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MALARIAL FEVERS.

PREVALENCE AND GEOGRAPHIC DISTRIBUTION IN MISSISSIPPI, 1913.

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The occurrence of malarial fevers has been reported from every county in the State of Mississippi. The region of greatest prevalence appears to be in the Yazoo Valley, located in the northwestern section of the State, between the Mississippi River on the west and the Yazoo River on the east. The population in this region is composed of 62½ to 75 per cent and over of negroes. The census for 1910 gives a total white population of 786,111 or 43.7 per cent of whites and 1,009,487 or 56.2 per cent colored for the State.

There was 1 death in the urban districts as against 7.2 deaths in the rural districts, confirming the statement generally made that malaria is mainly a rural disease.

Prevalence of the Disease—Morbidity Reports.

Circular franked postal cards were mailed to every physician in the State, calling for certain information on the reply cards for each of the months of August, September, October, and November.

Reports were received from all of the 79 counties in the State and in all of them malarial fevers were said to occur.

The following table is a summary of the postal-card reports received:

	August.	Septem- ber.	October.	Novem- ber.
Number of cards mailed.....	2,009	2,001	1,982	1,982
Number of cards returned unclaimed.....	9	19	17	17
Number of replies received.....	528	435	402	280
Number of counties represented in replies.....	79	77	78	73
Number of towns or cities represented.....	320	278	252	196
Number of cases of malaria reported.....	14,753	9,164	7,433	3,009
Whites.....	6,306	4,000	3,323	1,453
Colored.....	8,447	5,164	4,110	1,556
Average number of cases per physician reporting.....	28	21	18	5
Number of cases of malaria confirmed microscopically.....	1,142	699	387	329
Tertian.....	800	384	264	221
Quartan.....	127	101	27	54
Estivo-autumnal.....	215	204	96	54
Number of chronic cases of malaria.....	1,455	1,160	1,487	506
Number of cases under 15 years of age.....	4,434	2,943	2,065	879
Number of physicians using microscope.....	136	94	67	29

Morbidity reports of a number of diseases, including malarial fevers, are regularly received by the State board of health. The following table of the number of cases notified during 1913, by color and by counties, was prepared and furnished by Dr. F. L. Watkins, deputy State registrar of vital statistics:

Prevalence of malarial fever in Mississippi during 1913, by months and counties, as shown by reported cases.

County.	January.		February.		March.		April.		May.		June.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Adams.....	(1)	(1)	(1)	(1)	.....	4	(1)	(1)	(1)	(1)	(1)	(1)
Alcorn.....	(1)	(1)	10	11	22	9	22	5	40	26	42	12
Amite.....	(1)	(1)	6	8	(1)	(1)	(1)	(1)	(1)	50	24	24
Attala.....	18	8	11	9	12	8	18	12	(1)	(1)	(1)	(1)
Benton.....	3	3	7	3	5	4	11	5	14	6	15	17
Bolivar.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	53	145	90	256
Calhoun.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	3	3	(1)	(1)
Carroll.....	35	12	18	6	30	12	14	8	47	17	(1)	(1)
Chickasaw.....	(1)	(1)	12	11	24	16	17	13	35	25	(1)	(1)
Choctaw.....	12	2	4	2	18	2	14	2	43	4	14	6
Claiborne.....	.....	.....	.....	.....	.....	.....	.....	.....	(1)	(1)	(1)	(1)
Clarke.....	37	31	58	6	109	8	83	21	(1)	(1)	(1)	(1)
Clay.....	.....	.....	6	2	20	28	18	24	29	69	74	68
Coahoma.....	2	38	27	53	5	16	4	53	74	27	98	47
Copiah.....	10	9	47	24	28	4	.....	.....	(1)	(1)	25	.....
Covington.....	5	5	(1)	(1)	.....	.....	.....	.....	(1)	(1)	.....	.....
De Soto.....	.....	3	1	5	3	5	2	8	2	7	.....	6
Forrest.....	(1)	(1)	6	2	9	7	(1)	(1)	(1)	(1)	24	6
Franklin.....	7	2	26	7	21	9	27	9	15	5	42	18
George.....	33	19	17	5	17	8	25	10	60	14	95	10
Greene.....	10	.....	10	.....	12	3	43	9	84	36	24	6
Grenada.....	3	1	2	1	2	2	5	8	12	16	10	12
Hancock.....	10	15	10	7	10	13	12	16	20	10	(1)	(1)
Harrison.....	23	27	40	5	.....	18	40	.....	46	2	18	6
Hinds.....	.....	.....	.....	.....	.....	.....	.....	.....	2	7	.....	.....
Holmes.....	28	36	18	41	26	48	50	99	36	92	119	290
Issaquena.....	10	40	10	50	10	75	(1)	(1)	15	100	20	180
Itawamba.....	20	6	15	0	8	.....	50	10	55	20	120	6
Jackson.....	35	19	15	7	16	8	39	25	80	134	112	41
Jasper.....	14	1	20	6	22	.....	29	6	39	12	59	14
Jefferson.....	4	.....	.....	.....	4	.....	.....	.....	(1)	(1)	(1)	(1)
Jefferson Davis.....	10	5	4	7	11	4	14	5	25	12	18	2
Jones.....	(1)	(1)	11	4	20	17	71	15	61	25	53	18
Kemper.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Lafayette.....	.....	.....	.....	.....	.....	.....	.....	.....	10	6	3	0
Lamar.....	49	19	40	12	32	6	46	13	48	7	43	5
Lauderdale.....	5	1	28	6	44	11	62	31	162	56	183	105
Lawrence.....	52	32	28	25	19	33	27	16	35	25	24	32
Leake.....	(1)	(1)	14	22	35	8	15	9	41	18	53	19
Lee.....	(1)	(1)	31	21	57	33	96	44	154	39	233	126
Leflore.....	.....	.....	7	33	27	40	5	14	(1)	(1)	(1)	(1)
Lincoln.....	(1)	(1)	4	3	4	3	21	7	(1)	(1)	40	16
Lowndes.....	(1)	(1)	(1)	(1)	6	.....	.....	.....	(1)	(1)	(1)	(1)
Madison.....	(1)	.....	.....	.....	.....	.....	.....	.....	(1)	(1)	(1)	(1)
Marion.....	(1)	(1)	8	1	12	0	30	4	20	5	(1)	(1)
Marshall.....	1	.....	.....	.....	3	3	6	6	13	16	12	6
Monroe.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Montgomery.....	3	1	3	3	8	12	12	23	45	36	25	135
Neshoba.....	20	5	10	.....	18	2	10	.....	10	.....	20	.....
Newton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Noxubee.....	11	21	17	23	16	28	(1)	(1)	(1)	(1)	41	75
Oktibbeha.....	5	3	(1)	(1)	4	7	(1)	(1)	5	7	1	17
Panola.....	3	3	5	3	5	5	12	18	7	8	6	6
Pearl River.....	13	5	.....	.....	20	1	22	.....	6	.....	26	6
Perry.....	.....	.....	8	2	20	10	56	20	60	11	(1)	(1)
Pike.....	.....	.....	.....	.....	(1)	(1)	(1)	(1)	(1)	(1)	28	25
Pontotoc.....	.....	.....	6	4	6	4	12	8	27	20	(1)	(1)
Prentiss.....	(1)	(1)	21	11	18	1	55	4	20	7	(1)	(1)
Quitman.....	2	1	4	8	6	12	6	10	4	10	10	8
Rankin.....	(1)	(1)	13	5	25	16	23	24	35	29	(1)	(1)
Scott.....	2	1	1	.....	2	.....	7	1	18	1	19	1
Sharkey.....	1	11	1	8	2	9	(1)	(1)	1	5	(1)	8
Simpson.....	23	12	8	4	12	1	16	1	(1)	(1)	(1)	(1)

¹ No report.

Prevalence of malarial fever in Mississippi during 1913, by months and counties, as shown by reported cases—Continued.

County.	January.		February.		March.		April.		May.		June.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Smith.....	(1)	(1)	1	(1)	4	(1)	2	2	10	(1)	10	2
Sunflower.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tallahatchie.....	(1)	(1)	(1)	(1)	(1)	(1)	58	75	92	68	(1)	(1)
Tate.....	29	24	31	26	44	60	40	43	48	54	113	95
Tippah.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tishomingo.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Tunica.....	45	88	44	115	51	105	34	50	(1)	(1)	66	234
Union.....	(1)	(1)	13	6	20	7	12	28	20	10	(1)	(1)
Warren.....	50	100	42	36	20	7	(1)	(1)	20	10	(1)	(1)
Washington.....	5	7	6	2	16	4	12	13	8	2	12	8
Wayne.....	15	10	2	2	2	2	5	0	3	(1)	(1)	1
Webster.....	3	(1)	5	(1)	3	2	2	0	1	(1)	(1)	2
Wilkinson.....	2	1	12	5	70	8	21	7	26	16	(1)	15
Winston.....	7	3										
Yalobusha.....												
Yazoo.....												
	675	627	824	663	1,070	759	1,410	802	1,844	1,270	2,130	1,981

County.	July.		August.		September.		October.		November.		December.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Adams.....	15	15	0		48	129	(1)	(1)	(1)	(1)		
Alcorn.....	50	11	69	10	20	8	20	7	30	3	6	12
Amite.....	71	49	72	25	56	51	24	16	26	8	22	3
Attala.....	22	16	17	6			26	14	(1)	(1)	(1)	(1)
Benton.....	24	37	29	43	59	31	(1)	(1)	(1)	(1)	7	3
Bolivar.....	195	603	243	690	340	981	235	498	187	359	85	144
Calhoun.....	17	3					10		(1)	(1)	(1)	(1)
Carroll.....	210	73	200	172	98	102	80	70	(1)	(1)	38	35
Chickasaw.....	62	33					73	30	(1)	(1)	(1)	(1)
Choctaw.....	102	24	142	14	52	22	(1)	(1)	70	26	(1)	(1)
Claiborne.....	30	25	65	122	70	118	38	69	22	45	16	33
Clarke.....	84	51	60	30	76	24	95	96	33	32	30	10
Clay.....	61	93	150	12	49	103	8	30	38	22	19	5
Coahoma.....	124	514	157	762	206	878	155	537	149	402	89	246
Copiah.....	47	33	130	145	154	177	91	20	50	43	23	31
Covington.....	9	9	20	5	31	18	17	13	7	6	12	4
De Soto.....	5	15	2	5	2	6	3	5	1	4	1	1
Forrest.....	13	2	67	10			(1)	(1)	(1)	(1)	(1)	(1)
Franklin.....	92	42	110	77	47	28	(1)	(1)	4	4	16	6
George.....	93	43	100	39	82	52	46	20	40	18	23	5
Greene.....	18	2	80	20	40	10	60	10	18	3	25	5
Grenada.....	26	25	70	49	74	86	20	15	31	39	16	12
Hancock.....	2	0	5	5	4	3	(1)	(1)	3	2	2	
Harrison.....	64	25	15	5	20	4	101	2	23	7	26	6
Hinds.....	1	8	77	24	68	53	(1)	(1)	(1)	(1)	15	5
Holmes.....	97	297	229	440	145	426	95	499	82	201	45	86
Issaquena.....	25	225	(1)	(1)	20	130	20	130	27	93	5	45
Itawamba.....	280	20	115	5	(1)	(1)	(1)	(1)	27	3	(1)	(1)
Jackson.....	68	23	24	16	36	106	42	10	33	92	35	8
Jasper.....	68	20	43	25	63	27	40	18	18	5	30	7
Jefferson.....	(1)	(1)	12	28	52	32	(1)	(1)	17	50	2	
Jefferson Davis.....	22	12	64	28	(1)	(1)	30	12	20	18	38	16
Jones.....	76	30	189	63	117	44	119	65	44	15	83	15
Kemper.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Lafayette.....	3	1	2	6	10	16	10	16				
Lamar.....	90	20	38	10	56	22	46	29	40	12	11	10
Lauderdale.....	140	82	242	127	134	104	117	33	91	28	55	22
Lawrence.....	91	17	76	72	124	97	34	53	53	42	29	23
Leake.....	21	8	32	7	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Lee.....	189	129	224	133	144	109	131	68	96	45	53	27
Leflore.....							1				1	
Lincoln.....	70	25	56	32	60	35	31	20	20	10	23	15
Lowndes.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)				
Madison.....							24	6				
Marion.....	177	67	199	100	142	55	63	37	86	55	70	25
Marshall.....	3	4	62	79	25	42	(1)	(1)	(1)	(1)	6	0

No report.

