

# PUBLIC HEALTH REPORTS

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VOL. XXVIII.

NOVEMBER 21, 1913.

No. 47.

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## PELLAGRA.

### BRIEF COMMENTS ON OUR PRESENT KNOWLEDGE OF THE DISEASE.

By C. H. LAVINDER, Surgeon, United States Public Health Service.

The literature of pellagra continues to increase in volume, but our actual knowledge of the nature of the disease still leaves much, very much, to be desired. The etiology of pellagra remains in obscurity. The Italian school continues to ring changes on the corn theory, while the American school seems largely inclined to regard pellagra as an infectious disease of some undetermined nature. A review, however, of the proceedings of the last Italian Congress on Pellagra and of the last meeting of the American Association for the Study of Pellagra, along with other recent literature, leaves one in the end about as wise as in the beginning. There have been two or three reports of the successful production of pellagra in the lower animals, especially in the monkey, but these all await confirmation, and at present may be accepted with very much doubt. Taking all things into consideration, at present the safest point of view with regard to the causation of this disease is probably one of frank agnosticism, backed up by a healthy spirit of criticism and investigation, with the suppression of all desire to rush into print with immature speculations, fantastic hypotheses, and incomplete experimentation. "Prove all things," said the apostle; "hold fast to that which is good"—a precept no less applicable to medicine than to morals.

Much good work has been done on the epidemiology of pellagra. Such work has added materially to our knowledge of the disease along certain lines, but so far no one has been found who can place upon these facts any interpretation which promises to lead us to a better comprehension of the real nature of pellagra. It is well to remember that this kind of investigation, while valuable, must ultimately be completed by experimental proof. It is worthy of remark that Sambon has shown, what was already suspected, that the disease is far more prevalent than has been heretofore stated. In striking confirmation of this fact he has reported recently the discovery of over 50 cases of the disease in the British Isles. In the

United States, while accurate data are lacking, there is little doubt that pellagra continues to spread, and numerous cases are now found where the disease scarcely existed a year ago.

Needless to say, nothing of consequence has been added to our knowledge of the symptomatology of pellagra. It would seem still wise, however, to repeat a word of caution against hasty diagnoses in doubtful cases; still more important not to overlook frank cases of pellagra and call them "skin erysipelas," which, in spite of all that has been written and said, is still being done by some medical men.

Some more or less recent studies of the pathologic anatomy have appeared, but students do not seem in entire accord among themselves, and so far this line of investigation has not materially aided in throwing any light on the true nature of this malady.

It is no uncommon thing to hear doctors lament the difficulties surrounding the prognosis of pellagra. The chief disturbing point is, "When may one say the disease is cured and the patient finally recovered?" The answer to this question is just about as definite as the answer to such a question would be in tuberculosis of the lungs. A recovered pellagrin, under proper conditions, may remain in a good state of health indefinitely; but, like sufferers from tuberculosis, such a patient must always remember the possibility of a recurrence, and both he and his doctor should govern themselves accordingly. Pellagra in this respect does not differ from other diseases which might be mentioned, and there is therefore nothing mysterious about the matter.

The patient and doctor alike all seek some specific remedy for this, as well as other diseases. There is none for pellagra, and there is none for the vast majority of our diseases. Lacking a specific remedy, however, we have no need to throw up our hands in despair. There is no specific remedy for typhoid fever, for example, though there is a very logical treatment for this disease which, properly applied, gives good results. Likewise in pellagra there is no specific drug, but there is a treatment which gives good results, especially if applied in early cases. This treatment is largely summed up in the removal of the patient from his surroundings, if possible, and preferably to an institution, proper diet, properly regulated rest, hydrotherapy, and intelligent attention to general symptomatic treatment without too much drugs. Such treatment for pellagrins implies the use of institutions for this purpose, and we have none. We have at least partially met this difficulty in the treatment of tuberculosis, however, and pellagra may demand the same thing. The Italians have such places and report excellent results.

Arsenic enjoys the reputation of being very beneficial in this disease. It would seem, however, that a word of caution is necessary in the use of this remedy. I feel satisfied that many times arsenical

preparations have been used in the treatment of pellagra to the detriment of the patient, and I would counsel careful judgment in the administration of such a remedy in this disease. Especial caution is needed with regard to the employment of the so-called arsenical preparations, such as atoxyl and salvarsan. These remedies are potent both for good and ill, and to use them without careful deliberation is sometimes to invite disaster. Personally, I agree with the majority who have had experience, that salvarsan in pellagra is not only useless, but very often dangerous as well. To misuse a good thing and thus jeopardize its worth is an offense against common sense.

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### OVERCROWDED STREET CARS.

From the Bulletin of the Department of Health of the City of Louisville, Ky., for November 15, 1913.

A street car crowded to its greatest capacity, all the seats occupied, the aisles jammed with people clinging to straps, swaying against each other, many of them coughing and sneezing, is exceedingly dangerous to the public health. Under such conditions the air breathed is filthy and germ laden from diseased throats and lungs and head colds in active stages. One or two small ventilators, even if always open, are not sufficient.

All that is necessary to improve this condition is to put more cars on during the rush hours and allow only a certain number of passengers to each car. They should not be allowed to stand in the aisles. In most of the cities in Europe the street cars are plainly marked with the seating capacity of the car. When the car contains this number of passengers no more are taken. If European city governments have fully and effectively succeeded in regulating their street car accommodations, why can not we do it in Louisville?

# PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

## IN CERTAIN STATES AND CITIES.

### SMALLPOX.

#### Wisconsin Report for October, 1913.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Wisconsin:						
Barron County.....	1					1
Brown County.....	7		4		1	2
Dane County.....	7				2	5
Dodge County.....	3					
Kewaunee County.....	6				3	3
La Crosse County.....	4		1		3	
Marathon County.....	5				3	5
Marquette County.....	11		1			10
Milwaukee County.....	10					10
Outagamie County.....	1		1			
Portage County.....	8		1	1		6
Rock County.....	3					3
Winnebago County.....	1					1
Wood County.....	2					2
Total.....	69		8	1	12	48

#### Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Connecticut (Oct. 1-31):			Iowa—Continued.		
Counties—			Counties—Continued.		
Hartford.....	1		Washington.....	1	
New London.....	18		Total.....	21	
Windham.....	60				
Total.....	79		New Jersey (Oct. 1-31):		
District of Columbia (Oct. 1-31) <sup>1</sup>			Counties—		
Iowa (Sept. 1-30):			Middlesex.....	1	
Counties—			Morris.....	1	
Crawford.....	2		Total.....	2	
Linn.....	1		South Carolina (Oct. 1-31):		
Marion.....	3		Counties—		
O'Brien.....	1		Jasper.....	3	
Polk.....	9		Newberry.....	7	
Pottawattamie.....	1		Spartanburg.....	2	
Story.....	2		Union.....	1	
Warren.....	1		Total.....	13	

<sup>1</sup> No case.

## SMALLPOX—Continued.

## City Reports for Week Ended Nov. 1, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.....	1	.....	Milwaukee, Wis.....	3	.....
Bennington, Vt.....	3	.....	Nashville, Tenn.....	1	.....
Biddeford, Me.....	2	.....	Oakland, Cal.....	1	.....
Chattanooga, Tenn.....	1	.....	Oklahoma, Okla.....	2	.....
Chicago, Ill.....	2	1	Richmond, Va.....	1	.....
Kansas City, Kans.....	5	.....	St. Louis, Mo.....	1	.....
La Crosse, Wis.....	2	.....	Spokane, Wash.....	2	.....
Lynchburg, Va.....	1	.....	Toledo, Ohio.....	4	.....
Marinette, Wis.....	4	.....			

## TYPHOID FEVER.

## State Reports for October, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
<b>New Jersey:</b>		<b>South Carolina—Continued.</b>	
Atlantic County.....	10	Spartanburg County.....	2
Bergen County.....	20	Sumter County.....	1
Burlington County.....	6		
Camden County.....	18	Total.....	55
Cape May County.....	1		
Cumberland County.....	12	<b>Wisconsin:</b>	
Essex County.....	26	Ashland County.....	1
Gloucester County.....	5	Barron County.....	1
Hudson County.....	22	Bayfield County.....	4
Hunterdon County.....	10	Calumet County.....	1
Mercer County.....	13	Columbia County.....	1
Middlesex County.....	34	Dane County.....	1
Monmouth County.....	33	Douglas County.....	15
Morris County.....	6	Dunn County.....	1
Ocean County.....	1	Fond du Lac County.....	3
Passaic County.....	14	Grand County.....	2
Salem County.....	1	Green Lake County.....	3
Somerset County.....	4	Juneau County.....	1
Sussex County.....	1	Kenosha County.....	3
Union County.....	17	La Crosse County.....	3
Warren County.....	1	Langlade County.....	1
Total.....	265	Lincoln County.....	1
		Marathon County.....	3
<b>South Carolina:</b>		Marinette County.....	9
Abbeville County.....	2	Milwaukee County.....	25
Chester County.....	2	Oconto County.....	3
Dillon County.....	3	Oneida County.....	1
Greenville County.....	1	Polk County.....	3
Kershaw County.....	1	Rock County.....	2
Marlboro County.....	1	Sheboygan County.....	4
Newberry County.....	19	Trempealeau County.....	1
Oconee County.....	1	Waukesha County.....	4
Orangeburg County.....	3	Winnebago County.....	9
Pickens County.....	10	Wood County.....	2
Richland County.....	8	Total.....	108
Saluda County.....	1		

**TYPHOID FEVER—Continued.****City Reports for Week Ended Nov. 1, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.	2		Lowell, Mass.	4	1
Aurora, Ill.	1		Lynchburg, Va.	1	
Austin, Tex.	1		Marinette, Wis.	2	
Baltimore, Md.	22	4	Marlboro, Mass.	1	
Bayonne, N. J.	1	1	Massillon, Ohio	1	
Beaver Falls, Pa.	2		Milwaukee, Wis.	1	
Boston, Mass.	24	4	Moline, Ill.	1	1
Bridgeport, Conn.	1		Nashville, Tenn.	5	1
Brockton, Mass.	6		New Bedford, Mass.	2	
Buffalo, N. Y.	1	3	New Castle, Pa.	2	1
Cambridge, Mass.	1		New Orleans, La.	3	1
Cambridge, Ohio	1		Niagara Falls, N. Y.	1	
Camden, N. J.	1		Norristown, Pa.	2	
Chattanooga, Tenn.	2		North Adams, Mass.	1	
Chicago, Ill.	66	13	Oakland, Cal.	4	1
Chicopee, Mass.		1	Oklahoma, Okla.	7	1
Cincinnati, Ohio.	5	1	Philadelphia, Pa.	45	4
Cleveland, Ohio.	8	2	Pittsburgh, Pa.	9	2
Coffeyville, Kans.	1		Pittsfield, Mass.	1	
Concord, N. H.	1		Providence, R. I.	7	2
Cumberland, Md.	14		Reading, Pa.	14	
Danville, Ill.		2	Richmond, Va.	2	1
Dayton, Ohio.	1		Roanoke, Va.		1
Dunkirk, N. Y.	1		St. Louis, Mo.	10	2
Evansville, Ind.		1	San Francisco, Cal.	4	
Fall River, Mass.	1	1	South Omaha, Nebr.	1	
Grand Rapids, Mich.	4		Spokane, Wash.	2	
Harrisburg, Pa.	1		South Bethlehem, Pa.	5	
Hartford, Conn.	4		Springfield, Ill.		1
Haverhill, Mass.	1		Toledo, Ohio.	13	4
Jersey City, N. J.		1	Washington, D. C.	10	1
La Crosse, Wis.	1		Wheeling, W. Va.	3	2
Lawrence, Mass.	1		Wilkes-Barre, Pa.	1	1
Lexington, Ky.		1	Wilkinsburg, Pa.		1
Los Angeles, Cal.	18	2	Wilmington, N. C.	1	
Little Rock, Ark.	1		York, Pa.	4	

**CEREBROSPINAL MENINGITIS.****State Reports for October, 1913.**

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
South Carolina:		Wisconsin—Continued.	
Pickens County.....	1	Milwaukee County.....	4
Wisconsin:		Shawano County.....	1
Brown County.....	1	Total.....	6

**City Reports for Week Ended Nov. 1, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.	2		Milwaukee, Wis.	1	2
Cambridge, Mass.	1		Pittsburgh, Pa.	1	1
Chicago, Ill.		1	Pittsfield, Mass.	1	1
Cincinnati, Ohio.	1	1	Portsmouth, N. H.		1
Cleveland, Ohio.	1		St. Louis, Mo.	1	
La Crosse, Wis.	1		Springfield, Ill.		1
Los Angeles, Cal.	3	1	Worcester, Mass.	2	

**POLIOMYELITIS (INFANTILE PARALYSIS).****State Reports for October, 1913.**

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
<b>New Jersey:</b>		<b>Wisconsin:</b>	
Cumberland County.....	1	Bayfield County.....	1
Essex County.....	3	Calumet County.....	2
Hudson County.....	3	Columbia County.....	1
Mercer County.....	4	Door County.....	1
Monmouth County.....	1	Grant County.....	3
Union County.....	4	La Crosse County.....	3
Total.....	16	Marathon County.....	1
		Monroe County.....	1
		Total.....	13

**Iowa Report for September, 1913.**

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
<b>Iowa:</b>		<b>Iowa—Continued.</b>	
Chickasaw County.....	2	Kossuth County.....	2
Des Moines County.....	1	Polk County.....	1
Dickinson County.....	1	Poweshiek County.....	1
Fayette County.....	3	Scott County.....	1
Floyd County.....	1	Total.....	14
Keokuk County.....	1		

**Indiana—Evansville.**

Surg. Oakley, of the Public Health Service, reported by telegraph that during the week ended November 15, 1913, 1 case of poliomyelitis had been notified at Evansville, Ind.

**City Reports for Week Ended Nov. 1, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.....	4	.....	Fall River, Mass.....	1	.....
Bridgeport, Conn.....	1	.....	Haverhill, Mass.....	3	.....
Brockton, Mass.....	1	1	Newton, Mass.....	1	.....
Brookline, Mass.....	1	.....	Oakland, Cal.....	1	.....
Chicago, Ill.....	2	.....	Portsmouth, N. H.....	1	.....
Cincinnati, Ohio.....	1	1	Providence, R. I.....	4	.....
Cleveland, Ohio.....	1	.....	Worcester, Mass.....	2	.....
Concord, N. H.....	3	1			

**ERYSIPELAS.****City Reports for Week Ended Nov. 1, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....	1	.....	Milwaukee, Wis.....	1	.....
Beaver Falls, Pa.....	1	.....	New Castle, Pa.....	1	.....
Boston, Mass.....	.....	1	New Orleans, La.....	.....	1
Brockton, Mass.....	1	.....	Norristown, Pa.....	1	.....
Buffalo, N. Y.....	2	1	Philadelphia, Pa.....	5	3
Chicago, Ill.....	5	.....	Pittsburgh, Pa.....	3	1
Cincinnati, Ohio.....	2	.....	St. Louis, Mo.....	5	.....
Cleveland, Ohio.....	7	.....	San Francisco, Cal.....	1	.....
Dayton, Ohio.....	1	.....	South Bethlehem, Pa.....	1	.....
Los Angeles, Cal.....	1	.....			

**LEPROSY.****South Carolina—Pickens County.**

The State Board of Health of South Carolina reported that during the month of October, 1913, a case of leprosy had been notified in Pickens County, S. C.

**PELLAGRA.****City Reports for Week Ended Nov. 1, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Coffeyville, Kans.....	1	1	Oklahoma, Okla.....	1	1
Lynchburg, Va.....	1	.....	Roanoke, Va.....	1	.....
Nashville, Tenn.....	2	.....			

**PLAGUE.****Rats Collected and Examined.**

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Oakland.....	Oct. 25, 1913	39	652	383	.....
Berkeley.....	do.....	6	215	131	.....
San Francisco.....	do.....	19	1,771	767	.....

**California—Squirrels Collected and Examined.**

During the week ended October 25, 1913, 89 ground squirrels from Alameda County were examined for plague infection. No plague-infected squirrel was found.

**Washington—Seattle—Plague-Infected Rat.**

A case of plague in a rat was verified at Seattle November 14, 1913. The rat was found November 5, 1913.



**PLAGUE—Continued.****California—Destruction of Squirrels in 1913.**

In 1912, from March to October, 29,544 squirrels were shot on infected territory; 902, or 3.05 per cent, were found to be infected with plague. From March to October, 1913, 18,722 were shot on infected territory; 417, or 2.17 per cent, were plague infected. There was, therefore, a diminution in the total number of infected squirrels collected in 1913, as compared with the total number in 1912, of 485 squirrels, or 53.7 per cent. The diminution in the number of squirrels shot on infected areas in 1913, as compared with 1912, was 10,822, or 36.6 per cent, although squirrel hunting in 1913 was carried on in a much more detailed and intensive manner than in 1912. More men were engaged in hunting operations and a much larger territory was covered.

**PNEUMONIA.****City Reports for Week Ended Nov. 1, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal. ....	2	1	Lancaster, Pa. ....	1	.....
Binghamton, N. Y. ....	6	5	Lawrence, Mass. ....	2	.....
Braddock, Pa. ....	1	.....	Los Angeles, Cal. ....	6	5
Cambridge, Ohio. ....	1	1	Pasadena, Cal. ....	2	.....
Chicago, Ill. ....	1	57	Philadelphia, Pa. ....	16	21
Cleveland, Ohio. ....	13	15	Pittsburgh, Pa. ....	22	27
Dunkirk, N. Y. ....	2	.....	South Omaha, Nebr. ....	1	.....
Grand Rapids, Mich. ....	3	2	Wilkesburg, Pa. ....	1	1
La Crosse, Wis. ....	2	.....			

**RABIES.****California—Berkeley, Oakland, San Francisco—Rabies in Animals.**

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended November 15, 1913, 1 case of rabies in a dog had been reported in Berkeley, 3 cases in dogs in Oakland, and 1 case in San Francisco, Cal.

**Florida—Jacksonville.**

The State Board of Health of Florida reported that during the week ended November 2, 1913, 1 case of rabies in man had been notified in Jacksonville, Fla.

**TETANUS.****City Reports for Week Ended Nov. 1, 1913.**

During the week ended November 1, 1913, tetanus was notified by cities as follows: Philadelphia, Pa., 1 case; Pittsburgh, Pa., 1 case; St. Louis, Mo., 1 case; Toledo, Ohio, 1 death.

**TYPHUS FEVER.****Massachusetts—Taunton.**

The State Board of Health of Massachusetts reported by telegraph November 13, 1913, that a fatal case of typhus fever had been notified at Taunton, Mass.

**SCARLET FEVER, MEASLES, DIPHThERIA, AND TUBERCULOSIS.****Iowa Report for September, 1913.**

	Scarlet fever.	Measles.	Diphtheria.
Iowa.....	24	.....	43

**Massachusetts—Vineyard Haven—Diphtheria.**

Acting Asst. Surg. Worth, of the Public Health Service, reported by telegraph November 18, 1913, that several cases of diphtheria had been notified in Vineyard Haven, Mass., and that the schools had been closed and strict quarantine established.

**Michigan—Detroit—Diphtheria.**

The health officer of Detroit, Mich., reported by telegraph November 19, 1913, that there were present in Detroit 130 cases of diphtheria, and that 256 deaths from this disease had occurred since January 1, 1913.

