

Public Health Reports

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

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UNITED STATES.

Quarantine officer at Havana, Cuba.

In accordance with Executive order of January 17, 1899, Sanitary Inspector W. F. Brunner, United States Marine-Hospital Service, was detailed by the Secretary of the Treasury, February 1, 1899, as quarantine officer of the port of Havana.

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

Smallpox in the United States.

COLORADO.

DENVER, COLO., *February 4, 1899.*

SIR: The following statement is issued in order that the medical profession may be accurately informed as to the present status of the smallpox outbreaks in Denver.

Denver has been free from smallpox since 1890, with the exception of imported cases at long intervals, as follows: 1891, 1 case from Trinidad; 1892, 1 case from New Mexico; 1893, 4 cases from Seattle; 1895, 1 case en route from Mexico.

PRESENT PREVALENCE OF THE DISEASE IN DENVER.

On November 15, 1898, a sheep herder from New Mexico, suffering from the disease, passed through the city, going to Fort Collins, where it is reported he died. Ten days after he passed through Denver, 2 railway employees with whom he had come in contact developed smallpox; a week later the child of one of these men and a sister of the other were taken down. All were removed to hospital; all recovered

and were discharged by January 15, 1899. No further manifestations have been discovered due to this infection and we regard it as ended.

A negro from Pueblo, of whom the officers had a description but whom they were unable to discover, came to Denver about Christmas time. Persons who had come in contact with him began to be sick the first week in January. A succession of 12 cases among the negroes have occurred as a result of this infection, all being removed to the hospital and all are there under treatment at this date. The cases range from the lightest varioloid to the severest confluent and hemorrhagic types. This outbreak is still under way and will probably contribute new cases from time to time.

On December 24, a business man of this city returned from a trip through southern Texas, where he had been exposed to smallpox. On January 7, he was reported to the office by his physician as having smallpox. From this case two other cases arose, one being the child and the other the partner of the gentleman originally affected.

About January 18, a prisoner in the county jail began to complain of illness; he had been an inmate of the jail for two months and was not known to have been in any way exposed to smallpox; after several days, however, a typical eruption developed and he was removed to the hospital. On January 27, a man just discharged from the jail was found to have the disease; he had been a prisoner for three months and in the same corridor with the preceding case.

The total number of cases occurring from these four sources of infection has been 21; at this time every known case of the disease is isolated at the Sand Creek Quarantine Hospital. One death has thus far occurred, and it is probable that several of the colored persons affected will die, as the disease is confluent with some of them.

PRECAUTIONS TAKEN.

In each instance of infection all persons whose exposure has been great have been removed to hospital for supervision or observation or else the occupants of the infected premises have been kept under surveillance for two full weeks. Vaccination has been done for all persons in infected districts. General vaccination has been urged upon the whole city and a very large number of persons have been vaccinated. In the health office alone over 8,000 vaccinations have been done.

The wholesale drug firms report the sale of over 15,000 tubes of lymph to physicians in the city. It is assumed that nearly 24,000 persons have been vaccinated since January 1.

Infected goods in the houses where the cases occurred have been burned in every instance. The houses have always been disinfected twice and in some instances three times, using either sulphur or formaldehyd, as the circumstances seemed to justify.

The advisory board of health met on the evening of February 1, and, after a careful consideration of all the circumstances connected with the various phases of the outbreaks, decided that it was necessary to call the attention of every physician in the whole city to a plain statement of all the facts.

It was further decided that since the diagnosis of smallpox in its earlier stages presents difficulties that for a time may mislead even the most experienced and conscientious practitioner, all physicians be urged to comply with the strict letter of the law in reporting to the health office for examination and consultation all cases where the slightest possibility of a contagious eruptive disease may exist. The public

welfare, as well as the personal reputation of each physician, is at stake, and the responsibility of decision should be early placed upon the health officer, whose duty under the circumstances is clearly defined by law.

The health commissioner trusts that the measures already taken will, with the cooperation of the members of the medical profession, be effectual in stopping the spread of this disease, although the city is in constant danger of fresh importations of infection so long as other communities in the State continue to suffer from it.

Table revised to February 8, 1899. November 25 to February 8, 23 cases, 1 death.

Very respectfully,

WM. P. MUNN,
Health Commissioner.

DISTRICT OF COLUMBIA.

WASHINGTON, D. C., *February 7, 1899.*

SIR: I have the honor to report that 4 new cases of smallpox were discovered in this District on the 5th instant, and that 2 more were discovered to-day. The total number of cases up to and including the present time is 10, but they have all occurred in but 5 houses. With a single exception they are now in the smallpox hospital. The prevailing type of disease is exceedingly mild, rendering diagnosis difficult.

Respectfully, yours,

WM. C. WOODWARD, M. D.,
Health Officer.

GEORGIA.

Circular for obtaining information concerning smallpox.

STATE OF GEORGIA, ADJUTANT GENERAL'S OFFICE,

Atlanta, Ga., February 10, 1899.

SIR: The inclosed circular has been issued by the Governor of Georgia for the purpose of obtaining accurate information relative to smallpox in this State.

Respectfully, yours,

C. P. WERTENBAKER,
Passed Assistant Surgeon, U. S. M. H. S.

[Inclosure.]

STATE OF GEORGIA, EXECUTIVE OFFICE,

Atlanta, Ga., February 9, 1899.

To the ordinaries, county commissioners, and local health authorities:

In view of the prevalence of smallpox in a number of counties in the State, it is desired, in order to suppress the disease and prevent its spread, to have accurate information as to the condition in each county and city in the State. You are requested to furnish the following information at the earliest possible moment, and thereafter make a weekly report as to the condition in your county or city.

- (1) Does smallpox exist in your county or city?
- (2) If so, how long has it existed?
- (3) How many cases have there been, and how many now?
- (4) Give the localities, with numbers of cases in each?
- (5) Is the disease chiefly among the whites or blacks?
- (6) What is being done to suppress it? State in detail the methods that are being used.
- (7) Is the disease spreading?
- (8) Does chicken pox or any other contagious or infectious disease exist? If so, give localities, number of cases, and other details.

Address your communications to Dr. C. P. WERTENBAKER, *Passed Assistant Surgeon, U. S. M. H. S., Special Aide, Adjutant-General's Office, Atlanta, Ga.*

In case of doubt as to the nature of any eruptive disease, you are requested to isolate the case until the diagnosis can be determined. If desired, an expert in the diagnosis of smallpox will be sent to render you such aid as may be necessary.

Very truly, yours,

A. D. CANDLER,
Governor.

INDIANA.

EVANSVILLE, IND., *February 8, 1899.*

SIR: Referring to my telegram last night regarding the case of smallpox, I have the honor to report as follows: Upon my return from the city yesterday afternoon, the interne, Dr. Fred C. McIsaac, informed me he had a case of smallpox in the office. I at once went in, and after a careful examination of the patient I came to the same conclusion. The city health officer was at once notified, and owing to the proximity of the 2 orphan asylums, he agreed to remove the patient to the pesthouse at once. The patient was kept in the office till this morning, when not having seen or heard anything from the city officials he was removed to the deadhouse. The P. M. table, scales, etc., were removed, a fire made, and patient put to bed, and preparations were made to care for him there. It was too cold and windy to put up the tent. At about 10 o'clock a. m. the pesthouse wagon came for him. The office and deadhouse are now open to the freezing temperature, and will be fumigated later. The vaccine virus arrived yesterday, and patients and attendants are being vaccinated.

Respectfully, yours,

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

INDIANAPOLIS, IND., *February 8, 1899.*

SIR: In compliance with the resolutions adopted at the conference of State and provincial boards of health, held at Toronto, October 6, 1896, it becomes my duty to inform you that 1 additional case of smallpox has been reported in Indianapolis, 1 case Dana, 1 case Evansville. Origin of the disease is: Dana case, Arkansas; Evansville case, colored man, off of steamer.

Respectfully, yours,

J. N. HURTY, M. D.,
Secretary, Indiana State Board of Health.

KENTUCKY.

LOUISVILLE, KY., *February 8, 1899.*

SIR: In relation to the prevalent outbreak of smallpox in this city, I have the honor to report that a total of 74 cases have been sent to the municipal eruptive hospital, with 47 cases still under treatment at that place, no deaths having occurred to date.

Respectfully, yours,

HOWARD C. RUSSELL,
Assistant Surgeon, U. S. M. H. S., In Temporary Charge.

MAINE.