Prevalence of malarial fever in Mississippi during 1913, by months and counties, as shown by reported cases—Continued.

County.	July.		August.		September.		October.		November.		December.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Monroe.....	56	29	36	24	62	23	30	38	(¹)	(¹)	16	10
Montgomery.....	80	50	79	88	100	74	53	22	31	19	12	6
Neahoba.....	10		10		15		15	5	10		5	
Newton.....			8	8			6	2			3	1
Noxubee.....	38	65	41	63	27	63	22	38	13	30	19	31
Oktibbeha.....	16	24	16	38	22	68	15	22	13	18	11	14
Panola.....	15	15	80	40	140	110	65	123	10	11	2	1
Pearl River.....	23	4	47	10	20	8	15	1	15	1	13	
Perry.....	113	85	123	129	75	73	68	44	82	52	44	26
Pike.....	19	10	(¹)	(¹)	116	48	(¹)	(¹)	(¹)	(¹)	24	8
Pontotoc.....			(¹)	(¹)	(¹)	(¹)	5	4	15	7	15	
Prentiss.....	69	10	103	8	24	6	36	8	12	2	18	13
Quitman.....	18	22	18	24	30	28	14	26	6	4	6	2
Rankin.....	8	12	15	15	4	6	7	3	5		10	
Scott.....	22	9	54	27	35	18	5	3	6	3	12	1
Sharkey.....	2	9	3	16	4	17	2	15	3	16	5	9
Simpson.....	85	34	69	31			59	28	24	10	30	12
Smith.....	10		(¹)	(¹)	7		8		1		(¹)	(¹)
Sunflower.....			67	537	203	859	250	590	99	307	182	383
Tallahatchie.....	101	136	152	277	93	191	51	179	20	50	(¹)	(¹)
Tate.....	124	97	113	137	67	66	160	138	74	40	31	24
Tippah.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Tishomingo.....	103		36	16	54		31		42	7	11	1
Tunica.....	55	266	75	318	93	414	75	202	13	54	20	95
Union.....	25	12	77	28	36	14	22	8	20	9	13	
Warren.....	124	34	152	343	142	393	86	77	31	77	45	48
Washington.....	142	278	217	577	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	34	65
Wayne.....	35	4	33	10	16	4	30	3	12	3	6	2
Webster.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Wilkinson.....	2	1	8	7	33	13	1	3		1		
Winston.....	198	32	246	40	(¹)	(¹)	196	30	(¹)	(¹)	12	3
Yalobusha.....	82	66	171	114	115	148	33	20	(¹)	(¹)	13	1
Yazoo.....					241	316	127	220	122	167	77	75
	4,432	4,035	5,536	6,362	4,498	7,184	3,398	4,294	2,045	2,580	1,638	1,726

¹ No report.

Reports of cases of malarial fever were received through the circular postal cards from those counties from which no reports had been made to the State board of health, as shown in the foregoing table. These reports were as follows:

County.	August.		September.		October.		November.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Adams.....	29	53			14	19	6	3
Attala.....	(¹)	(¹)	128	83			4	6
Benton.....			(¹)	(¹)	23	13	4	9
Calhoun.....	69	46	61	10		53	9	2
Carroll.....							6	4
Chickasaw.....	48	60	50	50			14	3
Choctaw.....					12	20		
Forrest.....			106	90	23	11	30	13
Franklin.....					5			
Hancock.....					45	55		
Hinds.....					33	27	12	3
Issaquena.....	133	357						
Itawamba.....					37			
Jefferson Davis.....			9	6				
Kemper.....	78	95	36	31	24	12	17	9

¹ No report.

County.	August.		September.		October.		November.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Lafayette.....							(1)	(1)
Leake.....			38	18	47	17	16	16
Leflore.....	136	431	172	420		133	1	22
Lowndes.....	84	71		20	12	12	5	2
Madison.....	17	92	10	43			(1)	(1)
Marshall.....					26	54	11	11
Monroe.....							3	
Neshoba.....		30		14				8
Pike.....	80	41			36	23	8	9
Pontotoc.....	137	15	22	10				
Rankin.....								6
Simpson.....			19	8				7
Smith.....	12	5		6	4	1	11	10
Tippah.....	2	3	59	10	1	3	2	2
Tishomingo.....			8			4		
Washington.....			68	157	56	128	7	25
Webster.....	43	9	64	17	2		16	36
Winston.....			33	20			5	1
Yalobusha.....							12	7
Yazoo.....	71	188						
Total.....	939	1,496	892	1,013	400	585	200	208
Grand total.....								5,733

¹ No report.

The following is a comparative table of reports of cases received by postal card and those received by the State board of health:

Months.	State morbidity reports.			Postal-card reports.		
	White.	Colored.	Total.	White.	Colored.	Total.
1913.						
January.....	675	627	1,302	(1)	(1)	
February.....	824	663	1,487	(1)	(1)	
March.....	1,077	759	1,836	(1)	(1)	
April.....	1,410	802	2,212	(1)	(1)	
May.....	1,844	1,270	3,114	(1)	(1)	
June.....	2,130	1,981	4,111	(1)	(1)	
July.....	4,432	4,035	8,467	(1)	(1)	
August.....	5,536	6,362	11,898	6,306	8,447	14,753
September.....	4,498	7,184	11,682	4,000	5,164	9,164
October.....	3,398	4,294	7,692	3,323	4,110	7,433
November.....	2,045	2,580	4,625	1,453	1,556	3,009
December.....	1,638	1,726	3,364	(1)	(1)	
	29,507	32,283	61,790	15,082	19,277	34,359

¹ No report.

It can therefore be estimated that at least 67,523 cases of malarial fever occurred in Mississippi during the year 1913. This gives a reported morbidity rate of 37.5 per 1,000 population, or about 1 person in every 26 suffered an attack of malaria during the year.

There was therefore 1 registered death from malaria for every 53 cases reported.

Types of Infection.

The tertian and estivo-autumnal types of infection have been reported in every county in the State. The tertian type prevails.

The number of counties in which the types of infection were stated and reported confirmed for the period were as follows:

Types.	Number of counties.		Total counties.
	Not confirmed.	Confirmed microscopically.	
Tertian.....	17	62	79
Quartan.....	44	32	76
Estivo-autumnal.....	25	54	79

This shows that tertian and estivo-autumnal types of infection have been reported from every county in the State.

Map No. 1 shows by symbols the different types reported as prevailing in each county.

During a visit made in August, 1913, to the State board of health laboratory at Jackson, Miss., which is under the charge of Dr. C. Stingily, an abstract was made of laboratory reports of the blood examinations made for physicians in the State.

The records show the following results of examinations made:

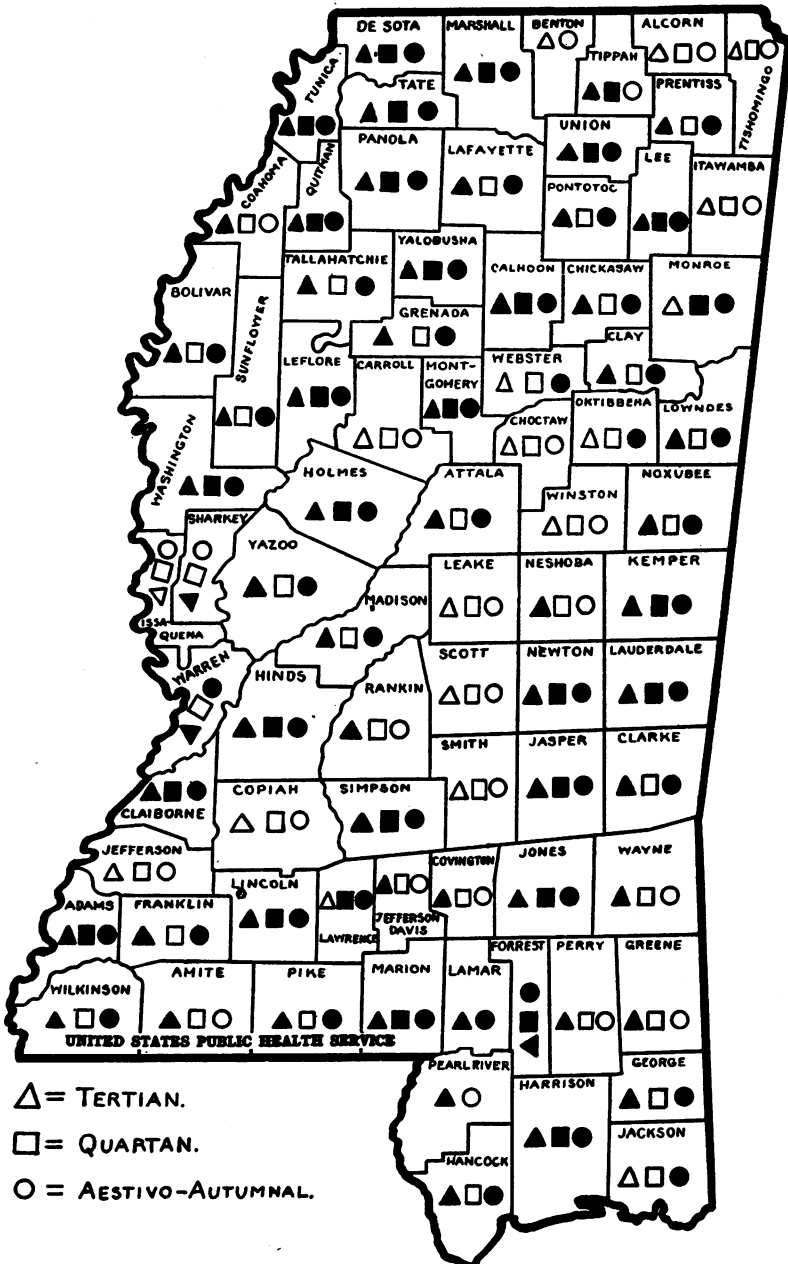
For the year 1910, October, November, and December, 7 positive; year 1911, 22 positive from 8 counties; year 1912, 30 positive from 18 counties; year 1913, January to July, 33 positive from 16 counties.

There are 79 counties in the State, of which number 29 counties are represented in these laboratory reports, where positive findings were obtained from specimens submitted, as follows: Attala, Bolivar, Calhoun, Claiborne, Clarke, Coahoma, Copiah, Covington, De Soto, Grenada, Hinds, Holmes, Issaquena, Jackson, Jones, Kemper, Lauderdale, Lafayette, Lee, Leflore, Madison, Marshall, Pearl River, Perry, Prentiss, Scott, Tallahatchie, Tate, and Wilkinson.