**City Reports for Week Ended Nov. 1, 1913.**

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.....	558,485	156	37	4	2	.....	13	.....	30	14
Boston, Mass.....	670,585	216	29	.....	10	.....	30	.....	54	30
Chicago, Ill.....	2,185,283	590	190	14	8	.....	87	9	159	77
Cleveland, Ohio.....	560,663	144	108	4	17	.....	17	2	23	12
Philadelphia, Pa.....	1,549,008	389	48	2	7	.....	39	5	103	36
Pittsburgh, Pa.....	533,905	146	54	4	13	1	81	3	24	4
St. Louis, Mo.....	687,029	205	57	10	9	1	32	.....	45	19
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.....	423,715	214	25	3	6	.....	13	.....	12	23
Cincinnati, Ohio.....	364,463	121	22	2	1	.....	17	.....	35	19
Los Angeles, Cal.....	319,198	109	10	1	2	.....	7	1	50	12
Milwaukee, Wis.....	373,857	96	23	3	11	.....	20	.....	15	8
New Orleans, La.....	339,075	159	47	5	.....	.....	1	1	21	19
San Francisco, Cal.....	416,912	142	4	.....	3	.....	4	.....	13	11
Washington, D. C.....	331,069	121	16	.....	11	.....	14	.....	21	14
From 200,000 to 300,000 inhabitants:										
Jersey City, N. J.....	267,779	70	.....	1	.....	.....	.....	.....	.....	4
Providence, R. I.....	224,326	53	19	1	.....	.....	11	.....	10	7

## SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Nov. 1, 1913—Continued.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 100,000 to 200,000 inhabitants:										
Bridgeport, Conn.	102,054	24	5	.....	7	.....	7	.....	5	1
Cambridge, Mass.	104,839	21	6	.....	1	.....	2	.....	7	2
Dayton, Ohio.	116,577	35	41	.....	8	.....	4	.....	2	4
Fall River, Mass.	119,295	32	6	1	.....	.....	6	.....	7	2
Grand Rapids, Mich.	112,571	37	14	2	86	.....	11	.....	2	.....
Lowell, Mass.	106,294	25	5	1	.....	.....	.....	.....	3	4
Nashville, Tenn.	110,364	34	7	.....	.....	.....	10	.....	4	4
Oakland, Cal.	150,174	32	9	.....	1	.....	1	.....	2	2
Richmond, Va.	127,628	50	10	3	1	.....	9	.....	5	2
Spokane, Wash.	104,402	.....	1	.....	.....	.....	.....	.....	.....	.....
Toledo, Ohio.	168,497	56	8	.....	3	.....	2	.....	11	5
Worcester, Mass.	145,986	40	7	1	11	.....	6	.....	3	1
From 50,000 to 100,000 inhabitants:										
Allentown, Pa.	52,127	13	1	.....	.....	.....	3	.....	2	1
Bayonne, N. J.	55,545	14	8	.....	4	1	5	.....	3	1
Brockton, Mass.	56,878	12	10	1	.....	.....	2	.....	1	3
Calden, N. J.	94,538	.....	2	.....	.....	.....	2	.....	3	.....
Evansville, Ind.	69,647	21	1	.....	.....	.....	.....	.....	1	2
Harrisburg, Pa.	64,186	24	11	.....	.....	.....	2	.....	2	.....
Hartford, Conn.	98,915	23	10	.....	1	.....	6	.....	4	2
Hoboken, N. J.	70,324	4	4	.....	.....	.....	1	.....	11	2
Johnstown, Pa.	56,482	13	11	.....	.....	.....	1	.....	.....	1
Kansas City, Kans.	82,331	.....	2	.....	1	.....	1	.....	4	.....
Lawrence, Mass.	85,892	.....	3	.....	.....	.....	1	.....	4	.....
Lynn, Mass.	89,336	19	5	.....	5	.....	1	.....	6	3
New Bedford, Mass.	96,652	.....	2	.....	.....	.....	7	.....	5	.....
Oklahoma City, Okla.	64,205	42	15	1	.....	.....	2	.....	.....	3
Pawtucket, R. I.	51,622	.....	3	1	.....	.....	.....	.....	.....	.....
Reading, Pa.	96,071	26	10	1	2	.....	2	.....	2	1
South Bend, Ind.	53,684	14	.....	.....	7	2	.....	.....	.....	1
Springfield, Ill.	51,678	20	5	.....	.....	.....	.....	.....	.....	1
Springfield, Mass.	88,926	28	6	.....	2	.....	1	.....	1	2
Wilkes-Barre, Pa.	67,105	21	6	.....	1	.....	1	.....	3	.....
Yonkers, N. Y.	79,803	19	5	.....	26	.....	4	.....	10	3
From 25,000 to 50,000 inhabitants:										
Atlantic City, N. J.	46,150	8	1	.....	.....	.....	.....	.....	1	.....
Aurora, Ill.	29,807	6	.....	.....	.....	.....	.....	.....	.....	.....
Austin, Tex.	29,860	21	8	1	.....	.....	1	.....	.....	.....
Binghamton, N. Y.	48,443	29	.....	.....	.....	.....	4	.....	5	4
Brookline, Mass.	27,792	5	.....	.....	.....	.....	.....	.....	2	.....
Chattanooga, Tenn.	44,604	.....	1	.....	.....	.....	3	.....	2	.....
Chelsea, Mass.	32,452	14	2	.....	2	.....	.....	.....	3	1
Chicopee, Mass.	25,401	3	.....	.....	.....	.....	.....	.....	.....	.....
Danville, Ill.	27,871	9	.....	.....	.....	.....	2	.....	.....	1
East Orange, N. J.	34,371	.....	2	.....	2	.....	.....	.....	.....	.....
Everett, Mass.	33,484	7	1	.....	.....	.....	1	.....	.....	.....
Fitchburg, Mass.	37,826	10	5	.....	.....	.....	1	.....	4	1
Haverhill, Mass.	44,115	.....	11	.....	1	.....	1	.....	.....	.....
La Crosse, Wis.	30,417	6	3	.....	.....	.....	.....	.....	1	.....
Lancaster, Pa.	47,227	.....	4	.....	.....	.....	.....	.....	.....	.....
Lexington, Ky.	35,099	12	5	.....	.....	.....	1	.....	.....	.....
Little Rock, Ark.	45,941	.....	1	.....	.....	.....	1	.....	.....	.....
Lynchburg, Va.	29,494	13	1	.....	.....	.....	.....	.....	.....	.....
Newcastle, Pa.	36,280	.....	1	.....	1	.....	.....	.....	.....	.....
Newport, Ky.	30,309	7	1	.....	.....	.....	.....	.....	.....	.....
Newton, Mass.	39,806	6	2	.....	2	.....	.....	.....	2	.....
Niagara Falls, N. Y.	30,445	.....	1	.....	.....	.....	.....	.....	.....	.....
Norristown, Pa.	27,875	3	1	.....	.....	.....	.....	.....	.....	.....
Orange, N. J.	29,630	9	.....	.....	3	.....	.....	.....	2	1
Pasadena, Cal.	30,291	10	1	.....	.....	.....	.....	.....	.....	.....
Pittsfield, Mass.	32,121	14	3	.....	.....	.....	3	.....	2	3
Portsmouth, Va.	33,190	8	.....	.....	.....	.....	2	.....	.....	1
Racine, Wis.	38,002	9	6	.....	.....	.....	2	.....	2	.....
Roanoke, Va.	34,874	14	2	.....	.....	.....	3	.....	2	2
South Omaha, Nebr.	26,259	9	.....	.....	.....	.....	.....	.....	.....	.....
Superior, Wis.	40,384	4	.....	.....	.....	.....	2	.....	.....	.....
Taunton, Mass.	34,259	15	2	.....	.....	.....	7	1	1	2
Waltham, Mass.	27,834	6	2	.....	.....	.....	.....	.....	1	.....
Wheeling, W. Va.	41,641	14	5	.....	.....	.....	1	.....	1	.....
Wilmington, N. C.	25,748	7	.....	.....	6	.....	1	.....	.....	.....
York, Pa.	44,750	.....	3	.....	.....	.....	2	.....	3	.....

## SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Nov. 1, 1913—Continued.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Less than 25,000 inhabitants:										
Alameda, Cal.	23,363	4	2							
Ann Arbor, Mich.	14,817	1	1						6	
Beaver Falls, Pa.	12,191		2							
Biddleford, Me.	17,079	5	2							
Bennington, Vt.	8,608	8								
Braddock, Pa.	19,357		5			1				
Cambridge, Ohio.	11,327	3				2				
Coffeyville, Kans.	12,667								2	
Columbus, Ind.	8,813	2	2			1				
Concord, N. H.	21,497	10	1							1
Cumberland, Md.	21,839	6	4			2				
Dunkirk, N. Y.	17,221	10	1		26	1				
Franklin, N. H.	6,732	4								
Galesburg, Ill.	22,089	1								
Kearny, N. J.	18,659	3	4	1	4	3			2	
La Fayette, Ind.	20,081	10	1							
Marinette, Wis.	14,610	1	1							
Marlboro, Mass.	14,579	1								1
Massillon, Ohio.	13,879									
Medford, Mass.	23,150	5			1	2			1	1
Melrose, Mass.	15,715	4				3			1	
Moline, Ill.	24,199	6	1		1	1				
Montclair, N. J.	21,550	6			1				2	1
Nanticoke, Pa.	18,877	5	1							
Newburyport, Mass.	14,949	10	2							1
North Adams, Mass.	22,019	10				1				2
Northampton, Mass.	19,431	8				3				
Plainfield, N. J.	20,550	7	1		1				1	1
Portsmouth, N. H.	11,269						1			
Pottstown, Pa.	15,599	4								
Rutland, Vt.	13,546	3					2			
Saratoga Springs, N. Y.	12,603	5								
South Bethlehem, Pa.	19,973	5			1				2	
Wilkinsburg, Pa.	18,324	7	3			2	1			
Woburn, Mass.	15,308	2								

## IN INSULAR POSSESSIONS.

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### HAWAII.

#### Examination of Rats and Mongoose.

Rats and mongoose have been examined in Hawaii as follows: Honolulu—week ended October 25, 1913, 418; week ended November 1, 1913, 418; Hilo—week ended October 18, 1913, 3,010; week ended October 25, 1913, 3,212. No plague-infected animal was found.

### PHILIPPINE ISLANDS.

#### Cholera—Cholera Carriers.

During the week ended October 4, 1913, 11 cases of cholera with 7 deaths were notified in Manila. These figures show a decided increase as compared with the number notified for the preceding week. The cases continue to occur in widely separated sections of the city and no connection has been shown to exist between them.

A case of cholera also occurred at Polo, Bulacan, which is on the railroad about 10 miles north of Manila. The history of this case showed it to be in a male, Filipino, farm laborer, who had not been away from the immediate vicinity of his home for a number of months. He was attacked very suddenly and died in the course of a few hours.

Another case occurred in Cavite on the steamship *Cebu* while the vessel was in dry dock. The history of this man was that he left Manila October 1, was taken violently ill on October 2, and died six hours later. An examination of the contacts who lived in the same house with this man in Manila showed one of them to be a positive cholera carrier.

It is also of interest to note that 2 additional positive cholera carriers were detected among the contacts of the true cholera cases which occurred during the week.

During the week ended October 11, 1913, 13 cases of cholera with 8 deaths were notified at Manila.

Stool examinations were made of 188 contacts. Contacts of 2 of the cholera cases were found to be true cholera carriers. Among the contacts of one case there were 70 contacts examined, of whom 4 were found to be positive cholera carriers. In the other group there were

11 contacts, of whom also 4 were positive cholera carriers. All positive cholera carriers are immediately placed in quarantine at the San Lazaro Cholera Hospital.

One case of cholera was found at Meycauayan, which, however, came from Manila.

Another case of cholera occurred in Cavite on October 5, in the person of an American marine who had deserted on September 29, and who was known to have been in Manila on October 2, 3, and 4, so that in all probability he contracted his infection there.

### PORTO RICO.

#### Rodents Collected and Examined.

During the week ended October 31, 1913, there were examined 819 rodents, collected from various points in Porto Rico. Of these, 611 were collected from various parts of San Juan municipality. None was found infected with plague.

#### Summary of Plague-Suppressive Measures.

JULY 1-OCTOBER 31, 1913.

During the period from July 1 to October 31, 1913, 12,366 rats, 5,142 mice, and 16 mongoose were examined at the laboratory at San Juan, Porto Rico, for plague infection.

These animals were obtained from different localities as follows:

	Rats.	Mice.	Mongoose.	Total.
San Juan.....	2, 296	1, 435	0	3, 731
Puerta de Tierra.....	1, 435	762	2	2, 199
Santurce.....	4, 334	1, 950	9	6, 293
Carolina.....	42	11	0	53
Caguas.....	322	344	1	667
Ponce.....	8	4	0	12
Mayaguez.....	2, 406	79	4	2, 489
Arecibo.....	1, 155	514	0	1, 669
Aguadilla.....	368	43	0	411
<b>Total.....</b>	<b>12, 366</b>	<b>5, 142</b>	<b>16</b>	<b>17, 524</b>

No plague infection was found within the period under report.

On October 31, 1913, this work was discontinued by this service.

# FOREIGN REPORTS.

## AUSTRALIA.

### Smallpox—New South Wales.

The total number of cases of smallpox notified in New South Wales from July 1 to September 26, 1913, was 829. Of this number 810 cases occurred in Sydney and 19 in country districts.

## AUSTRIA-HUNGARY.

### Status of Cholera.

During the period from October 9 to 13, 1913, 9 cases of cholera were notified in Bosnia-Herzegovina.

## CHINA.

### Cholera—Amoy.

Cholera was reported present at Amoy, October, 1913.

### Cholera—Plague—Hongkong.

During the week ended October 4, 1913, cholera and plague were notified at Hongkong as follows: Cholera, 6 cases; plague, 3 cases, with 3 deaths.

During the same period 2,278 rats were examined at Hongkong for plague infection. No plague-infected rat was found.

### Examination of Rats—Shanghai.

During the two weeks ended October 18, 1913, 590 rats were examined at Shanghai for plague infection. Five plague-infected rats were found.

## CUBA.

### Communicable Diseases—Habana.

OCT. 21-31, 1913.

Diseases.	New cases.	Deaths.	Under treatment.
Leprosy.....	3		258
Malaria.....	110		10
Typhoid fever.....	16	3	44
Diphtheria.....	7		6
Scarlet fever.....	10		4
Measles.....	40		60
Varicella.....			3
Paratyphoid fever.....	3		3

<sup>1</sup> Guines, 1; Santa Cruz del Sur, 1; Gibara, 1; Manacas, 1; Ciego de Avila, 1; Encrucijada, 1; Santiago de Cuba, 3.

**GREAT BRITAIN.****Plague in Rodents—London.**

From a letter written by Dr. C. A. Moseley, a district medical officer of Jamaica, contained in the Annual Report of the Superintending Medical Officer of Jamaica for the year ended March 31, 1913, pages 2 and 3, it appears that a considerable number of plague-infected rats were found in London during 1912. The following is that part of Dr. Moseley's letter bearing on the subject:

PORT ANTONIO, *April 25, 1913.*

SIR: While on leave in London in July last, it occurred to me that my time might be usefully employed in obtaining as extensive a knowledge of plague as possible. \* \* \*

Later in the year I decided to do the bacteriology and chemistry, and in fact as much of the work as I could in the three months at my disposal, for the public health diploma, this I did at St. Bartholomew's Hospital.

Here again, through the kindness of Dr. F. W. Andrews, pathologist to the hospital, I had ample opportunity to observe the post mortem appearances in rodent plague, and to follow up the bacteriological findings. For a matter of two weeks or more some six or eight rats were sent to Dr. Andrews daily for examination. With few exceptions they had all died as the result of plague. Hearing that I was interested in the matter he very kindly asked me to be present while he was doing the work in connection with them.

**ITALY.****Quarantine Against Salamina.**

Vessels arriving at Italian ports from the island of Salamina, Greece, were made subject, October 10, 1913, to the measures prescribed against cholera.

**MOROCCO.****Plague—Rabat.**

Three cases of plague were notified October 25, 1913, at Rabat.

**PERU.****Status of Plague.**

Plague has been notified in Peru as follows:

OCT. 6-12, 1913.

Places.	New cases.	Remain- ing.	Places.	New cases.	Remain- ing.
Lima (city).....	2	15	Monsefu.....	12	3
Lima (district).....	1	4	San Pedro.....	3	1
Mollendo.....	4	3	Trujillo.....	1	2



**ROUMANIA.****Status of Cholera.**

During the period from October 16 to 22, 1913, 169 cases of cholera, with 140 deaths, were notified in Roumania, making, from the beginning of the outbreak to date, 5,634 cases, with 2,880 deaths. On October 22, 1913, 291 cases remained under treatment.

**RUSSIA.****Status of Cholera.**

During the period from September 28 to October 4, 1913, 36 cases of cholera with 13 deaths were notified in Russia. The cases were distributed in the governments of Bessarabia, Ekaterinislav, Kher-son, and Taurida.

**SERVIA.****Status of Cholera.**

During the week ended October 11, 1913, 174 cases of cholera with 56 deaths were notified in Servia. The cases were distributed in 18 provinces.

**TURKEY IN ASIA.****Cholera—Trebizond.**

Cholera was reported present October 29, 1913, in the military barracks at Trebizond.

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.****Reports Received During Week Ended Nov. 21, 1913.****CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Croatia-Slavonia—				
Pozanga—				
Brod.....	Sept. 29-Oct. 5....	4	.....	
Davor.....	.....do.....	2	.....	
Jasenovac.....	Sept. 22-Oct. 5....	2	2	
Novska.....	Sept. 22-28.....	1	1	
Syrmien—				
Adasevci.....	Sept. 29-Oct. 5....	10	6	
Beska.....	Sept. 14-28.....	2	.....	
Bosnjaci, Zupenja district.	.....do.....	14	3	
Bosut.....	Sept. 22-28.....	1	1	
Cerna.....	Sept. 22-Oct. 5....	9	.....	
Cortanoveci.....	Sept. 22-28.....	1	.....	
Drenoveci.....	Sept. 14-28.....	6	2	
Galubinci.....	Sept. 14-Oct. 5....	16	6	
Ilinci.....	Sept. 29-Oct. 5....	1	.....	
Klenac.....	Sept. 29-Oct. 4....	2	2	
Kupinovo.....	Aug. 17-Sept. 22..	2	1	
Kuzmin.....	Sept. 14-Oct. 5....	123	38	
Lacarc.....	.....do.....	7	1	
Martinci.....	Aug. 16-Oct. 5....	19	13	Including previous reports.
Mikanovici.....	Sept. 29-Oct. 5....	2	.....	
Mitrovica.....	Sept. 14-28.....	7	.....	
Morovic.....	.....do.....	5	3	
Novo Karlovci.....	Sept. 15-Oct. 5....	14	8	
Ogar.....	Sept. 22-Oct. 5....	16	5	
Osiek.....	Sept. 22-28.....	3	1	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received During Week Ended Nov. 21, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Austria-Hungary—Continued.</b>				
<b>Croatia-Slavonia—Contd.</b>				
<b>Syrmien—Continued.</b>				
Raca.....	Sept. 22-28.....	1	1	
Semlin.....	Sept. 14-22.....	1	1	
Sid.....	Sept. 29-Oct. 5.....	1	1	
Siskovci.....	Sept. 22-Oct. 5.....	4	2	
Tovarnik.....	Sept. 14-28.....	3	2	
Vojka.....	Sept. 14-22.....	1	1	
Vukovar Argoviste.....	do.....	1	1	
<b>China:</b>				
Amoy.....	Oct. 4.....			Present.
Hongkong.....	Sept. 29-Oct. 4.....	6		
<b>Dutch East Indies:</b>				
<b>Java—</b>				
Batavia.....	Sept. 30-Oct. 4.....	15	15	1 European.
<b>India:</b>				
Bassein.....	Sept. 27.....	1		
Bombay.....	Oct. 5-11.....	3	2	
Calcutta.....	Aug. 31-Sept. 27.....		65	Including previous reports.
<b>Philippine Islands</b>				
Manila.....	Sept. 28-Oct. 11.....	24	15	
Cavite.....	Oct. 5.....	1		Sept. 28-Oct. 4, 1 fatal case on s. s. Cebu.
Mecauayan.....	Oct. 5-11.....	1		
Polo.....	Sept. 28-Oct. 4.....	1		In Bulacan.
<b>Roumania</b> .....				Aug. 1-Oct. 22: Total, 5,634 cases; deaths, 2,880. Oct. 16-22: Cases, 169; deaths, 140.
<b>Russia:</b>				
<b>Bessarabia—</b>				
Izmail.....	Sept. 21-Oct. 4.....	25	10	
<b>Ekaterinskav—</b>				
Nicopol.....	do.....	3		
Elizabethgrade.....	Sept. 28-Oct. 4.....	1	1	
Poltava.....	Sept. 21-Oct. 4.....	14	2	
<b>Kherson—</b>				
Kherson district.....	do.....	15	8	
Kherson.....	do.....	3	2	
Odessa district.....	do.....	7	4	
Odessa.....	do.....	3	2	
<b>Taurida—</b>				
Alechki.....	Sept. 28-Oct. 4.....	1		
Dneiper district.....	Sept. 21-27.....	3	1	
<b>Servia</b> .....				Sept. 29-Oct. 11: Cases, 638; deaths, 196.
<b>Turkey in Asia:</b>				
Trebizond.....	Oct. 29.....			Present among troops.
<b>Turkey in Europe:</b>				
Constantinople.....	Oct. 13-26.....	6	3	
Dardanelles.....				Oct. 28, present in Boulair and Gallipoli.
Kalemi.....	Oct. 12.....	2		Isle of Marmora.
Silviri.....	Oct. 15-27.....	4	4	

**YELLOW FEVER.**

<b>Venezuela:</b>				
Caracas.....	Oct. 1-31.....	1		From Valencia.