AUGUSTA, ME., *February 6, 1899.*

SIR: In accordance with the agreement entered into at the conference of State and provincial boards of health at Toronto, October 6, 1886, respecting the interstate notification of the occurrence of cholera, smallpox, and yellow fever, it becomes my duty to inform

you of the existence of 8 or more cases of smallpox at Waterville and Winslow, in the county of Kennebec, in this State. The origin of the disease is mixed up with chicken pox. Isolation, vaccination, and disinfection with steam and formaldehyd now under way.

Yours, truly,

A. G. YOUNG,
Secretary, State Board of Health of Maine.

AUGUSTA, ME., *February 11, 1899.*

SIR: One case of smallpox has appeared in Auburn, Androscoggin County, Me., since my first notification to you.

The outbreak in the city of Waterville and the town of Winslow, on the other side of the river, has proved to be a serious one. It is believed now, however, that the outbreak can be held well in hand. Every infected house has a guard over it day and night. Vaccination has been carried on very rapidly, and disinfection is under way.

Yours, truly,

A. G. YOUNG,
Secretary, State Board of Health of Maine.

MARYLAND.

BALTIMORE, MD., *February 10, 1899.*

SIR: I have the honor to report that the city health officer of Baltimore has reported 1 case of smallpox in this city on the 8th instant. This case was immediately sent to quarantine. The infection was supposed to have occurred in Norfolk, Va. Secretary of State board of health reports 1 case at Cumberland, Md., a total of 6 cases occurring in this State since December 8, 1898. He states that the only house believed to be infected at present is the quarantine hospital in this city. The State board will take active measures to prevent infection from Norfolk and other infected localities. * * *

Very respectfully, yours,

SHERRARD R. TABB,
Assistant Surgeon, U. S. M. H. S., In Temporary Charge.

TENNESSEE.

February 14. The secretary of the State board of health reports 7 cases of smallpox at Jackson and 2 at Memphis.

TEXAS.

LAREDO, TEX., *January 29, 1899.*

SIR: I inspect all incoming passenger trains from Mexico, as stated in former reports. I vaccinate all Mexican or foreign immigrants, and I include as such all second and third class passengers.

Smallpox at Laredo has as yet not been stamped out, although vigorous methods are now being taken by both city and county authorities. State Health Officer Blunt visited the city last week and inspected the situation. He did not consider quarantine of the county or city necessary, owing to the methods pursued to quarantine all infected houses and ranches. Owing to the prevalence of smallpox in other parts of the State, new foci are occasionally introduced.

There have been 2,550 persons vaccinated within the city limits since October 1, 1898, at the expense of the city and county. The county is also having all the ranch people vaccinated, but I can not obtain the number vaccinated outside the city at present. The figures I give are

not the full number vaccinated during the period named, as a great number, of course, are vaccinated at their own expense.

I notice by the Boletin del Consejo Sup. de Salubridad, December 21, 1898, of Mexico, that the epidemic of yellow fever at Tampico, Mexico, of 1898, was not introduced there. No ships had entered that port from infected points, and the quarantine was too strict to allow any cases to enter the city. The disease broke out among persons who resided in the center of the city and who had recently come from central table lands to Tampico. The conclusion of the Mexican experts was that the germs of yellow fever are always lying dormant in all Mexican ports, and that the combination of the necessary conditions with an appropriate soil may induce an epidemic at any time.

In my opinion we shall have yellow fever this summer at Monterey, Mexico, and very likely at Tampico, although I have not been to Tampico, but I know the conditions at Monterey.

I inclose report of cases of smallpox and deaths from same at Laredo, Tex., for week ended January 28, 1899, namely, 43 cases, 9 deaths.

Respectfully, yours,

H. J. HAMILTON,

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

LAREDO, TEX., *February 5, 1899.*

SIR: I inspect all passenger trains from Mexico, and vaccinate all of the second and third class passengers where necessary. I average from 3 to 8 vaccinations daily on trains, mostly children. I obtain my vaccine from the city of Laredo, Tex., free of cost on account of protection afforded city by my vaccinating all incoming persons. The city obtains fresh bovine virus on ivory points twice weekly.

On January 31, 1899, I found a family of 1 woman with 5 children, 1 of which had smallpox. The family had already been passed upon by the United States immigrant inspector. The mother had had smallpox, and 1 child, the oldest, had been vaccinated. I advised the mother to have others vaccinated at once, and she consenting, I vaccinated 3, the other was just breaking out. I was informed it had had fever for the three days previous. The family was going to Laredo, Tex. I had the family put off on the Mexican side of the boundary. On February 2, 1899, I was informed that they had come to this side, and also that others had crossed the footbridge and were in quarantine on the Laredo, Tex., side. I thereupon telegraphed you for authority to place night and day inspectors on the footbridge, which authority I received from you by telegram February 3, 1899, in evening. I hunted up, I think, 2 capable and intelligent men, and had Mr. Giles, the United States immigrant inspector, give them instructions about immigrants, and I instructed them in regard to diseases. They are both familiar with smallpox, one having had the disease himself. I also instructed them in vaccinating and told them to see that no one came over that was not vaccinated or had had smallpox previously, and also as to quarantinable diseases. Thirty persons were vaccinated on the footbridge on February 4, 1899.

* * * * *

I require a certificate of recent vaccination from a known physician, or person has to show vaccination, or be vaccinated at the bridge. * * *

There have been now 2,850 persons vaccinated or revaccinated since October 1, 1898, at the expense of city and county within the city of Laredo, but notwithstanding, the disease has not abated. A great many of the lower class of Mexicans, in fact the majority, believe they have to have smallpox sometime, and that they had better have it young,

and only three days ago, while with the county physician, we went to inspect a child that had been hidden and died of smallpox, and found there a mother with 2 young children, who had been living in Nuevo Laredo, Mexico, but had crossed over with her children to see her sister-in-law's child with the smallpox. She said her children might as well get the disease while they were young, and be through with it. She and the children were placed in quarantine. She also stated that she would rather have her children get smallpox, even if they died, than have them vaccinated. It is this class of people I wish to have vaccinated at the footbridge, or not permitted to enter the United States, as after they are once over it is almost impossible to keep track of them.

My telegram to you was sent after I had seen one from State health officer, Dr. Blunt, in answer to one from the county health officer requesting that an inspector be placed at the foot bridge to protect us from Mexican smallpox and unvaccinated, ignorant people, so that we could better break up the pest we now have. The State health officer telegraphed that there were no funds he could use for that purpose at present. I believe that the number of new cases will not be so many from now on, because, notwithstanding the number that have been exposed, the effect of the thorough vaccination ought to show from this week on, so I hope to be able to make a more favorable report next week, especially as we vaccinate all persons from Mexico at present. For the week ended February 4 there were 69 cases and 14 deaths from smallpox.

Yours, respectfully,

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

VIRGINIA.

Alexandria.—Sanitary Inspector Snowden reports as follows: February 7, 19 cases, 3 suspects; February 8, 11 cases, 3 suspects; February 9, 6 cases, 2 suspects; February 10, 5 cases, 3 suspects; February 11, 10 cases, 5 suspects; February 12, 3 cases, 3 suspects; February 13, 3 cases, 3 suspects; February 14, 2 cases, 2 suspects.

Hampton.—February 15, 6 cases.

Norfolk.—Passed Assistant Smith reports as follows: February 8, 9 cases, 7 from city, 2 from outside city—discharged, 12; total on hand, 139. February 9, 6 cases—discharged, 13; total on hand, 132. February 10, 6 cases—discharged, 14; February 11, 5 cases—discharged, 1; February 12, 4 cases—died, 1.

WISCONSIN.

MILWAUKEE, WIS., *February 7, 1899.*

SIR: In compliance with the agreement embodied in resolutions adopted by the conference of State and provincial boards of health respecting interstate notification of the occurrence of communicable diseases you are hereby informed that 2 cases of smallpox have been reported to this office as existing in Appleton, Outagamie County, in this State, probably taken from imported rags used in paper mill. Isolation, vaccination, and disinfection. Amount of exposure unknown. Should any further facts of importance to you in connection with these cases become known to this office you will be promptly informed concerning them.

Respectfully, yours,

U. O. B. WINGATE, M. D.,
Secretary State Board of Health of Wisconsin.

Medical inspection on railroad and steamship lines leaving Norfolk, Va.

NORFOLK, VA., February 11, 1899.

SIR : I have the honor to report that the following-named transportation lines have now instituted a medical inspection, or observation, of their passengers leaving this city for the points noted after each : Chesapeake and Ohio Railroad, to all points ; Old Dominion Steamship Company, to New York ; Bay Line Steamboats, to Baltimore ; Chesapeake Line, to Baltimore.