Laboratory specimens were examined and the tertian and estivo-autumnal types were confirmed. A specimen was sent me by the State laboratory in February, 1914, for determination of the type and a quartan infection was confirmed.

The following table gives the number of physicians who report using the microscope, the number of counties represented, and the number of cases in which the diagnosis was confirmed microscopically as shown in the postal reports received each month:

Month.	Number of physicians.	Counties represented.	Number of cases.
August.....	136	50	1,142
September.....	94	43	699
October.....	67	37	387
November.....	29	27	329



MAP NO. 1.—MISSISSIPPI, SHOWING THE TYPES OF MALARIA REPORTED PRESENT IN THE SEVERAL COUNTIES DURING THE YEAR 1913.

The solid black symbols indicate the forms of malaria reported by correspondents to have been confirmed microscopically.

Chronic Malaria.

A summary of the reports made of chronic cases of malaria each month is here given:

Month.	Number of physicians.	Counties represented.	Number of cases.
August.....	251	72	1,455
September.....	229	73	1,160
October.....	197	65	1,487
November.....	104	50	506

Children Under 15 Years of Age.

Postal-card reports were received of 34,359 cases of malaria for the four months, of which number 10,321 cases were reported to have occurred among children under 15 years of age. This represents 30 per cent of the total number reported for that period.

Children Undeveloped Mentally and Physically.

For the month of August 147 physicians from 58 counties; for September, 108 physicians from 54 counties; for October, 92 physicians from 46 counties; and for November, 76 physicians from 43 counties stated that there were children undeveloped, mentally and physically, on account of chronic malaria.

Reported Deaths from Malaria.

Through the courtesy of the State health officer, Dr. E. H. Galloway, mortality statistics were obtained. These statistics were prepared by Dr. F. L. Watkins, deputy State registrar, in charge of vital statistics.

The following table shows the number of deaths from all causes for the year 1913, by color, urban and rural, each month, reported for the State:

Deaths from all causes, 1913.

	White.	Colored.	Total.
State (total).....	7,644	13,662	21,306
Urban.....	1,697	2,798	4,495
Rural.....	5,947	10,864	16,811

Total deaths from all causes by months, 1913.

	White.	Colored.	Total.
Year (1913).....	7,644	13,662	21,306
January.....	727	1,166	1,893
February.....	671	1,094	1,765
March.....	628	1,294	1,877
April.....	575	1,110	1,685
May.....	614	1,212	1,826
June.....	700	1,313	2,013
July.....	681	1,197	1,878
August.....	715	1,209	1,924
September.....	621	1,100	1,721
October.....	594	1,046	1,640
November.....	583	977	1,560
December.....	535	989	1,524

The deaths reported as due to malaria for the year 1913, by color, urban and rural, for each month, are given in the following table:

Deaths registered as due to malaria, 1913.

Month.	Urban.		Rural.		Total.
	White.	Colored.	White.	Colored.	
January.....	2	5	12	31	50
February.....	2	3	2	17	24
March.....	1	7	17	17	42
April.....	3	4	10	27	44
May.....	5	7	23	43	78
June.....	7	9	31	51	128
July.....	4	18	47	117	186
August.....	3	9	86	162	260
September.....	13	13	61	104	191
October.....	6	18	36	84	144
November.....	1	8	23	45	77
December.....	3	2	6	29	40
	50	103	354	757	1,264

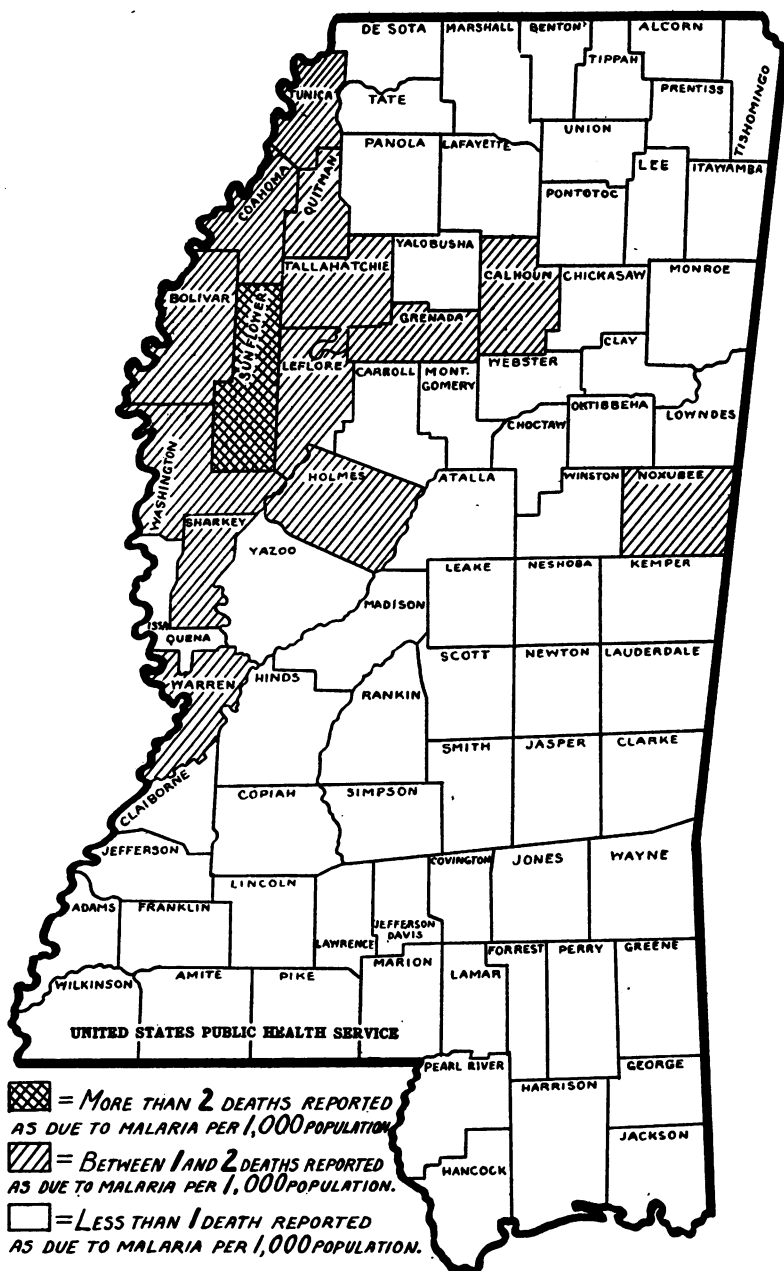
The deaths from malarial fever represent 5.93 per cent of deaths from all causes and a mortality rate of 70.3 per 100,000 population.

The malaria deaths of the whites, numbering 404, represent 5.28 per cent of deaths from all causes among the whites, and those of the colored, numbering 860, represent 6.29 per cent of deaths from all causes among the colored.

The increase in deaths begins with the month of May, reaching its height in August, subsiding gradually in each of the months of September, October, and November, and averages about the same for the months of December to April.

Map No. 2 here given shows the relative mortality from malaria reported in the several counties of the State, estimated on the population given by the census for 1910.

There are 14 counties in which the mortality rate from malarial fevers exceeded 100 per 100,000, as follows: Bolivar, Calhoun, Coahoma, Grenada, Holmes, Leflore, Noxubee, Quitman, Sharkey, Sunflower, Tallahatchie, Tunica, Warren, and Washington, of which Sunflower County had the highest rate, viz, 306 per 100,000



MAP, NO. 2.—MISSISSIPPI, SHOWING THE RELATIVE NUMBER OF DEATHS REPORTED TO BE DUE TO MALARIA PER 1,000 POPULATION IN THE SEVERAL COUNTIES, 1913.

Deaths registered as due to malaria by race and counties, and malaria mortality rate per 100,000 population by counties—Mississippi—1913.

County	White.	Colored.	Rate per 100,000.
Adams	0	7	27.7
Alcorn	6	0	33.0
Amite	3	1	17.4
Attala	7	14	72.4
Benton	2	4	58.5
Bolivar	14	54	139.0
Calhoun	13	5	101.5
Carroll	13	7	86.4
Chickasaw	2	6	35.0
Choctaw	6	4	69.5
Claiborne	1	7	45.9
Clarke	4	5	41.6
Clay	2	3	24.7
Coahoma	5	62	195.3
Copiah	2	6	22.2
Covington	3	0	17.7
De Soto	6	13	82.1
Forrest	4	5	43.4
Franklin	3	2	32.9
George	1	2	45.4
Greene	2	0	33.0
Grenada	2	16	114.4
Hancock	1	0	8.9
Harrison	5	6	31.7
Hinds	9	38	73.7
Holmes	8	41	125.3
Issaquena	1	6	66.2
Itawamba	7	1	55.7
Jackson	3	0	19.4
Jasper	1	5	32.4
Jefferson	0	4	21.9
Jefferson Davis	1	3	31.1
Jones	2	2	13.3
Kemper	6	3	44.2
Lafayette	10	7	77.6
Lamar	4	0	34.0
Lauderdale	8	11	44.0
Lawrence	3	2	38.2
Leake	4	1	27.3
Lee	7	2	31.1
Leflore	10	41	140.5
Lincoln	2	4	20.9
Lowndes	5	20	81.4
Madison	3	19	65.6
Marion	5	2	44.0
Marshall	6	2	29.8
Monroe	13	14	76.7
Montgomery	7	6	74.0
Neshoba	4	5	50.0
Newton	2	4	25.9
Noxubee	3	27	105.2
Oktibbeha	3	5	40.0
Panola	5	25	94.0
Pearl River	1	0	9.4
Perry	2	2	52.0
Pike	1	5	16.0
Pontotoc	9	0	45.7
Prentiss	8	4	70.0
Quitman	3	13	138.0
Rankin	6	3	37.5
Scott	3	3	35.8
Sharkey	3	23	160.0
Simpson	11	1	69.7
Smith	0	2	12.0
Sunflower	29	59	306.0
Tallahatchie	12	25	127.2
Tate	5	10	76.0
Tippah	3	0	20.5
Tishomingo	4	2	45.9
Tunica	4	24	150.1
Union	4	0	21.0
Warren	13	42	120.0
Washington	13	52	132.8
Wayne	1	5	40.7
Webster	4	3	47.0
Wilkinson	3	7	55.3
Winston	2	2	23.3
Yalobusha	5	9	65.0
Yazoo	6	35	87.8
	404	860	.....

Mosquitoes.

Mosquitoes were reported to be present in every county in the State. In 65, *Anopheles* were reported. The reports on the species of mosquitoes were as follows:

Species.	Number of counties.			
	August.	September.	October.	November.
<i>Anopheles</i>	17	22	25	30
<i>Anopheles</i> and <i>Culex</i>	27	18	25	16
<i>Anopheles</i> and <i>Stegomyia</i> (<i>Aedes</i>) <i>calopus</i>	4	5	6	4
<i>Anopheles</i> , <i>Culex</i> , and <i>Stegomyia</i> (<i>Aedes</i>) <i>calopus</i>	17	14	9	3
<i>Stegomyia</i> (<i>Aedes</i>) <i>calopus</i>	0	1	0	0
<i>Culex</i>	1	1	0	0
Unknown.....	13	16	12	18
Not stated.....	0	0	1	0
None.....	0	0	0	2
No report.....	0	2	1	6
Total.....	79	79	79	79

Swamps and poorly drained lands are said to exist in every county in the State.

SANITARY CONDITIONS IN ALASKA.