**PLAGUE.**

<b>Brazil:</b>				
Bahia.....	Oct. 12-18.....	3	4	
<b>China:</b>				
Hongkong.....	Sept. 28-Oct. 4.....	3	3	
<b>India:</b>				
Bombay.....	Oct. 5-11.....	8	9	
Mauritius.....	Aug. 29-Sept. 18.....	21	14	
<b>Morocco:</b> <sup>1</sup>				
Rabat.....	Oct. 19-25.....	3		

<sup>1</sup> From the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Nov. 5, 1913.

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received During Week Ended Nov. 21, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Peru:				
Arequipa—				
Mollendo.....	Oct. 6-12.....	4		
Libertad—				
San Pedro.....	.....do.....	3	1	
Trujillo.....	.....do.....	1		
Lima.....	.....do.....	2		
Monsefu.....	.....do.....	12		

**SMALLPOX.**

Australia:					
New South Wales.....	.....	.....	.....		Total July 1-Sept. 26: Cases 829, Sydney district, 810 cases.
Albury.....	Sept. 12-26.....	1			
Coolah.....	.....do.....	1			
Cootamundra.....	.....do.....	1			
Wellington.....	.....do.....	1			
Austria-Hungary:					
Coastland—					
Capodistria.....	Oct. 5-11.....	2			
Decani.....	.....do.....	2			
Trieste.....	.....do.....	2			
Tyrol.....	.....do.....	8			
Brazil:					
Bahia.....	Oct. 12-18.....	1			
Pera.....	Oct. 26-Nov. 1....	8	7		
Rio de Janeiro.....	Sept. 29-Oct. 4....	4			
France:					
St. Etienne.....	Oct. 1-15.....		1		
Mexico:					
Aguascalientes.....	Oct. 27-Nov. 2....		3		
Veracruz.....	Oct. 25-31.....		5		
Newfoundland:					
St. Johns.....	Oct. 12-18.....	1			
Russia:					
Moscow.....	Sept. 29-Oct. 4....	1			
St. Petersburg.....	Sept. 30-Oct. 18...	4	1		
Warsaw.....	Aug. 24-30.....	7	7		
Turkey in Asia:					
Beirut.....	Oct. 12-25.....	10			

**Reports Received from June 28 to Nov. 14, 1913.****CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Hodeidah.....	Aug. 27-Sept. 4...	3	2	Among the military at quaran- tine.
Do.....	Aug. 20-Sept. 4....	123	21	
Austria-Hungary:				
Bosnia-Herzegovina—				
Bijela.....	Aug. 16-27.....	3		
Boljanic.....	Sept. 30-Oct. 7....	1		
Bosnisch Samac.....	Aug. 16-Sept. 15...	7	1	
Brad.....	Sept. 30-Oct. 7....	1		
Brecko.....	Aug. 1-Sept. 29...	34	7	
Brezovopolje.....	Sept. 1-30.....	1		
Buskino.....	Aug. 1.....	1		
Creveno Brodo.....	Aug. 28-Sept. 6....	1		
Donja Skukva.....	Aug. 16-27.....	1	1	
Golovac.....	Sept. 1-30.....	1		
Gornja Tuzla.....	Aug. 1-Sept. 7....	6	1	
Gracanica.....	Aug. 16-27.....	1		
Gracanica.....	Sept. 30-Oct. 7....	5		
Janja.....	Aug. 28-Sept. 29...	5		
Kostajnica.....	Sept. 30-Oct. 7....	1		
Labuca.....	.....do.....	1		

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued****Reports Received from June 28 to Nov. 14, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Austria-Hungary—Continued.</b>				
<b>Bosnia-Herzegovina—Con.</b>				
Ljubaca.....	Aug. 28-Sept. 6....	1	.....	
Morac.....	do.....	2	.....	
Orasje.....	Aug. 16-Sept. 29....	18	1	
Tuzla.....	Aug. 28-Sept. 29....	2	.....	
Uljice.....	Aug. 16-26.....	1	.....	
Vidovice.....	Aug. 16-Sept. 29....	9	.....	
Vusic Dolnji.....	Aug. 16-Sept. 7....	3	.....	
Vusic Gornji.....	Aug. 16-Sept. 15....	4	.....	
<b>Croatia-Slavonia—</b>				
<b>Syrmien—</b>				
Adasevci.....	Sept. 8-14.....	2	1	
Alt Slankamen.....	Aug. 16.....	2	.....	
Bacinci.....	Sept. 8-14.....	5	3	
Bebrina.....	Sept. 1-7.....	1	1	
Bosnjaci, Mitrovica district.....	do.....	1	.....	
Bosnjaci, Zupenja district.....	Aug. 16-Sept. 2....	25	10	
Bosut.....	Aug. 25-Sept. 2....	3	1	
Cortanovci.....	Aug. 25-Sept. 14....	5	3	
Djakova.....	Aug. 25-Sept. 2....	1	.....	
Galubinci.....	Sept. 8-14.....	2	.....	
Grad, Mitrovica district.....	Sept. 1-14.....	2	1	
Grad, Zenum district.....	Sept. 8-14.....	1	1	
Ilinci.....	Aug. 25-31.....	1	.....	
Krecedin.....	Sept. 1-7.....	1	1	
Kreevna.....	July 31.....	5	3	
Kutina.....	Aug. 25-Sept. 2....	1	.....	
Kuzmin.....	Sept. 1-14.....	19	7	
Lacarak.....	Aug. 25-Sept. 14....	6	.....	
Martinci.....	Aug. 16-Sept. 14....	4	1	
Mihovica.....	July 15-Sept. 14....	3	2	
Novo Karlovci.....	Aug. 25-Sept. 14....	16	10	
Novo Slankamen.....	Sept. 8-14.....	1	1	
Ogar, Ruma district.....	do.....	2	1	
Ogar, Sid district.....	do.....	1	.....	
Otok.....	Sept. 1-7.....	2	1	
Podgajci.....	Aug. 16-Sept. 14....	3	2	
Rivica.....	Sept. 8-14.....	2	2	
Semlin.....	Aug. 25-31.....	1	.....	
Vinkovci.....	Sept. 8-14.....	1	1	
Zupinge.....	Sept. 22-25.....	.....	.....	Present.
<b>Crownland—</b>				
<b>Bohemia—</b>				
Marienbad.....	Sept. 13.....	1	.....	
Weinberge.....	Sept. 27.....	1	1	
<b>Dalmatia—</b>				
Cattaro.....	Aug. 6.....	1	1	
<b>Galicia—</b>				
<b>Skole—</b>				
Oporzec.....	Sept. 10-Oct. 6....	15	9	
Slawsko.....	do.....	1	.....	
Tuchla.....	Sept. 18-Oct. 6....	2	.....	
Tucholka.....	Sept. 10-Oct. 6....	2	1	
Wyzlow.....	do.....	1	1	
<b>Lower Austria—</b>				
Vienna.....	Aug. 4.....	1	.....	
<b>Hungary—</b>				
<b>Bacs-Bodrog—</b>				
Ada.....	Sept. 7-13.....	2	.....	
Apatin.....	Sept. 29-Oct. 4....	3	.....	
Bacs.....	Sept. 14-27.....	3	.....	
Csurog.....	Sept. 2-Oct. 4....	20	2	
Kolpeny.....	Sept. 14-Oct. 4....	2	.....	
Petroz.....	Sept. 7-20.....	2	1	
Obecse.....	Sept. 7-Oct. 4....	.....	.....	
Szentlomas.....	Sept. 14-Oct. 4....	31	.....	
Temerin.....	do.....	2	.....	
<b>Bereg—</b>				
Alsolvreczke.....	Sept. 21-27.....	1	.....	
Borhalom.....	do.....	2	.....	
Csetfalva.....	Oct. 4.....	1	.....	
Felsovereczke.....	Sept. 7-27.....	7	.....	
Marsfalva.....	do.....	2	.....	

Including previous reports.

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Hungary—Continued.				
Bereg—Continued.				
Kanora.....	Sept. 14-20.....	4		
Kissana.....	Sept. 21-27.....	7		
Kissolyva.....	Sept. 7-13.....	2		
Munkacs.....	do.....	1		
Nagylukska.....	Sept. 21-28.....	1		
Odavidhaza.....	Sept. 7-13.....	3		
Orosztelek.....	Sept. 7-28.....	4		
Proszueg.....	Sept. 14-20.....	3		
Rakocziszallas.....	Sept. 14-28.....	9		
Szarvoskut.....	Sept. 21-28.....	4		
Szentomiklos.....	Sept. 14-28.....	13		
Szolyva.....	Sept. 21-28.....	6		
Tarpa.....	Sept. 21-Oct. 4.....	4		
Ujdavidhaza.....	Sept. 14-28.....	5		
Varkulesa.....	Sept. 7-Oct. 11.....	5		
Varpalanka.....	Sept. 21-28.....	3		
Veszerszallas.....	do.....	1		
Voloscz.....	Sept. 7-Oct. 4.....	2		
Zalago.....	Sept. 7-13.....	1		
Zellip.....	Sept. 21-Oct. 11.....	6		
Zugo.....	Sept. 7-Oct. 11.....	6		
Borsod—				
Sajolad.....	Sept. 28-Oct. 11.....	22		
Budapest—				
Budapest.....	Sept. 13-Oct. 4.....			
Fejer—				
Adony.....	Oct. 4.....	1		
Pazmand.....	Sept. 21-28.....	1		
Heves—				
Ludas.....	Oct. 5-11.....	1		
Poroszló.....	do.....	1		
Jasz-Nagykun-Szolnok—				
Tiszaroff.....	do.....	2		
Kolozs—				
Kolozsvár, Klausenburg.....	Sept. 21-Oct. 11.....	17		
Komarom, Komorn.....	Sept. 29-Oct. 4.....	1		
Mezozoppor.....	Oct. 4.....	2		
Panceova.....	Sept. 29-Oct. 4.....	1		
Krasso-Soreny—				
Bozovics.....	Sept. 14-Oct. 11.....	6		
Dalbosfalva.....	Oct. 5-11.....	5		
Illyed.....	Sept. 21-Oct. 4.....	7		
Jam.....	do.....	7		
Nagylaposnok.....	Sept. 14-Oct. 4.....	23		
Neramezo.....	Sept. 21-Oct. 11.....	4		
Neramogyoros.....	Sept. 7-14.....	18		
Stajerlak-anina.....	Sept. 21-28.....	1		
Szakalar.....	Sept. 14-Oct. 4.....	21		
Pest-Pilis—				
Erzsébetfalva.....	Sept. 21-28.....	1		
Fajsz.....	Oct. 5-11.....	1		
Hidegkut.....	Sept. 21-28.....	2		
Raczkve.....	do.....	2		
Do.....	do.....	1		
Tokol.....	do.....	1		
Pozanoy, Fressburg—				
Kismagyar.....	Oct. 5-11.....	1		
Szatmar—				
Tiszabecs.....	Oct. 4.....	3		
Temes—				
Deliblat.....	Sept. 1-Oct. 4.....	31		
Homokos.....	Oct. 4.....	3		
Kevevera.....	Aug. 16-Sept. 20.....	8	3	
Palank.....	Aug. 10-Oct. 4.....	16	1	
Temesvalalza.....	Oct. 5-11.....	7		
Torontal—				
Csenta.....	Oct. 11.....	6		
Melenze.....	Sept. 14-20.....	2		
Nagybecskerek.....	Sept. 21-28.....	1		
Kuman.....	Sept. 14-28.....	8		

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 23 to Nov. 14, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Austria-Hungary—Continued.</b>				
<b>Hungary—Continued.</b>				
Ung				
Csap.....	Sept. 14-Oct. 4....	6	.....	
Kisteglas.....	Sept. 21-23.....	1	.....	
Lehocz.....	.....do.....	1	.....	
Nagyrat.....	.....do.....	3	.....	
Palocz Ujvaros.....	Oct. 5-11.....	1	.....	
Titel.....	Sept. 17-27.....	1	.....	
Unglovasad.....	Oct. 5-11.....	2	.....	
Zala—				
Nagykanizsa.....	Oct. 11.....	6	.....	
Radvanc.....	Sept. 14-20.....	1	.....	
Zemplen—				
Satoraljanjhely.....	Sept. 21-23.....	1	.....	
<b>Bulgaria.....</b>				Sept. 10, present in the districts of Pleven, Sivistov, Vratza, and Widin.
Rustchuk.....	Sept. 8.....	18	8	
Sistovo.....	.....do.....	60	.....	
Tirnov.....	.....do.....	14	14	
Varna.....	Sept. 11.....	3	.....	Aug. 25, 3 deaths among returning soldiers.
<b>Ceylon:</b>				
Colombo.....	Aug. 17-23.....	1	1	Oct. 15, present on s. s. Karema and s. s. Karonga from Calcutta.
<b>China:</b>				
Amoy.....	Aug. 23.....	.....	.....	Present in vicinity.
Canton.....	July 13-26.....	132	6	
Chuan Chow.....	Sept. 6.....	.....	.....	Present.
Foochow.....	Sept. 13.....	.....	.....	Do.
Hongkong.....	Aug. 3-Sept. 27.....	72	41	
Swatow.....	Aug. 1-31.....	31	30	
<b>Dutch East Indies:</b>				
Borneo.....				Total, May 12-June 7: Cases, 131; deaths, 105.
Sesajap, district.....	May 12-June 7....	57	40	
<b>Java—</b>				
Batavia and Tanjong-Priok.....	May 18-Sept. 27....	529	424	May 25-Aug. 23: 12 cases and 1 death among Europeans.
Madison, Province.....	Apr. 22-28.....	1	4	
Pekalongan.....	Aug. 10-Sept. 20....	110	76	
Preanger.....	Aug. 9-15.....	41	23	
Samarang.....	July 12-Aug. 16.....	18	11	
Surabaya.....	Aug. 2-23.....	2	.....	
Sibiru.....	Mar. 24-Apr. 27....	117	104	
<b>Sumatra—</b>				
Djambi, Province.....	June 1-Sept. 20....	299	141	July 15-Aug. 17 not received.
Palembang.....	June 22-Aug. 4.....	252	157	
<b>Greece:</b>				
Athens.....	Sept. 15-29.....	1	1	
Piræus.....	Sept. 13-Oct. 13....	9	5	Among troops at quarantine.
<b>India:</b>				
Bassein.....	May 4-July 19.....	31	23	
Bombay.....	May 25-Oct. 4.....	45	31	
Calcutta.....	Apr. 27-Sept. 27....	.....	459	
Madras.....	June 15-Oct. 4.....	16	10	
Moulmine.....	May 4-June 14.....	6	6	
Rangoon.....	May 1-Aug. 31.....	7	.....	
<b>Indo-China</b> .....				Total, Jan 1-Sept. 19: Cases, 213. Deaths, Jan. 1-July 10: 145.
Saigon.....	June 17-23.....	2	2	
<b>Japan:</b>				
Kobe.....	Sept. 5-8.....	7	.....	From s. s. Canada Maru. Crew quarantined at Wada.
Nagasaki.....	Aug. 25-31.....	2	.....	From s. s. Canada Maru.
<b>Philippine Islands:</b>				
Manila.....	Aug. 25-Sept. 20....	8	2	
<b>Roumania</b> .....				Total Aug. 1-Oct. 15: Cases, 5,465; deaths, 2,766. Sept. 30-Oct. 15: Cases, 1,134; deaths, 726.
Bucharest.....	Aug. 5-14.....	1	1	
Braila.....	To Sept. 2.....	43	.....	Among the military.
Do.....	Sept. 3-8.....	4	3	Civilians.
Galatz.....	Aug. 22-Sept. 2.....	34	6	
Kustenje.....	Sept. 3-12.....	8	1	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.	
Roumania—Continued.					
Silistria.....	To Aug. 25.....	26	.....	Including previous reports. Cases present.	
Stephanesti.....	Aug. 1-14.....	18	7		
Sulina.....	To Aug. 24.....	56	.....		
Turnu-Magurele.....	Aug. 5.....	.....	1		
Vilsoara-Teleorman.....	do.....	3	.....		
Russia:					
Governments—					
Bessarabia—					
Akkerman.....	Sept. 16-18.....	3	1	Total, Aug. 24-Sept. 20: Cases, 107; deaths, 48; including pre- vious reports.	
Ishmail.....	do.....	1	1		
Kishinef.....	Sept. 22.....	3	1		
Wolfcanechty.....	Sept. 18-21.....	1	1		
Ekaterinskav.....	Sept. 22.....	2	.....		
Nicopol.....	Sept. 22.....	2	.....	Present.	
Kherson.....	Aug. 26-Sept. 13 ..	27	19		
Kherson, district.....	Aug. 26-Sept. 20 ..	48	12		
Odessa, district.....	Sept. 7-14.....	22	13		
Odessa.....	do.....	2	1		
Varvaroka.....	Sept. 22.....	.....	.....		
Kief—	.....	.....	.....		
Zvenigoroda.....	Sept. 8.....	2	2	Total, July 4-Sept. 27: Cases, 3,934; deaths, 1,648.	
Minsk.....	Sept. 14-22.....	1	1		
Poltava.....	Sept. 18-20.....	11	3		
Taurida—	.....	.....	.....		
Alechki.....	Sept. 8-14.....	4	1		
Dneprovski.....	do.....	8	2		
Servia.....					
Districts—					
Belgrade.....	July 4-Sept. 27.....	100	49	Sept. 22, 1 case	
Belgrade.....	July 4-Aug. 30.....	262	98		
Kraina.....	Aug. 3-Sept. 27.....	257	95		
Kragujevatz.....	July 4-Sept. 27.....	281	94		
Kroushevatz.....	do.....	235	82		
Lajkovac.....	Aug. 1-7.....	1	.....	Aug. 9, 1 case on s. s. Carlsbad.	
Morava.....	July 4-Sept. 27.....	584	241		
Niche.....	do.....	327	114		
Oujitze.....	July 22-Sept. 27.....	30	20		
Palanka.....	Aug. 1-7.....	1	.....		
Piot.....	July 4-Sept. 27.....	625	250	Present.	
Podrigne.....	do.....	106	48		
Pojarevatz.....	Aug. 3-Sept. 27.....	441	237		
Pozenga.....	July 25-31.....	1	.....		
Roudnik.....	Aug. 3-Sept. 27.....	34	16		
Shabat.....	Aug. 1-7.....	1	.....	Sept. 30, still present.	
Smederevo.....	July 4-Sept. 27.....	200	78		
Tchatchak.....	July 22-Aug. 30.....	45	7		
Timok.....	July 19-Sept. 27.....	251	129		
Toplitza.....	July 22-Sept. 27.....	45	20		
Ueskub.....	July 19-Aug. 2.....	37	19	July 19-Aug. 8, epidemic. Among civilians. July 10, pres- ent in Kavala, Drama, Oriana, Serres, and Stroumitza.	
Vsanjica and Mirjevo.....	July 4-21.....	.....	1		
Waljevo.....	July 22-Sept. 27.....	264	194		
Wragne.....	do.....	377	194		
Siam:					
Bangkok.....	Mar. 23-Sept. 6.....	.....	18	Aug. 9, 1 case on s. s. Carlsbad.	
Straits Settlements:					
Singapore.....	July 6-Sept. 27.....	18	17		
Turkey in Asia:					
Smyrna.....	July 29-Oct. 12.....	293	179		
Turkey in Europe:					
Constantinople.....	Aug. 2-Oct. 12.....	45	24	Present.	
Dardanelles—					
Gallipoli.....	Sept. 17.....	.....	.....		
Maidos.....	Sept. 8.....	.....	3		
Kavak.....	Aug. 8-22.....	98	50		
Reduto.....	Sept. 17-Oct. 5.....	12	8	Sept. 30, still present.	
Saloniki (Macedonia).....	Sept. 17-Oct. 5.....	12	8		
Saloniki.....	July 7-Oct. 12.....	511	458		

