

WEEKLY ABSTRACT OF SANITARY REPORTS.

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TREASURY DEPARTMENT,
OFFICE SUPERVISING SURGEON-GENERAL,
U. S. MARINE-HOSPITAL SERVICE,
Washington, D. C., November 29, 1889.

Abstract of Domestic and Foreign Sanitary Reports received during the week ended November 29, 1889, published in accordance with section 4, Act of Congress, approved April 29, 1878.

UNITED STATES.

Special Reports.

YELLOW FEVER—*Key West, Fla.*

BULLETIN NO. 5, STATE BOARD OF HEALTH OF FLORIDA.

JACKSONVILLE, FLA., *November 16, 1889.*

The occurrence of two more cases of yellow fever at Key West, Fla., on the 15th instant, after an interval of exemption of twenty-six days, requires a re-enacting of the restrictions on travel and surveillance of passengers from that place which were removed on the 11th instant, and announced in Bulletin No. 4 from this office; accordingly, it is forbidden for persons to leave the island of Key West without an acclimation certificate from me or from my legally appointed representative at that place, for any point on the main-land of Florida, and captains of all vessels leaving the port or island of Key West are forbidden to take as a passenger any person not having such certificate or permit, and they are likewise forbidden to enter any of the ports of the State of Florida without a permit from me or from my representative at Key West, so to do.

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The occurrence of these last two cases in Key West demonstrates satisfactorily to my mind that the city is infected. The locality, or localities, from which the infection has been drawn have, of course, not been satisfactorily determined upon, nor am I able to state at present in what way the germ of the disease has been imported into Key West.

It is, I trust, fully comprehended that the restrictions on travel from Key West and the fumigation of baggage arriving from that island at other sea-ports are sufficient safeguards at this period to prevent the introduction from there to the main-land of yellow-fever infection.

JOSEPH Y. PORTER, M. D.,
Health Officer State of Florida,

CEREBRO-SPINAL MENINGITIS.—The following report has been received :

PORT OF EVANSVILLE, IND.,
Surgeon's Office, November 23, 1889.

SIR: I have the honor to inclose a clipping from the *Evansville Courier* of this date in regard to an endemic of cerebro-spinal fever now prevailing in Webster County, and to inform you that I have two cases under treatment in the marine ward of the city hospital—these cases having been received from the steamboat Joe Fowler, which runs between this city and Paducah, Ky.

Very respectfully,

GEORGE T. VAUGHAN,
Assistant Surgeon, Marine-Hospital Service.

To the SUPERVISING SURGEON-GENERAL M. H. S.

Reports of States, and Yearly and Monthly Reports of Cities.

ILLINOIS—*Peoria*.—Month of October, 1889. Population, 40,000. Total deaths, 47; including diphtheria, 1.

IOWA—*Davenport*.—Month of October, 1889. Population, 33,715. Total deaths, 21; including diphtheria, 4.

MICHIGAN.—Reports to the State board of health, Lansing, from 65 observers, indicate that for the week ended November 16, 1889, cholera infantum, cholera morbus, erysipelas, measles, and scarlet fever increased, and cerebro-spinal meningitis, membranous croup, remittent fever, and enteric fever decreased, in area of prevalence.

Diphtheria was reported present during the week, and since, at 38 places; scarlet fever at 33 places; enteric fever increased 26 per cent., and was present at 49 places; and measles increased 29 per cent., and was reported at 9 places.

MINNESOTA—*Minneapolis*.—Month of October, 1889. Population, 200,000. Total deaths, 207; including enteric fever, 18; diphtheria, 31; scarlet fever, 4; and whooping-cough, 2.

NEW HAMPSHIRE.—The official organ of the State board of health, the *Sanitary Volunteer*, announces that diphtheria prevails in several parts of the State, and that, upon application, the board of health will mail to any address a pamphlet relating to the prevention and restriction of diphtheria.