The Norfolk and Washington line has maintained inspections the past two weeks, as before reported, and continues them.

The work of vaccinating the crews of vessels at this port is progressing in a satisfactory manner, and nearly all the passenger boats and ferries belonging to regular lines have been attended to, the managers of the lines having given all necessary assistance to make the work complete.

Respectfully, yours,

A. C. SMITH,

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

Smallpox in the United States as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to February 17, 1899.

Places.	Date.	Cases.	Deaths.	Remarks.
Alabama :				
Calvert	Dec. 10-Jan. 20.....	10		
Catherina	Jan. 6.....			Smallpox reported.
Clarke County.....	Dec. 25-Jan. 20.....		2	Several cases.
Clay County.....	Jan. 27.....			Smallpox reported.
Collerine	Jan. 6.....	1		
Dallas County.....	Jan. 27.....			Do.
Green County.....	.....do.....			Do.
Hale County.....	.....do.....			Do.
Lowndes County.....	.....do.....			Do.
Marengo County.....	.....do.....			Do.
Mobile	Jan. 2-Jan. 27.....	7		
Randolph County.....	Jan. 27.....			Do.
Southside.....	Jan. 6.....	96		
Washington County.....	Jan. 27.....			Do.
Wilcox County.....	.....do.....			Do.
Arkansas :				
Pulaski County.....	Jan. 27.....	7	1	
California :				
San Francisco	Jan. 31.....	2		
Colorado :				
Arapahoe County.....	Dec. 1-Feb. 8.....	23	1	
El Paso County.....	Jan. 31.....	2		
Fremont County.....	Dec. 1-Jan. 31.....	24		
Los Animas County.....	Jan. 31.....	12		
Pueblo County.....	Dec. 17-Jan. 31.....	60	4	
Connecticut :				
New Haven.....	Jan. 16.....	2		
District of Columbia :				
Washington	Jan. 21-Feb. 15.....	16		
Florida :				
Pensacola.....	Jan. 14.....	1		
Georgia :				
Jones County.....	Jan. 1-Jan. 16.....	300		
Illinois :				
Bethel	Jan. 7.....	2		
Media .....	.....do.....	1		
Indiana :				
Dans	Feb. 8.....	1		
Evansville	Feb. 7.....	1		
Indianapolis.....	Jan. 25-Feb. 11.....	9		
Sullivan County.....	Feb. 11.....	1		
Iowa :				
Lee County.....	Jan 13.....	7	1	
Wayne County.....	.....do.....	1		
Kansas :				
Marion County.....	Jan. 17.....	11		
Kentucky :				
Louisville.....	Dec. 20-Feb. 8.....	74		
Louisiana :				
New Orleans	Jan. 30-Feb. 4.....	2		

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Maryland:				
Baltimore.....	Feb. 8.....	1		
Cumberland.....	do.....	1		
Michigan:				
Detroit.....	Jan. 1-Feb. 4.....	14		
Minnesota:				
Minneapolis.....	Dec. 8.....	1		
Mississippi:				
Clay County.....	Jan. 27.....			Smallpox reported.
Jones County.....	do.....			Do.
Lauderdale County.....	do.....			Do.
Noxubee County.....	do.....			Do.
Perry County.....	do.....	17		
Tishomingo County.....	do.....			Do.
Missouri:				
St. Louis.....	Nov. 1-Jan. 21.....	15	2	
Nebraska:				
Nebraska City.....	July 1-Dec. 8.....	153		
	Dec. 9-Jan. 16.....	147	3	
Omaha.....	Jan. 1-Feb. 4.....	28		
Otoe and Nemaha Counties.....	Jan. 1-Jan. 16.....	21		
Peru.....	Jan. 2.....	5		
Plattsmouth.....	Dec. 10.....	1		
Tecumseh.....	Jan. 2.....	9		
New Jersey:				
Jersey City.....	Dec. 5-Jan. 22.....	6		
New York:				
New York.....	Jan. 7-Feb. 11.....	3	1	
Dunkirk.....	Jan. 8-Jan. 21.....	5		
North Carolina:				
Edgecombe County.....	Feb. 1.....	24		
Gates County.....	do.....	1		
Northampton County.....	Jan. 12.....	1		
Wilmington.....	Feb. 3.....	1		
Ohio:				
Cincinnati.....	Jan. 23-Feb. 11.....	50	1	
Cleveland.....	Dec. 25-Feb. 4.....	27		
Oklahoma:				
Chandler.....	Dec. 30.....	1		
Doggett.....	do.....	1		
Parkland.....	do.....	1		
Sac and Fox Agency.....	do.....	2		
Stroud.....	do.....		3	
Pennsylvania:				
Altoona.....	Jan. 1-Jan. 23.....	2		
Ball Hill.....	Dec. 31-Jan. 23.....	1		
Bedford.....	do.....	1		
Brumbaugh.....	do.....	2		
Charlesville.....	Dec. 31.....	15		Smallpox reported.
Claysburg.....	Dec. 31-Jan. 23.....	1		
East Vincent Township.....	Dec. 31.....	1		
Everett.....	do.....	3		
Homer City.....	do.....	2		
Hopewell.....	do.....	3		
Hustontown.....	do.....	4		
New Granada.....	do.....	7		
Philadelphia.....	Dec. 31-Jan. 23.....	9		
Pittsburg.....	Dec. 31.....	1		
Steelton.....	do.....	11		
Waterfall.....	do.....	1		
Porto Rico:				
Ponce.....	Jan. 17.....	46		
Tennessee:				
Jackson.....	Feb. 14.....	7		
Memphis.....	do.....	2		
Texas:				
Brownsville.....	Jan. 7.....	1		
El Paso.....	Aug. 1-Dec. 31.....	45		Year 1898.
	Jan. 1-Jan. 18.....	21		
Laredo.....	Jan. 1-Feb. 4.....	112	41	
San Rafael.....	Jan. 29.....	4		
Virginia:				
Alexandria.....	Jan. 4-Feb. 14.....	228		
Hampton.....	Feb. 15.....	6		
Newport News.....	Dec. 31.....	4		
Norfolk.....	Jan. 1-Feb. 12.....	316	1	
Portsmouth.....	Dec. 31-Feb. 4.....	22		
Richmond.....	Jan. 25.....	1		
Wisconsin:				
Outagamie County.....	Feb. 7.....	2		
Wyoming:				
Rock Springs.....	Dec. 24.....	1		

REPORTS FROM NATIONAL QUARANTINE

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Alexandria, Va.....	Feb. 11			
Beaufort, N. C.....	do.			
Brunswick, Ga.....	do.			
Cape Charles, Va.....	do.			
Cape Fear, N. C.....	do.			
Delaware Breakwater Quarantine, Del.	do.			
Eureka, Cal.....	Feb. 4			
Grays Harbor, Wash.....	do.			
Gulf Quarantine, Ship Island, Miss.	do.			
Honolulu, Hawaiian Islands.....	Jan. 28			
Newbern, N. C.....	Feb. 11			
Port Townsend, Wash.....	do.			
Reedy Island Quarantine, Del.....	do.			
San Diego, Cal.....	do.			
San Francisco Quarantine, Cal.....	Feb. 4			
San Juan, Porto Rico.....	do.			
South Atlantic Quarantine, Blackbeard Island, Ga.	do.			
Tortugas Quarantine, Key West, Fla.	do.			
Washington, N. C.....	do.			

REPORTS FROM STATE AND

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Anclote, Fla.....	Feb 10			
Baltimore, Md.....	do.			
Boston, Mass.....	do.			
Carrabelle, Fla.....	do.			
Charleston, S. C.....	do.			
Charlotte Harbor, Fla.....	do.			
Elizabeth River, Va.....	do.			
Galveston, Tex.....	Feb. 4			
	Feb. 10			
Gardiner, Oreg.....	Feb. 4			
	Feb. 10			
Key West, Monroe County, Fla.	do.			
Los Angeles, Cal.....	Feb. 11			
Mobile, Ala.....	do.			
New Bedford, Mass.....	Feb. 10			
Newport News, Va.....	do.			
Newport, R. I.....	do.			
Pass Cavallo, Tex.....	do.			
Providence, B. I.....	do.			
Round Island, Miss.....	do.			
Savannah, Ga.....	Feb. 4	Nor. bk. Vardoen (a).....	Jan. 25	Bahia.....
		Nor. bk. Paragon (a).....	do.	do.
		Aust. bk. Blandina P.....	Feb. 1	Rio.....
		Nor. bk. Mirzapore.....	Feb. 2	Rio via Barbados.
Tampa Bay, Fla.....	Feb. 10			

a Previously reported.