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****YELLOW FEVER.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Brazil:</b>				
Bahia.....	May 11-Oct. 4....	42	22	
Manaos.....	June 30-July 5....	6	6	
Pernambuco.....	May 1-June 30.....	3	3	
Rio de Janeiro.....	May 25-Sept. 20....	4	4	Sept. 13—1 fatal case on s. s. Canova from Bahia. Oct. 30, 1 death.
<b>Colombia:</b>				
Cartagena.....	Aug. 23.....	1		Contracted in the interior.
<b>Cuba:</b>				
Habana.....	July 16.....			1 case on s. s. Hydra, which left Manaos June 17. Para June 21. Four deaths occurred in voyage; 2 at Manaos, 1 at Guantánamo, and 1 at Cienfuegos.
Do.....	Aug. 8-14.....	1		From steamship Morro Castle, passenger from Campeche.
<b>Ecuador:</b>				
Babahoyo.....	June 1-July 31....	2	2	
Bucay.....	June 1-Aug. 31....	3	2	
Duran.....	May 1-31.....	1		
Guayaquil.....	May 1-Sept. 30....	33	21	Nov. 6, increasing.
Milagro.....	May 1-Aug. 31....	21	11	
Naranjito.....	do.....	12	9	
<b>Mexico:</b>				
Campeche.....	May 25-Oct. 18....	26	11	Total May 25-Sept. 20: Cases, 27; deaths, 15.
Carmen.....	Oct. 11.....			Present.
Maxcanu.....	Aug. 23-Sept. 6....	2	2	Case, Aug. 23, from Campeche.
<b>Southern Nigeria:</b>				
Forcados.....	Oct. 31.....	1		
Lagos.....	May 12.....	1		July 23-Aug. 22: Epidemic; Oct. 15, still present.
Worri.....	June 1-30.....			Present.
<b>Venezuela:</b>				
Caracas.....	Feb. 1-28.....	1		
Do.....	May 1-31.....	1		From Valencia.
Do.....	July 1-31.....	1	1	

**PLAGUE.**

<b>Arabia:</b>				
Aden.....	June 3-25.....	8	4	Total Apr. 9-June 25: Cases, 81; deaths, 59.
Debai.....				Aug. 31, free; reported, p. 656. Pt. I.
<b>Argentina:</b>				Nov. 6, outbreak, with 25 deaths in 4 localities west from Rosario.
<b>Brazil:</b>				
Bahia.....	May 11-Oct. 4....	128	63	
Rio de Janeiro.....	July 27-Sept. 20....	2	2	
<b>British East Africa:</b>				1 death.
Kisumu.....	May 15-June 12....			
Mombasa.....	May 15-Sept. 1....	6	1	
Nairobi.....	May 1-Sept. 11....	89	73	Apr. 25-30, 15 deaths.
	May 15-Sept. 11....	9	5	
<b>Ceophalonis Island:</b>	Oct. 4.....			Present.
<b>Chile:</b>				
Iquique.....	May 11-Oct. 4....	45	19	
<b>China:</b>				
Amoy.....	Apr. 1-Aug. 25....		409	May 18-June 14; still present in Am-po, Chaoyang, Fungshun, Kityang, Puning, Ta-bu, and other points along the railway.
Kulungsu.....	Jan. 1-May 24....		20	May 25-June 7, 10 to 20 deaths daily; Sept. 22, free.
Canton.....				June 7, 1 or 2 deaths daily.
				Apr. 1-June 30: Cases, 229. Apr. 10-May 22, 300 fatal cases in the Sunning district.
Hongkong.....	May 18-Sept. 20....	285	239	
Kaochow.....	Apr. 10-May 22....			10 deaths daily.
Macao.....	July 3.....			Present Aug. 7, 1913.
Shanghai.....	June 1-15.....	8	7	Among natives.
Swatow.....	July 12.....			Decreasing along the Swato Chaochowfu Railway.



**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Java—				
Districts—				
Kediri.....	Apr. 1-Aug. 31....	1,102	932	
Madoen.....	do.....	402	371	
Malang.....	do.....	2,833	2,724	
Surabaya.....	do.....	122	115	
Madura—				
Bangkalan.....	July 13-Aug. 9....	34	27	And district, Nov. 6, 112 cases.
Ecuador:				
Guayaquil.....	May 1-Sept. 30....	94	28	
Milagro.....	May 1-July 31....	1	1	
Egypt.....				Total, Jan. 1-Oct. 15: Cases, 626; deaths, 292.
Alexandria.....	May 28-Oct. 3....	30	14	
Port Said.....	June 2-Sept. 9....	18	6	Aug. 11, 2 fatal cases.
Provinces—				
Bahera.....	June 13-Oct. 2....	11	4	
Fayoum.....	May 30-Oct. 11....	46	16	
Galloubeh.....	May 21-Sept. 12....	7	2	
Garbieh.....	May 27-Sept. 13....	55	40	Jan. 1-May 26: Cases, 12; deaths, 5.
Girgeh.....	Oct. 1.....	1	1	
Gizeh.....	May 29-July 1....	6	1	
Menouf.....	May 28-Aug. 27....	3	3	Jan. 1-May 26: Cases, 51; deaths, 24.
Minieh.....	May 30-Sept. 7....	29	10	
German East Africa:				
Districts—				
Usmawo—				
Misumgi.....	Mar. 15-May 10....			Present.
Nona.....	do.....			Do.
Urima.....	do.....			Do.
Muanza.....	Mar. 15-June 11....	503	459	Aug. 24, fatal case from s. s. Sybil.
Greece:				
Athens.....	Aug. 29.....	1		
Piræus.....	Aug. 21-Sept. 3....	8	2	
India:				
Bombay.....	May 18-Oct. 4....	686	585	
Calcutta.....	Apr. 27-Sept. 27....		302	
Karachi.....	May 18-Oct. 4....	173	154	
Rangoon.....	May 1-Aug. 31....	305	288	
Provinces.....				Total, May 4-Sept. 13: Cases, 28,963; deaths, 23,482.
Delhi.....	May 4-Aug. 2....	24	18	
Bombay.....	May 4-Sept. 13....	6,681	4,701	
Madras.....	do.....	555	516	
Bengal.....	do.....	308	316	
Bihar and Orissa.....	do.....	1,690	1,372	
United Provinces.....	do.....	9,495	8,156	
Punjab.....	do.....	6,685	5,580	
Burma.....	do.....	1,289	1,213	
Coorg.....	June 22-Aug. 30....	10	8	
Central Provinces.....	May 4-17.....	2	1	
Mysore.....	May 4-Sept. 13....	1,542	1,056	
Hyderabad.....	do.....	347	265	
Central India.....	May 4-31.....	9	9	
Rajputana.....	May 4-Sept. 13....	206	179	
Kashmir.....	May 4-Aug. 2....	65	44	
North West Province.....	May 4-Sept. 13....	55	48	
Indo-China.....				Total, Jan. 1-Sept. 10: Cases, 2,745; Jan. 1-July 10: Deaths, 2,547.
Saigon.....	June 17-Aug. 25....	63	40	
Japan:				
Taiwan—				
Kagi.....	June 1-July 19....	81	63	
Yokohama.....	Sept. 19-Oct. 29....	12	1	
Mauritius.....	Apr. 18-Aug. 28....	47	32	Total, Jan. 1-Aug. 28: Cases, 126; deaths, 70.
Morocco:				
Casablanca.....	Oct. 2.....	1		
Persia.....				June 5, in Kermanschah Province, 150 cases, at Caravadeh, Harounabad, and Loud. June 11, present in vicinity of Abassabad.
Djame-Chouran.....	May 31-Sept. 13....	37	21	
Faizabad.....	June 11.....		3	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 26 to Nov. 14, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Persia—Continued.</b>				
Gommi.....	June 11.....	.....	11	
Harounabad.....	May 20-June 25.....	71	51	
Larzangueneh.....	May 27-June 15.....	30	28	
Mahi-Dacht.....	June 4.....	2	2	
Taybat.....	June 11.....	.....	3	
Zebryi.....	May 31-June 25.....	14	10	
<b>Peru:</b>				
<b>Departments—</b>				
<b>Ancachs—</b>				
Chimbote.....	July 28-Sept. 7....	2	.....	
<b>Arequipa—</b>				
Mollendo.....	Apr. 28-Sept. 21....	12	2	
<b>Callao.</b>	June 30-Sept. 21....	6	.....	
<b>Caxamarca—</b>				
Cutervo.....	June 9-Aug. 17.....	5	.....	
<b>Chota.</b>	June 30-July 27.....	.....	.....	Present.
<b>Libertad—</b>				
Chiclayo.....	Apr. 28-June 8.....	1	1	
Salaverry.....	June 4-Aug. 17.....	3	1	
San Pedro.....	June 4-Oct. 6.....	6	1	
Trujillo.....	May 19-Oct. 6.....	12	.....	
Lima.....	.....do.....	22	.....	
<b>Piura.</b>	June 30-July 27.....	.....	.....	Present.
Catacaos.....	Sept. 2-Oct. 6.....	2	.....	
Piura.....	.....do.....	1	.....	
<b>Philippine Islands:</b>				
<b>Manila.</b>	May 11-24.....	3	.....	Fourth quarter 1912: Cases, 39; deaths, 33. First quarter 1913: Cases, 8; deaths, 7. Second quarter: Cases, 9; deaths, 7.
<b>Do.</b>	Sept. 21-27.....	1	1	
<b>Russia:</b>				
<b>Astrakhan.</b>				Aug. 2, 2 fatal cases.
Tsarev.....	June 3-10.....	.....	9	Pneumonic form.
Acheozek.....	Aug. 22.....	1	1	
Diamantai-Toubek.....	July 15-Aug. 17....	6	6	
<b>West Turkestan—</b>				
Semiretchji territory—				
Prjevalsk district.	Sept. 25.....	26	26	Among the Tourguen.
<b>Siam:</b>				
Bangkok.....	Mar. 23-Sept. 6.....	.....	18	
Korat.....	Mar. 21-31.....	.....	.....	Epidemic.
<b>Straits Settlements:</b>				
Singapore.....	June 15-21.....	1	1	
<b>Tripoli:</b>				
Derma.....	July 15.....	.....	.....	Present.
Tripoli.....	July 1-Sept. 30.....	56	19	
<b>Turkey in Asia:</b>				
Adalia.....	Aug. 30.....	1	.....	
Basra.....	July 14-21.....	1	1	To June 3, 31 cases.
Trebizond.....	Sept. 29-Oct. 4....	11	2	In the prison.
<b>Uruguay:</b>				
Montevideo.....	.....	.....	.....	July 28, present.

**SMALLPOX.**

<b>Algeria:</b>				
<b>Departments—</b>				
Algiers.....	May 1-July 31.....	11	.....	
Constantine.....	Apr. 1-July 31.....	27	.....	
Oran.....	May 1-July 31.....	59	.....	
<b>Arabia:</b>				
Aden.....	June 3-9.....	1	.....	Oct. 6, 1 case.
<b>Argentina:</b>				
Buenos Aires.....	Apr. 1-July 31.....	.....	11	
<b>Australia:</b>				
<b>New South Wales.</b>				Total July 1-Sept 11: Cases, 73.
Cootamundra.....	Aug. 7-Sept. 11....	1	.....	
Goulburn.....	July 1-31.....	1	.....	
Ilkabo.....	Aug. 7-Sept. 11....	1	.....	
Bardon.....	.....do.....	1	.....	
Lithgow.....	July 1-31.....	1	.....	
Liverpool.....	Aug. 7-Sept. 11....	2	.....	
Newcastle.....	July 1-31.....	1	.....	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Australia—Continued.</b>				
<b>New South Wales—Contd.</b>				
Nyngan.....	July 1-31.....	1	.....	
Parkes.....	do.....	5	.....	
Penrith.....	do.....	2	.....	
Sydney.....	July 1-Sept. 11.....	721	.....	
Taree.....	July 1-31.....	2	.....	
Ulmsarra.....	do.....	2	.....	
<b>Queensland—</b>				
Brisbane.....	Aug. 7-Sept. 11.....	1	.....	
Ipswich.....	July 1-Sept. 11.....	4	.....	
Toowoomba.....	July 1-31.....	1	.....	
South Australia.....	July 17-Aug. 2.....	1	.....	
<b>Victoria—</b>				
Melbourne.....	July 14.....	.....	.....	1 case on s. s. Karoola from Sydney.
<b>Austria-Hungary:</b>				
Coastland.....	July 6-12.....	1	.....	
Fiume.....	May 27-July 7.....	19	1	
Galicja.....	July 6-Aug. 12.....	1	.....	
Gorz and Gradinska.....	Aug. 7-14.....	1	.....	
Krain.....	do.....	1	.....	
Trieste.....	June 1-Oct. 4.....	41	1	Cases June 14 from Patras.
Tyrol and Vorarlberg.....	Aug. 10-Oct. 4.....	5	.....	
<b>Belgium:</b>				
Antwerp.....	July 1-7.....	1	.....	
<b>Brazil:</b>				
Bahia.....	May 11-Aug. 30.....	13	1	
Manaos.....	June 15-21.....	1	.....	
Para.....	June 15-Oct. 18.....	67	32	
Pernambuco.....	May 1-Sept. 30.....	.....	250	
Rio de Janeiro.....	May 4-Sept. 13.....	175	27	
<b>British East Africa:</b>				
Mombasa.....	Mar. 1-June 30.....	29	9	
<b>Canada:</b>				
<b>Provinces—</b>				
<b>British Columbia—</b>				
Vancouver.....	June 8-Sept. 13.....	2	.....	
<b>Manitoba—</b>				
Winnipeg.....	June 15-Oct. 18.....	20	.....	
<b>Nova Scotia—</b>				
Sydney.....	July 14-Aug. 2.....	2	.....	Case July 14 from s. s. Hartlepool from Marseille.
<b>Ontario—</b>				
Hamilton.....	Oct. 1-31.....	3	.....	
Fort William.....	June 10-30.....	4	.....	
Ottawa.....	June 8-Oct. 4.....	12	.....	
Toronto.....	June 16-Aug. 2.....	9	.....	
<b>Quebec—</b>				
Grosse Isle Quarantaine.....	June 20.....	1	1	In steerage.
Quebec.....	June 8-Sept. 20.....	6	.....	
Montreal.....	July 6-Nov. 1.....	70	2	
St. Johns.....	May 25-July 5.....	4	.....	
<b>Chile:</b>				
Iquique.....	June 1-21.....	2	.....	
Santiago.....	June 15-29.....	.....	.....	Present. Aug. 16-Sept. 13, epidemic.
Valparaiso.....	July 12.....	.....	.....	Present.
<b>China:</b>				
Amoy.....	May 25-June 7.....	.....	.....	Do.
Kulangsu.....	May 25-31.....	.....	.....	Do.
Chungking.....	Aug. 2.....	.....	.....	Do.
Dalny.....	July 27-Oct. 20.....	2	1	
Holhow.....	.....	.....	.....	Aug. 22, free.
Hongkong.....	May 18-June 14.....	9	7	
Nanking.....	May 11-Sept. 27.....	.....	.....	Do.
Shanghai.....	May 19-Sept. 20.....	8	47	Deaths among natives.
Tientsin.....	June 8-14.....	.....	1	
<b>Dutch East Indies.</b>				
<b>Java—</b>				
Batavia.....	June 22-Sept. 13.....	17	6	
Surabaya.....	May 11-Aug. 29.....	11	5	
<b>Egypt:</b>				
Alexandria.....	May 28-Oct. 7.....	25	17	
Cairo.....	May 14-Sept. 9.....	42	10	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>France:</b>				
Limoges.....	Sept. 1-30.....	.....	21	
Lyon.....	June 23-29.....	.....	1	
Marseille.....	May 1-Sept. 30.....	.....	97	
Nantes.....	Aug. 3-9.....	1	.....	
Paris.....	May 25-Sept. 27.....	25	.....	
St. Etienne.....	Sept. 21-30.....	1	.....	
Toulon.....	Aug. 18.....	1	.....	
<b>Germany:</b>				Total June 8-Oct. 4: Cases, 7.
Berlin.....	Aug. 24-30.....	1	.....	
Kehl.....	June 1-July 31.....	2	1	
Strassburg.....	Aug. 1-31.....	1	.....	
<b>Great Britain:</b>				
Hull.....	Sept. 14-20.....	1	.....	
Liverpool.....	May 25-Oct. 18.....	6	1	
Manchester.....	July 20-26.....	1	.....	
<b>Greece:</b>				
Patras.....	June 9-Aug. 31.....	.....	9	
<b>India:</b>				
Bombay.....	May 26-Oct. 4.....	74	67	
Calcutta.....	Sept. 13-27.....	.....	2	
Karachi.....	May 25-Aug. 16.....	13	4	
Madras.....	May 24-Oct. 4.....	31	13	
Moolmaine.....	Mar. 30-June 28.....	5	5	
Do.....	Aug. 3-9.....	1	1	
Rangoon.....	May 1-Aug. 31.....	50	20	
<b>Indo-China:</b>				
Saigon.....	July 8-14.....	1	1	
<b>Italy:</b>				
Naples.....	Aug. 2-15.....	3	.....	
Rome.....	Jan. 5-11.....	1	1	
<b>Japan:</b>				Total Jan. 1-July 31: Cases, 57; deaths, 29.
Hokkaido.....	Apr. 1-30.....	1	.....	
Kanagawa ken.....	May 1-31.....	1	.....	
Kobe.....	June 23-29.....	1	.....	
Nagasaki ken.....	May 1-July 31.....	54	14	
Osaka ken.....	May 1-June 30.....	11	4	
Tokyo.....	June 18-July 31.....	11	7	Aug. 18, epidemic.
Yokohama.....	Aug. 19-25.....	1	1	
<b>Luxemburg:</b>				
Esch.....	May 17-31.....	2	.....	
<b>Mauritius:</b>	Apr. 13-July 5.....	1,019	106	
<b>Mexico:</b>				
Acapulco.....	May 25-Aug. 16.....	.....	5	
Aguascalientes.....	June 9-Sept. 21.....	.....	31	
Chihuahua.....	June 23-Aug. 2.....	.....	9	
Guadalajara.....	June 8-Oct. 18.....	80	.....	
Hermosillo.....	June 7-Sept. 13.....	126	85	Among troops.
Manzanillo.....	July 18.....	.....	.....	Present.
Mexico.....	Apr. 20-Sept. 20.....	235	130	
Monterey.....	June 9-Aug. 31.....	.....	7	
Oaxaca.....	Oct. 12-18.....	.....	1	
Panuco.....	Sept. 12.....	30	.....	
Puerto Mexico.....	July 1-31.....	.....	3	
San Luis Potosi.....	Apr. 27-Sept. 20.....	24	13	
Saltillo.....	Aug. 1-June 30.....	.....	25	
Vera Cruz.....	June 16-Sept. 13.....	10	2	
Tampico.....	Sept. 16-Oct. 20.....	3	2	
<b>Newfoundland:</b>				
St. Johns.....	June 15-Sept. 26.....	38	.....	
<b>Peru:</b>				Sept. 30, epidemic in Ancon, Callao, Chancay, Huaco, and Lima. Sept. 27, still present in Ancon and Huaco. In Lima Jan. 1-June 30, 235 cases were admitted to the lazaretto. First quarter, 1913: Cases, 57; second quarter, cases, 63.
<b>Philippine Islands:</b>				
<b>Portugal:</b>				
Lisbon.....	May 25-Oct. 18.....	72	.....	
<b>Russia:</b>				
Batoum.....	Apr. 1-May 31.....	4	.....	
Libau.....	June 2-July 20.....	3	1	
Moscow.....	May 18-Sept. 27.....	89	22	
Odessa.....	June 8-Aug. 23.....	58	15	
Riga.....	June 22-28.....	6	.....	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 28 to Nov. 14, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Russia—Continued.</b>				
St. Petersburg.....	May 18-Sept. 27...	26	1	
Siberia—				
Vladivostok.....	May 7-June 20....	3	.....	
Warsaw.....	Feb. 23-Aug. 23....	63	24	
<b>Samoa:</b>				
Apia.....				May 18, 1 death on transport Michael Jepson, from Hong-kong, and to June 4, 4 cases transferred from this vessel to a lighter 3 miles east.
<b>Servia:</b>				
Belgrade.....	June 1-Sept. 27....	16	3	July 16, present in Dubotzi, Neresmitza, and Volui.
<b>Siam:</b>				
Bangkok.....	Mar. 23-Aug. 9....		11	
<b>Spain:</b>				
Almeria.....	June 1-Aug. 31....		6	
Barcelona.....	June 8-Oct. 11....		87	
Cadiz.....	May 1-Sept. 30....		5	
Madrid.....	June 1-Sept. 30....		160	
Malaga.....	Aug. 1-31.....		1	
Seville.....	July 1-31.....		1	
Valencia.....	June 1-Oct. 4....	5	.....	
<b>Straits Settlements:</b>				
Singapore.....	May 4-10.....	1	1	
<b>Switzerland:</b>				
Cantons—				
Basel.....	June 1-Sept. 20....	37	.....	
Zurich.....	May 18-24.....	1	.....	From Paris.
<b>Turkey in Asia:</b>				
Beirut.....	May 25-Oct. 11....	84	51	
Damascus.....	June 1-7.....		.....	Present.
Mersina.....	May 25-July 12....		3	
Smyrna.....	Apr. 26-Aug. 2....		67	
<b>Turkey in Europe:</b>				
Constantinople.....	June 1-Oct. 11....		76	
Saloniki.....	June 2-Oct. 12....	39	39	
<b>Union of South Africa:</b>				
Johannesburg.....	May 10-June 7....	23	.....	
<b>Uruguay:</b>				
Montevideo.....	Sept. 16-30.....		1	
<b>West Indies:</b>				
Trinidad.....	Aug. 19.....	2	.....	On s. s. Danube and placed in quarantine 5 miles distant.

