
Valentine, Nebr.....	25	5	.....	.08	.....	.08
Huron, S. Dak.....	16	11	.....	.14	.....	.12
Pierre, S. Dak.....	22	10	.....	.14	.....	.14
Moorhead, Minn.....	8	12	.....	.14	.....	.06
Bismarck, N. Dak.....	10	17	.....	.14	.....	.14
Williston, N. Dak.....	8	17	.....	.17	.....	.17
Rocky Mountain Region:						
Havre, Mont.....	16	17	.....	.14	.....	.14
Helena, Mont.....	21	10	.....	.21	.....	.18
Miles City, Mont.....	17	13	.....	.07	.....	.04
Rapid City, S. Dak.....	26	8	.....	.06	.....	.06
Spokane, Wash.....	29	2	.....	.63	.....	.63
Wallawalla, Wash.....	36	3	.....	.52	.....	.51
Baker City, Oreg.....	27	.....	4	.42	.....	.15
Winnemucca, Nev.....	30	.....	4	.30	.26	.....
Idaho Falls, Idaho.....	21	.....	7	.35	.....	.30
Salt Lake City, Utah.....	32	.....	9	.36	.25	.....
Lander, Wyo.....	21	0	.....	.10	.....	.09
Cheyenne, Wyo.....	25	.....	1	.07	.16	.....
North Platte, Nebr.....	24	7	.....	.14	.....	.14
Denver, Colo.....	30	.....	1	.14	.10	.....
Pueblo, Colo.....	33	.....	8	.14	.06	.....
Dodge City, Kans.....	30	1	.....	.14	.....	.12
Oklahoma, Okla.....	37	2	.....	.61	.....	.61
Amarillo, Tex.....	34	.....	7	.19	.....	.15
Abilene, Tex.....	48	.....	6	.33	.....	.33
Santa Fe, N. Mex.....	30	.....	8	.17	.....	.17
El Paso, Tex.....	46	.....	6	.11	.....	.11
Phoenix, Ariz.....	52	.....	.....	.32	.....	.....
Pacific Coast:						
Seattle, Wash.....	41	1	.....	1.26	.....	.78
Tacoma, Wash.....	40	1	.....	1.68	.....	.51
Fort Canby, Wash.....	43	1	.....	2.24	1.60	.....
Portland, Oreg.....	40	1	.....	1.85	.....	1.00
Roseburg, Oreg.....	40	.....	1	1.60	.....	1.04
Eureka, Cal.....	48	.....	3	1.96	.....	1.73
Redbluff, Cal.....	46	0	.....	1.29	.....	.90
Carson City, Nev.....	33	2	2	.49	.....	.37
Sacramento, Cal.....	47	.....	5	1.02	.03	.....
San Francisco, Cal.....	51	.....	2	1.23	.....	.57
Fresno, Cal.....	45	.....	1	.35	.....	.34
San Luis Obispo, Cal.....	52	2	.....	1.05	.....	1.05
Los Angeles, Cal.....	54	3	.....	.99	.....	.99
San Diego, Cal.....	55	.....	1	.48	.....	.47
Yuma, Ariz.....	56	4	.....	.14	.....	.14

a The figures in these columns represent the average daily departure.

FOREIGN.

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

Cholera, yellow fever, plague, and smallpox as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to January 6, 1899.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India: Madras.....	Nov. 19-Nov. 25...	.....	5	

YELLOW FEVER.

Brazil: Rio de Janeiro	Nov. 11-Nov. 25...	12	7	
Colombia: Barranquilla	Dec. 2-Dec. 9...	1	1	
Cuba: Havana.....	Dec. 16-Dec. 22.....		1	
Mexico: Vera Cruz.....	Dec. 8-Dec. 22.....		13	

PLAGUE.

India: Bombay	Nov. 22-Nov. 29.....		43	
Madras.....	Nov. 19-Nov. 25.....		1	

SMALLPOX.

Brazil: Bahia	Nov. 19-Nov. 26...	46	3	
Rio de Janeiro.....	Nov. 11-Nov. 25...	38	14	
England: Liverpool.....	Dec. 3-Dec. 10...	1	1	
India: Bombay.....	Nov. 22-Nov. 29.....		1	
Japan: Awomori Ken.....	Nov. 18-Dec. 8...	53	13	
Higo Ken.....	Nov. 18-Dec. 8...	1		
Kanagawa Ken.....	Nov. 18-Dec. 8...	1		
Nagasaki Ken.....	Nov. 18-Dec. 8...	1		
The Hokkaido.....	Nov. 18-Dec. 8...	8		
Tottori Ken.....	Nov. 18-Dec. 8...	3		
Russia: Moscow.....	Nov. 26-Dec. 3...	13	11	
Odessa	Dec. 3-Dec. 9...	5	1	

BRAZIL.

*Sanitary report from Rio.*RIO DE JANEIRO, *November 24, 1898.*

SIR: I have the honor to transmit to you the official report for the week ended November 11. There were 238 deaths from all causes, a decrease of 35 as compared with the foregoing week; 11 deaths from *accessio pernicioso*, a decrease of 1; 3 deaths from yellow fever, an increase of 1; 3 deaths from smallpox, the same as before; no death from typhoid fever and diphtheria, a decrease of 3 and 1, respectively; 3 deaths from whooping cough, an increase of 2; 1 death from beriberi, a decrease of 4, and 50 deaths from tuberculosis, a decrease of 3.

* * * * * * *

Information.—During the last two weeks we have had numerous rainy days. In general the state of health has been favorable. Light forms of bronchitis and rheumatic diseases occurred in great number. The number of fatal cases of tuberculosis shows a considerable increase.

Of infectious diseases, yellow fever continues, although in an unimportant degree. Smallpox prevails in the same manner as before, the death rate of the last week showing even an increase. However, at present, varicella and whooping cough exist in mild forms. Meanwhile, also, an unusual number of men-of-war of different nations have been in this port and have left it again. Fortunately there has not occurred any feverish infectious disease among the crews. It was rumored that on board of an Italian man-of-war there had been a suspicious case of yellow fever, but this report has been officially contradicted. Especially on board of the American squadron, consisting of the battle ships *Oregon* and *Iowa*, and the transport *Celtic*, the state of health has been perfectly satisfactory.