The following contagious and infectious diseases were reported to the board for the month of October :

Diphtheria: Manchester 14, Acworth 2, Canaan 3, Nashua 1, Canterbury 1, Rochester 1, Marlow 3, Walpole 1, Claremont 5, and Keene 48, with 12 deaths. This makes 73 cases of diphtheria in Keene since the 1st of September. The health officer says, "Private funerals have been ordered, prophylactic measures enforced as much as possible, and in some cases attendants have been furnished for the sick."

Scarlet fever: Manchester 14, Concord 3, Canaan 1, Keene 2, Tilton 6, and Hooksett 2.

Typhoid fever: Manchester 3, Concord 3, Henniker 1, South Newmarket 3, Nashua 9, Canterbury 1, Rochester 1, Laconia 2, Pittsburg 1, Weare 1, and Amherst 2.

RHODE ISLAND—*Newport*.—Month of October, 1889. Population, 22,000. Total deaths 21, including enteric fever 2.

TENNESSEE.—Month of October, 1889. The State board of health bulletin, dated November 20, contains an account of the recent proceedings of the American Public Health Association at Brooklyn, reported by the delegate, the president of the board, S. J. D. Plunket: also accredited articles upon general sanitary topics, and a translation from the *Revue Medico-Pharmaceutique*, Constantinople, of a report upon cholera in Mesopotamia.

The principal diseases during October, named in the order of their greater prevalence, were malarial fever, pneumonia, dysentery, consumption, bronchitis, tonsillitis, cholera infantum, diarrhoea, and rheumatism. Enteric fever occurred in 21 counties, diphtheria in 8, and scarlet fever in 6. Ninety-six counties are enumerated, with health reports from 36. From 49 counties having health officers no reports were received, and 11 counties are reported as having no health officer.

The deaths in 5 cities having an aggregate population of 209,606, numbered 307; including enteric fever, 15; diphtheria and croup, 10; scarlet fever, 1; whooping-cough, 1. The bulletin concludes with a report of the meteorological department of the State board of health, compiled from the reports of 37 voluntary observers in different sections of the State.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Small-pox.	Varioloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
New York, N. Y.....	Nov. 23.....	1,590,159	612						10	5	14	6	7
Brooklyn, N. Y.....	Nov. 23.....	843,602	291						2	2	21		1
Baltimore, Md.....	Nov. 23.....	500,343	140						4	1			
St. Louis, Mo.....	Nov. 16.....	450,000	149						5	7	8		
Boston, Mass.....	Nov. 23.....	420,000	168						7		14		1
San Francisco, Cal.....	Nov. 15.....	330,000	118						6	1	3		1
Cincinnati, Ohio.....	Nov. 23.....	325,000	114						3	1	12		
New Orleans, La.....	Nov. 16.....	254,000	114						2		1		
Washington, D. C.....	Nov. 16.....	250,000	99						5		4		
Detroit, Mich.....	Nov. 16.....	250,000	65								7		
Pittsburgh, Pa.....	Nov. 16.....	230,000	93						5	1	10		
Pittsburgh, Pa.....	Nov. 23.....	230,000	92							2	9	1	
Louisville, Ky.....	Nov. 23.....	227,000	34										
Minneapolis, Minn.....	Nov. 23.....	200,000	40							2	7		
Kansas City, Mo.....	Nov. 16.....	180,000	39						1	1	1		
Kansas City, Mo.....	Nov. 23.....	180,000	34							1	1		1
Rochester, N. Y.....	Nov. 23.....	130,000	36						1				
Providence, R. I.....	Nov. 23.....	127,000	45						3		2		
Indianapolis, Ind.....	Nov. 22.....	124,450	32						4		1		
Richmond, Va.....	Nov. 16.....	100,000	32						1		2		
Richmond, Va.....	Nov. 23.....	100,000	33										
Toledo, Ohio.....	Nov. 23.....	89,000	30								7		1
Fall River, Mass.....	Nov. 23.....	69,000	14						1				
Nashville, Tenn.....	Nov. 23.....	65,153	26						2				
Charleston, S. C.....	Nov. 23.....	60,145	39						1				
Manchester, N. H.....	Nov. 16.....	42,000	15						1			2	
Portland, Me.....	Nov. 23.....	42,000	12								1		
San Diego, Cal.....	Nov. 13.....	32,000	2										
Yonkers, N. Y.....	Nov. 22.....	31,000	4										
Altoona, Pa.....	Nov. 16.....	30,000	4										
Binghamton, N. Y.....	Nov. 23.....	30,000	7								1		
Auburn, N. Y.....	Nov. 23.....	26,000	9										
Haverhill, Mass.....	Nov. 23.....	25,000	4										
Newton, Mass.....	Nov. 16.....	21,553	6						1		1		
Newton, Mass.....	Nov. 23.....	21,553	5										
Keokuk, Iowa.....	Nov. 16.....	16,000	3										
Rock Island, Ill.....	Nov. 17.....	16,000	4								1		
Pensacola, Fla.....	Nov. 16.....	15,000	8								1		