A REPORT UPON THE DISEASES FOUND AMONG THE INDIANS OF SOUTHEASTERN ALASKA.

By EMIL KRULISH, Passed Assistant Surgeon, United States Public Health Service.

During November and December, 1913, the villages of Petersburg, Klukwan, Haines, Klawock, Kake, Hoonah, Saxman, Metlakatla, Kasaan, Ketchikan, Juneau, Sitka, Douglas, Wrangell, Yakutat, Hydaburg, Killisnoo, and Skagway were visited. I personally examined all natives in these settlements at the time and special effort was made to determine the number infected with tuberculosis, trachoma, and syphilis.

The native population of southeastern Alaska is approximately 5,200, but due to the nomadic life which these people lead, the number inspected was 2,494.

The routine of examination was similar to the methods employed by officers at the immigration stations in the inspection of arriving aliens. The examination of Indians in their homes is necessarily difficult and inconvenient and while this report may not be absolutely accurate, it is sufficiently reliable for all practical purposes and as correct as it could be made under existing circumstances. A table accompanying this report represents the results of this survey in detail.

Tuberculosis.

The number of tuberculous cases detected was 197, or 7.9 per cent of the number examined. This includes all forms of tuberculosis. The percentage of pulmonary tuberculosis in the district was found to be about 5.4 per cent, which varied in the different villages, while the greatest proportion of cases was noted at Haines—13.9 per cent. These figures indicate the actual number of active tuberculous infections.

Considering the overcrowding and the insanitary conditions which prevail in the majority of native homes harboring tuberculous cases, the percentage of infection is remarkably low. An important factor in diminishing contagion is the fact that after the disease is well developed in these natives, unless they receive proper care and treatment, its progress is rapid and death removes what would otherwise remain a menace and a focus for infection.

An interesting feature in connection with pulmonary tuberculosis in the Alaska Indians is the frequent occurrence of profuse hemorrhages even in the early stages of the infection with apparently no other physical manifestations of the disease. Approximately 50 per cent of the cases gave histories of hemoptysis. Another fact which has an important bearing on the treatment of the disease is the manner in which these natives respond to the rest and open-air treatment. Marked improvement usually follows in a comparatively brief period.

Tuberculosis in the Indian is, however, not limited to the lungs. The bones, glands, and joints are frequently attacked and result in abscess formation, deformities, and cripples. I have seen several cases of advanced Pott's disease with complete paralysis of the lower extremities from pressure of the spine on the cord in the region of the necrosis.

Syphilis.

The accurate number of syphilitics in the district is difficult to determine, for the objective symptoms of the disease are not always manifested and to elicit a reliable history of previous indications is absolutely impossible. The disease is more prevalent in those communities situated near white settlements than in the isolated villages. Seventy individuals, or 2.8 per cent of the natives examined, exhibited signs of syphilitic infection.

Eye Diseases.

Eye diseases (trachoma, keratitis, cataract, pterygium, and conjunctivitis) are common among the natives of southeastern Alaska. Thirteen per cent of those examined showed evidences of having had some form of eye trouble. Trachoma was found in 2 per cent and

11 individuals, or 20 per cent of these, were blind from the effects of it. The percentage of trachoma varies in the different settlements from 1.3 per cent at Douglas to 9 per cent at Yakutat. In 6 settlements no cases of the disease were detected.

There is no doubt in my mind as to the contagious character of trachoma, for I have repeatedly been able to select all members of one family out of a group of persons simply by the examination of their eyelids for the presence of trachoma. In the families thus segregated, usually the parents were totally or partially blind, the older children exhibited the advanced stages of the disease, while the younger children showed indications of recent infection.

Testing the sight for refractive errors was prevented by the lack of proper facilities, but it was observed that presbyopia appeared in comparatively young people. Cataracts were likewise frequently detected, and these also occurred at an early age. It was not uncommon to see well-advanced cataracts in natives of 35 years of age.

There is no doubt that the majority of the blindness and partial loss of vision in the district might have been prevented by proper care and treatment of the cases in the early stages of the disease.

Adenoids and Enlarged Tonsils.

Throat affections are common among the young people; approximately 20 per cent of those under 18 years of age have adenoids and hypertrophied or diseased tonsils requiring surgical attention. This predisposes these individuals to tuberculosis, diphtheria, and other throat infections, impairs their hearing, retards their mental development, and results in deformities of the jaws, mouth, teeth, and palate. These sequelæ of adenoids and diseased tonsils are seen too frequently in every native settlement.

Rheumatism.

The damp climate of southeastern Alaska is chiefly responsible for the large number of rheumatic complaints in this district. The rainfall in this section is exceedingly heavy and the natives are necessarily exposed to the elements by virtue of their business—hunting and fishing. A number of severe cases of arthritis deformans were noted.

Other Diseases.

Epidemics of scarlet fever, measles, influenza, whooping cough, and diphtheria were reported during the year at the different villages. The mortality resulting from infectious diseases is usually exceedingly high, owing to the complications arising from lack of care and proper treatment. Bronchitis is prevalent during all seasons. Gun-

shot wounds and infected sores are of frequent occurrence. As a result of eating improperly prepared food and of the almost exclusive meat diet, digestive disturbances are likewise common.

The Relation of the Indian to the Community.

The majority of natives of southeastern Alaska are located near the whites; they trade in the same stores, work in the same mines and canneries, and the two races intermingle freely in public places. Indians are by nature very sociable and indulge very frequently in feasts, dances, and other ceremonies. On these occasions hundreds of them often gather from all sections of the district. All these factors contribute to the dissemination of communicable diseases not only among them but also among the white population. The Indian is therefore an important factor in relation to the health of the community, and this fact can not be lost sight of and should receive due consideration.

The monthly reports of teachers in the Alaska school service for the fiscal year ending June 30, 1913, indicate the proportion between births and deaths per thousand in southeastern Alaska to be 41 to 47, or a decrease of 6 per thousand of the population. It is apparent that unless proper medical and sanitary relief is extended to these natives in the near future, the dissemination of disease will continue among them, and in time the Indian race of Alaska will be exterminated.

Health Work of the Bureau of Education.

The Bureau of Education is cognizant of this alarming condition and its officials are waging a heroic struggle in attempting to prevent the excessive mortality, but with its present resources the work is necessarily limited and inadequate to the demand.

A part of the appropriation for the education of natives of Alaska is being expended for the maintenance of three improvised hospitals in schoolhouses and for salaries of several physicians and nurses. All schools are supplied with a medicine chest containing simple remedies accompanied by a medical handbook explaining the use of the drugs, and the teachers are directed to devote special attention to improving sanitary conditions in the homes and villages. Lectures are delivered at meetings on tuberculosis, eye diseases, ventilation, care of infants, preparation of food, and other subjects relating to prophylactic measures of the common diseases. Paper towels and individual drinking cups have been introduced into the schools this current year and their value has been explained to the pupils. Various bulletins of the Public Health Service on appropriate subjects have been distributed to the field workers for their instruction and guidance.

Diseases found among natives of southeastern Alaska.

[Estimated population, 5,200; number examined, 2,494.]

	Cases.	Remarks.
Trachoma.....	52	2 per cent.
Corneal opacity.....	86	
Pterygium.....	25	
Conjunctivitis.....	23	
Cataract.....	37	
Keratitis.....	31	
Blindness, both eyes.....	36	11 due to trachoma.
Blindness, one eye.....	35	
Optic atrophy.....	1	Total eye cases 326, or 13 per cent.
Tuberculosis, pulmonary.....	135	5.4 per cent.
Tuberculosis, osseous.....	36	
Tuberculosis, glandular.....	20	
Tuberculosis, laryngeal.....	4	
Tuberculosis, dermal.....	2	Total cases tuberculosis, 197—7.9 per cent.
Syphilis.....	70	2.8 per cent.
Rheumatism, complaints.....	408	16.3 per cent.
Lumbago.....	8	
Arthritis deformans.....	6	
Adenoids and enlarged tonsils.....	142	5.6 per cent.
Pneumonia.....	4	
Pleurisy.....	4	
Organic cardiac disease.....	9	
Aneurism subclavian artery.....	1	
Eczema.....	5	
Scabies.....	18	
Deafness.....	7	
Mastoiditis.....	3	
Harelip.....	1	
Paralysis agitans.....	1	
Hemiplegia.....	3	
Bell's palsy.....	1	
Epilepsy.....	2	
Imbecility.....	5	
Dementia.....	1	
General paresis.....	1	
Hysteria.....	1	
Lipoma, multiple.....	1	
Hemorrhoids.....	2	
Carcinoma, rectum.....	1	
Carbuncle.....	1	
Clubfoot.....	2	
Fractured clavicle.....	2	
Total cases.....	1,233	Or 49.4 per cent.

Record of births and deaths in the district compiled from the monthly reports of teachers. Births 41 per thousand, deaths 47 per thousand, a decrease of 6 per thousand of population.

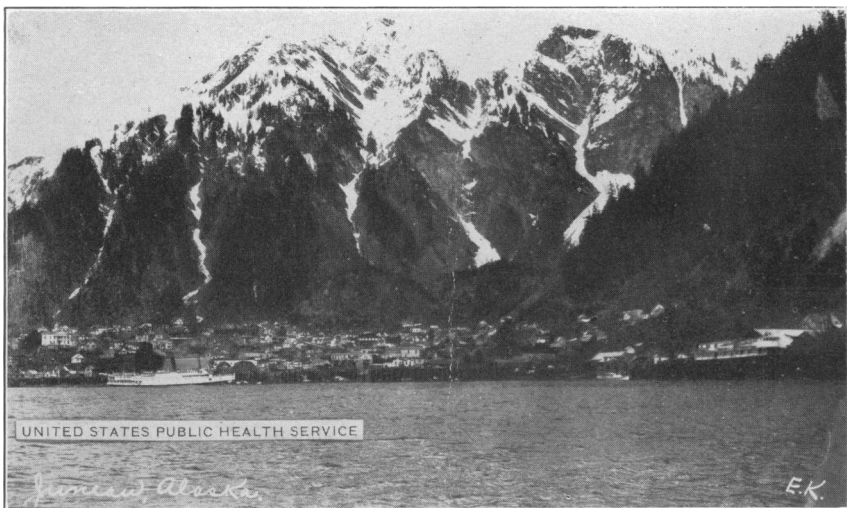


FIG. 1.—THE TOWN OF JUNEAU, THE CAPITAL OF ALASKA. POPULATION, 4,500



FIG. 2.—INDIANS OF SOUTHEASTERN ALASKA. THE THLINGET TRIBE.



FIG. 3.—INDIAN BOYS. THE THLINGET TRIBE.



FIG. 4.—INDIAN CHILDREN. THE THLINGET TRIBE.



FIG. 5.—KLUKWAN, AN INDIAN VILLAGE ON THE CHILCAT RIVER IN SOUTH-EASTERN ALASKA.



FIG. 6.—INDIAN VILLAGE OF HOONAH.

This settlement has a population of 400 and represents a typical Indian village in southeastern Alaska.



FIG. 7.—INDIAN FISH CAMP.

This summer life is very beneficial to those suffering with tuberculosis.

Public Health Reports, May 22, 1914.



FIG. 8.—INDIAN FISH CAMP

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.

Maryland—Salisbury.

The State Department of Health of Maryland reported by telegraph May 18, 1914, that a new focus of smallpox had been reported in Maryland through the notification of 2 cases of the disease at Salisbury, Wicomico County

North Carolina—Wilmington.

Dr. Charles T. Nesbitt, county health officer of Hanover County, N. C., reports that since the 1st of May, 1913, there have been 19 known cases of smallpox in Wilmington and that these have been apparently the result of infection from 8 separate and distinct foci in adjoining counties.