Since last report the following-named ships have been inspected and received bills of health of this office: November 18, steamship *York*, British, for New Orleans. November 19, barkentine, *Frances*, American, for Baltimore. November 21, steamship *Livorno*, German, for New York. November 22, steamship *Buffon*, British, for New York. November 27, ship *Ellerslie*, British, for Mobile.

Respectfully, yours,

W. HAVELBURG, M. D.,
Sanitary Inspector, U. S. M. H. S.

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

RIO DE JANEIRO, *November 28, 1898.*

SIR: I have the honor to transmit to you the official report for the week ended November 18. There were 261 deaths from all causes, an increase of 23 as compared with the foregoing week; 8 deaths from *accessio pernicioso*, a decrease of 3; 2 deaths from yellow fever, a decrease of 1; 8 deaths from smallpox, an increase of 5; 2 deaths from typhoid fever, an increase of 2; 2 deaths from measles, an increase of 2; 1 death from whooping cough, a decrease of 2; no deaths from beriberi, a decrease of 1, and 60 deaths from tuberculosis, an increase of 10.

* * * * * * *

MORTALITY IN RIO FOR FORTY-EIGHT YEARS.

Information.—The character of the general state of health has not changed during the last week, compared with the foregoing week.

Dr. Nuno de Andrade, director-general of public health, has just published especial bulletins on the mortality of this city for a period of forty-eight years. In this work there are lacking data in relation to the period elapsed from 1851 to 1858. It contains 16 instructive diagrams. He says that he was induced to prepare this document by the uncertainty, alleged by physicians and others, concerning the mortality among children in the city of Rio de Janeiro. According to this work there were, during forty years, 486,197 deaths, of which 118,429 were children. He says that the percentage of deaths among children in the total death rate was as follows:

London, 1896, 44.9 per cent; Paris, 1892, 25.9 per cent; Washington, 1895, 31.8 per cent; Buenos Ayres, 1896, 36.6 per cent; Montevideo, 1894, 35.5 per cent; Rio de Janeiro, average for the five years, 1893-1897, 27.2 per cent.

Yellow fever and tuberculosis.—The tables referring to yellow fever and tuberculosis attract at once general attention. These diseases together have caused 132,598 deaths, the number caused by all other diseases being 329,537. In this number are not included stillbirths.

The number of deaths caused by yellow fever from 1850 to 1898 was 53,515, and that of the deaths caused from 1859 to 1898 by tuberculosis, 79,083.

Dr. Andrade remarks that the mortality caused by tuberculosis has been comparatively greater than it is now. As the population of the city was estimated at 350,000 in 1859, and at 650,000 in 1896, it is seen, he asserts, that the number of deaths from tuberculosis declined from 58.7 per cent to 40.5 per cent.

Table No. 4 shows that from 1889 to June 30, 1898, the mortality caused by yellow fever has made remarkable progress. In this incomplete decade there were registered 17,539 deaths from yellow fever (also called icteroid typhus), against 8,473 in the previous decade.

Although some of the epidemics in recent years, especially those of 1891 and 1898, assumed the form of a real calamity in view of a great number of deaths in proportion to the number of cases, "it is not correct," says Dr. Nuno de Andrade, "to explain the increase to double the number of deaths since 1889 against ten years before by attributing it to the accidental increase of intensity of the infection." Another factor, he states, has led to this result, and this, he asserts, is the rapid increase of the population of this city through the numerous immigration to this capital from all the States of the Brazilian Union and from foreign countries since 1889, when the change of the former government attracted general attention to the center of radiation in the new life of the nation. In the four years from 1894 to 1897, inclusive, the excess of arrivals over departures was, he says, 160,257.

He gives the following table of the estimated population and the number of deaths from yellow fever:

Year.	Population.	Deaths.	Year.	Population.	Deaths.
1880.....	432,000	1,693	1890.....	550,000	719
1881.....	440,000	257	1891.....	564,000	4,454
1882.....	451,000	502	1892.....	578,000	4,413
1883.....	463,000	1,606	1893.....	592,000	742
1884.....	474,000	649	1894.....	617,000	4,715
1885.....	486,000	445	1895.....	633,000	818
1886.....	498,000	1,446	1896.....	650,000	2,900
1887.....	511,000	137	1897.....	679,000	159
1888.....	523,000	754	1898 (a).....	750,000	918
1889.....	537,000	2,155			

a Six months.

Malarial fevers.—The number of deaths from malarial infection in this city from 1868 to 1898, inclusive, was, according to Table No. 5, 31,553. Dr. Nuno de Andrade says that it is necessary to bear in mind, that from a certain date up to the present time the number of deaths in the city of Rio de Janeiro has been increased by the reception at hospitals of patients, who have come from suburban localities for the purpose of being treated in those establishments. If they recover, they return to their residences, but if they died, then the urban death rate is increased by the addition of this alien factor. The patients of this class are principally those who suffer from malarial affections, tuberculosis, beriberi, and hypœmia (anæmia intertropical, caused by the anchylostomum duodenate).

Accesso pernicioso.—The extremely great number of deaths in 1889, 1891, 1892, and 1894 displays, he says, the anomaly of "acceso pernicioso." There are some physicians who think that an incomplete diagnosis classified among acute forms of malarial affections many cases of different character and they are inclined to attribute these deaths to the exclusive influence of the high temperature and say, that these cases belong to the ancient syriasis or, according to the French expression, "coup de chaleur." Dr. Nuno de Andrade says that he does not agree with this opinion, which, he says, is not supported by the meteorological phenomenon, which is alleged in its support. Up to the present the most reliable statements induce him, he says, to reject the hypothesis of syriasis, but he hesitates between the theory of acceso pernicioso and that of very acute yellow fever. In the years mentioned above the epidemic disease was in reality intense and in this respect the table of malarial infection seems to coincide with that of yellow fever; practically, however, he goes on to say, the doubt will be settled by the direct examination of the blood.