FOREIGN.

(Reports received through the Department of State and other channels.)

GREAT BRITAIN—*England and Wales.*—The deaths registered in 28 great towns of England and Wales during the week ended November 9 corresponded to an annual rate of 18.1 a thousand of the aggregate population, which is estimated at 9,555,406. The lowest rate was recorded in Birkenhead, viz, 12.2, and the highest in Plymouth, viz, 26.0 a thousand. Diphtheria caused 2 deaths in Plymouth.

London.—One thousand three hundred and fifty deaths were registered during the week, including small-pox, 1; measles, 20; scarlet fever, 23; diphtheria, 23; whooping-cough, 24; enteric fever, 11; diarrhoea and dysentery, 17; and cholera, 1. The deaths from all causes corresponded to an annual rate of 16.2 a thousand. Diseases of the respiratory organs caused 318 deaths. In greater London 1,694 deaths were registered, corresponding to an annual rate of 15.7 a thousand of the population. In the "outer ring" the deaths included measles, 6; scarlet fever, 5; and diphtheria, 10.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended November 2, in the 16 principal town districts of Ireland, was 22.3 a thousand of the population. The lowest rate was recorded in Drogheda and Kilkenny, viz, 4.2, and the highest in Dublin, viz, 26.1 a thousand. In Dublin and suburbs 185 deaths were registered, including scarlet fever, 1; enteric fever, 9; diarrhoea, 5; dysentery, 2; and typhus fever, 1.

Malta and Gozo.—Three hundred and fourteen deaths were registered during the month of September, 1889, including diphtheria, 6; enteric fever, 4; dysentery, 3, and whooping-cough, 1.

Calcutta.—Nine hundred and ninety deaths were registered during the month of August, 1889, against 960 in the preceding month. The proportion of male to female deaths was as 122 to 100. There were 35 deaths from cholera, against 73 in the preceding month, and 2 deaths from small-pox. Fevers caused 333 deaths; bowel complaints, 114. There were 117 deaths from tetanus during the month, of which 110 were infants under 1 year.

Decennial statement of deaths from principal diseases.

[Census of 1881, 433,219.]

Period.	Cholera.	Small-pox.	Fevers.	Bowel com-plaints.	Injury.	All other causes.	Total exclusive of still births.	Annual ratio per 1,000 of population.
1879.....	56	7	272	146	18	301	800	22.1
1880.....	17	3	216	70	20	397	723	22.0
1881.....	49	1	260	95	13	390	808	22.3
1882.....	54	2	255	95	31	410	847	23.4
1883.....	38	2	224	62	16	396	738	20.4
1884.....	54	23	258	73	16	358	782	21.6
1885.....	131	5	263	113	15	433	960	26.5
1886.....	95	3	251	82	23	343	797	22.0
1887.....	79	221	71	9	379	759	21.0
1888.....	54	2	181	54	16	413	720	19.9
Mean numbers.....	63	5	240	86	18	382	794	22.0
1889.....	35	2	333	114	16	490	990	27.4

Singapore.—Five hundred and seventy-four deaths were registered during the month of August, 1889, including fevers, 164; bowel complaints, 93; and beri-beri, 5. Four hundred and eighty-five deaths were registered during the month of September, 1889, including fevers, 121; bowel complaints, 60; small-pox, 1; and beri-beri, 38.