The manner of control has been the vaccination and revaccination of contacts and the quarantine, without guards, of cases and those intimately associated with cases. The infection was entirely of the mild type generally prevalent throughout the country.

Texas—Galveston.

Surg. Bahrenburg, of the Public Health Service, reported by telegraph that during the week ended May 15, 1914, 4 cases of smallpox had been notified in Galveston, Tex.

SMALLPOX—Continued.

Wisconsin Report for April, 1914.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Wisconsin:						
Barron County.....	1				1	
Bayfield County.....	3					3
Brown County.....	1				1	
Buffalo County.....	10					10
Clark County.....	1				1	
Columbia County.....	6		1	2	3	
Crawford County.....	4				4	
Dane County.....	10				3	7
Dodge County.....	10		4		6	
Douglas County.....	9					9
Forrest County.....	2				2	
Grant County.....	7				7	
Green County.....	1		1			
Iowa County.....	2					2
Iron County.....	9		2			7
Jefferson County.....	2				2	
Kenosha County.....	61				61	
La Crosse County.....	6			2	4	
Manitowoc County.....	3			1	2	
Marathon County.....	2					2
Marrinette County.....	3				3	
Milwaukee County.....	124					124
Oneida County.....	10			2	8	
Outagamie County.....	14	1			3	11
Pierce County.....	3				3	
Polk County.....	2			1	1	
Racine County.....	3		2		1	
Rock County.....	9		1		8	
St. Croix County.....	1			1		
Sauk County.....	2		2			
Sawyer County.....	2		1		1	
Sheboygan County.....	1			1		
Trempealeau County.....	6				6	
Vilas County.....	1		1			
Walworth County.....	1			1		
Washington County.....	11				7	4
Waukesha County.....	5				4	1
Waupaca County.....	6		5		1	1
Winnebago County.....	4				2	2
Total.....	358	1	20	11	144	183

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Connecticut (Apr. 1-30):			Florida (Mar. 1-31)—Contd.		
Counties—			Counties—Continued.		
Hartford.....	6		Duval.....	13	
New Haven.....	2		Escambia.....	1	
New London.....	3		Hillsborough.....	8	
Middlesex.....	1		Levy.....	2	
Total.....	12		Manatee.....	1	
Florida (Mar. 1-31):			Osceola.....	2	
Counties—			Polk.....	1	
Alachua.....	34		Suwanee.....	2	
Bradford.....	2		Taylor.....	4	
Brevard.....	1		Volusia.....	31	
Calhoun.....	31		Total.....	133	

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Illinois (Mar. 1-31):			Louisiana (Mar. 1-31):		
Counties—			Parishes—		
Adams.....	48		Bienville.....	7	•
Alexander.....	45		Caddo.....	6	
Carroll.....	1		Livingston.....	2	
Champaign.....	1		St. Landry.....	4	
Christian.....	3		St. Martin.....	6	
Cook.....	23		Terrebonne.....	27	
Crawford.....	5		Total.....	52	
Douglas.....	2				
Franklin.....	6		Louisiana (Apr. 1-30):		
Fulton.....	30		Parishes—		
Grundy.....	9		Beauregard.....	5	
Hamilton.....	126		Caddo.....	6	
Hancock.....	1		Cameron.....	12	
Henderson.....	10		Natchitoches.....	14	
Henry.....	9		Sabine.....	16	
Jefferson.....	4		Terrebonne.....	12	
Johnson.....	1		Vernon.....	12	
Jo Daviess.....	4		Total.....	77	
Kane.....	6				
Knox.....	1		New Jersey (Apr. 1-30):		
Lake.....	8		Counties—		
La Salle.....	12		Burlington.....	1	
Lee.....	18		Monmouth.....	1	
McDonough.....	1		Ocean.....	1	
Madison.....	33		Passaic.....	2	
Massac.....	7		Total.....	5	
Montgomery.....	120				
Morgan.....	4		South Carolina (Apr. 1-30):		
Ogle.....	21		Counties—		
Peoria.....	8		Abbeville.....	3	
Piatt.....	2		Anderson.....	4	
Pike.....	34		Beaufort.....	1	
Pulaski.....	2		Chester.....	2	
Richland.....	1		Darlington.....	3	
Rock Island.....	9		Fairfield.....	1	
St. Clair.....	6		Greenville.....	5	
Saline.....	3		Horry.....	2	
Sangamon.....	60		Kershaw.....	1	
Shelby.....	9		Lancaster.....	1	
Stark.....	6		Laurens.....	7	
Stephenson.....	8		Marlboro.....	2	
Tazewell.....	1		Newberry.....	3	
Vermilion.....	5		Orangeburg.....	2	
Wabash.....	3		Spartanburg.....	1	
Warren.....	4		Union.....	1	
Wayne.....	3		York.....	10	
White.....	41		Total.....	49	
Whiteside.....	89				
Will.....	2		Virginia (Apr. 1-30):		
Williamson.....	14		Counties—		
Winnebago.....	12		Albemarle.....	6	
Total.....	881		Alexandria.....	1	
			Amherst.....	6	
Louisiana (Jan. 1-31):			Appomattox.....	20	
Parishes—			Augusta.....	2	
Beauregard.....	27		Bedford.....	19	
De Soto.....	20		Botetourt.....	1	
Jackson.....	2		Buchanan.....	1	
Jeff Davis.....	8		Campbell.....	38	
St. Landry.....	7		Charlotte.....	1	
St. Mary.....	10		Culpeper.....	2	
Terrebonne.....	25		Dickenson.....	1	
West Feliciana.....	1		Dinwiddie.....	3	
Total.....	100		Fluvanna.....	6	
			Franklin.....	3	
Louisiana (Feb. 1-28):			Frederick.....	1	
Parishes—			Grayson.....	9	
Beauregard.....	3		Greenville.....	7	
Caddo.....	4		Hallfax.....	11	1
La Salle.....	6		Henrico.....	1	
St. Martin.....	28		Henry.....	11	
Terrebonne.....	21	1	Isle of Wight.....	22	
Vernon.....	3		King and Queen.....	1	
Total.....	65	1	Lancaster.....	42	

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Virginia (Apr. 1-30)—Contd. Counties—Continued.			Virginia (Apr. 1-30)—Contd. Counties—Continued.		
Lee.....	10	.....	Rockingham.....	13	.....
Loudon.....	5	.....	Russell.....	61	.....
Mathews.....	4	.....	Scott.....	4	.....
Mecklenburg.....	1	.....	Shenandoah.....	3	.....
Montgomery.....	1	.....	Southampton.....	37	.....
Nansemond.....	12	.....	Sussex.....	3	.....
Nelson.....	7	.....	Surry.....	3	.....
Norfolk.....	23	.....	Tazewell.....	24	.....
Northampton.....	3	.....	Washington.....	1	.....
Nottoway.....	1	.....	Warren.....	1	.....
Orange.....	1	.....	Westmoreland.....	1	.....
Pittsylvania.....	2	.....	Wise.....	1	.....
Princess Anne.....	21	.....	Wythe.....	1	.....
Prince Edward.....	3	.....	Total.....	495	2
Prince George.....	20	1			
Roanoke.....	13	.....		

City Reports for Week Ended May 2, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.....	2	.....	Los Angeles, Cal.....	2	.....
Austin, Tex.....	3	.....	Lynchburg, Va.....	6	.....
Baltimore, Md.....	8	1	Manchester, N. H.....	1	.....
Chicago, Ill.....	3	.....	Milwaukee, Wis.....	23	.....
Cincinnati, Ohio.....	4	.....	Moline, Ill.....	6	.....
Coffeyville, Kans.....	2	.....	Muscatine, Iowa.....	3	.....
Columbus, Ohio.....	5	.....	Nashville, Tenn.....	16	.....
Covington, Ky.....	2	.....	New Orleans, La.....	1	.....
Detroit, Mich.....	4	.....	Niagara Falls, N. Y.....	1	.....
Duluth, Minn.....	3	.....	Oakland, Cal.....	1	.....
Evansville, Ind.....	14	.....	Portland, Oreg.....	3	.....
Kansas City, Mo.....	22	1	Racine, Wis.....	3	.....
Kokomo, Ind.....	1	.....	St. Louis, Mo.....	3	.....
La Crosse, Wis.....	3	.....	Toledo, Ohio.....	20	.....
Lexington, Ky.....	5	.....	Washington, D. C.....	4	.....
Little Rock, Ark.....	2	.....	Zanesville, Ohio.....	1	.....

TYPHOID FEVER.

State Reports for April, 1914.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
New Jersey:		South Carolina:	
Atlantic County.....	1	Berkeley County.....	2
Bergen County.....	2	Charleston County.....	4
Burlington County.....	3	Florence County.....	1
Camden County.....	7	Marion County.....	1
Essex County.....	22	Marlboro County.....	1
Hudson County.....	7	Orangeburg County.....	2
Mercer County.....	3	Richland County.....	2
Middlesex County.....	1	Spartanburg County.....	1
Monmouth County.....	1	Sumter County.....	1
Morris County.....	5	York County.....	4
Ocean County.....	1	Total.....	19
Passaic County.....	2		
Salem County.....	1		
Somerset County.....	1	Virginia:	
Union County.....	4	Albemarle County.....	4
Total.....	61	Alleghany County.....	1
		Botetourt County.....	1
		Buchanan County.....	1

TYPHOID FEVER—Continued.

State Reports for April—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Virginia—Continued.		Virginia—Continued.	
Campbell County.....	1	Rockbridge County.....	2
Caroline County.....	1	Rockingham County.....	1
Dinwiddie County.....	1	Russell County.....	3
Elizabeth City County.....	1	Scott County.....	5
Fairfax County.....	1	Shenandoah County.....	2
Floyd County.....	2	Smyth County.....	3
Fluvanna County.....	1	Southampton County.....	2
Franklin County.....	1	Tazewell County.....	5
Goochland County.....	2	Washington County.....	3
Grayson County.....	2	Wise County.....	4
Greensville County.....	3	Wythe County.....	5
Halifax County.....	6	York County.....	3
Hanover County.....	3		
Henrico County.....	7	Total.....	102
Henry County.....	3		
Highland County.....	1	Wisconsin:	
Isle of Wight County.....	2	Ashland County.....	1
James City County.....	1	Pond du Lac County.....	1
Lancaster County.....	1	Kenosha County.....	3
Lee County.....	2	Marathon County.....	2
Montgomery County.....	3	Milwaukee County.....	12
New Kent County.....	1	Oneida County.....	4
Nelson County.....	1	Outagamie County.....	2
Page County.....	1	Sawyer County.....	1
Pittsylvania County.....	1	Sheboygan County.....	3
Powhatan County.....	1	Winnebago County.....	1
Prince Edward County.....	1		
Prince George County.....	2	Total.....	30
Prince William County.....	1		