# SANITARY LEGISLATION.

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## STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

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### ARKANSAS.

#### **Local Health Officers—Powers and Duties of. (Reg. Bd. of H., May 16, 1913.<sup>1</sup>)**

1. The responsibility of placing quarantine or isolation rests solely with the health officer, who must satisfy himself of the existence of the disease in question before enforcing regulations governing the particular disease.

2. Health officers shall keep a record of all transactions with which they are officially concerned. They shall keep a complete record of all cases of communicable diseases reported within their jurisdiction; said record shall include the name of the disease, name of the patient, age, sex, color, address, and location, probable source of infection, measures taken for the prevention and spread, attending physician and nurse, together with the date quarantine or isolation was ordered, date released, date disinfected, name of person who disinfected the premises, termination of the case whether by death or recovery, and such other information as may seem necessary under a heading of "Remarks."

3. Health officers shall conform to the following rules:

(a) Make an annual sanitary survey and maintain a continuous sanitary supervision over the territory within their jurisdiction.

(b) Make a sanitary inspection at least once annually of all school buildings, places of public assemblage, and report thereon to those responsible for the maintenance of such school buildings and places of public assemblage.

(c) Take such steps as may be necessary to secure prompt and full reports by physicians of communicable diseases, and prompt and full registration of births and deaths.

(d) Enforce within their jurisdiction the provisions of the rules and regulations of the State board of health.

(e) Attend the annual conference of sanitary officers called by the State board of health.

4. *Records.*—They shall keep a complete record regarding the sanitary conditions of:

(a) Slaughterhouses, dairies, butcher shops, bakeshops, restaurants, boarding houses, hotels, rooming houses, bottling works, market places, factories, soda fountains, and all other places where food and drinks are sold.

(b) Schools, jails, almshouses, hospitals, and other public buildings and places of amusement.

(c) Stables, lumber camps, and sawmills.

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<sup>1</sup> These regulations were promulgated by the Arkansas State Board of Health under authority of the act of Feb. 25, 1913. (Public Health Reports, May 30, 1913, p. 1107.)

(d) An inspection of all such places shall be made at least once annually and as often as may be deemed necessary.

5. Written notice shall be served on all persons responsible for the conditions found to be unfavorable to the public health and the public comfort, as provided for by regulations governing such places.

6. A reinspection shall be made after three days to see that the changes ordered have been or are being carried out.

7. A summary report giving the number of places of each class inspected and notices served for the correction of public nuisances shall be forwarded to the State health officer on the 5th day of the month for the month preceding.

8. The city health officer, in addition to the duties prescribed for county health officers, shall furnish the State health officer at the end of each month a copy of all new regulations and ordinances which have been adopted for their cities relative to any sanitary measures.

9. City health officers in cities of the first class shall cause an inspection to be made of all public buildings, institutions, and other places mentioned as requiring inspection, to be inspected at least once every two months from November 1 to May 1 and once each month from May 1 to November 1.

10. Health officers should study the causes of excessive morbidity and mortality from any disease within their jurisdiction and endeavor to enlist the cooperation of all organizations and physicians for the improvement of the public health therein, and promote the information of the general public in all matters pertaining to the public health.

#### **Communicable Diseases—Control of. (Reg. Bd. of H., May 16, 1913.)**

11. *Notifiable diseases.*—For the purposes of these regulations the following-named diseases are declared to be contagious, infectious, and communicable and dangerous to the public health, and are made notifiable: Asiatic cholera, acute anterior poliomyelitis, epidemic cerebrospinal meningitis, chicken pox, diphtheria, hookworm disease, leprosy, malaria, measles, ophthalmia neonatorum, pellagra, plague, scarlet fever, smallpox, trachoma, tuberculosis (laryngeal and pulmonary), typhoid fever, typhus fever, whooping cough, yellow fever. Other communicable diseases not named in this list may at any time be declared notifiable as the necessity and public health demand, and regulations for their control shall apply when so ordered by the State board of health.

12. It shall be the duty of every physician in the State of Arkansas to report, as soon as possible, every case of communicable disease declared notifiable which occurs in his practice, or which he may be called upon to attend, to the local city or county health officer having jurisdiction. When there is no physician in attendance upon any case of communicable disease mentioned it shall be the duty of any person having knowledge of the same, by reason of attendance or upon whose premises a case of such disease is suspected to exist, to make a report as specified.

13. Such report shall be made in writing within 12 hours from the time a case is recognized and discovered, and shall contain the following particulars: Name of the disease; name of patient; age; sex; color; residence or location of patient; source of infection (if ascertainable); probable date of onset; what steps have been taken to prevent spread.

14. If the case be one of yellow fever, Asiatic cholera, bubonic plague, or smallpox, notification shall be made without delay to the local city or county health officer in whose jurisdiction such case occurs, and the health officer so notified shall, except for smallpox, notify by telephone or telegraph the State health officer, and for smallpox by first mail.

15. A weekly report of communicable diseases, giving number of cases, color and sex of each, and deaths, for the period ending Saturday of each week, shall be made by local, city, and county health officers to the State health officer, and where no such diseases have been reported the report shall so state.

16. The State health officer may require special daily reports of new cases and deaths of notifiable diseases occurring each day in any locality. Such report shall be furnished and transmitted by health officers, by mail, telephone, or telegraph, as directed.

17. For uniformity of reports, the manner and form in which permanent records of all reported cases shall be kept by city or county health officers shall conform to the forms required and demanded by the State health officer.

18. Local city or county health officers shall notify the State health officer of any unusual prevalence or epidemic of a disease not mentioned in the list of diseases made notifiable.

19. No person shall interfere with any health authorities having jurisdiction, carry or remove from one building to another, or from one locality to another, within or without the State, any patient affected with a communicable disease dangerous to the public health.

20. Health officers shall satisfy themselves that all preventive measures prescribed in these regulations for control and prevention of spread of infection are being carried out in each and all cases of communicable diseases reported to them.

21. Whenever a health officer shall know or suspect or be informed of the existence of any communicable disease declared notifiable, and no licensed physician is in attendance, or should a physician in attendance fail or refuse to report such case to the health officer, it shall be the duty of said health officer to investigate such case or cases of alleged communicable diseases and act as required, even when doubt exists, under the rules governing such cases of communicable diseases.

22. Where doubt exists as to the diagnosis, the health officer should enforce quarantine measures for the suspected disease as if it were a communicable disease, and refer the matter to the State officer, who will have an investigation made for final decision.

23. Whenever a case of obscure illness shall be reported to the health officer, which upon investigation presents symptoms of a disease subject to quarantine or isolation, but in which, in the judgment of the health officer, sufficient time has not elapsed to render a positive diagnosis of the disease possible, a temporary quarantine or isolation shall be imposed, which quarantine or isolation shall be in all respects governed by the same rules and regulations as a permanent quarantine or isolation. If the disease proves not to be one of a contagious or infectious nature, the health officer shall then declare the temporary quarantine or isolation terminated.

24. Any person reported suffering with a communicable disease residing in a boarding house, lodging house, hotel, or hospital shall be effectively isolated together with all his attendants, and where these regulations are obeyed the public need not fear transmission of the disease to them. The door of the sick room shall be placarded.

25. No quarantine regulations of commerce or travel shall be instituted or operated by any place, city, town, or county against another place or county in this or in any other State except by authority of the State health officer.

26. The State health officer shall impose such quarantine restrictions and regulations upon commerce and travel by railway, common carrier, or any other



means, and upon all individuals as in his judgment may be necessary to prevent the introduction of communicable diseases into the State or from one place to another within the State.

**27. Quarantine, isolation, and observation.**—The following degrees of control are to be carried out in all cases of communicable diseases declared notifiable: Quarantine, isolation, and observation.

**28. Quarantine.**—Quarantine is defined to mean and include—

(a) Strict isolation of the person sick and of those attendant upon him, in a room screened against flies and mosquitoes.

(b) Absolute prohibition of entrance to or exit from a building of any persons except the attending physician, health authorities, or any person or persons especially authorized by the health authorities.

(c) The following-named diseases shall be placed under quarantine: Plague, cholera, and typhus and yellow fever.

**29. Isolation.**—Isolation is defined to mean and include—

(a) Complete separation of the person sick with the communicable disease and of those attendant upon him, from all other persons on the premises, in a room screened against flies and mosquitoes.

(b) Prohibition of entrance to and exit from a building except against certain members of the family authorized by the health authorities under certain definite restrictions. Persons permitted ingress and egress under this regulation, who do not come in contact with the sick, may go about their occupations, provided they do not bring them in contact with assemblages of children. They must also refrain from visiting places of amusement, worship, or education.

**30. Placarding of premises.**—On all premises where a case of a communicable disease exists subject to quarantine or isolation, there shall be posted in conspicuous places, both at the back and front of the house or apartment, white placards bearing the name of the disease in large black letters with the following warning: "All persons are by this means notified of the presence of the above-named disease and are warned of the danger of coming in contact with it. It is unlawful to deface, mutilate, cover up, or remove this placard without the authority of the health officer. Penalty: Fine of not less than \$10 nor more than \$100, or by imprisonment not exceeding one month, or both." The placard shall be not less than 6 inches in width and 10 inches in length. In the case of scarlet fever the color of the placard shall be red; of diphtheria, blue; and of smallpox, yellow. For all other diseases the color shall be white.

**31.** The following-named diseases shall be placed under isolation: Acute anterior poliomyelitis, chicken pox, epidemic cerebrospinal meningitis, measles, smallpox, diphtheria, scarlet fever, and leprosy. Other restrictions governing this class of diseases shall be carried out according to the regulations laid down for each individual disease.

**32. Observation.**—Observation is defined to mean and include—

(a) Inspection from time to time by the local health officer of a person suffering from a communicable disease not subject to the regulations for isolation or quarantine.

(b) The supplying of information, printed or otherwise, to such persons relative to the measures for the care and prevention of the spread of infection. The health officer shall have such surveillance over such persons deemed necessary to prevent their becoming dangerous to the public health.

**33.** The following-named diseases shall be placed under observation: Tuberculosis, whooping cough, ophthalmia neonatorum, typhoid and paratyphoid fever, trachoma, malaria, pellagra, and hookworm disease.

34. Persons who have been exposed to a communicable disease may be placed under observation until the period of incubation has elapsed.

35. *Unlawful to remove placard.*—The fact of the alteration, destruction, or removal of any such notice shall be considered evidence that such notice was altered, destroyed, or removed by the occupant or persons having possession or control of the house or building upon which such notice is placed or posted, and it shall be the duty of the occupant having charge of the house or building to immediately notify the health officer having jurisdiction of such destruction or removal.

36. In the event that any of the general provisions for isolation and observation of communicable diseases are found to be violated, the local health officer may, with the approval of the State health officer, enforce quarantine.

37. *Release from quarantine.*—When persons confined in a house have recovered from a communicable disease, and when other persons confined in the house by reason of exposure, for which quarantine or isolation was established, are considered free from danger of spreading infection, the quarantine or isolation shall be raised by order of the health officer, but not until measures for disinfection applying to the particular disease have been carried out under the direction of the health officer or his authorized assistant.

38. It shall be the duty of every physician in attendance upon a case of a communicable disease to send to the health officer having jurisdiction a certificate signed by him certifying to the recovery or death of such case within 12 hours after he becomes aware of such recovery or death.

39. No person suffering from any communicable disease subject to quarantine or isolation shall be certified as having recovered therefrom until he is considered entirely free from communicating the disease to others, and the health officer shall satisfy himself that such is the case before ordering the removal of quarantine or isolation.

40. *Unoccupied premises to be cleaned.*—No person shall rent, or permit to be occupied, any apartment, residence, or building previously occupied by a person who has suffered from tuberculosis, scarlet fever, diphtheria, smallpox, or acute anterior poliomyelitis until the insides of such apartments shall have been thoroughly disinfected and cleaned under the supervision of a health officer or his assistant.

41. Every vacated house, store, office, or place of business or amusement in this State shall be thoroughly cleaned by means of the free use of water and a cleaning agent, vacuum cleaner, or other efficient and approved agent before being leased or used again.

42. There shall not be any public, house or church, funeral of any person who has died of plague, Asiatic cholera, smallpox, typhus fever, diphtheria, scarlet fever, acute anterior poliomyelitis, or epidemic cerebrospinal meningitis, and the attendance shall be limited, and only adults being allowed to participate in the brief service. The public notice of death of a person dying from one of the diseases enumerated in this paragraph shall state the name of the disease which caused the death.

43. No other persons than licensed physicians, undertakers, or nurses in attendance may enter or leave any house or building infected with any communicable disease subject to quarantine or isolation without first procuring permission from the health officer having jurisdiction and obeying absolutely his directions as to all sanitary precautions which he ordered.

44. No person recovering from a communicable disease shall leave the sick room or premises where he has been under quarantine or isolation until after removal of the placard, or warning card, by order of the health officer, in writing.

45. Physicians visiting patients under quarantine or isolation must take all possible precautions to avoid spreading the disease.

46. All dogs, cats, or other domestic pet animals shall be excluded from the room of persons ill of diseases requiring quarantine or isolation, and should be excluded from the house.

47. *Special regulations for communicable diseases.*—Asiatic cholera, plague, typhus and yellow fever shall be quarantined and reported at once by telephone or telegraph to the State health officer, when special instructions will be furnished.

#### SMALLPOX, VARIOLA, OR VARIOLOID.

48. *Isolation.*—Any person suffering with smallpox shall be isolated in a special room set aside for that purpose and from which all unnecessary furnishings have been removed. If such isolation can not be strictly enforced, then the patient should be removed to a hospital or place provided by the proper authorities for the care and treatment of such cases, provided this can be done without endangering the life of the patient.

*Placarding of premises.*—(See regulation 30.)

49. *Contacts.*—All persons who have been exposed or are likely to have been exposed to smallpox shall be immediately vaccinated and shall be under observation for 14 days from date of last exposure, unless they have had smallpox or have been successfully vaccinated within one year. All persons refusing to be vaccinated shall remain isolated 14 days.

50. Health officers shall vaccinate free, at stated hours and places, all persons who may apply for vaccination.

51. *Removal of placard.*—When the attending physician considers a smallpox patient as having recovered, after complete desquamation, he shall report the fact in writing to the health officer having jurisdiction, who shall thereupon remove or order removed the placard or warning card from the house. The patient must not leave the house until after the removal of the warning card.

52. *Disinfection.*—The apartments which have been occupied by a smallpox patient shall be deemed to be infected and when made vacant by death, removal, or recovery of the patient shall, together with their contents, be thoroughly cleaned and disinfected under the supervision or direction of the local health officer. All persons having been ill from smallpox shall, before being released from their isolation, have their clothing disinfected and take a disinfecting bath.

#### SCARLET FEVER.

53. *Isolation.*—Every case of scarlet fever shall be isolated in a special room set aside for that purpose and from which all unnecessary furnishings have been removed. If such complete isolation can not be enforced, then the case should be removed to a hospital or place provided by local authorities for the care and treatment of such cases, and such isolation shall continue until all evidences of inflammation of the nose, throat, and accessory cavities have disappeared, desquamation complete, and until after terminal disinfection.

*Placarding of premises.*—(See regulation 30.)

54. *Disinfection.*—The apartments occupied by a scarlet-fever patient shall be deemed infected and when vacated by death, removal, or recovery of the patient shall, together with their contents, be thoroughly disinfected under the supervision or direction of the health officer. All persons having occupied such apartments during the period of isolation shall have their clothing disinfected and shall take a disinfecting bath previous to their release from the isolated

apartment. All disinfection prescribed in this rule shall be a part of the control of the disease.

55. *Contacts*.—Residence in a household where scarlet fever exists shall constitute exposure, and adults residing therein may pursue their ordinary vocations, provided they have furnished a signed statement to the health officer declaring that they will not come in contact with the patient or the patient's room. School children, teachers, or others having to do with children shall be excluded from all schools or any public or private gathering whatever for 10 days of observation after last exposure to any case of scarlet fever within the household or termination of all restrictions for isolation.

56. *Children to be removed from school*.—During the prevalence of scarlet fever in a community teachers and others in charge of schools shall exclude children showing evidence of inflammation of the throat.

57. *Sale of milk, etc.*—No milk, butter, or other dairy product shall be sold or given to any person or delivered at any creamery or butter factory from a house where a case of scarlet fever exists.

58. No person residing in a house where a case of scarlet fever is under isolation shall be engaged in the handling of milk or other dairy products.

#### DIPHTHERIA (MEMBRANOUS CROUP).

59. *Isolation*.—Isolate the patient as for scarlet fever and until the secretions from the nose and throat are free from the diphtheria bacilli as shown by two consecutive bacteriological examinations of such secretions, made at intervals of not less than 48 hours. Culture tubes will be furnished and examination made free of charge for counties and cities that do not maintain a bacteriological laboratory upon application to the hygienic laboratory of the State board of health.

60. If a bacteriological examination is not possible the patient shall be held under isolation for a period of two weeks after all evidence of sore throat or any discharge from the eyes, ears, nose, or throat has disappeared.

*Placarding of premises*.—(See regulation 30.)

61. *Contacts*.—Children and other persons who have been exposed to diphtheria not residing in a house where a case exists shall be isolated until shown by a bacteriological examination to be free of the diphtheria organism; when such examinations are not made they shall be kept in isolation for three days after an immunizing dose of diphtheria antitoxin of not less than 1,000 units has been administered; and when no such immunizing dose of diphtheria antitoxin has been administered the period of isolation shall be seven days since last possible exposure.

62. Children and other persons residing in a house in which a case of diphtheria exists shall be detained in their homes until the patient is released from isolation, after which they shall be subject to the restrictions mentioned in regulation 61. Wage earners shall be allowed to continue their occupations when employed in industries other than the production, manufacture, or sale of wearing apparel and foodstuff, and when their employment does not bring them in contact with children.

63. *Disinfection*.—Apartments occupied by a diphtheria patient shall be deemed to be infected, and when vacated by death, removal, or recovery of the patient shall, together with their contents, be thoroughly disinfected. All persons having occupied such apartments during the period of isolation shall have their clothing disinfected and take a disinfecting bath before being released from isolation. All disinfection prescribed in this rule shall be a part of the control of the disease.

64. *Sale of milk.*—No milk, butter, or other dairy product shall be sold or given to any person or delivered at any creamery or butter factory from a house under isolation because of the presence of diphtheria therein.

#### MEASLES.

65. *Isolation.*—All cases of measles shall be isolated as soon as the nature of the affection is suspected, and such isolation shall be continued until all catarrhal symptoms have disappeared. The fact of the disappearance of symptoms shall be determined by the proper local health authority, and this should determine the removal of quarantine by him.

*Placarding of premises.*—(See regulation 30).

66. *Contacts.*—Children and others who have been in contact with measles patients, and those living in the same house where cases are present, shall not be required to be isolated, but shall be prohibited from attending school or other public gathering for a period of 14 days from last possible exposure. In the event of such children developing catarrhal symptoms, however, they shall be at once isolated.

67. *Notification of cases to teachers.*—Teachers and others in charge of schools shall be promptly notified by the proper health authority of the names of pupils who have developed measles and the names of contacts who have been prohibited from attending school.

68. During the prevalence of measles in a community, teachers and others in charge of schools shall exclude children presenting catarrhal symptoms indicative of the disease. Teachers shall report to the health officer immediately the names of pupils who have been so excluded. Before permitting a child to return to school a certificate shall be required from the health officer or attending physician that it is no longer likely to convey infection.

69. *Disinfection.*—The discharges and articles soiled by the discharge shall be promptly disinfected during the course of the disease. Terminal disinfection is not necessary, but the room should be thoroughly aired for 24 hours before it is occupied by a well person.

#### CHICKEN POX.

70. All persons affected with chicken pox shall be excluded from school and shall not be allowed to associate with other children.