NETHERLANDS.—The deaths registered in the principal cities of the Netherlands, having an aggregate population of 1,054,720, corresponded to an annual rate of 19.1 a thousand. The lowest rate was in Leeuwarden, viz, 13.9, and the highest in Hertogenbosch, viz, 27.8. The deaths included measles, 13; enteric and typhus fevers, 11; scarlet fever, 5; croup, 15; whooping-cough, 23; diphtheria, 20; diarrhœa and dysentery, 28, and cholera nostras, 2.

BRAZIL—Bahia.—The United States consul, under date of October 21, 1889, reports that the sanitary condition of the city and adjacent country is good, with the exception of a few cases of small-pox. There is still much suffering reported from the interior on account of the lack of sufficient rain.

Rio de Janeiro.—Four hundred and seventy deaths were registered during the two weeks ended November 2, 1889, including yellow-fever, 5; small-pox, 41; enteric fever, 6; and typhus, 12. The United States consul says that "yellow-fever has nearly disappeared. Small-pox is confined to the filthy quarters of the city. The general health is very good."

Paramaribo.—Eighty-two deaths were reported during the month of September, 1889, including malignant fever, 5.

UNITED STATES OF COLOMBIA—*Cartagena*.—Sixty-two deaths were registered during the period from August 24 to October 12, 1889. None from contagious diseases.

MEXICO—*Guaymas*.—Twenty-six deaths were registered during the month of October, 1889. No particular diseases. Sanitary condition of city, good.

CUBA—*Cardenas*.—November 16, 1889. Good health; weather dry; cool mornings, and warm until midnight.

HAYTI—*Cape Haytien*.—Fifty-two deaths were registered during the period from September 14 to November 9, 1889, including none from contagious diseases.

DANISH WEST INDIES—*St. Thomas*.—Six hundred and seventy-two deaths were registered during the third quarter of 1889, including dysentery, 33; whooping-cough, 4; intestinal catarrh and diarrhœa, 131, and erysipelas, 2.

BAHAMAS—*Nassau, N. P.*—November 9, 1889. City is healthy. Number of deaths never reported.

PROPHYLAXIS AGAINST TUBERCULOSIS.

[Translated for this Bureau from *La Pratique Médicalé*, Paris.]

In the name of a commission composed of Messrs. Verneuil, Germain, Sée, Dujardin-Beaumetz, Cornil, and Villemin, reporter, the latter read a report on the prophylaxis of tuberculosis, a report which terminates with the following conclusions:

I. Tuberculosis is of all diseases that which numbers most victims. In the large cities it counts for one-fourth to one-seventh in the mortality. To explain this high rate it must be borne in mind that pulmonary phthisis is not the only manifestation of tuberculosis, as the public wrongly believe. Indeed, in numbers of cases, bronchitis, pleurisy, meningitis, peritonitis, enteritis, osseous and articular lesions, cold abscesses, etc., are maladies of the same nature.

II. Tuberculosis is an infections, parasitic disease, caused by a microbe, but it is transmissible to a healthy individual by an ill subject only under special conditions which we will proceed to determine.

Independently of direct hereditary transmission, the microbe of tuberculosis penetrates into the organism by the ærial passages with the air we breathe, by the digestive canal with food, by the skin and the mucous membranes, by excoriations, pricks, wounds, and diverse ulcerations.

III. The most frequent source of contagion and the most to be dreaded is the spittle of consumptive patients. Almost inoffensive while it is in a liquid state, it is when reduced to powder that it becomes dangerous. It quickly takes this form when projected on the soil, on floors, pavements, walls; when it sullies clothing, blankets, bedding, carpets, curtains; when received into handkerchiefs, napkins, etc. It is then that, dry and pulverulent, it is set in motion by sweeping and dusting, by beating and brushing stuffs, furniture, blankets, clothing. This dust,

suspended in the air, penetrates the respiratory channels, is deposited on cutaneous and mucous surfaces deprived of their epidermic varnish; on utensils used in the preparation of food, and thus becomes a permanent menace to persons living in an atmosphere thus contaminated.