City Reports for Week Ended May 2, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Austin, Tex.....	1	.....	Milwaukee, Wis.....	3	1
Baltimore, Md.....	4	.....	Moline, Ill.....	1	.....
Beaver Falls, Pa.....	1	.....	Nashville, Tenn.....	3	1
Binghamton, N. Y.....	2	.....	Newark, N. J.....	3	1
Boston, Mass.....	4	.....	New Orleans, La.....	5	1
Brookton, Mass.....	1	.....	Oakland, Cal.....	1	.....
Brookline, Mass.....	1	.....	Philadelphia, Pa.....	14	4
Buffalo, N. Y.....	4	2	Pittsburgh, Pa.....	2	3
Cambridge, Mass.....	1	.....	Portland, Oreg.....	1	1
Camden, N. J.....	6	.....	Pottstown, Pa.....	.....	1
Chelsea, Mass.....	1	.....	Providence, R. I.....	2	.....
Chicago, Ill.....	10	3	Reading, Pa.....	1	.....
Cincinnati, Ohio.....	1	.....	Richmond, Va.....	1	.....
Columbus, Ind.....	.....	1	Sacramento, Cal.....	3	1
Cumberland, Md.....	1	.....	Saginaw, Mich.....	1	.....
Dunkirk, N. Y.....	42	.....	St. Louis, Mo.....	3	.....
Fall River, Mass.....	4	1	Saratoga Springs, N. Y.....	1	.....
Grand Rapids, Mich.....	3	.....	Schenectady, N. Y.....	1	.....
Harrisburg, Pa.....	2	.....	South Bend, Ind.....	.....	1
Hartford, Conn.....	1	1	South Bethlehem, Pa.....	1	.....
Haverhill, Mass.....	1	.....	Springfield, Mass.....	1	.....
Kansas City, Mo.....	1	1	Trenton, N. J.....	1	.....
Kokomo, Ind.....	1	.....	Toledo, Ohio.....	.....	1
Lancaster, Pa.....	1	.....	Washington, D. C.....	1	.....
Little Rock, Ark.....	1	.....	Wheeling, W. Va.....	3	1
Los Angeles, Cal.....	1	.....	Wilkes-Barre, Pa.....	3	.....
Lynchburg, Va.....	1	.....	Worcester, Mass.....	1	.....
Lynn, Mass.....	1	.....	York, Pa.....	1	.....
Melrose, Mass.....	.....	1			

CEREBROSPINAL MENINGITIS.

State Reports for April, 1914.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Louisiana:		Wisconsin—Continued.	
Ascension Parish.....	1	Milwaukee County.....	2
Wisconsin:		Pierce County.....	1
Lafayette County.....	1	Total.....	5
Marathon County.....	1		

City Reports for Week Ended May 2, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.....	5	1	Los Angeles, Cal.....		1
Brooklyn, Mass.....		1	Lowell, Mass.....	2	
Chicago, Ill.....	3	3	Newark, N. J.....	1	1
Cleveland, Ohio.....	4	2	New Orleans, La.....	1	
Clinton, Mass.....	1		Pittsburgh, Pa.....	1	
Dayton, Ohio.....		1	Pittsfield, Mass.....		1
Fall River, Mass.....	1		St. Louis, Mo.....	1	1
Haverhill, Mass.....	1	1	Wilkes-Barre, Pa.....	1	
Kansas City, Mo.....	1		Worcester, Mass.....	1	1

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April, 1914.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
New Jersey:		Virginia—Continued.	
Essex County.....	2	Nansemond County.....	2
Morris County.....	1	Orange County.....	1
Somerset County.....	1	Prince George County.....	1
Total.....	4	Rockingham County.....	1
Virginia:		Russell County.....	1
Amherst County.....	1	Total.....	10
Augusta County.....	1	Wisconsin:	
Botetourt County.....	1	Chippewa County.....	1
Middlesex County.....	1		

City Reports for Week Ended May 2, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Bridgeport, Conn.....	1	1	Providence, R. I.....	1	
Everett, Mass.....	1		Wilmington, N. C.....	1	
Philadelphia, Pa.....	1	1			

ERYSIPELAS.**City Reports for Week Ended May 2, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Binghamton, N. Y.	1	1	New Castle, Pa.	1	1
Brookton, Mass.	1	1	New Orleans, La.	1	1
Buffalo, N. Y.	8	1	Norristown, Pa.	1	1
Chicago, Ill.	27	4	Philadelphia, Pa.	22	2
Cincinnati, Ohio.	7	1	Pittsburgh, Pa.	5	1
Cleveland, Ohio.	7	1	St. Joseph, Mo.	1	1
Duluth, Minn.	1	1	St. Louis, Mo.	9	1
Harrisburg, Pa.	1	1	South Bethlehem, Pa.	1	1
Hartford, Conn.	2	1	Taunton, Mass.	1	1
Lancaster, Pa.	1	1	Trenton, N. J.	1	1
Lexington, Ky.	1	1	Reading, Pa.	2	1
Los Angeles, Cal.	3	1	Rochester, N. Y.	4	1
Milwaukee, Wis.	2	1	York, Pa.	2	1

PLAGUE.**California—Rats Collected and Examined.**

During the week ended April 25, 1914, 226 rats were collected at San Francisco. Of this number, 166 were examined. No plague-infected rat was found.

California—Plague-Infected Squirrels Found.

Plague-infected ground squirrels have been found in California as follows: Monterey County, April 10, 1914, 1 squirrel; San Benito County, April 14, 1914, 1 squirrel.

PNEUMONIA.**City Reports for Week Ended May 2, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y.	2	1	Philadelphia, Pa.	44	76
Binghamton, N. Y.	7	3	Pittsburgh, Pa.	34	25
Chicago, Ill.	165	106	Port Huron, Mich.	1	1
Cleveland, Ohio.	27	20	Reading, Pa.	3	4
Duluth, Minn.	5	4	Rochester, N. Y.	2	10
Dunkirk, N. Y.	2	2	Sacramento, Cal.	1	1
Grand Rapids, Mich.	1	1	Saratoga, N. Y.	1	1
Kansas City, Mo.	7	12	Schenectady, N. Y.	2	1
Los Angeles, Cal.	11	9	South Bethlehem, Pa.	5	1
Manchester, N. H.	2	2	South Omaha, Nebr.	4	1
Nanticoke, Pa.	3	1	Steelton, Pa.	1	1
New Castle, Pa.	6	1	Wilkes-Barre, Pa.	1	2
Newport, Ky.	1	1	Wilkinsburg, Pa.	1	1
North Adams, Mass.	1	1	Wilmington, N. C.	1	1

TETANUS.

During the week ended May 2, 1914, 1 case of tetanus was notified at Los Angeles, Cal., and 1 at Pittsburgh, Pa.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

Duluth, Minn.—Scarlet Fever.

Acting Asst. Surg. Cheney, of the Public Health Service, reported by telegraph that during the week ended May 16, 1914, 11 cases of scarlet fever had been notified in Duluth, Minn.

Pittsburgh, Pa.—Scarlet Fever.

Surg. Stoner, of the Public Health Service, reported by telegraph that during the week ended May 16, 1914, 97 cases of scarlet fever, with 3 deaths, had been notified in Pittsburgh, Pa., making a total of 3,426 cases, with 163 deaths, reported since the beginning of the outbreak, August 1, 1913. •

State Reports for April, 1914.

States.	Scarlet fever.	Measles.	Diphtheria.
New Jersey.....	973	2,779	413
South Carolina.....	8	736	38
Wisconsin.....	497	1,039	209

City Reports for Week Ended May 2, 1914.

Cities.	Population United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Over 500,000 inhabitants:											
Baltimore, Md.	558,485	190	23		23		25	1	33	13	
Boston, Mass.	670,585	239	32	4	94	2	102	3	68	19	
Chicago, Ill.	2,185,283	780	119	11	213	2	98	5	229	104	
Cleveland, Ohio.	560,663	172	30	2	46	1	11	1	42	21	
Philadelphia, Pa.	1,549,008	594	46	7	232		44	5	99	66	
Pittsburgh, Pa.	533,905	178	20	3	27	1	107	3	34	21	
St. Louis, Mo.	687,029	248	55	6	217	2	37	3	51	24	
From 300,000 to 500,000 inhab- itants:											
Buffalo, N. Y.	423,715		7	1	38		9		28	11	
Cincinnati, Ohio.	364,463	139	13	1	4		14	1	36	29	
Detroit, Mich.	465,766	176	22			1	21	1		17	
Los Angeles, Cal.	319,198	100	5		9		20	1	44	18	
Milwaukee, Wis.	373,857	131	26	2	37		29	1	25	13	
Newark, N. J.	347,469	116	27	1	130	2	44	1	47	11	
New Orleans, La.	339,075	145	23		32		11		24	25	
Washington, D. C.	331,069	108	4		22		8		23	8	
From 200,000 to 300,000 inhab- itants:											
Jersey City, N. J.	267,779	66	11		20		15		14		
Kansas City, Mo.	248,381	69	3		24		3		1	7	
Portland, Oreg.	207,214		2		20		7		4		
Providence, R. I.	224,326	85	5	1	18	3	6	1	7	13	
Rochester, N. Y.	218,149	66	4		73	3	22	1	5	2	
From 100,000 to 200,000 inhab- itants:											
Bridgeport, Conn.	102,054	30	5		7	2			1	1	
Cambridge, Mass.	104,839	20	1		23		10		9	5	
Columbus, Ohio.	181,548	64	12		110	2	3		6	7	
Dayton, Ohio.	116,577	13	4		9		6	1	1	5	
Fall River, Mass.	119,295		2		2		9		11	5	
Grand Rapids, Mich.	112,571	39	2	1	17		6	3	1	4	
Lowell, Mass.	106,294	29	1		22		1		4	2	
Nashville, Tenn.	110,364	40			2				8	5	
Oakland, Cal.	150,174	47	3		13		4	2	7	4	
Richmond, Va.	127,628	64			9	1	1		11	9	
Toledo, Ohio.	168,497	45	4		26	1	3		8	8	
Worcester, Mass.	145,986	50	1		1		9	1	7	5	

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd

City Reports for Week Ended May 2, 1914—Continued.

Cities.	Population United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhab- itants:										
Altoona, Pa.	52,127	18	1	1	12		3			2
Bayonne, N. J.	55,545				10		1		1	
Brockton, Mass.	56,878	17	3		16		9	1	6	1
Camden, N. J.	94,538		1		18		5		4	
Covington, Ky.	53,270		2		1				3	
Duluth, Minn.	78,466		3		5		10	1	6	5
Evansville, Ind.	69,647	25	1		15		3			5
Harrisburg, Pa.	64,186	27	3		39					
Hartford, Conn.	98,915	41	18	2	8		2		7	1
Hoboken, N. J.	70,324				13		7		10	1
Johnstown, Pa.	55,482	15	6		11		2			
Lynn, Mass.	89,336	23	6	1			9		7	2
Manchester, N. H.	70,063	17	3		4		8		2	2
New Bedford, Mass.	96,652	38	2		1		4		15	3
Passaic, N. J.	54,773	15	1		19	1	4		3	
Pawtucket, R. I.	51,622				2		2			1
Reading, Pa.	96,071	23	1		1		7		2	3
Saginaw, Mich.	50,510	9	3		2		3			
St. Joseph, Mo.	77,403	24			13				5	2
Schenectady, N. Y.	72,826	16			1		5		2	
South Bend, Ind.	53,684	12	1		6		3			1
Springfield, Ill.	51,678	15	1	1			1			1
Springfield, Mass.	88,926	29	2		1		1		3	3
Trenton, N. J.	96,815	42	5		1		20			2
Wilkes-Barre, Pa.	67,105	20	2		62		4		8	
From 25,000 to 50,000 inhabitants:										
Atlantic City, N. J.	46,150	11			6		3		2	
Auburn, N. Y.	34,668	13	1	1	12		3	2		
Aurora, Ill.	29,807	13								
Austin, Tex.	29,860	15								3
Binghamton, N. Y.	48,443	27			27	1	2		2	
Brookline, Mass.	27,792				7		1		1	
Chelsea, Mass.	32,452	13	7		2		5		3	3
Chicopee, Mass.	25,401	8	1				1			
East Orange, N. J.	34,371				45		5		4	
Elmira, N. Y.	37,176	11								
Everett, Mass.	33,484	4			3		5		1	1
Fitchburg, Mass.	37,826	11			3		1			
Haverhill, Mass.	44,115	14	1				2		5	2
La Crosse, Wis.	30,417	10	2		1				1	2
Lancaster, Pa.	47,227		1		1		1		1	
Lexington, Ky.	35,099	14			24					2
Little Rock, Ark.	45,941	35			13				3	
Lynchburg, Va.	29,494	14	1		10		2		2	3
Malden, Mass.	44,404	12		1						
New Castle, Pa.	36,280		1				1			
Newport, Ky.	30,309	9	1				2			
Newton, Mass.	39,806	10	1		40		5			
Niagara Falls, N. Y.	30,445	7			1					1
Norristown, Pa.	27,875	13			12		1			2
Orange, N. J.	29,630	13	1		10		2		4	1
Pasadena, Cal.	30,291				1		4		1	1
Pittsfield, Mass.	32,121	18					4		2	1
Portsmouth, Va.	33,190	10			6		1			
Racine, Wis.	38,002	12	1				2			
Roanoke, Va.	34,874	17			36		1		1	3
Rockford, Ill.	45,401	7	1							1
Sacramento, Cal.	44,696	17			1		2			2
South Omaha, Nebr.	26,259	9								
Superior, Wis.	40,384	12					3		1	2
Taunton, Mass.	34,259	18	1		1		8		1	3
Waltham, Mass.	27,834	12	1		3		5		2	2
West Hoboken, N. J.	35,403		1				2		1	
Wheeling, W. Va.	41,641	9			1		2			
Wilmington, N. C.	25,748	16	1		1				1	5
York, Pa.	44,250		6		1		1			
Zanesville, Ohio	28,026				1		1			