Smallpox.—The great epidemics of eruptive fevers in 1865, 1872, 1873, 1878, 1883, 1887, 1891, and 1895, in which the mortality caused by acute exanthemata exceeded 1,000 deaths per annum, consisted almost entirely of smallpox. This is shown by the following table:

Years.	All eruptive fevers.	Smallpox.	Years.	All eruptive fevers.	Smallpox.
1865.....	1,239	1,226	1883.....	1,505	1,366
1872.....	1,096	1,021	1887.....	3,633	3,397
1873.....	1,695	1,629	1891.....	4,017	3,944
1878.....	2,245	2,175	1895.....	1,924	1,865

This proportion is maintained in other years in the period from 1859 to 1898, so that in the total number of 25,299 deaths resulting from eruptive fevers during the forty years, 21,410 were caused by smallpox.

Beriberi.—Table No. 7 refers to beriberi. While in the period from 1874 to 1888, inclusive, the total number of deaths from beriberi was about 300; in the year 1889 the number of deaths from this cause alone amounted to 500. Of the total number of 3,161 deaths from beriberi in twenty-four years, 2,850 belong to the ten years from 1889 to 1898.

It is known that the Brazilian navy furnishes a large number of cases to the beriberi mortality, and, calculating the number of persons who belong to that navy, it is seen, we regret to say, that the greater part of that personnel is gradually devoured by the disease.

Led by the humane wish to throw light on the dark etiological problem of beriberi, some physicians have attributed the disease to the food

of the crews, as especially to the use of hulled rice, which is considered the principal cause of this infection. Dr. Andrade obtained from the chief of staff of the navy a schedule of the rations furnished to the navy, and it was found that rice forms quite an insignificant part thereof. He is convinced that it is unnecessary to make any radical change in the ration, which, with a few slight additions, will be equal to that of the American navy, which he regards as the best.

Intestinal diseases.—Table No. 9 shows the mortality resulting from diseases of the digestive tube in the period of thirty years, beginning with 1868. This table would not attract attention were it not for the mortality among children, which is highly significant. Although it is observed that the general mortality resulting from such diseases has increased, which is explained by the increasing of the population, it may be noted that the proportion of deaths among children from this cause to the general death rate is constantly increasing.

He states that the number of fatal cases resulting from the diseases, indefinitely classified as hereditary weakness, has increased considerably.

Infantile tetanus is here comparatively rare; on the other hand, there are frequent cases of death from convulsions, which is not surprising in view of the extreme excitability of the nervous system of children.

In every 100 cases of deaths from diseases of the digestive tube the proportion of children has been as follows: 1868–1876 (9 years), 39; 1882–1891 (10 years), 57; 1892–1898 (6½ years), 64.

Census of Rio.—In regard to the population of the city of Rio de Janeiro Dr. Nuno de Andrade makes the following statements:

“The census of 1849 estimated the population of this city at 205,905, and that of 1890 at 429,848. Considering that the factors which form the base of those estimates were insufficient, it is necessary to increase those figures, and 10 per cent, which is admitted as an average, should be added to the said figures. In the case in question this increase of 10 per cent is too moderate, and it shows the number of 226,495 for 1849, and for 1890 472,832. Dividing the difference of 256,337 by the number of years in the interval we have the quotient of 6,252 as the theoretical rate of annual increase both from birth rate and from immigration. This quotient is equivalent to about 2.75 per cent of the population of 1849, and about 1.32 per cent of that of 1890. The medium of these two extremes is 2.03 per cent, which thus constitutes the arithmetical rate of increase per annum.”

He then goes on by a process difficult to explain that the number 472,832, to which he has increased the census report of 429,848, is also insufficient, and he consequently adds 77,664 more, thus making the total of 550,496, and adds that consequently the present population must be about 750,000, as stated in the bulletins of his office, which, in his opinion, is still perhaps even less than the actual population.

Dr. Andrade then goes on to prove this by means of the mortality in the forty years from 1849–1898. Excluding the stillbirths, the total number of deaths in the 8 periods of five years each was as follows: 1859–1863, 45,607; 1864–1868, 41,933; 1869–1873, 51,479; 1874–1878, 57,230; 1879–1883, 53,002; 1884–1888, 54,959; 1889–1893, 82,934; 1894–1898 (4½ years), 74,992.

Applying these figures to the estimated population in the respective years, the percentage of mortality was as follows: First five years, 22.9 per cent; fourth five years, 31.3 per cent; sixth five years, 30.1 per cent; seventh five years, 45.4 per cent.

What can explain the wonderful leap from 31.3 per cent to 45.4 per

cent? asked Dr. Nuno de Andrade, and he answers, Evidently, the sudden increase of the population from 1889 up to this date, in consequence of which the rate of 2.5 per cent no longer represents the real increase as it did at one time. Therefore, the year 1898 figures with the difference between the arrivals and departures in 1897, and the estimate of 750,000 must be considered as that of the minimum population of Rio de Janeiro.

Since last report the following-named ships have been inspected and received bills of health of this office: November 26, steamship *British Prince*, British, for New York; bark *Baltimore*, American, for Baltimore. November 28, steamship *Bellenden*, British, for New York; steamship *Etona*, British, for New York. November 30, steamship *Cyprian Prince*, British, for New York.

Respectfully, yours,

W. HAVELBURG, M. D.,
Sanitary Inspector, U. S. M. H. S.

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

CUBA.

Sanitary report from Habana.

HABANA, CUBA, December 24, 1898.

SIR: I have the honor to submit the following report for the week ended Thursday, December 22:

The death rate is slowly decreasing each week; the present week shows the lowest mortality since the early spring. The only death from yellow fever occurred in one of the military hospitals. There was a marked decrease of deaths from enteric fever compared with the previous week.

The Spanish troops are being rapidly brought in from the country districts to embark for Spain, and the sugar warehouses which line the water front are filled with these troops; the wharves connected with these warehouses are so filled up with human excrement that masters of vessels have again refused to allow their vessels to go alongside the wharves. There must be about 7,000 soldiers occupying these warehouses and all the excreta from these troops are piled up on the wharf front.