71. *Chicken pox in adults.*—Chicken pox in adults occurs occasionally, but as this name is frequently given to evade the diagnosis of mild cases of smallpox, it is hereby required that every case be reported and treated by isolation of the adult patient until released by the health officer.

#### WHOOPIING COUGH.

72. *Observation.*—Separate the patient from direct contact with other members of the family for not less than five weeks from the beginning of the disease, and longer, if necessary, until the "whoop" has entirely ceased. The patient should be cautioned not to cough in the presence of children.

73. Children of the household should be prevented from coming in intimate contact with the sick.

**ACUTE ANTERIOR POLIOMYELITIS (INFANTILE PARALYSIS).**

74. *Isolation.*—The patient shall be isolated for a period of two weeks from the onset of symptoms and according to the rules governing cases subject to isolation.

*Placarding.*—(See regulation 30.)

75. Discharges from the throat, nose, and mouth of the patient must be received on cloths and burned at once. Other discharges shall be disinfected before being allowed to leave the sick room.

76. *Disinfection.*—After death or termination of the case all personal clothing and bedding of the patient, together with the contents of the room and the room itself, shall be thoroughly disinfected and the destruction of any flies assured, under the supervision of the health officer.

77. *Contacts.*—Children, teachers, or others having to do with children, residing in an affected household, shall be kept under observation until isolation measures have been removed and the premises properly disinfected.

**EPIDEMIC CEREBROSPINAL MENINGITIS.**

78. *Isolation.*—Isolate the patient for a period of at least two weeks from onset of symptoms.

*Placarding of premises.*—(See regulation 30.)

79. *Disinfection.*—The discharges from the throat, nose, and mouth of the patient must be received on cloths and burned, or the cloths may be immersed in boiling water or a disinfectant solution. Free ventilation of the sick room and exposure to sunlight of articles coming from the sick room will suffice in lieu of disinfection.

80. Persons living in a house where the disease is present should use disinfectant sprays for the nose and throat and should not mingle with the general public as provided for under the general rules for isolation.

81. *Contacts.*—All children from a household where a case is under isolation shall be excluded from school until such time as in the opinion of the local health officer all danger of conveying the disease has passed.

**LEPROSY.**

82. Cases of leprosy which are in the ulcerated stage or show the bacillus of leprosy in the sputum or nasal secretions, on microscopic examination, shall be subject to rigid segregation and quarantine according to directions to be issued by the State health officer.

83. Ordinary cases of leprosy shall be isolated as provided by general regulations.

**OPHTHALMIA NEONATORUM.**

84. Should one or both eyes of an infant become inflamed or swollen or reddened, or should any pus or secretion form in the eyes or upon the edge of the lids at any time, it shall be the duty of the midwife, nurse, or other person having charge of such infant to report, within 6 hours, to the local health officer, or to some legally qualified practitioner of medicine in the community in which such case shall occur the fact that such inflammation, swelling, or redness or accumulation in the eyes exists.

85. It shall be the duty of said health officer or physician, immediately upon receipt of the report, to notify the parents or person having charge of said

infant of the danger to the eyes of said infant by reason of any neglect of proper treatment, and he shall give directions for the proper treatment thereof.

#### TUBERCULOSIS.

86. No person affected with pulmonary or laryngeal tuberculosis shall so dispose of the sputum or other bodily secretion or excretion as to cause offense or danger to any person or persons.

87. Any health officer receiving a complaint to the effect that the foregoing regulation is being violated shall investigate the same, and if it appears that the violation complained of is such as to cause offense or danger, he shall require him or her to dispose of the sputum or other infectious bodily secretion or excretion in such a manner as to remove all reasonable cause of offense or danger.

88. The apartments occupied by a tuberculosis patient shall be deemed to be infected, and when vacated by death or removal of the patient shall, together with their contents, be thoroughly disinfected under the supervision of the health officer. All disinfection prescribed in this rule shall be a part of the control of the disease.

#### TYPHOID AND PARATYPHOID FEVER.

89. No person affected with typhoid fever or in charge of a typhoid-fever patient shall so dispose of the excreta or other infectious bodily secretion or excretion so as to cause offense or danger to any person or persons.

90. Health officers shall direct those having charge of a typhoid-fever patient to immediately disinfect the excreta or other infectious bodily secretion or excretions coming from such patient.

91. The possible source of infection of cases of typhoid fever shall be carefully investigated by all health officers, and they shall make report thereof to the State health officer. Prompt measures must be taken to prevent any further infection from the known source.

92. Every case of typhoid fever should be isolated in a room set aside for that purpose, or hospital, and securely screened against flies. The health officer shall order and enforce screening of the apartment or room in which the patient is confined.

#### TRACHOMA.

93. No child suffering from trachoma shall be allowed to attend any private, public, or parochial school, unless under the close supervision of a competent physician, who shall certify in writing to the school board and the health officer that the case is not in a contagious stage.

(Sections 94 to 121 describe disinfectants and methods of disinfection.)

#### SCHOOLS.

122. Pupils actually infected with the following-named diseases shall be excluded from school during the existence of the disease and shall be readmitted only upon presenting a certificate from a licensed physician attesting to their recovery: Tonsillitis, trachoma (or sore eyes of any kind), scabies (itch), pediculosis capitis (head lice), pediculosis corporis (body lice), tinea circinata (ringworm), impetigo contagiosa, favus.

No person suffering from any communicable disease shall be employed as teacher or janitor or in any capacity which brings them in contact with children in any public school in this State.

123. The teacher or principal shall exclude from school any child suspected to be suffering from any communicable disease, pending examination, and report from a licensed physician.

124. No pupil who has suffered and recovered from a communicable disease while attending school, or who has recently suffered from a communicable disease, shall be permitted to reenter or enter, as the case may be, any school except upon certificate of a licensed and competent physician, setting forth that all rules and regulations have been complied with, and that the pupil presents no evidence of the disease and is incapable of conveying the infection.

125. No person shall be entered as a teacher, employee, or pupil in a public or private school in this State without having first presented to the principal in charge or the proper authorities a certificate from a licensed and competent physician of this State certifying that the said teacher, employee, or pupil has been successfully vaccinated; or in lieu of a certificate of successful vaccination a certificate certifying a recent vaccination done in a proper manner by a competent physician or a certificate showing immunity from having had smallpox.

126. Teachers boarding or residing in a family in which any disease subject to quarantine is known or suspected to exist shall immediately remove to premises not so infected, and provided they have not been actually exposed to scarlet fever, diphtheria, or smallpox, may be allowed to continue their attendance at school: *Provided*, That in the case of smallpox such teacher has been successfully vaccinated and recently revaccinated within one year; and in the case of diphtheria and epidemic cerebrospinal meningitis that bacteriological examination of the discharges from the throat and nose proves negative, may be permitted to return to discharge school duties.

127. Every building used for school purposes, and in which school both sexes are in attendance, shall be furnished with at least two closets, one for males and one for females, and so arranged as to afford the greatest possible privacy. Buildings to which water and sewerage are available shall be provided with water-closets and connected with the sewerage system. When water and sewerage are not available, buildings, dry closets, privies, or other sanitary provisions shall be provided, which shall be flyproof in construction and built and maintained in accordance with the plans and specifications of the State board of health.

NOTE.—Plans and specifications of dry closets will be furnished by the State board on application.

128. Sanitary drinking fountains and other devices, or individual drinking cups, shall be used exclusively in all schools. Where it is necessary to use a water receptacle, a tank with a faucet shall be provided. A common drinking cup or pail is prohibited. (See regulation 255.)

129. In communities where there is no public water supply, tubular or driven wells with pump should be provided to furnish water for drinking purposes. Water from a dug well, unless provided with a pump and protected from seepage, should not be used for drinking purposes in public schools. The source of water must be located at least 150 feet from any closet, horse lot, cowpen, or any other thing that might pollute the soil; and in no case shall it be placed at a lower altitude than the closet.

130. Buckets and all open water receptacles are condemned and forbidden. When water is not supplied at the pump or from water faucets, or from sanitary drinking fountains, then covered tanks or coolers, with free flowing faucets, shall be supplied.



131. Where springs are used as a source of water supply for schools, they shall be strictly guarded against contamination through soil pollution, drippings or waste water, and under no condition shall pools, sodden places, or large or small mudholes be allowed to exist within 125 feet of the source of the water supply.

132. Water and soap for hand washing shall be provided. Towels for common use are prohibited. Paper towels are recommended.

133. Teachers should instruct pupils to wash their hands immediately after visiting water-closets, outhouses, or comfort stations.

134. Ventilation must be carefully attended to in all schoolrooms, and when a special ventilating system is not installed it shall be the duty of teachers to flood the schoolrooms with fresh air by opening the windows and doors at recess and at noontime, and daily at other times whenever the air becomes close or foul.

During cold weather, the pupils should be given calisthenic exercises during the time windows are open with school in session.

135. Dry dusting and sweeping is condemned and prohibited. Before sweeping, light sprinkling of the floor with dampened or oiled (kerosene) sawdust or paper is recommended.

136. In dusting, oiled (kerosene) or dampened cloths shall be used. Feather dusters shall not be used.

**Public Buildings—Care and Maintenance of. (Reg. Bd. of H., May 16, 1913.)**

137. State, county, city, and town institutions, theaters, halls, places of amusement, office buildings, churches, and any other buildings used for public meetings, shall conform in their sanitary arrangements to the requirements of the State board of health, and shall at all times be kept in a clean and sanitary condition.

138. *Ventilation and lighting.*—Every such building shall be provided with proper methods for maintaining the purity of the air within such building, and a suitable number of windows and doors shall be provided. Ample exhaust fans or other auxiliary means may be installed for proper ventilation. For lighting, the glass area of windows shall equal one-fifth of the floor space of the room.

139. *Water-closets and urinals.*—Water-closets and urinals must be provided in all public buildings, and shall be connected with the public sewer: *Provided*, No sewer system exists and other means for the disposal of human excreta are used, plans for sewage and waste disposal for public institutions must be submitted for approval by the State health officer, and for other public buildings named for approval by the local health officer.

140. *Methods of cleaning.*—All buildings used for public meetings shall be cleaned after each meeting held in them, such cleaning to consist of thorough sweeping of floors and the wiping of woodwork, together with the opening of all windows and doors, to permit the entrance of fresh air and sunshine; said windows and doors to remain open not less than three hours. Sweeping of the floors must be done in such manner that dust will not arise, either by the use of the pneumatic vacuum process or by sprinkling sufficient sawdust or paper dampened with oil or water to allay the dust. For the removal of dust a cloth dampened with oil or water shall be used. Mopping may be substituted for sweeping.

NOTE.—In construing this rule, all meetings held in a single day shall be regarded as one meeting.

141. *Spittoons*.—No spittoons or cuspidors, shall be placed in theaters, churches, lecture halls, indoor places of amusements, restaurants or other places where food is served. In all other public buildings wide-mouthed cuspidors, or spittoons, shall be provided, and shall contain water at least 1 inch in depth. Such spittoons and cuspidors shall be emptied, washed, and rinsed with water and rendered thoroughly clean daily.

142. *Heating*.—All public buildings shall be provided with proper heating facilities for the comfort of the occupants, and should be maintained at a temperature between 68° and 72° F. and shall never be superheated.

143. *Common drinking cup and common towel prohibited*.—The use of the common drinking cup and the common towel is prohibited. (See regulations 255 and 256.)

144. *Water supply*.—Water supply for all such buildings must be from a pure source and kept at all times in such a manner as to prevent contamination or pollution.

**Hotels, Boarding Houses, and Lodging Houses—Sanitation of. (Reg. Bd. of H., May 16, 1913.)**

145. *Sanitary conditions*.—Every hotel, boarding house, or lodging house shall have the premises well drained and shall be kept at all times in a clean and sanitary condition, free from vermin, and free from effluvia arising from any sewer, drain, privy, or other source within the control of the proprietor. All walls, ceilings, floors, and furniture shall be kept free of dust and dirt.

146. *Ventilation*.—Every room which has been occupied by any person shall be properly ventilated and aired for at least three hours after cleaning, by completely opening the windows, by raising the lower sash at least 15 inches and lowering the upper sash at least 15 inches: *Provided*, The construction of the windows will permit it.

147. *Water-closets and privies*.—All hotels, boarding houses, or lodging houses shall be provided with water-closets connected with a sewerage system if possible; if not possible or reasonable to connect with sewer, and privies are used, they shall be properly screened, amply ventilated, and lighted with window light, communicating directly with the external air. Sufficient suitable, and separate privy accommodations shall be provided for the use of males and females. These structures shall conform in construction with the regulations providing for the proper disposal of human excreta. (See regulations 216 *et seq.*)

**NOTE**.—Plans and specifications for sanitary privies will be sent on application.

148. *Furnishings of bedrooms*.—Every hotel shall furnish clean and fresh bed linen unused by any other person or guest since the last laundering of such bed linens, on all beds assigned to the use of any guest or patron of such hotel. The sheet shall be of sufficient width and length to reach the entire length of the bed, cot, or other sleeping place, and with 3 feet extra to cover the upper or head end which shall be lapped back over any other covering thereon.

149. *Airing bedding*.—All beds, mattresses, and bed coverings shall be kept clean, free from dust, dirt, vermin, and anything objectionable to sight or smell. All mattresses, pillows, and bedding shall be exposed to fresh air for at least three hours every two weeks.

150. *Care of toilet articles*.—All bowls, pitchers, and other toilet articles used in a room shall be made thoroughly clean. Toilet articles used for the reception of excreta shall be washed and rinsed out with scalding water. Pitchers shall be emptied and refilled with fresh water upon the reception of a guest.

151. *Vessels to be of earthenware*.—All toilet articles, including basin, slop jar, urinals, and pitchers shall be made of earthenware, granite, or enamel ware,

and shall always be in perfect repair. No tin or iron ware articles shall be furnished.

152. *Clean towels*.—At least two clean towels, not less than 18 by 36 inches in dimensions, and one bath towel and plenty of soap shall be furnished daily to each guest.

153. *Drinking glass*.—A clean drinking glass which has been thoroughly washed in boiling water shall be furnished to each guest.

154. *Fire escape*.—It shall be the duty of every person operating any hotel or inn containing seven rooms or more, of two stories high or more, to have a rope not less than one-half inch in diameter and knotted not more than 15 inches apart and of sufficient strength to hold up 500 pounds and long enough to extend within 24 inches of the ground. The rope shall be securely attached to the window sill or wall of one window in each room above the first story of said building to be occupied by guests. The rope shall be kept in full view at all times and protected against dust and shall be placarded "Fire escape." This law does not apply to hotels equipped with iron fire escapes.

155. *Screening*.—It shall be the duty of every hotel or inn keeper to properly screen with wire gauze, not less than 18 mesh, all openings communicating with the exterior of the building, windows of sleeping apartments, the doors and windows of the kitchen and dining rooms, so as to effectively prevent the entry of flies, mosquitoes, and other insects into the building.

156. *Cleaning*.—All floors without fixed carpets, including the halls, galleries, staircases, passages, kitchen, dining rooms, and toilet rooms, shall be scrubbed at least twice a week with soap and water.

157. *Dusting and sweeping*.—Dry sweeping and dusting is condemned and prohibited. Sweeping must be performed daily at such an hour when free of occupants and must be done in such a way that dust will not arise, by the use of either the pneumatic vacuum process, or by sprinkling sufficient sawdust or paper, dampened with oil (kerosene) or water to allay the dust. For removal of dust, cloth dampened with oil or water shall be used. Floors should be mopped or scrubbed.

158. *Bathing facilities*.—Every hotel shall have an ample number of sanitary bath tubs or shower baths, where a public water supply is obtainable, for the use of guests, and an ample supply of hot and cold water for bathing purposes shall be furnished.

159. *Refrigerators and ice*.—Hotels, boarding houses, restaurants, eating houses, and all other places where food and drinks are prepared, served, sold, or stored shall have every ice box or refrigerator scoured with boiling water at least once each week, and oftener if necessary, and shall always be kept in a cleanly condition. Ice must be washed before being put into ice boxes and handled with tongs, never with the bare hands. No decomposing foods shall be allowed to remain in ice boxes or refrigerators. Milk and butter shall be kept in separate compartments from meat and vegetables.

160. *Garbage and refuse*.—Every restaurant, hotel, boarding house, inn, or any eating house shall provide a suitable covered receptacle for liquid garbage and refuse, and said receptacle must be emptied and its contents removed from the premises at least once daily.

161. *Diseases*.—No person suffering with active tuberculosis in any form or venereal diseases in a communicable stage or with a communicable skin disease shall be employed in a hotel, lodging house, restaurant, eating house, or places where food or drink is handled or served or other places patronized by the public where such communicable disease might be conveyed to other persons.

162. *Spitting*.—Notices reading as follows: "Do not spit on the floor; to do so may spread disease," shall be prominently posted in corridors, hallways, and lavatories.

**Bakeries—Construction and Maintenance of. (Reg. Bd. of H., May 16, 1913.)**

163. Every place used as a bakery shall be kept in a clean and sanitary condition as to its floors, sidewalks, ceilings, woodwork, fixtures, furniture, tools, machinery, and utensils.

164. All parts of the bakery shall be adequately lighted and shall be ventilated by means of windows, skylights, air shafts, air ducts, or mechanical apparatus, if necessary, so as to insure the free circulation of air at all times.

165. The floor of every place used as a bakery shall be at least 12 inches above the ground, unless constructed of cement, asphalt, or other impervious material, and must be thoroughly scrubbed not less than twice a week.

166. The floors must be water-tight and substantial, and the angles, where they join with the walls, shall be made and maintained so as to be rat proof.

167. All doors, windows, and other openings shall be screened with 18-mesh wire and have suitable shutters of wood or glass to protect against dust, dirt, and insects.

168. Walls and ceilings shall be smooth and tight and kept in good repair; shall be kept well painted, white, or lime washed or kalsomined, and all woodwork, except floors, shall be kept well painted with oil paint.

169. Every bakery shall be provided with adequate plumbing arrangements and drainage facilities, including well-ventilated water-closets and impermeable sinks on iron supports. No water-closet shall be in direct communication with a bakery.

170. No person shall sleep in any bakery where flour, meal, or food products are handled or stored.

171. No domestic animals shall be permitted in a bakery or place where flour or meal is stored or manufactured bakery products are kept or offered for sale.

172. Storage rooms shall be separated from bakery and shall be of rat-proof construction.

173. All workmen and employees engaged in the manufacture or handling of bakery products in a bakery shall wear outer garments of washable material, which shall be kept clean at all times. They shall cleanse their hands and finger nails thoroughly before beginning work.

174. Spitting on the floor is prohibited, and the use of tobacco in any form is prohibited.

175. Every bakery shall be kept clean and at all times free from rats, mice, flies, vermin, dogs, cats, or other animals. Dry sweeping and dusting is prohibited.

176. All storage rooms where flour and meal are kept for use in connection with any bakery shall be dry and well ventilated; and all shelves, cupboards, trays, troughs, bins, cases, and other appliances for handling or storing the same shall be arranged so that they can be easily removed and cleaned.

177. All bread offered or intended for sale shall be suitably wrapped, each loaf separately, in paraffin or other clean paper, in such a manner as to completely protect the bread from dust, dirt, flies, or any vermin; said wrapping to be done at the shop or plant where said product is made.

**Milk and Milk Products—Production, Care, and Sale of. (Reg. Bd. of H., May 16, 1913.)**

178. Any person owning or managing a dairy or dairy farm, the products of which are sold, shall conform to each and every rule herein set forth for maintaining and handling all such products in a cleanly and sanitary condition.

179. *Cows.*—Cows shall be in a healthy condition, and should be tested for tuberculosis once a year, and those reacting or showing evidence of tuberculosis shall be removed.

180. Cows shall be kept in a cleanly condition, curried and brushed daily. Bedding shall be fresh, and the temperature of the stable kept comfortable.

181. *Location of stables.*—Stables shall be located on ground which is well-drained and free from any contaminating surroundings.

182. *Construction.*—Stables shall have water-tight floors and gutters for proper drainage; walls and ceilings to be tight and smooth. A proper stall for feeding shall be provided.

183. *Light.*—Provision shall be made for 4 square feet of glass light for each cow, and such light shall be of even distribution.

184. *Ventilation.*—An automatic ventilating system should be installed if practicable.

185. *Cubic feet of space per cow.*—There shall be provided not less than 500 cubic feet of space per cow.

186. *Barn roof.*—A cover to the barn shall be provided so as to protect cows from rain and sunshine, and if the roof is a slanting one, the lowest place shall be not less than 8 feet above the ground.