The contagious principle of tuberculosis is contained also in the dejections of the consumptive, whether it comes from the intestinal lesions so frequent in this disease, or from the spittle swallowed by the patients. Very frequently these latter are attacked by diarrhoea, soil their bed-clothing and linen, and thus create a source of infection against which it is necessary to guard.

Consequently, it is necessary :

(1) To be thoroughly convinced of the necessity for the greatest precaution with regard to the substance in the expectoration of consumptives. It should always and everywhere be received into spittoons containing a certain quantity of liquid, and not pulverulent material, such as sand, bran, and ashes. These should be emptied every day into the fire and cleansed with boiling water. They should never be emptied on muck piles, nor into courts or gardens, where they might tubercularize the poultry eating there. The use of spittoons should not be confined to hospitals and private houses, but the adoption of them in all public buildings, barracks, workshops, depots, and all other places of meeting, is indispensable.

(2) Not to allow linens soiled by dejections of tuberculous persons to dry, but to soak it in boiling water before sending it to the wash, or else to burn it.

(3) To avoid sleeping in the bed of a tuberculous person, and to occupy the same room as little as possible if minute precautions have not been taken against his spittle and the soil of linen by his dejections.

(14) To have rooms in hotels, furnished houses, cottages, villas, etc., occupied by consumptives at sea-side and winter resorts furnished and carpeted and curtained in such a manner that disinfection may be readily and thoroughly performed after the departure of each invalid. The public is the first to prefer dwellings in which such hygienic precautions are observed.

(15) Not to make use of articles contaminated by tuberculous persons (linen, bed-clothes, clothing, toilet articles, hangings, furniture, toys), except after preliminary disinfection by steam under pressure, ebullition, sulphur vapor, and coating with lime.

IV. If the spittle of consumptives and their alvine secretions are the most frequent origin of acquired tuberculosis, they are not the sole origin. The parasite of the disease may be found in milk, in the meat and blood of diseased animals which serve as food for men (beef, especially of the cow, hare, poultry, etc.).

(1) Milk, of the supply of which the least is generally known, should especially receive the attention of mothers and nurses, because of the aptitude of children to contract tuberculosis. (In Paris there die annually 2,000 tuberculous persons aged less than two years.) The tuberculous mother should not nurse her infant; she should confide it to a healthy nurse living in the country, in a house in which there are no consumptive persons, where, with the best hygienic conditions, the risks of tuberculous contagion are much less than in cities.

Breast nourishment being unattainable, if it is replaced by cow's milk, this should always be boiled. Asses milk and goat milk, unboiled, present infinitely less danger.

(2) The meat of tuberculous animals should be prohibited. The public has every interest in seeing that the inspection of meat, required by law, should be rigorously exercised.

(3) The practice of drinking blood at the slaughter-houses is dangerous. It is also inefficacious.

V. All individuals have not the same degree of aptitude for contracting tuberculosis. There are subjects especially predisposed to it who should redouble precautions to avoid the circumstances favorable to contamination which we have pointed out above. These are :

(1) Persons born of tuberculous parents or belonging to families which number many members attacked by tuberculosis.

(2) Those who are debilitated by privations or excesses. The abuse of alcoholic liquors is particularly disastrous.

(3) Individuals attacked by or convalescing from measles, scarlet fever, small-pox, and above all, diabetes, are also predisposed to tuberculosis.

THE BACILLUS OF TETANUS.

By Dr. S. Kitosato.

[Translated for this Bureau from the *Zeitschrift für Hygiene*, November 7, 1889.]

CONCLUSIONS.

1. Tetanus is an infectious disease caused by a specific bacillus.

2. The exciting cause of tetanus occurring in man, and of tetanus, when inoculated, is some bacillus which is identical with the "anærobic" bacillus first described by Nicolaier, and later confirmed by Rosenbach and others.