Transports bringing troops and supplies still continue to go to San José Wharf, where they lie from two to four days. The *Chester* and *Minnewaska* are now there.

Passenger steamers plying between ports in Florida and Habana are remaining in this harbor either all night or a great portion of it. I have been asked to inspect these vessels during the night time, and have refused to do so, feeling and knowing the necessity of having every chance to observe the conduct of those persons connected with the vessel.

I would state that the British steamship *Laughton* became infected with yellow fever at the Regla wharves in November, the disease developing two days after her departure from Habana; there were 4 cases and 1 death. This information I have just received on her return to Habana.

Very respectfully,

W. F. BRUNNER,
Sanitary Inspector, U. S. M. H. S.

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

Mortality of the city of Habana for the week ended Thursday, December 22, 1898.

Cause of death.	Total.
Yellow fever.....	1
Enteric fever.....	18
Pernicious fever.....	21
Malarial fever.....	42
Diphtheria.....	1
Dysentery.....	28
Eteritis.....	68
Grippe.....	2
Starvation.....	1
Pneumonia.....	2
Tuberculosis.....	42
Deaths from all causes.....	387
Deaths in the military hospitals from yellow fever.....	1
Deaths in the city from yellow fever.....	0
Deaths in the civil hospitals from yellow fever.....	0
Annual ratio per 1,000.....	100.62

Sanitary report from Habana.

HABANA, CUBA, *December 30, 1898.*

SIR: The following report for the week ended Thursday, December 29, 1898, is respectfully submitted. From the mortality report it will be observed that the death rate is declining. There were 3 deaths from yellow fever, 1 occurred in a military hospital, the other 2 occurred in the city near the harbor. Two cases of smallpox were brought to this city yesterday from Barcelona, on the Spanish steamship *Buenos Ayres*, a vessel which will take Spanish soldiers back to Spain. I have not located where these cases were sent, although I am told that they were taken to the Reina Mercedes, a civil hospital.

A case of smallpox developed in the camp of the One Hundred and Sixty-first Indiana Regiment yesterday, and this office was called on for vaccine virus by the chief medical officer of the Seventh Army Corps, and as much virus as could be spared was sent him. These cases are the first that have appeared in Habana in several weeks, and I believe that the case in the American camp must have originated from contact with the country people. I would recommend that all soldiers returning to the United States be required to pass examination at this office. This examination has been carried out and has developed the fact that so far as the volunteers are concerned vaccination has not been required on enlistment.

Deaths from malarial fevers show an increase over those of the preceding week. I look for a decreased death rate during the next few months, which will be due to American control.

While the winter is somewhat advanced without any practical sanitary work having been performed, still the first four months of the year leave considerable time in which intelligent efforts well applied can be made toward sanitation that must have salutary effect on the health of the city. This work must be planned and begun immediately. The sanitary conditions here are unusually bad. A city which has in its streets and in some of its oldest buildings the filth of centuries and in which yellow fever has been endemic for one hundred and sixty-eight years presents no easy task even to the alert progressive American.

All of the military hospitals but one have been or will be abandoned by January 1. The filthiest one, San Ambrosio, located near Talla-

piedra Wharf has been untenanted for the past two weeks. This building must be destroyed.

Very respectfully,

W. F. BRUNNER,
Sanitary Inspector, U. S. M. H. S.

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

Mortality of the city of Habana for the week ended Thursday, December 29, 1898.

Cause of death.	Total.
Yellow fever.....	3
Enteric fever.....	20
Pernicious fever.....	14
Malarial fever.....	76
Dysentery.....	12
Enteritis.....	70
Grippe.....	2
Pneumonia.....	11
Tuberculosis.....	39
Deaths from all causes.....	369
Deaths in the military hospitals from yellow fever.....	1
Deaths in the city from yellow fever.....	2
Annual ratio per 1,000.....	95.94

Sanitary reports from Santiago.

SANTIAGO DE CUBA, *November 26, 1898.*

SIR: I have the honor of informing you that owing to heavy rainfalls, and the stirring of the ground necessary for the repairing and building of the streets and roadways, malarial fevers of bad character have lately prevailed, increasing the mortality to a great extent. Sixty-two deaths have been reported for the week ending to-day, of which 33 were from malaria; remittent and typhomalaria taking the lead. Diarrhea still prevails among the poorer classes, and dropsy and anæmia cause many deaths. Many who were infected at Caney during the siege and bombardment have never been able to rally, and die. The Americans, as a rule, only suffer from intermittent fevers.

Respectfully,

H. S. CAMINERO,
Sanitary Inspector, U. S. M. H. S.

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

SANTIAGO DE CUBA, *December 3, 1898.*

SIR: I have the honor to inform you that owing to important regulations, carried out for the sanitation of the city, the general health improves every day. The death rate is lower, only 40 deaths having been recorded for the week ending to-day. Of these, remittent and pernicious fevers head the list; diarrhea, interocolitis, and dysentery causing few deaths. Of course, the deaths are among the poorer classes and the negroes, in proportion of 1 white for every 5 colored. I am happy to state that enforcement of sanitary measures by General Wood is working wonders. The streets are swept daily, and new ones are replacing the old ones. No garbage is allowed to accumulate, and privies and water-closets are emptied and disinfected.

Respectfully,

H. S. CAMINERO,
Sanitary Inspector, U. S. M. H. S.

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

SANTIAGO DE CUBA, *December 10, 1898.*

SIR: I have the honor of informing you that the sanitary condition of Santiago de Cuba is exceptionally good at present. The mortality, as I have mentioned in former reports, has gradually decreased, only 37 deaths having been reported for the week ending this day. Of these, by far the greater number are from malarial fevers and paludean cachexia; enteritis and diarrhea from bad nourishment also cause some deaths. Yellow fever has completely disappeared from Santiago, although inexperienced physicians belonging to the Army see it in all cases of fever they treat, but the cemetery records do not show any deaths from it.

Respectfully,

H. S. CAMINERO,
Sanitary Inspector, U. S. M. H. S.

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

JAPAN.

Sanitary report from Yokohama.