AND INSPECTION STATIONS.

Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
			No transactions.....	
			No report	
			do	
			do	1
			No report	
			No transactions.....	
			do	7
			No report	
			do	5
			No report	
			do	1
			No report	
			do	4
			No transactions.....	
			No report	

MUNICIPAL QUARANTINE STATIONS.

Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
			No report	
			do	
			do	
			do	
			do	
			do	
			do	
			do	
			do	
			do	
			do	
			No transactions.....	
			do	22
			No report.....	
			do	
			do	
			do	
			No transactions.....	
			No report.....	
Savannah	Ballast discharged; vessel disinfected.	Feb. 2		13
do.....	do	Feb. 1		
do	Ballast discharged.			
do	do			
			2 deaths from beriberi at sea.	
			No report	

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

CONNECTICUT—*Hartford*.—Month of January, 1899. Estimated population, 75,000. Total number of deaths, 159, including diphtheria, 3; enteric fever, 1; la grippe, 21; measles, 2; whooping cough, 1, and 12 from phthisis pulmonalis.

GEORGIA—*Columbus*.—Month of December, 1898. Estimated population, 19,303; white, 10,276; colored, 9,027. Total number of deaths, 37; white, 13; colored, 24, including la grippe, 1, and 6 from phthisis pulmonalis.

Month of January, 1899. Total number of deaths, 29; white, 12; colored, 17, including la grippe, 2, and 2 from phthisis pulmonalis.

ILLINOIS—*Springfield*.—Month of January, 1899. Estimated population, 35,000. Total number of deaths, 78, including la grippe, 7, and 9 from phthisis pulmonalis.

INDIANA—*Evansville*.—Month of January, 1899. Estimated population, 70,000. Total number of deaths, 95, including diphtheria, 1; enteric fever, 2; la grippe, 8, and 8 from phthisis pulmonalis.

MISSOURI—*St. Louis*.—Month of December, 1898. Estimated population, 623,000; white, 587,000; colored, 36,000. Total number of deaths, 841; white, 747; colored, 94, including diphtheria, 31; enteric fever, 12; scarlet fever, 3; whooping cough, 2, and 96 from phthisis pulmonalis.

NEW HAMPSHIRE—*Concord*.—Month of January, 1899. Estimated population, 18,000. Total number of deaths, 45, including diphtheria, 2; la grippe, 6, and 1 from phthisis pulmonalis.

NEW YORK—*Yonkers*.—Month of January, 1899. Estimated population, 43,000. Total number of deaths, 70, including la grippe, 3, and 9 from phthisis pulmonalis.

PENNSYLVANIA—*Conshohocken*.—Year ended December 31, 1898. Estimated population, 5,470. Total number of deaths, 83, including diphtheria, 3; enteric fever, 2, and 3 from phthisis pulmonalis.

Meadville.—Year ended December 31, 1898. Estimated population, 12,000. Total number of deaths, 93, including diphtheria, 1; enteric fever, 2; measles, 1, and 9 from phthisis pulmonalis.

Mechanicsburg.—Year ended December, 1898. Estimated population, 4,500. Total number of deaths, 68, including diphtheria, 2, and 9 from phthisis pulmonalis.

Phoenixville.—Year ended December 31, 1898. Estimated population, 8,514. Total number of deaths, 157, including diphtheria, 4; enteric fever, 3, and 10 from phthisis pulmonalis.

Williamsport.—Month of January, 1899. Estimated population, 35,000. Total number of deaths, 24, including 1 from phthisis pulmonalis.

UTAH—*Salt Lake City*.—Month of December, 1898. Estimated population, 70,000. Total number of deaths, 50, including enteric fever, 3; scarlet fever, 1, and 5 from phthisis pulmonalis.

VIRGINIA—*Petersburg*.—Four weeks ended January 26, 1899. Estimated population, 25,000; white, 12,000; colored, 13,000. Total number of deaths, 52; white, 17; colored, 35, including la grippe, 1, and 7 from phthisis pulmonalis.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—												
				Phthisis pulmonalis.	Yellow fever.	Smallpox.	Varicoid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.		
Allegheny, Pa.	Jan. 28.	105,287	53	7						2						
Altoona, Pa.	do.	30,337	15	2												
Do.	Feb. 4.	30,337	12	1												
Do.	Feb. 11.	30,337	14	1						1						
Ann Arbor, Mich.	Jan. 4.	9,431	4													
Aurora, Ill.	do.	19,688	10							2						
Brockton, Mass.	Feb. 4.	27,294	8	2												
Charleston, S. C.	do.	a 54,955	b 23													
Chicago, Ill.	Feb. 11.	1,099,850	541	32						14	13	15	3			
Cleveland, Ohio.	Feb. 4.	261,353	126	4						1		2				
Denver, Colo.	Jan. 21.	106,713	55	10								2				1
Dubois, Pa.	Feb. 11.	6,149	2													
Dunmore, Pa.	Jan. 28.	8,315	3													
Do.	Feb. 4.	8,315	9													
Elmira, N. Y.	do.	27,708	12													2
Everett, Mass.	do.	11,068	7													
Fitchburg, Mass.	do.	22,037	4													
Holyoke, Mass.	Feb. 11.	35,637	11									1				1
Jacksonville, Fla.	Feb. 4.	17,201	19	3												
Jersey City, N. J.	Feb. 5.	163,003	52	6							1	3	2			
Kalamazoo, Mich.	Feb. 4.	17,853	16	1								1				
Lowell, Mass.	Feb. 11.	77,696	36	5								1				
Lynchburg, Va.	do.	18,709	8							1						
Massillon, Ohio	do.	10,092	3													
Medford, Mass.	Feb. 11.	11,079	4													
Melrose, Mass.	Feb. 4.	8,519	5													
Nashville, Tenn.	Feb. 11.	76,168	41	5												
New Bedford, Mass.	do.	40,733	27									1				
Newburyport, Mass.	Jan. 28.	13,947	5	1												
Do.	Feb. 4.	13,947	7	1												
New Orleans, La.	do.	242,039	16							2						1
Norristown, Pa.	do.	19,791	7													
Do.	Feb. 11.	19,791	7													
Omaha, Nebr.	Feb. 4.	140,452	27													
Petersburg, Va.	Feb. 5.	22,680	15	2												
Philadelphia, Pa.	Feb. 4.	1,046,964	512	48						38		22				1
Pittsburg, Pa.	do.	238,617	133	13						6		1				4
Providence, R. I.	Feb. 11.	132,146	65	4								1				1
Salt Lake City, Utah	Feb. 4.	44,843	10	3												
San Diego, Cal.	do.	16,159	3	2												
San Jose, Cal.	do.	18,060	5	1												
Santa Barbara, Cal.	do.	5,864	0													
Sault Ste. Marie, Mich.	do.	5,760	4													
Spokane, Wash.	do.	19,922	9									1				
Springfield, Ill.	Feb. 6.	24,963	9									1				
Steelton, Pa.	do.	9,250	5	1												
Washington, D. C.	do.	230,392	110	12						1	1	5	1			
Wheeling, W. Va.	do.	35,013	15	2												
Wilmington, N. C.	Feb. 11.	61,431	29	4									1			
Winona, Minn.	Feb. 4.	18,208	9	1												
Yonkers, N. Y.	Feb. 10.	32,033	16	2									1			1

a Estimated population, 65,165; white, 28,870; colored, 36,295.
 b White, 7; colored, 16. La grippe, 1.