3. This bacillus appears both in the wound-pus of tetanic persons and of inoculated animals. It frequently produces spores in the pus, but if the pus is examined early it may often be seen as a small rod free from spores.

4. Pure cultures of these bacilli can be made from the pus of tetanic patients or animals, and inoculations from these cultures will produce tetanic symptoms in other animals.

5. The former statements, apparently contradictory, concerning the etiology of tetanus, and particularly regarding the appearance of the bacteria, are made clear by the fact that the investigations were made at different stages of the disease. The sooner patients or animals die the less likely are spores to be found in the pus. But the bacilli themselves are never wanting, and spore forming tetanus bacilli can always be artificially cultivated from tetanic pus that is free from spores.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—								
				Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-cough.
London.....	Nov. 2	5,642,015	1,647					19	23	41	29	
London.....	Nov. 9	5,642,015	1,694			1		11	23	33	26	
Paris.....	Nov. 2	2,260,945	879					10	7	22	10	4
Paris.....	Nov. 9	2,260,945	899			1		11	2	16	17	4
Glasgow.....	Nov. 2	545,678	241					2	2	2		
Glasgow.....	Nov. 9	548,678	245					2	4	2		
Warsaw.....	Oct. 26	445,770	262			47			6	15		
Warsaw.....	Nov. 2	445,770	268			45			10	10		
Calcutta.....	Sept. 28	433,219	220	6								
Calcutta.....	Oct. 5	433,219	206	4								
Calcutta.....	Oct. 12	433,219	213	5							1	
Amsterdam.....	Nov. 2	399,051								2		
Amsterdam.....	Nov. 9	399,051	158						1	8		
Copenhagen.....	Oct. 12	307,000	97						2	5		
Copenhagen.....	Oct. 19	307,000	98						1	3		
Copenhagen.....	Oct. 26	307,000	92					2	1	8		
Copenhagen.....	Nov. 2	307,000	96					1	1	12		
Edinburgh.....	Oct. 5	266,900	91					1	1	3		
Edinburgh.....	Oct. 12	266,900	82							5		
Palermo.....	Nov. 2	250,000	65						1			
Palermo.....	Nov. 9	250,000	74							1		
Bristol.....	Oct. 26	229,361	62						1			
Rotterdam.....	Nov. 2	197,724	69									
Rotterdam.....	Nov. 9	197,724	77					1		1		
Genoa.....	Nov. 2	180,398	98					6		1		
Genoa.....	Nov. 9	180,398	99				3			1		
Toronto.....	Nov. 9	175,000	59					1				
Toronto.....	Nov. 16	175,000	37					2		1		
Trieste.....	Oct. 26	154,500	67					1	2	4		
Trieste.....	Nov. 2	154,500	50					1	1	1		
Stuttgart.....	Nov. 2	125,510	33				1			3		
Stuttgart.....	Nov. 9	125,510	43							1		
Havre.....	Nov. 2	112,074	55					2		2		
Havre.....	Nov. 9	112,074	46					3	1	1		
Barmen.....	Nov. 2	109,000	41							1	2	
Catania.....	Oct. 28	108,000	58					1	1	1		
Catania.....	Nov. 4	108,000	66					1	1	1		
Leghorn.....	Nov. 10	103,287	51									
Rheims.....	Oct. 26	97,903	44					6		1	2	
Rheims.....	Nov. 2	97,903	44									
Leith.....	Oct. 5	76,400	30							4		
Leith.....	Oct. 12	76,400	29						1	1		
Mayence.....	Oct. 26	65,802	31						2	1		
Cadiz.....	Nov. 2	57,157	48									
Merida.....	Oct. 28	47,448	48									
Merida.....	Nov. 4	47,448	45									
Vera Cruz.....	Nov. 7	23,800	22									
Gibraltar.....	Nov. 3	23,681	8					1		2		
Kingston, Can.....	Nov. 15	18,284	10									
Laguayra.....	Nov. 16	7,428	4									

JOHN B. HAMILTON,
Supervising Surgeon-General, Marine-Hospital Service.