YOKOHAMA, JAPAN, *December 9, 1898.*

SIR: I have the honor to forward herewith my regular report of infectious diseases in Japan for period November 18 to December 8, inclusive. It will be noticed that, with the exception of the still persisting epidemic, dysentery, the country is in remarkably good sanitary condition, the only district in which smallpox is present, in more than sporadic form, being the Ken of Awamori, at the extreme north of Nippon, and remote from any connection with shipping for foreign ports.

I am, sir, very respectfully your obedient servant,

STUART ELDRIDGE, M. D.,
Sanitary Inspector, U. S. M. H. S.

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

[Inclosure.]

Report of infectious diseases in Japan from November 18 to December 8, 1898.

Locality.	Cholera.		Dysentery.		Smallpox.		Plague.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Kioto Fu.....			56	13				
Osaka Fu.....			20	8				
Tokyo Fu.....			23	18				
Aichi Ken.....			44	13				
Akita Ken.....			29	5				
Awomori Ken.....			46	15	53	13		
Chiba Ken.....			177	42				
Fukui Ken.....								
Fukuoka Ken.....			27	6				
Fukushima Ken.....			50	21				
Gifu Ken.....			52	19				
Gumma Ken.....			51	21				
Hiogo Ken.....			132	38	1			
Hiroshima Ken.....			189	6				
Ibaraki Ken.....			49	28				
Ishikawa Ken.....			8	5				
Iwate Ken.....			135	55				
Kagawa Ken.....			58	21				
Kagoshima Ken.....			63	23				
Kanagawa Ken.....			69	18	1			
Kochi Ken.....			43	6				
Kumamoto Ken.....			223	38				
Miyagi Ken.....			51	22				
Miyazaki Ken.....			32	8				
Miye Ken.....			50	6				
Nagano Ken.....			189	68				
Nagasaki Ken.....			132	26	1			
Nara Ken.....			1	1				
Niigata Ken.....			122	95				
Oita Ken.....			52	18				
Okayama Ken.....			24	9				
Okinawa Ken.....			16	4				
Saga Ken.....			7	5				
Saitama Ken.....			75	17				
Shidzuoka Ken.....			190	41				
Shiga Ken.....			17	5				
Shimane Ken.....			99	37				
Tochigi Ken.....			44	18				
Tokushima Ken.....			29	16				
Tottori Ken.....			4	3	3			
Toyama Ken.....								
Wakayama Ken.....			4	1				
Yamagata Ken.....								
Yamaguchi Ken.....			31	15				
Yamanashi Ken.....			189	60				
Yehime Ken.....			49	15				
The Hokkaido.....					8			
Taiwan (Formosa).....			(a)					

a No report.

Infectious diseases in Japan in 1895, and measures proposed by the central sanitary bureau.

[Compiled in this Bureau from the report of the central sanitary bureau of the Imperial Japanese Government, 1895.]

The total number of cases of infectious disease in Japan during the year 1895 was 152,443, of which 64,856 proved fatal, showing a ratio of 43.54 deaths per 100 cases. When compared with the preceding year, the number of cases had decreased by 57,775, while the number of deaths had increased by 14,116. This decrease of cases is attributable to the fact that there was no epidemic of dysentery, which had been very prevalent in the preceding year, and the increase of deaths to the fact that there was a great prevalence of cholera. The details relating to each of the six infectious diseases are given as follows:

Cholera.—During the months of February and March of the year 1895 it was reported that some cases of diarrhea had appeared in the Japan-

ese army fighting in China just at the time when they captured the bay of Ikaiyei, but no official report was made, and there were no means of ascertaining whether they were really of an infectious nature. It is historically true, however, that epidemic diseases almost inevitably follow war, and it was considered necessary to institute preventive measures. While preparations to meet a possible emergency were in progress it was reported on March 19 that some cases of cholera had appeared at the port of Moji, in Fukuoka Ken. A counselor of the home department was immediately sent to Hiroshima to consult with the superintendent of barracks sanitation and with the vice minister of the army. Deputies from the department were also sent to the two Ken of Yamaguchi and Fukuoka for consultation with the governor as to preventive measures and for investigation of the disease.

On March 28 a report was received that a few cases of cholera had appeared in the port of Ujina, in Hiroshima Ken, and also among the Japanese troops stationed in Kiushu (China) and on Hoko Island. In spite of strict enforcement of the quarantine regulations by the department of the army and the careful execution of preventive measures at home by the home department, cholera penetrated into the country, and spread so rapidly as to cause more than 55,000 cases and 40,000 deaths. The spread of the disease was greatly facilitated by the movements of troops returning from China and by the increase in the means of railway communication throughout the country. That it did not cause a more severe epidemic was undoubtedly due to the quarantine measures enforced at the ports and the preventive measures carried out within the country.

The distribution of cases and deaths was as follows :

Prefectures.	Cases.	Deaths.
Osaka.....	7,195	5,564
Hiroshima.....	3,910	2,957
Hiogo.....	3,662	2,822
Toyama.....	4,351	2,697
Tokyo.....	3,424	2,597
Okayama.....	2,941	2,004
Kagawa.....	2,323	1,503
Miyagi.....	2,238	1,595
Fukuoka.....	2,138	1,464
Total	32,182	23,203

The other prefectures in which there were more than 1,000 cases each were Kioto, Nagasaki, Ibaraki, Yamagata, Tottori, Yamaguchi, Ehime, and Kochi.

Enteric fever.—The total number of cases of enteric fever during the year 1895 was 37,015, of which 8,401 proved fatal, showing an increase of 348 in the number of cases and 347 in the number of deaths.

The distribution of cases and deaths was as follows :

Prefectures.	Cases.	Deaths.
Gifu.....	1,867	298
Nagano.....	1,830	381
Fukuoka.....	1,598	389
Tokyo.....	1,585	415
Niigata.....	1,526	434
Total	8,406	1,917

The other prefectures in which there were more than 1,000 cases in each were Gumma, Hiogo, Saitama, Chiba, Tochigi, Aichi, Shidzuoka, Fukushima, Yamagata, and Kagawa.