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

City Reports for Week Ended May 2, 1914—Continued.

Cities.	Population United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Less than 25,000 inhabitants:										
Alameda, Cal.	23,383	4			54				1	
Ann Arbor, Mich.	14,817	7	1				1		4	
Beaver Falls, Pa.	12,191	0								
Bennington, Vt.	8,698	6			2		2			
Cambridge, Ohio.	11,327				19		1			
Canton, Mass.	13,075	3	3				1			
Coffeyville, Kans.	12,687				4				1	1
Columbus, Ind.	8,813				4				1	
Concord, N. H.	21,497	14								
Cumberland, Md.	21,839	2					12		3	
Dunkirk, N. Y.	17,221	3			5					1
Galesburg, Ill.	22,089	3					3			
Harrison, N. J.	14,498						2		2	
Kearny, N. J.	18,659	4	1		1		1		2	
Kokomo, Ind.	17,010	4			1		4			1
Marinette, Wis.	14,610	2					1			
Massillon, Ohio.	13,879	2								2
Medford, Mass.	23,150	5	4	1	2		3		3	
Melrose, Mass.	15,715	8			1		3		1	
Moline, Ill.	24,199	5					1			
Montclair, N. J.	21,550	8							1	
Morristown, N. J.	12,507	4			1		1			1
Muscataine, Iowa.	16,178	4								
Nanticoke, Pa.	18,877	7								
Newburyport, Mass.	14,949	1								
North Adams, Mass.	22,019	4								
Northampton, Mass.	19,431	7			25		2		2	1
Palmer, Mass.	8,610	1								
Plainfield, N. J.	20,550	6			5		3		2	
Port Huron, Mich.	18,863		1		4					
Pottstown, Pa.	15,599	5	1		2					
Rutland, Vt.	13,546	6					1			
Saratoga Springs, N. Y.	12,693	8			1		1		2	
South Bethlehem, Pa.	19,973	5	1		15				2	
Steelton, Pa.	14,246	8					1		1	2
Wilkinsburg, Pa.	18,924	7	1		1		5			
Woburn, Mass.	15,308	2								

IN INSULAR POSSESSIONS.

HAWAII.

Examination of Rats and Mongoose.

Rats and mongoose have been examined in Hawaii as follows: Honolulu, week ended April 25, 1914, 342; Hilo, week ended April 18, 1914, 2,427. No plague-infected animal was found.

Plague—Honokaa.

A fatal case of plague was notified at Honokaa, Hawaii, May 16, 1914.

PHILIPPINE ISLANDS.

Plague—Manila.

Surg. Victor G. Heiser, chief quarantine officer and director of health for the Philippine Islands, reports: During the week ended April 4, 1914, 2 fatal cases of plague were notified at Manila.

The plague infection referred to in the report for the week ended February 14, 1914,¹ which was located around the center of a block near No. 143 Calle Rosario was brought under complete control and no cases of plague infection have occurred since March 4, 1914. Many of the dead rats which were found upon opening up hollow walls and partitions in this section upon laboratory examination were proved to have died of plague.

On April 2 a case of plague was found at 702 Calle Lavesares and 1 case at 612 Calle Lara. These houses are in the San Nicolas district and not believed to be directly connected with the Rosario infection mentioned above.

¹ Public Health Reports, Mar. 6, 1914, p. 581, and Mar. 20, 1914, p. 705.

FOREIGN REPORTS.

CHILE.

Plague—Santiago.

During the week ended April 18, 1914, 2 fatal cases of plague were notified at Santiago, Chile.

CHINA.

Plague—Hongkong.

During the week ended May 13, 1914, 215 cases of plague were notified at Hongkong.

Plague Rats—Hongkong.

During the week ended April 4, 1914, 2,815 rats were examined at Hongkong. Of this number 40 were found plague-infected.

Plague Rats—Shanghai.

During the week ended April 11, 1914, 285 rats were examined at Shanghai. Five plague-infected rats were found.

In the French concession of Shanghai 459 rats were reported, April 11, 1914, to have been examined. Of this number 1 was found plague-infected.

CUBA.

A Correction.

The case of smallpox noted in the Public Health Reports for April 17, 1914, page 969, as having occurred at Sagua la Grande, Cuba, during the month of February, 1914, was an error. It is officially stated by the director of sanitation of Cuba that no case of smallpox occurred.

Plague—Habana.

A case of plague, occurring in a new focus, was notified in Habana, Cuba, May 15, 1914, making a total of 19 cases notified in Cuba from March 5, 1914.

INDIA.

Plague—Bombay.

An increase of plague has been noted in Bombay city and presidency. During the week ended April 11, 1914, 264 cases of plague with 233 deaths were notified in the city of Bombay and 789 cases with 633 deaths in the presidency. During the week ended April 18, 301 cases with 256 deaths were notified in the city and 1,038 cases with 805 deaths in the presidency.

JAMAICA.**Quarantine Against Smallpox.**

A telegram received from Kingston, Jamaica, May 14, 1914, states that the Government of Jamaica has instituted quarantine measures against smallpox requiring that passengers in transit through Panama who have not been on the isthmus 14 days and passengers from Baltimore and Galveston desiring to land must have been 14 days out, or show recent vaccination, or be vaccinated on the voyage, or complete the remainder of the 14 days at the quarantine station.

JAVA.**Plague—Surabaya.**

During the week ended March 28, 1914, 11 cases of plague with 6 deaths were notified at Surabaya, Java. Of these, 2 cases occurred in the city of Surabaya and 9 in the vicinity.

MEXICO.**Smallpox—Tampico.**

Fifty cases of smallpox were reported present at Tampico, Mexico, May 19, 1914.

PERU.**Status of Plague.**

Plague has been notified in Peru as follows:

FEB. 23—MAR. 22, 1914.

Places.	New cases.	Remain- ing.	Places.	New cases.	Remain- ing.
Callao.....		1	Lima (country).....		2
Casma.....	2	2	Mollendo.....	3	2
Catacaos.....	5	4	Pacasmayo.....	1	
Chiclayo.....	12	11	Salaverry.....	4	
Chimbote.....	(1)		Santiago de Cao.....	(1)	
Guadalupe.....	6	1	San Pedro.....	3	1
Lima (city).....	3	4	Trujillo.....	16	15

¹ Present.

² In lazaretto at San Pedro.

In lazaretto at Trujillo.

VENEZUELA.**Plague—State of Miranda.**

A fatal case of plague was notified May 19, 1914, in the State of Miranda, Venezuela.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.**Reports Received During Week Ended May 22, 1914.****CHOLERA**

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	May 29-Apr. 18....	9	5	
Philippine Islands:				
Panay Island.....	Mar. 18.....			Present. Last instance of cholera in the islands.
Straits Settlements:				
Singapore.....	Mar. 22-28.....	1	1	

YELLOW FEVER.

Brazil:				
Bahia.....	Apr. 12-25.....	9	15	May 2: Diminishing.
Ecuador:				
Guayaquil.....	Mar. 1-31.....	6	5	
Southern Nigeria:				
Lagos.....	Mar. 8.....	1		A European.

PLAGUE.

Brazil:				
Bahia.....	Apr. 12-25.....	2	3	
Ceylon:				
Colombo.....	Mar. 29-Apr. 11....	17	15	
Chile:				
Santiago.....	Apr. 18.....		2	
China:				
Hongkong.....				May 7-13: Cases, 215.
Cuba:				
Habana.....	May 15.....	1		Total Mar. 5-May 15: Cases, 18; deaths, 3.
Dutch East Indies:				
Surabaya.....	Mar. 28.....	2		9 cases in vicinity.
Ecuador:				
Guayaquil.....	Mar. 1-31.....	8	4	
Egypt:				
Port Said.....	Apr. 21.....	2	1	
Provinces—				
Assiout.....	Apr. 23.....	1	1	
Fayoum.....	Apr. 17.....	2	2	
Hawaii:				
Honokaa.....	May 16.....	1	1	
India:				
Bombay.....	Mar. 29-Apr. 18....	800	687	Feb. 1-28: Deaths, 37,724. Epidemic.
Karachi.....	Apr. 5-18.....	210	176	
Madras.....	Apr. 5-11.....	1		
Japan:				
Tokyo.....				May 12-18: Cases, 7.
Peru:				
Ancachs—				
Cosma.....	Feb. 23-Mar. 22....	2		
Chimbote.....	do.....			Present.
Arequipa—				
Mollendo.....	do.....	3		Apr. 11: 5 cases.
Lambayeque—				
Chiclayo.....	do.....	12		
Guadalupe.....	do.....	6		
Pacasmayo.....	do.....	1		
Libertad—				
San Pedro.....	do.....	3		
Santiago de Coa.....	do.....			Present.
Salaverry.....	do.....	4		
Trujillo.....	do.....	16		Apr. 21: 10 cases in hospital.
Lima—				
Lima.....	do.....	3		
Piura—				
Catacoas.....	do.....	5		
Philippine Islands:				
Manila.....	Mar. 29-Apr. 4....	2	2	
Venezuela:				
Miranda, State.....	May 19.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended May 22, 1914—Continued.****SMALLPOX.**