Table of temperature and rainfall, week ended February 11, 1899.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	αExcess.	αDefic'ncy.	Normal.	Excess.	Deficiency.
Atlantic Coast:						
Eastport, Me.....	19		7	.91		.84
Portland, Me.....	22		6	.85		.41
Northfield, Vt.....	13		8	.57		.43
Boston, Mass.....	25		3	.91		.15
Vineyard Haven, Mass.....	33		6	.82		.05
Nantucket, Mass.....	31		5	.76	.54	
Woods Hole, Mass.....	28		5	.91		.80
Block Island, R. I.....	29		4	1.04		.86
New Haven, Conn.....	26		3	1.01		.29
Albany, N. Y.....	21		3	.70		.11
New York, N. Y.....	29		2	.98		.23
Harrisburg, Pa.....	31		8	.71	.06	
Philadelphia, Pa.....	32		2	.77	.40	
New Brunswick, N. J.....	31		7	1.09		.47
Atlantic City, N. J.....	32		4	.84		.05
Baltimore, Md.....	34		7	.83	.35	
Washington, D. C.....	33		7	.84		
Lynchburg, Va.....	38		3	.91	.85	
Cape Henry, Va.....	43		3	.89	.64	
Norfolk, Va.....	41		1	.91	.75	
Charlotte, N. C.....	44	1		1.16	2.45	
Raleigh, N. C.....	44		1	.91	1.17	
Kittyhawk, N. C.....	44			.99		
Hatteras, N. C.....	46	2		1.19		.04
Wilmington, N. C.....	49	3		.85		.85
Columbia, S. C.....	48	3		.97	1.04	
Charleston, S. C.....	51	7		.85		.07
Augusta, Ga.....	49	8		.99	1.86	
Savannah, Ga.....	53	9		.77		.06
Jacksonville, Fla.....	57	8		.77		.10
Jupiter, Fla.....	67	4		.71		.38
Key West, Fla.....	71	3		.42		.42
Gulf States:						
Atlanta, Ga.....	48	2		1.36	.31	
Tampa, Fla.....	65	3		.63		.15
Pensacola, Fla.....	56	4		.98		.03
Mobile, Ala.....	53	3		1.12		.96
Montgomery, Ala.....	51	4		1.32	1.69	
Vicksburg, Miss.....	51		7	1.12	.26	
New Orleans, La.....	57	5		1.15		1.05
Shreveport, La.....	50		9	1.00		.82
Fort Smith, Ark.....	40		14	.78		.49
Little Rock, Ark.....	44		17	1.27		.80
Palestine, Tex.....	52		14	.91		.66
Galveston, Tex.....	56		3	.77		.70
San Antonio, Tex.....	54		10	.48		.40
Corpus Christi, Tex.....	60		11	.70		.56
Ohio Valley and Tennessee:						
Memphis, Tenn.....	43		17	1.31	1.19	
Nashville, Tenn.....	41		11	1.29	1.01	
Chattanooga, Tenn.....	44		2	1.41	3.16	
Knoxville, Tenn.....	40		2	1.33	2.32	
Louisville, Ky.....	36		13	1.04		.39
Indianapolis, Ind.....	30		12	.84		.44
Cincinnati, Ohio.....	34		11	.91		.02
Columbus, Ohio.....	29		9	.90		.47
Parkersburg, W. Va.....	33		9	.77	.94	
Pittsburg, Pa.....	31		8	.72	.28	
Lake Region:						
Oswego, N. Y.....	21		6	.65	1.14	
Rochester, N. Y.....	21		7	.70		.46
Buffalo, N. Y.....	22		7	.76		.58
Erie, Pa.....	25		10	.83		.73
Cleveland, Ohio.....	25		10	.69		.63
Sandusky, Ohio.....	26		10	.64		.49
Toledo, Ohio.....	25		10	.49		.41
Detroit, Mich.....	23		11	.55		.41
Lansing, Mich.....	23		15	.49		.41
Port Huron, Mich.....	20		9	.55		.48
Alpena, Mich.....	15		10	.56		.46
Sault Ste. Marie, Mich.....	9		11	.35		.33
Marquette, Mich.....	14		15	.48		.42
Green Bay, Wis.....	13		18	.62		.52
Grand Haven, Mich.....	23		12	.56		.30

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

Table of temperature and rainfall, week ended February 11, 1899—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Lake Region—Continued.						
Milwaukee, Wis.....	20		16	.43		.41
Chicago, Ill.....	24		16	.55		.51
Duluth, Minn.....	10		18	.26		.26
Upper Mississippi Valley:						
St. Paul, Minn.....	12		18	.21		.07
La Crosse, Wis.....	17		21	.27		.05
Dubuque, Iowa.....	20		17	.35		.34
Davenport, Iowa.....	22		16	.35		.33
Des Moines, Iowa.....	20		15	.28		.27
Keokuk, Iowa.....	25		15	.42		.41
Hannibal, Mo.....	28		19	.42		.40
Springfield, Ill.....	27		16	.72		.68
Cairo, Ill.....	36		16	.97		.57
St. Louis, Mo.....	32		17	.62		.45
Missouri Valley:						
Columbia, Mo.....	32		21	.53		.46
Springfield, Mo.....	34		20	.78		.63
Kansas City, Mo.....	27		18	.35		.22
Topeka, Kans.....	29		21	.34		.02
Wichita, Kans.....	30		23	.28		.17
Concordia, Kans.....	24		20	.21		.07
Lincoln, Nebr.....	19		16	.21		.19
Omaha, Nebr.....	22		20	.15		.13
Sioux City, Iowa.....	15		17	.14		.13
Yankton, S. Dak.....	17		20	.14		.11
Valentine, Nebr.....	20		30	.14	.11	
Huron, S. Dak.....	8		18	.14	.04	
Pierre, S. Dak.....	13		23	.07	.25	
Moorhead, Minn.....	1		12	.20		.16
Bismarck, N. Dak.....	8		22	.13		.10
Williston, N. Dak.....	7		25	.14		.13
Rocky Mountain Region:						
Havre, Mont.....	11		26	.14	.02	
Helena, Mont.....	18		34	.22	.17	
Miles City, Mont.....	13		29	.14		.10
Rapid City, S. Dak.....	20		32	.14		.00
Spokane, Wash.....	25		18	.56		.22
Walla Walla, Wash.....	31		14	.42	.10	
Baker City, Oreg.....	22		15	.42		.31
Winnemucca, Nev.....	30		11	.27		.14
Idaho Falls, Idaho.....	18		11	.42		.37
Salt Lake City, Utah.....	31		11	.28	.62	
Lander, Wyo.....	19		29	.14		.06
Cheyenne, Wyo.....	26		23	.08	.69	
North Platte, Nebr.....	22		24	.07		.08
Denver, Colo.....	30		27	.09	.20	
Pueblo, Colo.....	31		26	.07	.23	
Dodge City, Kans.....	30		25	.14	.04	
Oklahoma, Okla.....	37		19	.32		.25
Amarillo, Tex.....	34		16	.28		.25
Abilene, Tex.....	45		27	.31		.30
Santa Fe, N. Mex.....	32		2	.16	.15	
El Paso, Tex.....	50	1		.13		.13
Phoenix, Ariz.....	52		2	.16		.06
Pacific Coast:						
Seattle, Wash.....	39			1.18		
Tacoma, Wash.....	38			1.40		
Fort Canby, Wash.....	41			1.62		
Portland, Oreg.....	39			1.54		
Roseburg, Oreg.....	40			1.33		
Eureka, Cal.....	46			1.67		
Redbluff, Cal.....	48		5	.98		.98
Carson City, Nev.....	33		8	.43		.27
Sacramento, Cal.....	49		5	.34		.34
San Francisco, Cal.....	51		5	1.05		.95
Fresno, Cal.....	49		5	.28		.26
San Luis Obispo, Cal.....	53		7	.98		.70
Los Angeles, Cal.....	54		7	.76		.74
San Diego, Cal.....	54			.49		
Yuma, Ariz.....	57			.14		

^aThe 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 February 17, 1899.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	Dec. 20-Dec. 27...	.....	2	
Calcutta.....	Nov. 26-Dec. 31...	.....	103	
Madras.....	Nov. 19-Jan. 6...	.....	19	

YELLOW FEVER.

Brasil:				
Bahai.....	Dec. 24-Jan. 14...	4	2	
Rio de Janeiro.....	Nov. 11-Dec. 16...	24	19	
Colombia:				
Barranquilla.....	Dec. 2-Jan. 9...	3	3	
Cuba:				
Habana.....	Dec. 16-Jan. 12...	.....	6	
Mexico:				
Vera Cruz.....	Dec. 8-Feb. 2...	.....	29	

PLAGUE.

China:				
Hongkong.....	Dec. 10-Dec. 17...	1	1	
Formosa:				
Tainan.....	Jan. 9.....	5	2	
Taipeh.....	Dec. 25.....	10	2	
Taiwan.....	Dec. 31.....	.....	.....	Plague exists.
India:				
Bombay.....	Nov. 22-Nov. 29...	.....	43	
Madras.....	Nov. 19-Nov. 25...	.....	1	
Madagascar:				
Tamatave.....	Nov. 23-Dec. 16...	88	38	

SMALLPOX.