Dysentery.—The number of cases of dysentery in 1895 greatly decreased. There were only 52,711 cases in all, of which 12,959 proved fatal, while in the two preceding years there were between 150,000 and 160,000 cases. The distribution of cases and deaths in 1895 was as follows :

Prefectures.	Cases.	Deaths.
Kagoshima.....	4,421	826
Kumamoto.....	3,882	684
Niigata.....	2,597	446
Shimane.....	2,394	679
Okayama.....	2,341	709
Fukuoka.....	2,320	455
Hiroshima.....	2,278	744
Total.....	20,233	4,543

The other prefectures which had more than 1,000 cases each were Osaka, Hiogo, Aichi, Shidzuoka, Shiga, Gifu, Akita, Fukui, Ishikawa, Toyama, Yamaguchi, Tokushima, Kagawa, Ehime, Kochi, and Miyazaki.

Diphtheria.—Diphtheria had hitherto shown an annual increase, but its virulence suddenly abated in 1895. There were 6,100 cases in the whole country, of which 3,025 proved fatal, showing an increase of 792 in the number of cases and 122 in the number of deaths as compared with the preceding year. In spite of the increase in the number of cases the death rate has greatly decreased. The number of deaths per 100 cases was 54.69 per cent in 1894 and in 1895 only 49.59 per cent. The greatest decrease in the death rate was in Tokyo, where in 1894 the rate was 56.16 per cent, and in 1895, 28.91 per cent, a decrease of nearly 50 per cent.

The distribution of cases and deaths was as follows :

Prefectures.	Cases.	Deaths.
Tokyo.....	806	233
Shidzuoka.....	574	335
Ehime.....	422	177
Hiogo.....	289	143
Iwate.....	251	119
Osaka.....	246	108
Kioto.....	234	91
Miye.....	208	122
Total.....	3,030	1,328

The other prefectures having more than 100 cases in each were: Kanagawa, Niigata, Gumma, Shiga, Gifu, Nagano, Miyagi, Fukuoka, Awomori, Akita, Okayama, Fukushima, and Hokkaido.

The decrease in the death rate as above mentioned should be attributed to the efficiency of the treatment by means of serum.

Typhus fever.—The total number of cases of typhus fever was 186, of which 49 proved fatal, showing an increase of 47 in the number of cases, and 16 in the number of deaths, as compared with the preceding year. The prefecture which had the greatest number of cases was Hiogo, where more than one-third of the total number of cases occurred.

Smallpox.—The virulence of this disease greatly decreased during the year 1895, the number of cases in that year being about one-half of that of the preceding year. The prefectures in which the disease prevailed more or less were two Ken only, viz, Chiba and Yamanashi, where there were rather more than 400 cases, while no other prefecture had more than 100 cases.

Quarantine operations.

Ports.	Number of days enforced.	Number of ships inspected.				Total.
		Japanese ships.		Foreign ships.		
		Disinfected.	Inspected.	Disinfected.	Inspected.	
Yokohama.....	a 252	17	25	5	5	52
Kobe.....	252	20	142	2	58	222
Nagasaki.....	252	31	65	2	33	131
Shimonoseki.....	252	48	431	1	19	499
Total.....	.....	116	663	10	115	904

a April 10 to December 17.

Treatment of cholera and dysentery—Proposed investigation.—On February 5 instructions were given to the sanitary society of Japan that the causes of dysentery, as well as the measures relating to its treatment, should be investigated in the institution for the investigation of epidemic diseases and the results reported. Similar instructions were issued for the investigation of cholera.

Advancement of bacteriological education.—On April 17 a message was forwarded by the director of the central sanitary bureau to every fu and ken respecting the advancement of bacteriological education and its importance to national sanitation. At the institution for the investigation of epidemic diseases, a special regulation had been made in 1894, by which 5 or 6 students were allowed to enter on a term of instruction, and the number was now increased to 20, for the purpose of disseminating bacteriological knowledge.

Vaccination.—The first essential in vaccination is to obtain a supply of pure lymph. The manufacture of lymph has been much abused, and its quality has deteriorated steadily since it has been left in the hands of private individuals. It is, therefore, advisable that it should be prepared at a national establishment, where its quality may be actually tested and examined. A resolution was, therefore, formulated relating to the establishment of a national vaccine farm. This was presented to the cabinet on November 22.

Serum therapy.—The efficiency of the treatment of diphtheria with serum has been widely acknowledged, but the home manufacture of serum is becoming more and more abused and the imported article is less efficient, though very high in price. Diphtheria is, however, spreading yearly, and the demand for serum has greatly increased. It is, therefore, considered necessary to establish a serum institute at the national expense. A resolution to that effect was presented to the diet on December 7, 1895.

Examinations for the practice of medicine.—The examinations for medical practitioners were held in Tokyo, Kyoto, and Nagasaki. The total number of candidates for the primary examination was 2,636, of whom 227 passed; 1,518 for the final examination, of whom 263 passed, and 156 for examination in dentistry, of whom 22 passed.

Number of cases and deaths of infectious diseases during the ten years from 1886 to 1895, inclusive.

Year.	Cholera.		Enteric fever.		Dysentery.		Diphtheria.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1886.....	155,923	108,405	66,224	13,807	24,326	6,839	3,265	1,465
1887.....	1,228	654	47,449	9,813	16,149	4,257	2,741	1,429
1888.....	811	460	43,600	9,211	26,815	6,576	2,582	1,450
1889.....	751	431	35,849	8,623	22,873	5,970	2,669	1,495
1890.....	46,019	35,227	34,736	8,464	42,633	8,708	2,448	1,438
1891.....	11,142	7,760	43,987	9,614	46,358	11,208	3,429	1,974
1892.....	874	497	35,636	8,529	70,842	16,844	4,359	2,531
1893.....	633	364	34,069	8,183	167,305	41,282	5,726	3,205
1894.....	546	314	36,667	8,064	155,140	38,094	5,306	2,903
1895.....	55,144	40,154	37,015	8,401	52,711	12,959	6,100	3,025
Total.....	273,071	194,266	415,212	92,699	625,152	152,735	38,627	20,915
Average.....	27,307	19,427	41,521	9,270	62,515	15,274	3,863	2,092

Year.	Typhus fever.		Smallpox.		Grand total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1886.....	8,225	1,577	73,337	18,676	331,300	150,769
1887.....	2,487	448	39,779	9,967	109,833	26,568
1888.....	1,131	207	4,052	853	78,991	18,757
1889.....	300	88	1,324	328	63,766	16,935
1890.....	251	67	296	25	126,383	53,927
1891.....	1,194	203	3,608	721	109,698	31,480
1892.....	281	62	33,779	8,409	145,771	36,872
1893.....	228	56	41,898	11,852	249,859	64,942
1894.....	139	33	12,418	3,342	210,218	52,740
1895.....	186	49	1,287	268	152,443	64,856
Total.....	14,422	2,790	211,778	54,441	1,578,262	517,846
Average.....	1,442	279	21,178	5,444	157,826	51,785

Ratio of deaths from infectious diseases during the ten years from 1886 to 1895, inclusive.