187. *Cleanliness of stables.*—Stables shall be kept clean at all times. The floors, walls, ceilings, and ledges to be kept free from dust or dirt. Mangers, partitions, and windows shall also be kept clean.

188. *Storage of food.*—If any foodstuffs are stored in the loft, the floor of such loft shall be absolutely tight so that no particles of foodstuffs may come through. No storage of foodstuffs above the stalls shall be permitted unless the floor be tight and dust proof.

189. *Removal and care of manure.*—The barnyard shall at all times be kept clean and well-drained; manure or any other refuse shall be removed twice a day to a distance of at least 150 feet from the barn or stables and stored into a fly and wind proof receptacle.

190. *Milk room—Construction.*—The milk room shall be provided with doors and windows securely screened against flies; tight walls and floors kept constantly clean; the walls and floor to be of such construction as to allow easy and thorough cleansing, and all walls and ceilings shall have ample light and ventilation.

191. *Location of milk room.*—The milk room shall be free from contaminating surroundings and shall be removed from all barns at least 150 feet.

192. No portion of the building shall be used for stabling any other animal fowls, or for sleeping purposes, nor shall any cows used for dairy purposes be stabled in any portion of the building.

193. No water closet, privy or cesspool, urinal, or other source of contamination shall be erected, kept, or permitted within 150 feet of the room or portion of the building where cows are stabled, or in which milk or other dairy product is stored, mixed, or altered.

194. *Utensils and milking.*—Water for cleaning all milk utensils shall be clean, convenient, and abundant. A small topped milking pail is recommended. Facilities for hot water and steam shall be in the milk house and not in the kitchen.

195. Employees shall be provided with clean milking suits made of washable material.

196. Every care shall be taken to maintain absolute cleanliness of milking utensils, which should be thoroughly washed and sterilized in live steam before being placed in use for the reception of milk.

197. Personal cleanliness of employees shall at all times be maintained, who shall, before milking, wash their hands, clean their finger nails, and milk with dry hands.

198. The udders of cows shall be washed and dried immediately before milking.

199. *Handling the milk.*—All milk removed shall be handled by attendants having clean hands, and whose outer garments are of clean, washable material. Milk shall be removed immediately from the stable and cooled immediately after milking each cow.

200. No person suffering from a communicable disease or residing in a house where such disease is under treatment, and subject to quarantine, isolation, or observation, shall in any way handle, furnish, or sell milk or its products unless especially authorized by the local health officer.

201. No person shall sell or offer for sale any milk or dairy product from cows which have not been tested for tuberculosis and found to be free of the disease; nor from any cow known or suspected to be suffering from any local or general disease which is liable to render the milk from said cow unwholesome; nor milk watered or adulterated milk or milk known as swill milk, or milk from cows that are fed on swill, garbage, or other like substance, nor any butter or cheese made from any such milk.

#### **Camps and Resorts—Sanitation of. (Reg. Bd. of H., May 16, 1913.)**

202. The owner, agent, manager, or foreman of any lumbering camp, mining camp, sawmill camp, railroad camp, boarding car or construction camp, pleasure camp or resort, or so-called open-air health resort, or industry requiring the establishment of a camp, shall be responsible for the proper execution and enforcement of any regulations herein contained, or of any clause of any health regulation governing any case or circumstance for the proper sanitation and cleanliness thereof.

203. Kitchen, dining room, or eating room shall be screened, and shall be provided with proper facilities for the cleanliness of the employees.

204. Garbage and all refuse shall be disposed of so as not to create a nuisance or to contaminate drinking water, and in all and other respects conform to the regulations as provided elsewhere.

Pure and wholesome water in sufficient quantities shall be furnished at all times.

205. Latrines, earth, or other closets located not less than 150 feet distant from the nearest dwelling or kitchen, shall be constructed at every camp or resort, and in other respects conform to the regulations providing for the proper disposal of human excreta.

206. Stables in connection with any camp or resort must be so located as not to contaminate the water supply of the camp or of any neighboring community, and they shall be not less than 150 feet from the nearest dwelling or kitchen, or from the source of water supply.

207. A hospital building, or tent, shall be furnished for the care and treatment of any person suffering with a communicable disease.

208. Should any communicable disease requiring quarantine or isolation or any unusual amount of illness break out in any camp the nearest health officer within whose jurisdiction the camp is located shall at once be notified by the person in charge.

**Boarding and Construction Cars—Sanitation of. (Reg. Bd. of H., May 16, 1913.)**

209. Boarding cars, camp houses, or any wooden structures used in connection with any camp shall have all walls and ceilings whitewashed every three months, or painted every six months; the floors thereof must be scoured with soap or other cleansing agent and water at least twice a week, and said dwellings shall be constantly maintained in a sanitary condition free from vermin.

210. Boarding and construction cars shall be kept in a clean and sanitary condition at all times, and due regard shall be had for the comfort of those employed in and on such cars. Flies and mosquitoes shall be screened against, and water and food protected against contamination from any source.

211. All bunks or beds shall be kept clean and thoroughly aired every day.

212. Pure and wholesome water shall be furnished in sufficient quantities for drinking and domestic purposes at all times.

213. No nuisance shall be committed on any boarding or construction car which is repugnant to the senses.

**Privies and Cesspools—Construction, Maintenance, and Disposal of Contents. (Reg. Bd. of H., May 16, 1913.)**

214. In cities, towns, and villages, incorporated or unincorporated, all human excreta shall be deposited in sewers, cesspools, vaults, septic tanks, dry closets, or incinerators of special construction.

215. All cities and towns not now operating a sewerage system shall, before undertaking the installation of such system, present the proposed plan, together with the plan for the proposed final disposal of sewage, for the approval of the State board of health.

216. Cesspools and vaults shall be of water-tight construction for holding excreta, and be made fly proof, and whenever the contents reach within 2 feet of the ground surface must be cleaned out to the bottom. They shall at least once a year, and at such other times as may be considered necessary by the health officer, be thoroughly emptied and cleaned.

217. Cesspools and vaults shall be constructed in accordance with plans and specifications approved by the State board of health.

218. No part of the contents of any privy shall be removed therefrom nor shall the same be transported through or over any streets or highways except as the same shall be removed and transported by means of some air-tight apparatus, pneumatic or other process, so as to prevent the contents from being agitated or exposed to the open air during the process of such removal or transportation.

219. Where persons are employed or intended to be employed in any trade, occupation, or business there shall be provided sufficient and suitable privy accommodations, having regard to the number of persons employed or in attendance; and also where persons of both sexes are employed or intended to be employed or in attendance sufficient and separated privy accommodations shall be provided for each sex.

220. The term "privy" shall be held to mean any building or part of a building used or intended to be used for the reception of human excreta and which is not connected with the public sewer or some duly authorized system of sewage disposal so as to immediately remove such material from such building.

221. No person, firm, or corporation shall own, maintain, or rent any privy in any incorporated or unincorporated city, town, or village unless the same shall be so constructed as to prevent the soil from contamination; and to prevent the access of flies to the excrement deposited therein by means of wire gauze, 18 strands to the inch in each direction; and to permit the easy and proper placing and removal of a receptacle, the dimensions of which shall be at least 16 inches in height and 15 inches in diameter.

222. Regulation 216 applies to all schoolhouses, churches, camps, mills, depots, factories, public buildings, railroad stations, boarding and construction cars.

223. Dry closets shall be constructed in accordance with plans and specifications furnished by the State board of health.

224. All dry closets shall be kept free from odor, and for this purpose dry pulverized earth, ashes, or chloride of lime shall be used to cover at all times the excreta. Dry closets shall have containers emptied at least once in every two weeks, and as often as may be necessary.

225. Human excreta shall not be used for fertilization purposes except the same has been treated by a method by the State health officer.

226. Human excreta taken from cesspools, vaults, or dry closets shall be buried or incinerated. When such excreta is buried it shall be planted to a depth of not less than 3 feet and not less than 300 feet from any water supply, and shall not be buried within the corporate limits of any city or town, nor within 500 yards of any habitation.

227. No abandoned well or deep well shall be used for sewage or a receptacle for household waste.

228. No privy vault, cesspool, or reservoir into which a privy, water-closet, sink, or stable is drained, except it be water-tight, shall be established in water-bearing strata or within 150 feet of any well, spring, or any other source of water used for drinking or culinary purposes.

229. All privy vaults, reservoirs, or cesspools named in regulation 217 shall be cleaned and emptied of their contents at least once every year before the 1st day of May and shall at all times be kept thoroughly deodorized and disinfected by adding to the contents thereof at least once each month, or oftener if necessary, calcium hypochlorite as follows: Take the calcium hypochloride in powder form and sprinkle over the contents until the odor is abated, stirring contents if necessary. All privy vaults within the limits of any city or town shall not be less than 5 feet deep and shall be constructed of brick set in cement, or of concrete construction.

230. No privy vault, water-closet, cesspool, sink, or stable drain shall open into any ditch, stream, or drain, except into the public sewers of any city or into disposal tanks equipped with aerated contact or trickling filters of ample area.

231. All sewer drains leading to outfalls or disposal plants shall be of standard construction, and no sewer drain or outlet from any sewage-disposal plant, except as hereinafter provided, shall empty into any lake, pond, creek, stream, or open field.

232. Septic tanks or other disposal tanks shall be made of water-tight concrete or masonry construction. The filters of disposal plants, except in isolated locations in nonwater-bearing strata, shall be installed in basins with water-tight bottoms and side walls.

233. All disposal plants not discharging the effluent into an established sewer system shall be provided with aerated filter beds constructed of proper filtering materials and of sufficient capacity to render the effluent clear and nonputrescible at all seasons of the year: *Provided*, That in the case of country residence and other isolated locations the effluent from septic tanks or cesspools



or other types of sewage disposal need not be subjected to filtration if such effluent can be discharged in sufficient isolation to prevent the creation of a nuisance or a menace to health, and in any case the pollution of any source of domestic water supply must be avoided.

234. The nonputrescibility of effluents shall be determined by recognized tests.

235. If the effluent from the filters shall be discharged into any water course, open drain, stream, or pond or source of water supply, or upon any lowland where in any manner by drinking the effluent or water polluted by it, or by contact with the same, either by man or beast, pathogenic germs may be transmitted, such effluent shall be sterilized by calcium hypochlorite or other suitable and safe chemical means.

236. The discharge of the effluent from septic disposal plants or any other type of disposal plant into abandoned wells or into creviced strata reaching water-bearing strata from which a domestic or public water supply is drawn is prohibited.

237. The different methods of irrigation and intermittent filtration are not intended to be excluded by the above requirements, but are also permitted and recommended where the conditions and surroundings will allow such methods of sewage disposal to be safely employed without creating a nuisance or menace to public health and without polluting any source of domestic or public water supply.

• **Water Supplies—Protection of. (Reg. Bd. of H., May 16, 1913.)**

238. *Water pollution.*—Any person or persons, firm, company, corporation, or association in this State, or the managing agent of any person or persons, firm, company, corporation, or association in the State, or any duly elected, appointed, or lawfully created State officer in this State, or any duly elected, appointed, or lawfully created officer of any county or municipality in this State, shall not deposit, permit, or allow any person or persons in their employ or under their control, management, or direction to deposit in any of the waters, lakes, rivers, streams, wells, and ditches in this State any rubbish, filth, or poisonous or deleterious substance or substances liable to affect the health of persons, fish, or live stock, or place or deposit any deleterious substance or substances in any place where the same may be washed or infiltrate into any of the waters herein named.

239. *Potable waters.*—It shall be the duty of local health officers to make an inspection of the sources of water supply of the several communities within their jurisdiction as may be necessary in order to ascertain whether the water from same is pure and wholesome; to take all usual and reasonable measures and precautions to secure and preserve its purity and wholesomeness.

240. Water from wells should be drawn only by the use of pumps and shall be protected from seepage by a water-tight covering.

241. No well may be excavated or dug on any premises used as a bakery or bake shop, and if such now exists the same shall be immediately filled up to the surface of the ground. The boring of an artesian well is not prohibited.

242. When the Arkansas State Board of Health shall, for the better protection of the water supply from pollution and to insure as far as possible the purity and wholesomeness of such water supply and to safeguard the public health in any city, town, or community in this State, make any order or regulation the execution of which will require or make necessary the securing of another water supply, or the modification or extension of any methods of water purification, or the construction and maintenance of a sewerage system for the

disposal or purification of sewage, the corporation or municipality owning or operating waterworks or sewerage systems shall, at its own expense, comply with such orders and regulations in a reasonable length of time: *Provided*, That all proposed changes shall first be approved by the State health officer.

243. Every cistern used for drinking water shall be provided with a rain-water cut-off or any simple device which will deflect the first washings of the roof and prevent the introduction of impurities into the cistern.

**Rabies—Control of. (Reg. Bd. of H., May 16, 1913.)**

244. When an animal suspected of having rabies has bitten a human being the person so bitten, or his legal representative, shall secure or cause to be secured such animal alive and without injury if possible. The animal shall be confined in a safe, quiet, roomy, and comfortable place, and a report giving full particulars concerning the action taken sent to the State health officer. This report shall include the name of the locality in which the biting occurred, the date the bite was inflicted, the name, residence, and address of the owner of the animal; the full name or names of the person or persons bitten, together with their residence, age, sex, race, and information as to the location and extent of their bites; the names, addresses, and residences of all owners of animals which have been bitten by the animal in question, together with a list and description of the animals bitten and disposition made of the same. Such supposedly rabid animal must be kept under careful observation for at least five days, when, if rabid, clinical evidence of rabies will manifest itself and death will shortly ensue.

245. Unless the animal is plainly ill it should not be killed immediately after biting its victim. It should be held under observation for 10 days, and if it remains well during that time it is absolutely certain that it is not suffering with rabies.

246. Do not kill the animal by a blow or a shot in the head, for this often destroys the brain so completely that examination is impossible. When the animal dies or is killed the head and several inches of the neck should be cut off, packed in ice and sawdust, and inclosed in a water-tight container and sent to the hygienic laboratory of the State board of health for microscopical examination. Report will be made immediately after the diagnosis is made.

247. All persons bitten by an animal suspected of having rabies or declared upon microscopical examination by the State board of health to have been so infected, should have the Pasteur treatment administered for the prevention of rabies.

248. If it shall appear to the State health officer that the life and health of any settlement, village, town, or city is endangered by the prevalence of rabies, or the running at large of dogs suspected of being rabid, or to have been bitten by or exposed to rabid dogs, then the State health officer shall require all dogs kept in such settlement, village, town, or city to be effectively muzzled and for such length of time as shall be necessary for public safety. It shall be the duty of the local authorities, when such an order is promulgated by the State health officer, to enforce its provisions.

249. Whenever in the opinion of the city or county health officer, as the case may be, all danger has elapsed from an outbreak of rabies, upon such information being furnished, the State health officer shall terminate the muzzling order by proper promulgation.

**Flies and Mosquitoes—Screening Against. (Reg. Bd. of H., May 16, 1913.)**

250. *Screening against flies.*—Hotels, boarding houses, restaurants, cafés, and such other places where persons are served with food or drink of any description for pay shall have kitchens and dining rooms securely screened against flies.

251. All dealers in such food supplies as are liable to contamination from dirt, flies, insects, etc., such as milk, meats, fish, vegetables, fruits, candies, and cake, shall provide a covering of some suitable material, or other means, to protect any such food exposed for sale from dust, flies, insects, etc.

252. No person, firm, or corporation in any city or town shall suffer or permit or have upon their premises, whether owned or leased by them, any one or more of the following insanitary, fly-producing, disease-causing conditions, to-wit:

(a) Animal manure in any quantity that is not securely protected from flies.  
(b) Privies, vaults, cesspools, pits or like places, which are not securely protected from flies by screening.

(c) Garbage in any quantity which is not securely protected from flies.

(d) Trash, litter, rags, or anything whatsoever, in which flies may breed or multiply.

253. *Screening against mosquitoes.*—No hotel, boarding house, lodging house, or inn shall be operated for pay in the State of Arkansas without having all doors and entrances on the outside and all windows effectively screened against mosquitoes. The mesh of said screen shall be not less than 18 strands to the inch in either direction.

254. No person, firm, or corporation shall have upon their premises, whether owned or leased by them, any standing water liable to breed mosquitoes in or near cities, towns, or villages, unless treated by one of the following methods:

(a) Cisterns to be screened with wire mesh not less than 18 strands each way to the inch for covering all openings accessible to mosquitoes.

(b) Tanks and barrels to be screened in like manner, or water covered with coal oil or crude petroleum, or shall be emptied and dried.

(c) All water containers in hotels, boarding houses, public buildings containing water, shall be emptied at least once a week and the container dried before refilling.

(d) Water in ponds, pools, fountains, basins, urns, depressions, or excavations liable to hold water which may become stagnant, shall be stocked with small fish, or screened, or petrolled, or effectually drained by whichever method is applicable.

**Common Drinking Cups and Common Towels—Prohibited in Public Places. (Reg. Bd. of H., May 16, 1913.)**

255. *Common drinking cup.*—Common carriers, hotels, boarding houses, restaurants, schools, clubs, public buildings, theaters, factories, stores, and all other places where people eat and drink, congregate, or patronize, shall not provide any drinking cup, glass, or vessel for common use: *Provided*, That this regulation shall not be held to preclude the use of drinking cups, glasses, or vessels, which are thoroughly cleaned by washing in hot water after use by each individual, nor shall it be held to preclude the use of sanitary devices for individual use only.

NOTE.—This regulation does not apply to private houses.

256. *Common towel.*—The use of the common towel, or towel to be used in common, by the employees, patrons, frequenters of, or the public in any room, closet, pantry, lavatory, or washroom in or attached to any public place, railroad station, boarding house, warehouse, restaurant, saloon, hotel, club, school-house, office building, public office, store, factory, workroom, markets, or any

place where food or drinks are prepared, served, sold, or stored, used by the public or where persons are employed or patronize, is hereby forbidden.

257. The term "common towel," as used in these regulations, shall be considered to mean a roller towel, or a towel available for use by more than one person without being washed after such use.

NOTE.—This regulation does not apply to private houses.

**Spitting—Prohibited in Public Places. (Reg. Bd. of H., May 16, 1913.)**

258. Spitting upon the floor, walls, steps, stairways, sides, or platform of any railroad, steam, electric, or street car, station, steamboat or ferryboat, elevator car, or any public or private conveyance, or of any private building, halls, theaters, church, school, hotel, lodging house, factory, workshop, or other place of employment, or any house, tenement house, market, or upon any sidewalk in city, town, or any public or private place, or where people congregate or where people cater to the public, is hereby prohibited.

259. It shall be the duty of every corporation or person in charge of any place mentioned in the preceding paragraph to furnish as many receptacles for the reception of sputum as may be required by the health officer having jurisdiction, of a pattern, shape, or design approved by said health officer, and such receptacle shall at all times contain at least one-half pint of clear water and shall be washed daily until thoroughly clean.

260. It shall be the duty of every corporation or persons in charge of any place frequented by the general public mentioned in regulation 258 to have as many copies of regulation 258 as may be necessary to call the attention of the public to the requirement of the State board of health printed, framed, and permanently posted in conspicuous places.

261. The poster or notice shall contain the following:

(a) Warning: Do not spit on the floor; to do so may spread disease. (In large bold-face type.)

(b) Regulation 258. (Quote verbatim.)

(c) Penalty for violation, etc.

(Regulation 262 gives advice as to the preferable form of spittoons.)

**Lavatories—Required in Places where Food is Prepared or Handled. (Reg. Bd. of H., May 16, 1913.)**

263. No manufactory, bakery, butcher shop, slaughterhouse, or any other place where human food or drinks are prepared for use, and all stores, shops, public or office buildings, offices, and other places where people are employed or places catering to the public, shall operate unless there be provided for the use of any and all persons operating, patronizing, or employed therein a wash sink or lavatory, which shall be provided with or in connection to the urinals and water-closets, with an abundance of towels, water, and soap, and shall at all times be open and free to the use of persons operating in, patronizing, or employed in such places.

**Garbage and Refuse—Care and Disposal of. (Reg. Bd. of H., May 16, 1913.)**

264. No house refuse, offal, garbage, dead animals, decaying vegetable matter, or organic-waste matter of any kind shall be thrown upon any street, road, or public place; and no such refuse, putrescible or decaying animal or vegetable matter shall be kept in any house, cellar, or adjoining outhouses or premises for more than 48 hours in any incorporated or unincorporated city, town, village,

or built-up community. All receptacles for such garbage, etc., shall be so constructed as to be of sufficient dimensions for the reception of all garbage, and shall be water-tight, made of tight-matched lumber or galvanized iron, and shall stand at least 9 inches from the ground, and be provided with a suitable cover which must be kept properly adjusted to same, so as to protect the contents from flies, insects, rats, and animals, or vermin. All garbage or refuse containers shall have their contents emptied at least once every 48 hours.