Africa:				
Lorenzo Marquez.....	Dec. 1-Dec. 17...	17	.....
Argentina:				
Buenos Ayres.....	Nov. 1-Nov. 30...	.....	5	
Belgium:				
Antwerp.....	Dec. 3-Jan. 7...	41	14	
Brasil:				
Bahia.....	Nov. 19-Jan. 14...	117	10	
Rio de Janeiro.....	Nov. 11-Dec. 16...	67	29	
Canada:				
Province of Quebec.....	Jan. 26-Feb. 6...	11	1	
Cuba:				
Habana.....	Dec. 30.....	1	.....	In United States Army
England:				
Liverpool.....	Dec. 3-Jan. 21...	2	1	
London.....	Dec. 17-Jan. 14...	1	1	
Sunderland.....	Jan. 15-Jan. 21...	2	.....
France:				
Paris.....	Dec. 24-Dec. 31...	.....	1	
India:				
Bombay.....	Nov. 22-Dec. 27...	.....	4	
Calcutta.....	Nov. 19-Dec. 17...	.....	3	
Madras.....	Nov. 26-Jan. 6...	.....	3	
Italy:				
Milan.....	Jan. 22-Jan. 23...	1	.....

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

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Awomori Ken.....	Nov. 18-Dec. 31...	126	28	
Chiba Ken.....	Dec. 9-Dec. 31...	1	.....
Hiogo Ken.....	Nov. 18-Dec. 8...	1	.....
Iwate Ken.....	Dec. 9-Dec. 31...	1	.....
Kanagawa Ken.....	Nov. 18-Dec. 8...	1	.....
Nagano Ken.....	Dec. 9-Dec. 31...	1	.....
Nagasaki Ken.....	Nov. 18-Dec. 8...	1	.....
The Hokkaido.....	Nov. 18-Dec. 8...	8	.....
Tottori Ken.....	Nov. 18-Dec. 8...	3	.....
Korea:				
Seoul.....	Jan. 1-Jan. 7.....	.....	.....	Smallpox endemic.
Mexico:				
C. P. Diaz.....	Jan. 10.....	.....	.....	Do.
Chihuahua.....	Jan. 7-Jan. 23.....	.....	3	
City of Mexico.....	Dec. 31-Jan. 29.....	.....	8	
Monterey.....	Dec. 2-Jan. 5.....	.....	3	
Nuevo Laredo.....	Jan. 29-Feb. 4.....	9	1	
Vera Cruz.....	Jan. 5-Feb. 2.....	.....	3	
Russia:				
Moscow.....	Dec. 24-Jan. 14...	23	13	
Odessa.....	Jan. 7-Jan. 21...	6	2	
St. Petersburg.....	Jan. 1-Jan. 14...	7	1	
Turkey:				
Bagdad.....	Oct. 22-Nov. 27...	96	20	
Constantinople.....	Jan. 2-Jan. 23.....	.....	42	
Smyrna.....	Dec. 25-Jan. 1.....	.....	2	

Current quarantine measures.

[Translated in this Bureau from the "Veröffentlichungen des Kaiserlichen Gesundheitsamtes," Berlin, January 18, 1899.]

BELGIUM.—By order of the minister of agriculture and public works dated December 30, 1898, the measures prescribed in articles 1 and 4 of the royal ordinance of April 5, 1897, in regard to measures for preventing the introduction of plague from India are put in force against arrivals from Persia, and from localities in China and the island of Formosa lying south of the thirtieth parallel. All such arrivals shall be treated at the quarantine stations of the Scheldt and Ostend, also at Selzaete according to the regulations laid down in the Venice convention. Articles described in article 1 of the ordinance of April 5, 1897, arriving from a plague suspected port of the Indian Ocean, must be accompanied by a certificate of origin signed by the Belgian consul at the port of departure.

JAPAN.—The quarantine order against arrivals from the island of Formosa is declared out of force in consequence of the extinction of the plague epidemic on that island. The police order of the royal German consulate at Yokohama dated June 20, 1898, and applying to vessels arriving from Formosa is also declared out of force from December 6, 1898.

BRAZIL.

Sanitary report from Rio de Janeiro—Serum treatment of yellow fever by Sanarelli.

RIO DE JANEIRO, January 4, 1899.

SIR: I have the honor to transmit to you the official report for the week ended December 23. There were 315 deaths from all causes, an

increase of 21 as compared with the foregoing week ; 14 deaths from *accesso pernicioso*, a decrease of 2 ; 4 deaths from yellow fever, an increase of 1 ; 7 deaths from smallpox, an increase of 5 ; 3 deaths from typhoid fever, none before ; 2 deaths from measles, an increase of 1 ; 2 deaths from beriberi, an increase of 1 ; 44 deaths from tuberculosis, a decrease of 11. * * *

Information.—In my report of March 16, 1898 (PUBLIC HEALTH REPORTS, Vol. XIII, No. 15), I mentioned the experiments and results which Sanarelli obtained by application of his bactericide serum. That information was incomplete, although it was made public in a discourse of the said investigator. Since this serum treatment of the yellow fever, based on a theory whose scientific value can not be disputed, is of the highest practical and scientific importance, I may be permitted to return to this subject now. I have before me the report which the sanitary inspectors, Drs. Clemente, Ferreira, and Vicira de Mello, who accompanied Professor Sanarelli to Sao Carlos de Pinhal as official deputies, have presented to the director of the sanitary service and which has been published in a medical journal at Sao Paulo.

Of this report I give the following extract: Number of patients treated by the serum, 30 ; of these there were in the first stage of the disease, 26 ; in advanced stage, 3 ; decidedly oliguric, 1 ; total, 30. Of these 30 patients, were cured, 20 ; died, 10 ; of those who died, there received treatment in the first stage of the disease, 8 ; in advanced stage of the disease, 2 ; of those who were cured there received treatment in the first stage, 18 ; in the third stage, 2.

The total percentage of mortality was 33 per cent, but it is necessary to remark that the epidemic, which made its appearance this year in Sao Carlos, has been noted for its extraordinary violence.

We must classify in two series the cases submitted to the serotherapeutic treatment: (1) Those on whom was applied small moderate doses of the therapeutic agent, either subcutaneously or intravenously ; (2) those who received from the beginning large doses, the first application being 60, 80, 100, 120 c.c. The second series, we must divide in two classes: (a) That of the patients who received intensive treatment from serum A and E ; (b) the patients on whom were used injections of serum F. In the first series the dose produced little effect on the organism, being only observable when the intravenous treatment was used.

In the second series the reactionary phenomena were clearly defined, vehement, and even formidable in some of the patients on whom was employed the intensive method. Then at the end of five or ten minutes after the injections there appeared hyperæmia in the face in a violent form, as well as in the conjunctivæ and in the upper parts of the thorax. In the skin was observed an increase of the circulation of the blood ; urticaria, more or less prominent, frequently made its appearance. The pulse became stronger, fuller, and less rapid, especially always after the intravenous injection. At the same time the patients displayed an uncomfortable feeling of heat and swelling in the face, head, and whole body. This was followed by a more or less pertinacious cough, and in some cases chills, hyperthermia, and vomits. The temperature never failed to rise after the injections, even under the influence of small doses. In some cases there seemed to be a certain action of the serum on the uropoetic functions, there being free diuresis and even real polyuria. These are the physiological effects of the serum.

Of the therapeutic action we must still take in consideration the cases in which small doses were used and those in which the intensive method was employed. In the former, when the result was favorable, it was

observed that either the temperature after its rise, caused by the application of the serum, fell without rising again or that the subsequent elevations were insignificant and transient, or that the decline in general less prominent, which followed the reactionary rises of temperature, was ephemeral, the temperature again rising and passing during several days through greater or less irregular fluctuations, up to the period of normal state. At the same time the phenomena of the first stage showed the parallel attenuation and disappeared without the appearance of any accident. In rare cases there were phenomena of hemorrhages or ataxia, and, beyond, in some cases black vomit and a slight delirium, no other symptom was observed.

In the patients submitted to strong doses there seemed to be a more rapid decline in the principal symptoms and somewhat shorter evolution of the disease, and what is more important, the hemorrhagic accidents were exceptional, there being consequently no depressing phase of the affection.

In both instances the albuminuria did not seem to be visibly influenced by the serum, and in some of the patients this phenomenon, which failed to appear at the time of the first application, was displayed immediately afterwards with more or less prominence and lasted for a greater or less time without any visible difference from what is habitually observed.

In the cases which terminated with death, in both series the temperature, as a general rule, after reactionary elevations either did not decline at all or declined ephemerally, to rise again and to remain tenaciously at a high state in spite of repeated injections. At the end of three or four days of high temperature there was a decline, which was shortly followed by hemorrhagic and ataxic accidents, and a rapid and considerable decrease of the diuresis, which, however, never reached the point of complete cessation. In some patients, after a long reactionary period or even in the midst thereof, there appeared great complication in the brain and death promptly followed.