Year.	Cholera.	Enteric fever.	Dysentery.	Diphtheria.	Typhus fever.	Smallpox.	Total.
1886.....	69.52	20.85	28.11	44.87	19.17	25.47	45.51
1887.....	53.26	20.68	26.36	52.13	18.01	25.06	24.19
1888.....	56.72	21.13	24.52	56.16	18.30	21.05	23.75
1889.....	57.39	24.05	26.10	56.01	29.33	24.77	26.56
1890.....	76.55	24.37	20.42	58.74	26.69	8.45	42.67
1891.....	69.65	21.87	24.18	57.57	17.00	19.98	28.70
1892.....	56.86	23.93	23.78	58.06	22.06	24.89	25.29
1893.....	57.50	24.02	24.67	55.97	24.56	28.29	25.99
1894.....	57.51	21.97	24.56	54.69	23.74	26.91	25.09
1895.....	72.82	22.70	24.59	49.59	26.34	20.82	42.54
Total.....	62.78	22.56	24.73	54.38	22.52	22.57	31.03

WEST INDIES.

Sanitary report from Guadeloupe.

CONSULATE OF THE UNITED STATES,
Guadeloupe, West Indies, December 3, 1898.

SIR : I have the honor to request that a supply of blank forms and addressed envelopes be sent to me to enable me to comply with the instructions of Department Circular of October 31, "Weekly Sanitary Reports."

There is no regular publication of vital statistics in this colony, but statements of births, deaths, and marriages are published, irregularly, in the local newspapers.

I have been collecting these scattered data for some time, with the intention of making a report thereon.

I now inclose a tabular statement of the marriages, births, and deaths in this city. It will be noticed that there are breaks in this table, as from May 15 to June 13, June 26 to July 11, etc., I have not been able to supply these deficiencies nor to discover the cause of the deaths.

The period covered is from April 11 to November 27, with omissions of sixty-three days. Two main facts are to be noticed: (1) The legitimate births are but 27.72 per cent of the total births. The illegitimate births being 72.28 per cent. (2) The deaths exceed the births by 66, or in the proportion of nearly 1.5 deaths to 1 birth.

I will try to procure from the chief military physician of the port more detailed reports if desired.

I have the honor to be, sir, your obedient servant,

LOUIS H. AYME,
United States Consul.

HON. ASSISTANT SECRETARY OF STATE.

[Inclosure.]

Tabular statement of marriages, births, and deaths, Pointe-a-Pitre, Guadeloupe, April 11 to November 27, 1898.

Date.	Mar- riages.	Births.		Deaths.
		Legiti- mate.	Illegiti- mate.	
1898.				
April 11 to April 17.....				9
April 18 to April 24.....	1	1	4	7
April 25 to May 8.....	2	3	10	15
May 9 to May 15.....		2	4	7
June 13 to June 26.....		5	12	20
July 11 to July 17.....		2	3	7
July 18 to July 24.....	3	3	5	5
August 5 to August 14.....	1	1	1	11
August 21 to August 28.....	1	3	4	9
August 29 to September 4.....		2	4	8
September 5 to September 11.....	1		3	7
September 12 to September 18.....			3	7
September 19 to September 25.....		1	4	11
September 26 to October 2.....		1	4	11
October 3 to October 9.....	1	1	6	11
October 10 to October 16.....	1	2	4	11
October 17 to October 23.....	2	1	2	5
October 24 to October 30.....	4	3	11	9
October 31 to November 6.....		2	5	7
November 7 to November 13.....			2	5
November 14 to November 20.....	1	2	3	8
November 21 to November 27.....	2	3	5	13
Totals.....	20	38	99	203

RECAPITULATION.

Period from April 11 to November 27, less sixty-three days.

Population, estimated	17, 100
Marriages.....	20
Births	137
Deaths.....	203
Excess of deaths over births.....	66

STATISTICAL REPORTS.

BERMUDA.—Two weeks ended December 16, 1898. Estimated population, 15,013. Total number of deaths, 1. Three cases of enteric fever.

BRITISH COLUMBIA—Vancouver.—Two weeks ended December 16, 1898. Estimated population, 25,000. Total number of deaths, 10. No contagious diseases reported.

GERMANY—Stuttgart.—Month of September, 1898. Estimated population, 171,125. Total number of deaths, 181, including scarlet fever, 1, and 18 from phthisis pulmonalis.

GREAT BRITAIN—England and Wales.—The deaths registered in 33 great towns in England and Wales during the week ended December 17, correspond to an annual rate of 16.6 a thousand of the aggregate population, which is estimated at 11,218,378. The highest rate was recorded in Nottingham, viz, 21.9, and the lowest in Derby, viz, 10.9.

London.—One thousand four hundred and twenty-three deaths were registered during the week, including measles, 31; scarlet fever, 6; diphtheria, 40; whooping cough, 26; enteric fever, 19, and diarrhea and dysentery, 13. The deaths from all causes correspond to an annual rate of 16.5 a thousand. In greater London 1,886 deaths were registered, corresponding to an annual rate of 15.2 a thousand of the population. In the "outer ring" the deaths included 21 from diphtheria, 2 from measles, and 10 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended December 17 in the 23 principal town districts of Ireland was 23.9 a thousand of the population, which is estimated at 1,007,798. The lowest rate was recorded in Portadown, viz, 6.2, and the highest in Queenstown, viz, 40.2 a thousand. In Dublin and suburbs 169 deaths were registered, including diphtheria, 3; enteric fever, 6; scarlet fever, 1, and whooping cough, 5.