265. No filling in or making of land by the dumping of rubbish or other material shall be done within, or in the vicinity of, any incorporated or unincorporated city or town limits unless approved by the health officer having jurisdiction; and no garbage, offal, dead animal, or other vegetable, organic or putrescible matter or admixture thereof, shall be used for filling in lowlands, nor be deposited in any other places, nor in any manner, unless approved by the health officer having jurisdiction.

266. No offal, slops, or other wastes from any creamery, factory, shop, chicken house, slaughterhouse, tannery, boarding house, restaurant, laundry, meat market, or private residence, or any other source, shall be thrown or deposited, except in accordance with properly provided garbage disposal, upon any lot or land, or into any ravine or open ditch, stream, or pond, or upon any land adjoining, which is subject to overflow.

267. Any of the wastes herein mentioned, not properly disposed of as garbage and common sewage, shall be disposed of by independent disposal plants, which latter provision shall apply particularly to slaughterhouses, factories, and shops.

268. All dead animals, and all decomposed animal matter, in any city, shall be deodorized and immediately removed to dump grounds provided by the municipality, and there buried at least 3 feet under ground or incinerated.

269. The dump grounds so used shall be so located and of such a character as not to contaminate any domestic or public water supply, either by overflow or percolation.

270. No slops, offal, garbage, or manure, or any other refuse, shall at any time be deposited in any of the streets or alleys, or upon any lot in a city, except it be deposited in a regulation garbage box, as provided for in regulation 264. All property owners shall be held responsible for the sanitary condition of the alley abutting on their premises.

271. Cities having in force ordinances for the disposal of refuse and garbage equivalent to those demanded by the State board of health are not affected by these rules.

272. It shall be the duty of the city police authorities, or other sanitary police officers, to enforce the regulations as herein set forth, under the supervision of the health officer having jurisdiction.

273. All cellars, caves, and outbuildings shall be thoroughly cleansed and whitewashed at least twice each year, and all cattle yards, chicken yards, barns, or stables when in use shall be cleaned each day, and at all times kept free from all offensive odors.

#### **Dead Animals—Disposal of Bodies of. (Reg. Bd. of H., May 16, 1913.)**

274. No carcass of any dead animal, except when the same is killed for food, shall be left unburied in the State of Arkansas, nor shall it be thrown into any stream, lake, pond, well, or other body of water therein.

275. Any such carcass shall be buried by the owner so that it will be covered by at least 3 feet of earth. No carcass of any dead animal, except when the same is killed for food, shall be fed to dogs, hogs, or other animals. Burial shall be made within 24 hours after death.

276. In all cases of death from such diseases as glanders, anthrax, black leg, or black quarter; contagious pleuro-pneumonia or lung plague of cattle; rinder pest or cattle plague; hemorrhagic septicemia, foot-and-mouth disease, apthous fever of cattle, southern cattle fever, or Texas fever; sheep scab, mange of cattle or horses; hog cholera or swine plague; rabies or hydrophobia; malade de coit or eldurine of horses; advanced or generalized tuberculosis, or tuberculosis of the udder, such carcasses shall be enveloped in unslaked lime.

277. At all municipal dumping grounds where carcasses are disposed of provision shall be made for their immediate burial. In lieu of the foregoing the dead bodies of animals may be burned, or disposed of in such a manner as the local health officer may direct: *Provided*, That the purpose of this regulation be not violated.

**Jails, Prisons, and Lockups—Sanitation of. (Reg. Bd. of H., May 16, 1913.)**

278. All jails, prisons, and lockups shall be properly ventilated and lighted.

279. The floors and walls shall be scrubbed with soap or other cleansing agent and water at least twice a week, and the ironwork painted with white lead, white zinc, or asphaltum varnish twice a year.

280. Every prisoner shall be given a shower bath at least once a week, provided there is no disease or other condition present contraindicating bathing.

281. Each and every prisoner shall be provided with soap, towel, and drinking cup.

282. Privies shall be kept in a clean and sanitary condition and connected with the sewer if within 1,000 feet of same.

283. Cells should be constructed so that each cell will be provided with outside light and ventilation.

284. All proposed plans for jails, prisons, lockups, penitentiaries, and convict camps shall be submitted for approval of their sanitary arrangements to the State health officer.

**Slaughterhouses and Markets—Sanitation of. (Reg. Bd. of H., May 16, 1913.)**

285. No person or persons shall build or use any slaughterhouse within the limits of any town or city in the State without the consent of the local health officer, and the keeping and slaughtering of all cattle or other animals, and the preparation and keeping of all meat, fish, birds, or other animal food, shall be in the manner best adapted to secure and continue their wholesomeness as food.

286. Every butcher, or other person, leasing or occupying any place, room, or building wherein any cattle, sheep, or swine have been or are killed or dressed; and every person being owner, lessee, or occupant of any room or stable wherein animals are kept, or of any market, public or private, shall cause such place, room, building, stable, or market, and their yards and appurtenances to be thoroughly cleaned and purified; and all offal, blood, fat, garbage, refuse, and unwholesome or offensive matter to be removed therefrom at least once each 24 hours after the use thereof for any purpose herein referred to. All woodwork, save floors and counters, in any building, place, or premises above mentioned, shall at all times be kept thoroughly painted or whitewashed, and the floors of such building, place, or premises shall be so constructed as to prevent blood, or foul liquid, or washings, contaminating the soil by seepage, leakage, or by any other means.

287. All slaughterhouses and markets shall be supplied by a pure and wholesome water supply.

288. No person shall urinate, defecate, or commit any nuisance whatsoever in the slaughtering pens of any abattoir or slaughterhouse, or within 125 feet thereof.

289. Markets shall be well ventilated.

290. The use of sawdust, sand, or other absorbent material on the floors of markets is prohibited.

291. Each day the stalls and stands of markets shall be washed and cleaned so as to keep them in the highest state of cleanliness.

292. In every meat market, each room wherein meat is handled or stored shall be completely screened at doors, windows, and other openings with wire gauze, 18 mesh per inch in either direction, and such gauze shall at all times be kept in perfect repair. No meat offered for sale shall be exposed on the street or sidewalk.

293. The floor of every meat market shall be scrubbed once daily with water and concentrated lye, or other cleansing agent, and shall be kept clean at all times.

294. All meat that is or becomes tainted, or attacked by putrefactive bacteria, shall be removed from the premises at once or destroyed, and shall not be stored in any ice chest or refrigerator.

295. Chopping blocks shall be scraped daily and counters must be thoroughly scoured; all knives, saws, and other implements must be scalded and washed thoroughly daily, and maintained at all times in a cleanly condition.

296. *Lavatories*.—(See regulation 263.)

297. *Garbage cans*.—(See regulation 264.)

298. No dogs, cats, or other animals shall be allowed in a market or slaughterhouse.

299. All dealers in foodstuffs, such as milk, meat, fish, vegetables of whatsoever kind and variety, whether to be eaten raw or cooked, fruits, candies, cakes, confections, etc., shall not expose or exhibit the same on any sidewalk or alley in the State of Arkansas; but all such food intended for human consumption and offered for sale shall at all times be kept free from contamination by dust, dirt, flies, insects, cats, dogs, or other domestic animals.

#### **Barbers and Barber Shops—Regulations for. (Reg. Bd. of H., May 16, 1913.)**

300. No owner or manager of a barber shop shall knowingly permit any person suffering from a communicable disease, or from a venereal disease in a communicable stage, to act as a barber in said shop.

301. No person who, to his own knowledge, is suffering from a communicable disease, or from a venereal disease in a communicable stage which might be conveyed to another person by contact, shall act as a barber.

302. All barber shops, together with all furniture, shall be kept in a clean and sanitary condition.

(a) Mugs, shaving brushes, razors, scissors, clipping machines, pincers, needles, and other steel instruments shall be cleaned and sterilized either by steam, boiling water, or in alcohol of at least 60 per cent strength after each separate use.

(b) Combs and brushes shall be thoroughly sterilized after each separate use.

(c) A separate clean towel shall be used for each person.

(d) Alum or other material used to stop the flow of blood shall be applied only on a towel or other clean cloth.

(e) The use of powder puffs and sponges is prohibited.

(f) Every barber shop shall be kept well ventilated and provided with hot and cold water.

(g) Head rests of chairs shall be covered with a towel that has been washed since having been used before, or by clean new paper.

(h) Every barber shall cleanse his hands immediately and thoroughly before serving each customer.

(i) No person shall use a barber shop as a dormitory, nor shall any part of the shop be so used.

(j) No barber shall undertake to treat any disease of the skin or any lesions of the skin whatsoever, such as pimples, boils, warts, moles, and the like.

**Railway Cars and Stations—Sanitation of. (Reg. Bd. of H., May 16, 1913.)**

303. Any person having control or charge of any railway station house or houses, and every railroad company, sleeping car company, or corporation, individual or receiver thereof, engaged in the carrying of passengers in this State; and every agent of any such corporation or person having charge or control of such passenger cars, shall keep and maintain all such railway station houses and passenger cars in their charge as aforesaid, in a clean and sanitary condition at all times.

304. Floors, platforms, and such places as are frequented by passengers shall at all times be kept clean. Dry sweeping or dusting is prohibited.

305. At railway stations receptacles, with tight-fitting tops or automatic cover devices, for waste paper, trash, fruit peelings, and any other waste matter, shall be provided, which receptacles shall be emptied and thoroughly cleaned by washing daily, or oftener if necessary.

306. *Railway stations.*—At railway stations where cuspidors are provided the cuspidor should be elevated, or of such construction that the top will be at least 20 inches above the floor, or a fountain cuspidor of special device may be provided. No spittoon less than 9 inches from bottom to top shall be provided.

307. All water-closets provided at railway stations shall have the floors and seats of toilets scrubbed with soap or other cleansing agent and hot water daily, and oftener if necessary.

308. *Day coaches.*—Day coaches shall be thoroughly cleaned at the end of each trip, and in no instance shall the day coach go uncleaned longer than two days when such coach is in service.

309. Windows and doors shall be first opened and aisle strips, if there be any, removed from the car.

310. All upholstered furniture shall be dusted and brushed, using a vacuum or other air device if possible.

311. *Cleaning.*—Dry dusting and sweeping of floors of cars and railway stations is prohibited. The floors shall be washed with water. If the car is in transit the floors shall be swept after they have been sprinkled with dampened sawdust or paper (dampened with oil or water) in order to avoid raising any dust. The floors shall be scrubbed with soap and water at least once in every 24 hours if the car is in service. Dust is to be removed with a dampened cloth.

312. The use of the feather duster is prohibited in cars.

313. Seats, windows, and walls of cars must be wiped off with a dampened cloth while standing at division terminals or meal stations where a stop of 20 minutes or more is scheduled and the passengers are given an opportunity to leave cars during that time, and at other times during the run to keep the cars as free as possible from dust.

314. Water coolers must be emptied and scalded once each 24 hours, and shall be filled with good, wholesome drinking water when in service.



315. Ice which is used in water coolers in cars must not be dumped on floors, sidewalks, or car platforms where people have expectorated or are liable to expectorate, and before use it shall be washed and then handled with tongs.

316. The floors of closet rooms and the seats of closets shall be washed and scrubbed with soap and water and kept clean at all times, and the bowl and outlet of the commode shall be kept free of fecal deposits.

317. The smoking apartments of railway cars used for passengers must be provided with one cuspidor for each 2 passengers according to seating capacity. Each cuspidor must contain not less than one-half pint of clear water. The contents of the cuspidors must be emptied, washed with soap and water so as to be thoroughly cleaned, and then replenished with water when again placed in use at least once every 24 hours.

318. Every sleeping car operated in the State of Arkansas shall be cleaned at the end of each run, and in no case shall any sleeping coach or car be used for a period of time longer than one week without being thoroughly cleaned. All removable seats and backs shall be dusted and cleaned outside of the car.

319. Parlor, buffet, and dining cars must be cleaned at cleaning terminals. Carpets and draperies must be removed, dusted, and sunned and aired. Food boxes, refrigerators, closets, drawers, and cupboards to be thoroughly cleansed, and refrigerators to be washed with scalding water and aired and allowed to dry before being placed in use. This shall be done at least once a week.

320. Dining cars which have been used for sleeping apartments shall be thoroughly ventilated one-half hour or more before serving meals.

321. No parlor car, dining car, or sleeping car shall be required to provide cuspidors or spittoons except in apartments set apart for smoking and dressing rooms.

322. Passengers, patrons, and employees or others are prohibited from washing their teeth over and expectorating in basins which are used for bathing the face and hands in sleeping cars, passenger cars, or railway station buildings. Large cuspidors or dental lavatories shall be provided for such purposes.

323. Brushing of passengers' clothing and hats in railway coaches, except in the unoccupied ends of cars, is prohibited.

324. It is made the duty of any person, firm, or corporation to observe the regulations herein laid down for the sanitation of any railroad coach, car, station, factory, workshop, or other public place, or place where persons are employed, and the responsibility for the disobedience of such regulations shall rest upon the foreman, overseer, or other employee whose duty it is ordinarily to see to the cleanliness or sanitation of such railroad coach, car, station, workshop, or other public place or place where persons are employed.

325. If a car has been occupied by a person having a communicable disease its contents must be thoroughly aired and cleaned immediately at the end of its run.

**Communicable Diseases—Importation of—Restricting Order. (Reg. Bd. of H., May 16, 1913.)**

326. No common carriers or any person shall knowingly bring into the State of Arkansas any person sick or suspected of being sick with any communicable disease subject to quarantine or isolation.

327. Whenever yellow fever, smallpox, or any other communicable disease shall exist or prevail in any city or town of any State of the United States, to such an extent as the State health officer may deem dangerous to the health of the State of Arkansas, then the State health officer may declare a restricting order against such place, and all persons entering the State of Arkansas from

such infected locality shall be detained at such points at or near the border line of the State of Arkansas as may be selected by the State health officer, for observation, isolation, or treatment of the sick, and for fumigation of baggage, freight, and other articles as the case may require and as may be suitable and proper. The length of time of detention and the method of treatment of the sick and fumigation of property, freight, baggage of persons coming from such infected point shall be determined by the State health officer at the time of the declaration of such quarantine, and from time to time thereafter as may be convenient and seem expedient.

**Street Cars—Sanitation and Heating of. (Reg. Bd. of H., May 16, 1913.)**

328. Each and every car used upon every railway in a city or on an inter-urban line for the carrying or transportation of passengers, shall, on each and every day on which it may be used for the carrying and transportation of passengers, be carefully and thoroughly washed and cleaned in the following manner:

(a) The floors and platforms to be washed with soap or other cleansing agent, and water and all dirt removed by the use of a stiff brush.

(b) All woodwork around windows, doors, and arms of chairs shall be cleaned by washing.

329. There shall be posted in every street car in every municipality a notice conspicuously placed and sufficiently large to be easily read by the passengers, the following sign: "Do not spit on the floor; to do so may spread disease."

The penalty for violation of this regulation shall be printed on the card and may be in small type.

330. Street cars shall at all times be properly ventilated by the opening of doors, windows, and transoms.

331. Provision shall be made for the heating of cars during cold weather when the outside temperature is 40° F. or below, and the temperature shall during such weather be kept at a comfortable degree.

**Transportation of Dead Bodies—Rules for. (Reg. Bd. of H., May 16, 1913.)**

**RULE 1.** The transportation of bodies dead of smallpox or bubonic plague from, in, or into the State of Arkansas is absolutely forbidden.

**RULE 2.** The bodies of those who have died of Asiatic cholera, diphtheria (membranous croup), scarlet fever (scarlatina, scarlet rash), erysipelas, glanders, anthrax, or leprosy shall not be accepted for transportation unless prepared for shipment by being thoroughly disinfected by (a) arterial and cavity injection with an approved disinfectant fluid, (b) disinfecting and stopping of all orifices with absorbent cotton, (c) washing the body with the disinfectant, all of which must be done by an embalmer holding a certificate as such, approved by the Arkansas State Board of Embalmers. After being disinfected as above, such bodies shall be incased in an air-tight zinc, tin, copper, or lead lined coffin or iron casket, all joints and seams hermetically soldered, and all inclosed in a strong, tight wooden box. Or the body, being prepared for shipment as above outlined, may be placed in a strong coffin or casket, and said coffin or casket incased in an air-tight zinc, copper, or tin case, all joints and seams hermetically soldered, and all incased in a strong outside wooden box.

**RULE 3.** The bodies of those dead of typhoid fever, puerperal fever, tuberculosis, measles, epidemic cerebrospinal meningitis, anterior poliomyelitis (infantile paralysis), may be received for transportation when prepared for shipment

by filling cavities with an approved disinfectant, washing the exterior of the body with the same, stopping all orifices with absorbent cotton, and all incased in an air-tight coffin or casket: *Provided*, That this shall apply only to bodies which can reach their destination within 30 hours from the time of death. In case such body can not reach destination in 30 hours it shall be prepared for transportation in compliance with rule 2, but when the body has been prepared for shipment by being thoroughly disinfected by an embalmer holding a certificate as in rule 2, the air-tight sealing may be dispensed with.

RULE 4. The bodies of those dead of diseases for causes not stated in rules 2 and 3 may be received for transportation when encased in a sound coffin or casket and inclosed in a strong outside wooden box: *Provided*, They reach their destination within 30 hours from time of death. If the body can not reach its destination within 30 hours from time of death it must be prepared for shipment by arterial and cavity injection with an approved disinfectant fluid, washing the exterior of the body with the same, stopping all orifices with absorbent cotton, and incased in an air-tight coffin or casket. But when the body has been prepared for shipping by being thoroughly disinfected as in rule 2, the air-tight sealing may be dispensed with.

RULE 5. In the shipment of bodies dead from any disease named in rule 2 the body must not be accompanied by persons or articles which have been exposed to the infection of the disease, unless certified by the health officer as having been properly disinfected; and before selling passage tickets agents shall carefully examine the transit permit and note the name of the passenger in charge and any others proposing to accompany the body and see that all necessary precautions have been taken to prevent the spread of disease. The transit permit in such cases shall specifically state who is authorized by the health authorities to accompany the remains. In all cases where bodies are forwarded under rule 2 notice must be sent by telegraph to the health officer at destination advising the date and train on which the body may be expected. This notice must be sent by the shipping undertaken to the health officer at the destination.

RULE 6. Every dead body must be accompanied by a person in charge, who must be provided with a passage ticket and also a full first-class ticket marked "Corpse" for the transportation of the body, and a transit permit and a removal permit issued by the local registrar of the municipality or township in which the death occurred, giving the place of death, name of the deceased, age, sex, color, or race, date and hour of death, cause of death, including the name of the physician or coroner signing the death certificate, the point to which the body is to be transported, and when death is caused by any of the diseases specified in rule 2 the name of person authorized by the health officer to accompany the body; also the name of the undertaker shipping the body, over the signature of the local registrar and certificate of the shipping undertaker, stating that the body has been prepared strictly in accordance with the rule under which the shipment was made. The transit permit unfolded must be tacked on the top of the outside box. The removal permit shall be handed to the passenger in charge of the corpse. All outside boxes must be fitted with at least six handles, two on each side and one on each end.

RULE 7. When dead bodies are shipped by express the removal and transit permits shall be tacked unfolded upon the top of the outside box.

RULE 8. Disinterred bodies of persons who have died of any disease or cause shall be treated as infectious or dangerous to the public health and shall not be sent for transportation in or removal from this State unless said removal has been approved by the State health officer, and no such body shall be brought

into Arkansas without the approval of the public health authorities having jurisdiction of the place where such body is disinterred, and no such bodies shall be transported, received, or buried in this State unless satisfactory evidence of compliance with the rules of this board respecting the same shall be submitted to the State health officer and his written consent obtained to such transportation, receipt, or burial. All such disinterred remains shall be inclosed in an hermetically soldered zinc, tin, or copper-lined box. But bodies deposited in receiving vaults shall not be treated the same as buried bodies when originally prepared by a licensed embalmer as defined in rule 2, provided the shipment takes place within 30 days from the time of death. The shipment of bodies prepared in the manner above directed by a licensed embalmer from receiving vaults may be made within 30 days from time of death without the necessity of obtaining permission from the health authorities of the locality to which the body is consigned. After 30 days the casket or coffin box containing said body must be inclosed in an hermetically soldered box.

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