In cases treated with the serum, complete anuria was never observed, although it was common in other cases of this epidemic.

As to the patients, who in default of serum A and E, resorted to serum F, the results obtained were nugatory and the disease passed through all the stages without receiving the slightest favorable modification from this substance.

Since last report the following-named ships have been inspected and received bills of health of this office: December 28, bark *Sunbeam*, Norwegian, for Mobile, and steamship *Straits of Menai*, British, for Galveston. December 31 ship *Constance*, Norwegian, for Sapelo Island; bark *Saturnus*, German, for New Orleans; steamship *Hevelius*, Belgian, for New York; ship *Harvest Queen*, British, for Mobile, and steamship *Biela*, British, for New York. January 2, bark *Margaret Mitchell*, British, for Brunswick, and barkentine *Priscilla*, American, for Baltimore. January 4, barkentine *White Wings*, American, for Baltimore.

Respectfully, yours,

W. HAVELBURG.

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

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

CANADA.

Smallpox in the province of Quebec.

MONTREAL, February 6, 1899.

The present status of smallpox in the province is as follows :

Municipality.	County.	Population.	Date of outbreak.	New cases since last report.	Total cases since outbreak.	Died.	Recovered.	Still sick.	Houses infected since outbreak.	Houses still infected.
Coteau du Lac.....	Soulanges.....	1,276	Dec. 10	.....	5	0	5	0	1	0
Coteau Landing.....	.....do.....	507	Dec. 29	.....	1	1	.....	0	1	0
St. Telesphore.....	.....do.....	1,307	Jan. 12	α 4	5	.....	1	4	1	1

α In the previously infected house.

Mention could, perhaps, be made that in the city of Montreal, a boy having presented a suspicious eruption, upon the nature of which physicians could not agree at any time, quarantine has been kept over two weeks now, and will not be raised until after desquamation and subsequent disinfection of premises.

Yours, respectfully,
 ELZÉAR PELLETIER,
Secretary Board of Health of the Province of Quebec.

CUBA.

Sanitary report from Havana.

HAVANA, CUBA, February 6, 1899.

SIR: I have the honor to submit the following report for the week ended Thursday, February 2, 1899: Two weeks have elapsed since a death from yellow fever was recorded and I do not know that there is a case now existing in the city. The mortality has steadily decreased for the past few weeks until it makes the present week death rate the lowest for over a year, possibly for over two years. Under the present conditions it can not go much lower before it again rises. The decreased death rate is due to the presence of Americans and food to a large extent but the diminution of material must enter largely into the decreasing death rate. * * *

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 Havana for the week ended Thursday, February 2, 1899.

Cause of death.	Total.
Enteric fever.....	3
Pernicious fever.....	7
Malarial fever.....	31
La grippe.....	1
Dysentery.....	1
Enteritis.....	37
Pneumonia.....	4
Tuberculosis.....	30
Deaths from all causes.....	255
Annual ratio per 1,000.....	66.30

*Sanitary report from Santiago.*SANTIAGO DE CUBA, *January 28, 1899.*

SIR: I have the honor to inform you that no deaths from either infectious or contagious diseases have been reported during the week ended Saturday, January 28. The total number of deaths has been 54, of which 10 were from tuberculosis; malarial fevers follow, and the rest from different diseases of noncontagious character. Our sanitary condition is improving daily, as shown by the accompanying mortality table. Both the civil and military hospitals are now in splendid sanitary condition and perfectly well attended to. The public now pay more attention to hygiene, and the streets and houses are kept clean. Where disinfection is needed it is immediately practiced.

Respectfully,

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

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

JAPAN.

*Sanitary report from Yokohama.*YOKOHAMA, JAPAN, *January 3, 1899.*

SIR: I have the honor to forward herewith my regular report of infectious disease in Japan, for period December 9 to December 31, 1898.

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 December 9 to December 31, 1898.

Locality.	Cholera.		Dysentery.		Smallpox.		Plague.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Kioto Fu.....			11	5				
Osaka Fu.....			9	9				
Tokio Fu.....			17	16				
Aichi Ken.....			15	5				
Akita Ken.....			2					
Awomori Ken.....			10	6	73	15		
Chiba Ken.....			75	32	1			
Fukui Ken.....								
Fukuoka Ken.....			14	8				
Fukushima Ken.....			10	3				
Gifu Ken.....			14	9				
Gumma Ken.....			17	4				
Hiogo Ken.....			30	23				
Hiroshima Ken.....			48	27				
Ibaraki Ken.....			19	10				
Ishikawa Ken.....								
Iwate Ken.....			18	24	1			
Kagawa Ken.....			4					
Kagoshima Ken.....			20	5				
Kanagawa Ken.....			12	7				
Kochi Ken.....			12	6				
Kumamoto Ken.....			45	16				
Miyagi Ken.....			7	2				
Miyazaki Ken.....			26	11				
Miye Ken.....			8	4				
Nagano Ken.....			35	26	1			
Nagasaki Ken.....			15	12				
Nara Ken.....				1				
Niigata Ken.....			73	48				
Oita Ken.....			15	6				
Okayama Ken.....			3	4				
Okinawa Ken.....			16	3				
Saga Ken.....			3	2				
Saitama Ken.....			30	15				
Shidzuoka Ken.....			56	27				
Shiga Ken.....			13					
Shimane Ken.....			24	9				
Tochigi Ken.....			8	8				
Tokushima Ken.....			6	2				
Tottori Ken.....			7	1				
Toyama Ken.....								
Wakayama Ken.....			5	2				
Yamagata Ken.....								
Yamaguchi Ken.....			21	7				
Yamanashi Ken.....			65	38				
Yehime Ken.....			14	8				
The Hokkaido.....								
Taiwan (Formosa).....			(a)				(b)	
Total.....			852	454	76	15		

a No report.

b Exists.

Vessels and crews inspected at Yokohama for the six months ended December 31, 1899.

YOKOHAMA, JAPAN, January 6, 1899.

SIR: I have the honor to report that during the half year ended December 31, 1898, I have officially inspected 84 vessels, bound for ports of the United States, or an average of 1 every two and one-fifth days.

Of these ships 14 were under the United States flag, 55 were British, 9 Japanese, 3 German, 2 Hawaiian, and 1 French, with crews aggregating 4,743. The Hawaiian ship, twice inspected, is an anomaly, as her transfer of flag having been, for some reason, refused, she is sailing under colors practically nonexistent.

Of the vessels inspected, 57 were steamers and 27 sailing vessels, and of the steamers, 38 carried steerage passengers, concerning whom I

inclose a detailed statement, to the number of 13,578, as against 11,186 during the immediately preceding half year, and 6,938 in the corresponding period of 1897, showing a maintained increase in the amount of steerage travel through and from this port.

The number of steerage passengers, added to that of the crews of all vessels inspected, gives a total of 18,321 persons individually examined during the six months.

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.

Plague in Formosa.

YOKOHAMA, JAPAN, *January 13, 1899.*

SIR: I have the honor to report that a government telegram received in Tokio yesterday announces that at Sekiteibyō in Tainan prefecture, southern Formosa, 4 cases of plague occurred on the 7th instant, and 1 case on the 9th. The same message adds that 2 persons died of the disease in the city of Tainan, where it is rapidly spreading.

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.

MADAGASCAR.

Bubonic plague in Tamatave.

CONSULATE OF THE UNITED STATES,
Tamatave, December 25, 1898.

SIR: Referring to my cablegram of November 28, and confirmatory dispatch No. 28 of December 3, 1898, regarding the presence of the bubonic plague in Madagascar, I have the honor to say: To date there has been no abatement of the plague reported. Quarantine is still vigorously maintained. No shipping or receiving of merchandise of any kind. As a consequence, business of all kinds is paralyzed. Mean-time living becomes daily more and more costly; 200 per cent advance since pest declared.

* * * * *

I am, sir, your obedient servant,

W. W. GIBBS,
United States Consul.

Hon. ASSISTANT SECRETARY OF STATE.

FOREIGN STATISTICAL REPORTS.

AFRICA—*Lorenzo Marquez.*—Month of November, 1898. Estimated population, 5,000. Total number of deaths, 48, including smallpox, 19, and 3 from phthisis pulmonalis.

Month of December, 1898. Total number of deaths, 51, including enteric fever, 1; smallpox, 6, and 3 from phthisis pulmonalis.