Scotland.—The deaths registered in 8 principal towns during the week ended December 17 correspond to an annual rate of 19.4 a thousand of the population, which is estimated at 1,568,536. The lowest mortality was recorded in Perth, viz, 10.2, and the highest in Aberdeen, viz, 22.2 a thousand. The aggregate number of deaths registered from all causes was 584, including diphtheria, 6; measles, 8; scarlet fever, 12, and whooping cough, 16.

MALTA.—Two weeks ended November 15, 1898. Estimated population, 177,745. Total number of deaths, 235, including 9 from enteric fever.

ST. HELENA.—Six weeks ended November 29, 1898. Estimated population, 4,000. Total number of deaths, 8.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated popula- tion.	Total deaths from all causes.	Deaths from—							
				Cholera.	Yellow fe	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles. Whooping cough.
Acapulco.....	Dec. 17.....	6,500	1								
Bahia.....	Nov. 26.....	200,000				2					
Do.....	Dec. 3.....	200,000				1					
Barranquilla.....	Dec. 9.....	40,000	18		1						
Belfast.....	Dec. 10.....	304,610	148					7			1
Belize.....	Dec. 23.....	13,000	7								
Birmingham.....	Dec. 10.....	510,343	179					3	1	1	2
Bluefields.....	Dec. 17.....	83,018	2								
Bombay.....	Nov. 29.....	821,764	616			1		2		4	1
Bradford.....	Dec. 10.....	231,260	72					1			6
Bristol.....	do.....	316,900	126					1	1	1	1
Brussels.....	Dec. 3.....	531,024	180								
Calcutta.....	Nov. 12.....	681,560	391	2				1	1		1
Do.....	Nov. 19.....	681,560	419							1	
Callao.....	Nov. 24.....	25,000	20							1	
Do.....	Dec. 4.....	25,000	24								
Christiania.....	Dec. 10.....	207,000	78					1			
Colombo.....	Nov. 12.....	130,000	82							1	
Do.....	Nov. 19.....	130,000	61				2				
Colon.....	Dec. 21.....	8,000	0								
Crefeld.....	Dec. 10.....	110,000	31								
Curacao.....	Dec. 17.....	29,000	9								
Dundee.....	Dec. 10.....	164,575	70						1		2
Demerara.....	Nov. 5.....	35,000	45								
Do.....	Nov. 12.....	35,000	65								
Do.....	Nov. 19.....	35,000	44				1				
Do.....	Nov. 26.....	35,000	58								
Dublin.....	Dec. 10.....	349,574	170					4			3
Edinburgh.....	do.....	295,628	139				1	1	2	1	3
Glasgow.....	do.....	724,349	283					6	3	2	3
Gothenburg.....	Dec. 3.....	120,552	33					2	1		
Guatemala.....	Dec. 12.....	65,000	36								
Halifax.....	Dec. 24.....	38,700	20							1	
Hamilton, Bermuda.....	Dec. 13.....	16,000	0								
Do.....	Dec. 20.....	16,000	1								
Kingston, Canada.....	Dec. 23.....	51,000	7								
La Paz, Mexico.....	Dec. 10.....	5,000	0								
Leghorn.....	Dec. 11.....	104,372	44					1			
Leith.....	do.....	76,277	20							2	1
Liege.....	Dec. 3.....	168,241	54								
Liverpool.....	Dec. 10.....	668,645	273			1		5	3	4	5
London.....	do.....	6,408,321	1,924					31	16	59	27
Lyons.....	Dec. 3.....	466,028	179					7			
Madras.....	Nov. 25.....	452,518	6357	5							5
Manchester.....	Dec. 10.....	541,296	201					1	1	3	13
Maracaibo.....	Dec. 3.....	50,000	18								
Do.....	Dec. 10.....	50,000	16								
Do.....	Dec. 17.....	50,000	25								
Matamoras.....	Dec. 16.....	16,304	7								
Moscow.....	Dec. 3.....	1,000,000	518			11		6	6	11	4
New Castle on Tyne.....	Dec. 10.....	223,000	79						2		3
Ottawa.....	do.....	60,000	13							1	
Do.....	Dec. 17.....	60,000	31					1			
Paris.....	Dec. 10.....	2,511,955	863					5	1	7	3
Port au Prince.....	Nov. 21.....	60,000	18								
Do.....	Nov. 28.....	60,000	23								
Do.....	Dec. 5.....	60,000	18								
Do.....	Dec. 12.....	60,000	14								
Do.....	Dec. 19.....	60,000	17								
Puerto Cabello.....	Dec. 17.....	14,000	0								
Rio de Janeiro.....	Dec. 11.....	750,000	238		3	3					3
Do.....	Dec. 18.....	750,000	261		2	8		2			1
Rotterdam.....	Dec. 10.....	306,439	122					1		2	1
St. Georges, Bermuda.....	do.....	2,150	0								
Do.....	Dec. 17.....	2,150	0								
St. Johns, West Indies.....	Dec. 10.....	15,000	19								
St. Stephen, New Brunswick.....	Dec. 24.....	3,000	1								
Sheffield.....	Dec. 10.....	360,857	113					8	1	5	4
Southampton.....	do.....	100,886	39							7	1
South Shields.....	do.....	98,922	32								5
Trapani.....	Dec. 3.....	45,095	14								
Venice.....	do.....	169,001	64					2		2	

a Plague, 43.

b Plague, 1.

MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—							
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Vera Cruz	Dec. 15.....	30,000	51	.....	4	.....	.....	.....	.....	.....	.....
Do.....	Dec. 22.....	30,000	43	.....	9	.....	.....	.....	.....	.....	.....
Windsor.....	Dec. 24.....	3,000	1	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg.....	.....do.....	45,000	.....	.....	.....	.....	.....	.....	1	.....	.....

By authority of the Secretary of the Treasury :

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