BERMUDA.—Two weeks ended January 27, 1899. Estimated population, 15,013. No deaths and no contagious diseases.

BRITISH COLUMBIA—*Vancouver*.—Two weeks ended January 31, 1899. Estimated population, ———. Total number of deaths, 13.

CANADA—*Ontario—Hamilton*.—Month of January, 1899. Estimated population, 51,000. Total number of deaths, 55, including diphtheria, 2; la grippe, 3; whooping cough, 1, and 11 from phthisis pulmonalis.

COLOMBIA—*Panama*.—Four weeks ended January 29, 1899. Estimated population, 16,000. Total number of deaths not reported. No contagious diseases.

FRANCE—*Nice*.—Month of December, 1898. Estimated population, 108,227. Total number of deaths, 214, including diphtheria, 2; enteric fever, 15, and 21 from phthisis pulmonalis.

Marseilles.—Week ended January 16, 1899. Death rate high; average per day, about 34; maximum, 36; minimum, 32. Chief causes of death, influenza and chest affections.

Week ended January 30. Health conditions in the city of Marseilles remain almost stationary, influenza being the prevalent disease. Total deaths during week, 197; greatest number, 38; smallest number, 23; average number, 28½. Four clean bills of health have been issued since last report. No additional news concerning the cases of anthrax at La Fleche.

GUIANA—*Demerara*.—Month of December, 1898. Estimated population, 86,250. Total number of deaths, 297. No contagious diseases.

HONDURAS—*Belize*.—Month of December, 1898. Estimated population, 30,000. Total number of deaths, 128, including 5 from phthisis pulmonalis.

JAPAN—*Nagasaki*.—Three weeks ended January 10. Estimated population, 132,000. Total number of deaths not reported. Four deaths from diphtheria.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Acapulco	Jan. 28	6,000	4										
Aix la Chapelle	Jan. 21	130,000	47										
Alexandretta	Jan. 7	6,000	9										
Do	Jan. 14	6,000	11										
Amherstburg	Feb. 4	2,300	0										
Amsterdam	Jan. 28	512,758	148							2	2	3	
Bahia	Jan. 14	200,000			1	1							
Barmen	do	137,000	50										
Barranquilla	do	40,000	18						1		1	1	
Do	Jan. 21	40,000	21										
Belfast	do	308,960	147						3	2			4
Belize	Feb. 2	13,000	6										
Belleville	Feb. 6	10,300	3										
Berlin	Jan. 7	1,747,903	573					2	8	18	8		
Bradford	Jan. 21	231,260	88					2	2				1
Bremen	Jan. 14	144,000	50										
Brussels	Jan. 21	551,611	214					2			2	17	
Budapest	Jan. 22	650,000					8		2	6	6		
Cairo	Jan. 14	570,062	421				1	4		5	6		
Calcutta	Dec. 31	681,560	503	56						1			
Callao	Jan. 18	25,000	28										1
Carthage	Jan. 14	25,000	15										
Do	Jan. 19	25,000	7										
Catania	Jan. 27	120,000	85					3		1	1		
Christiana	Jan. 21	203,337	79							2			
Chaudiere Junction	Feb. 4	500	0										
Chemnitz	Jan. 14	163,000	83						2		1		
Coburg	Jan. 7	19,470	12										
Do	Jan. 14	19,470	14										
Cologne	do	353,243	156					1		4			2
Colombo	Dec. 24	130,000	98					1					
Colon	Jan. 25	8,000	0										
Constantinople	Jan. 16	750,000	247				5		11	3	1		
Do	Jan. 23	750,000	308				23		5		5	1	
Copenhagen	Jan. 21	351,000	124					1	3	3	6		2
Crefeld	do	110,000	39										
Dresden	Dec. 31	398,300	121					1	1	1	1		3
Dublin	Jan. 14	349,594	182					1	2	2	2		3
Do	Jan. 21	349,594	192	α			1	2	1	1	1		4
Edinburgh	do	298,927	120					1	1	1	6		12
Ensenada	Feb. 4	2,750	0										
Gibraltar	Jan. 22	25,900	9										
Girgenti	Jan. 21	24,423	14										
Glasgow	Jan. 20	733,903	316						4	4	2	2	15
Gothenburg	Jan. 14	122,205	35							1	1		
Guatemala City	Jan. 23	6,500	42										
Hamilton, Bermuda	Jan. 24	16,000	5										
Do	Jan. 31	16,000	1										
Hongkong	Dec. 24	248,710	94										
Honolulu	Jan. 21	30,000	17										
Konigsberg	do	179,686								1			
La Paz, Mexico	do	5,600	4										
Leeds	Jan. 28	423,889	137						1	1	8	1	
Leighorn	Jan. 22	104,509	39						1				
Leipzig	Jan. 14	422,071	127									1	
Leith	Jan. 21	77,385	23								2		1
Licata	do	20,000	11						2				
Liverpool	do	668,645	265					2	3	3	5	5	4
Livingston, Guatemala	Feb. 28	1,500	1										
Lyons	Jan. 14	466,028	154						1	1			
Madras	Jan. 6	452,518	388						1			3	
Manchester	Jan. 21	546,010	214						4	2	1	17	5
Matamoras	Feb. 3	16,304	6										
Mayence	Jan. 21	80,000	27										
Do	Jan. 28	80,000	29										
Mazatlan	do	16,700	15										
Monterey	Feb. 5	25,000	60										
Munich	Dec. 31	430,000	205							1	3	2	4
New Castle on Tyne	Jan. 21	186,345	83									3	2
Nuevo Laredo	Feb. 4	4,500	1						1				
Nuremberg	Dec. 31	194,515	79										2
Odessa	Jan. 21	400,000	167						2		1		

α Beriberi, 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.	Whooping cough.	
Osaka.....	Dec. 17.....	202,912	112					2					
Do.....	Dec. 24.....	202,912	115							4			
Do.....	Dec. 31.....	202,912	103					1		4			
Do.....	Jan. 7.....	202,911	131					2					
Paris.....	Jan. 21.....	2,511,955	884					9	3	5	6	3	
Plymouth.....	Jan. 28.....	99,848	45										
Prague.....	Jan. 21.....	196,257	130					1	2	11	4		
Puerto Cortes.....	Feb. 1.....	2,000	0										
Quebec.....	Feb. 4.....	73,000							1				
Rheims.....	Jan. 7.....	107,709	38					1		1			
Do.....	Jan. 14.....	107,709	38					2					
Rio de Janeiro.....	Dec. 23.....	750,000	315	4	7			3			2		
Rotterdam.....	Jan. 28.....	309,307	100					21	14	27	6	5	
St. Petersburg.....	Jan. 14.....	1,267,023	750					3					
St. Stephen, New Brunswick.....	Feb. 14.....	3,000	3										
St. Thomas, West Indies.....	Jan. 30.....	12,019	3										
Santiago.....	Jan. 28.....	635,000	54					3	2	4	1	1	
Sheffield.....	Jan. 21.....	361,440	127										
Smyrna.....	Jan. 8.....	300,000	87			4		3					
Do.....	Jan. 15.....	300,000	58					3					
Solingen.....	Jan. 21.....	43,928	7										
Southampton.....	Jan. 21.....	103,168	37							2		1	
South Shields.....	Jan. 21.....	98,922	38					2			1	2	
Stockholm.....	do.....	283,550						1		12	2		
Stuttgart.....	Dec. 19.....	162,934	55										
Sunderland.....	Jan. 21.....	145,613	59										
Tampico.....	Jan. 26.....	120,000	17										
Trapani.....	Jan. 21.....	45,095	16										
Trieste.....	Jan. 14.....	158,314	95						5	4			
Venice.....	Jan. 21.....	169,001	89							3	2		
Vera Cruz.....	Jan. 26.....	30,000	45		2	1							
Do.....	Feb. 2.....	30,000	40		2	1							
Victoria.....	Jan. 7.....	20,000	5										
Do.....	Jan. 14.....	20,000	7					1					
Do.....	Jan. 21.....	20,000	9					1					
Do.....	Jan. 31.....	20,000	9										
Vienna.....	Jan. 7.....	1,606,629	567					2	4	13	11	4	
Do.....	Jan. 14.....	1,606,629	666					2	6	16	10	5	
Windsor, Nova Scotia.....	Feb. 4.....		2										
Winnipeg.....	do.....	49,000								1			
Yokohama.....	Jan. 14.....	189,455								1			
Zurich.....	do.....	163,042	40							2			1

a Beriberi, 2

b Beriberi, 1.

By authority of the Secretary of the Treasury :

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