Places.	Date.	Cases.	Deaths.	Remarks.
Canada:				
Montreal.....	May 3-9.....	1		
Ottawa.....	Apr. 27-May 2.....	1		
Toronto.....	May 2-8.....	1		
Windsor.....	May 3-9.....	1		
Winnipeg.....	Apr. 27-May 2.....	2		
Ceylon:				
Colombo.....	May 29-Apr. 11.....	5		
Chile:				
Talcahuano.....	Apr. 5-11.....	3		
China:				
Dairen.....	Mar. 29-Apr. 11.....	8	4	
Shanghai.....	Mar. 31-Apr. 5.....	2	6	Deaths among natives.
Tsing Tau.....	Mar. 29-Apr. 11.....	9	1	
Dutch East Indies:				
Java.....				Total: In west part Mar. 22-28 Cases, 101; deaths, 23.
Batavia.....	Jan. 18-Apr. 4.....	91	38	
Cheribon.....	Mar. 7.....			Epidemic.
Egypt:				
Alexandria.....	Apr. 16-22.....	4		
France:				
Nantes.....	Apr. 19-May 2.....	3		
Paris.....	Mar. 12-18.....	1		
Germany:				
Plaue.....	Mar. 1-31.....	11		Apr. 12-25: Cases, 10.
Strassburg.....	do.....	1	1	
Greece:				
Hermopolis (Syros).....	Mar. 16.....	6		
India:				
Bombay.....	Mar. 29-Apr. 18.....	75	30	
Karachi.....	Apr. 5-11.....	1	1	
Madras.....	do.....	3	2	
Indo-China.....				Total Jan. 1-31: Cases, 160 deaths, 16.
Mexico:				
Nogales.....	Apr. 23-May 9.....	6		
Salina Cruz.....	Apr. 1-15.....	2		Present in vicinity. May 19: 50 cases present.
Tampico.....				
Turkey in Europe:				
Constantinople.....	Apr. 19-25.....		1	
Saloniki.....	Apr. 12-25.....		6	

Reports Received from Dec. 27, 1913, to May 15, 1914.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bosnia-Herzegovina—				
Brod.....	Nov. 13-18.....	2		
Kostjica.....	do.....	1		
Novigrad.....	Oct. 26-Nov. 5.....	1		
Sjekocac.....	Nov. 6.....	1		
Travnik, district.....	Dec. 10-16.....	6		
Vranduk.....	Nov. 20.....	1		
Zenica.....	Oct. 20-Nov. 19.....	9	2	
Croatia-Slavonia—				
Pozenga.....	Nov. 18-Dec. 1.....	2		
Syrmien—				
Adasevci.....	do.....	6	2	
Semlin.....	do.....	1	1	
Vitrovia—				
Dobrovic.....	do.....	2	2	
Hungary.....				Total, Sept. 1-Dec. 29: Cases, 729; deaths, 372; Dec. 29, free.
Bacs-Bodrog, district.....	Nov. 9-Dec. 29.....	52	31	
Jasz-Nagy-Kun - Szolnok—				
Szolnok.....	Nov. 9-15.....	2	2	
Maramaros.....	Nov. 30-Dec. 6.....	1	1	
Pest Pills—				
Soroksar.....	Nov. 9-22.....	2	1	
Szabolcs—				
Nyiregyhaza.....	Nov. 9-15.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Temes—				
Varasiget.....	Nov. 9-15.....	.....	1	
Torontal.....	Nov. 9-Dec. 13.....	27	19	
Ung—				
Jasza.....	Nov. 9-15.....	1	1	
Ceylon:				
Colombo.....	Nov. 9-Jan. 17.....	33	19	
Galle.....	Feb. 9-Mar. 28.....	12	.....
China:				
Hongkong.....	Nov. 9-Mar. 22.....	10	4	
Dutch East Indies.....				Jan. 1-31: Cases, 91; deaths, 74.
Java—				
Batavia and Tanjong Priok.....	Nov. 9-Feb. 14.....	47	35	
Do.....	Jan. 18-24.....	1	1	
Pamanoekan.....	do.....	1	1	
Samarang.....	Nov. 30-Dec. 27.....	47	25	
Do.....	Jan. 1-31.....	8	5	
Sumatra—				
Padang.....	Dec. 1-Jan. 24.....	136	101	Total.
Baros.....	Jan. 15-31.....	55	46	
Sorkam.....	Jan. 1-17.....	22	17	
India:				
Bassein.....	Feb. 1-Mar. 7.....	15	13	
Bombay.....	Nov. 10-Mar. 28.....	25	12	
Calcutta.....	Nov. 9-Mar. 28.....	.....	1, 174	
Madras.....	Nov. 16-Mar. 7.....	14	5	
Moulmine.....	Jan. 4-Feb. 28.....	23	23	
Negapatam.....	Jan. 4-Mar. 14.....	108	89	
Rangoon.....	Nov. 1-Dec. 31.....	5	1	
Do.....	Jan. 1-Feb. 28.....	6	4	
Indo-China.....				Year 1913: Cases, 432; deaths, 13. Total, Jan. 1-Feb. 10: Cases, 16; deaths, 13.
Cholon.....	Jan. 21-31.....	1	.....
Laos (Shan States).....	Jan. 1-10.....	10	.....	Along the upper Mekong River.
Phanri.....	Jan. 1-Feb. 10.....	.....	3	
Saigon.....	Jan. 13-Feb. 23.....	3	.....
Philippine Islands:				
Manila.....	Nov. 9-Mar. 14.....	86	56	Total, Aug. 23-Jan. 24: Cases, 186; deaths, 124. Third quarter, 1913: Cases, 14; deaths, 6. Fourth quarter, 1913: Cases, 107; deaths, 104. Jan. 3, 1 fatal case on s. s. Sigismund from Rabal, New Guinea. At the necropsy, pathological lesions of cholera and beriberi were found.
Provinces.....				Total, Aug. 23-Dec. 27: Cases, 148; deaths, 94.
Bulacan—				
Bulacan.....	Dec. 14-20.....	.....	.....	Present in vicinity.
Meycauayan.....	do.....	.....	.....	Present.
Capiz.....				Total, Dec. 17-23: Cases, 26; deaths, 18. Feb. 21, still present.
Banga.....	Dec. 17-20.....	.....	.....	Present.
Capiz.....	Jan. 28.....	.....	.....	Do.
Calivo.....	Dec. 17-Jan. 24.....	.....	.....	1 death daily.
New Washington.....	do.....	.....	.....	Present.
Cavite—				
Santa Cruz.....	Nov. 13-19.....	.....	.....	Do.
Cebu—				
Cebu.....	do.....	.....	.....	Do.
Opon.....	Nov. 19.....	1	.....	On Mactan Island.
Pampanga.....	Dec. 7-Jan. 28.....	.....	.....	Present in Guagua, Macabebes, San Fernando, and other places.
Pangasinan.....	Dec. 19-29.....	.....	.....	Present in Dagupan, Lingayen, San Carlos, and Urdaneta.
Rizal—				
Las Pinas.....	do.....	1	.....
Pasig.....	Nov. 19.....	.....	.....	Present.
Pateros.....	Jan. 28.....	.....	.....	Do.
Rizal.....	do.....	.....	.....	Do.
Roumania.....				Total, Nov. 14-Dec. 7: Cases, 18; deaths, 15.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Bessarabia—				
Ismail.....	Oct. 28-Nov. 8....	6	1	
Ekaterinoslav.....	do.....	1		
Kherson.....	do.....	6	9	
Taurida—				
Dneiper district.....	do.....	1	2	
Servia.....				Nov. 10-24: 8 cases with 2 deaths in the districts Podrigne and Pojarevat.
Siam:				
Bangkok.....	Nov. 2-Mar. 21.....		168	
Straits Settlements:				
Singapore.....	Nov. 2-Mar. 7.....	22	20	
Kedah, Province.....	Feb. 4.....			Present.
Turkey in Asia:				
Alvail.....	Jan. 10-23.....	9	6	
Beirut.....	Dec. 23.....	2	1	From among troops on the s. s. Bahr Amer from Rodosto.
Smyrna.....	Dec. 16-Jan. 8.....	11	4	
Trebizond.....	Dec. 9-Jan. 24.....	22	16	Dec. 9-16: 6 cases among troops from s. s. Guldjema. Jan. 17, 1 case in the city.
Turkey in Europe:				
Adrianople.....	Feb. 28-Mar. 28.....	99	38	Among the military.
Constantinople.....	Nov. 25-Feb. 15.....	141	56	Total, Aug. 2-Feb. 15: Cases, 216; deaths, 96. Total, Jan. 1-Mar. 21: Cases, 30; deaths, 14; Mar. 24, 1 fatal case.
Dardanelles.....	Jan. 9-20.....	10	9	
Gallipoli.....	Jan. 1-3.....	2	2	
Kirk Kilisse.....	Mar. 16.....	2	2	
Pera.....	Jan. 3-10.....	5		
Rodosto.....	Dec. 21-Jan. 9.....	22		

YELLOW FEVER.

Brazil:				
Bahia.....	Nov. 23-Apr. 4....	24	27	Apr. 1-21: Cases, 24; deaths, 17.
Ceara.....	Nov. 1-30.....		2	
Pernambuco.....	Mar. 1-15.....		17	
Ecuador:				
Guayaquil.....	Nov. 1-Dec. 31....	9	6	
Do.....	Jan. 1-Feb. 15.....	12	3	
Milagro.....	Jan. 1-Feb. 28.....	6	4	
Naranjito.....	Jan. 1-31.....	3	2	
Mexico:				
Merida.....	Dec. 10-11.....	1	1	From Campeche.
Do.....	Jan. 4-10.....	1	1	Do.
Southern Nigeria:				
Lagos.....	Oct. 20-Dec. 28....	5	1	Among Europeans from a vessel. Feb. 26, present.
Do.....	Feb. 13-14.....	2		
Omitsha.....	Jan. 24.....	1		
Togo:				
Lome.....	Sept. 12.....	1		
Trinidad:				
Brighton.....	Dec. 30.....	1		Total, Nov. 22-Dec. 30: Cases, 10; deaths, 3. Mar. 26, 1 case, 34 miles distant.
Labrea.....	Mar. 27.....	1		
Venezuela:				
Caracas.....	Feb. 1-28.....		3	

PLAGUE.

Arabia:				
Debal.....	Mar. 7.....			Present.
Australia:				
Thursday Island Quarantine Station.....	May 21.....	5		Pestis minor from s. s. Taynan from Hongkong to Townsville.
Azores:				
Terceira—				
Angra-Heróismo.....	Dec. 21.....		1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Nov. 23-Apr. 4....	26	19	
Pernambuco.....	Dec. 16-31.....	1	1	
Do.....	Jan. 1-Feb. 28.....	2	2	
Rio de Janeiro.....	Nov. 16-22.....	1	1	
British East Africa:				
Kisumu.....	Sept. 12-Oct. 13....	2	.....	Jan. 14-Nov. 15, 1913: Cases, 20; deaths, 22.
Mombasa.....	Sept. 12-Dec. 15....	31	16	Feb. 6-Dec. 15: Cases, 200; deaths, 173, including previous reports.
Nairobi.....	.....do.....	3	3	
Ceylon:				
Colombo.....	Jan. 25-Mar. 28....	29	67	Total Jan. 25-Mar. 25: Cases, 100; deaths, 88; of which 71 fatal cases were septicemic and 29 cases, with 17 deaths, bubonic.
Kandy.....	Jan. 25-Feb. 7....	1	.....	From Colombo.
Chile:				
Iquique.....	Nov. 9-Jan. 31.....	18	9	
Do.....	Jan. 11-Mar. 28....	19	12	
Santiago.....	Mar. 11-15.....	.....	2	
China				Mar. 14, present in Ampo and Tah-tau-po. Jan. 17-Mar. 1, present in localities 15 miles from Chaoyang, and in Chin Khol, Hak Is, Hwellai, Ko Khol, Khol Tau, Kun Pau, Sua Ming Sia, and Toa Phau.
Amoy.....	Feb. 18-Mar. 28....	3	5	Present in the island.
Chao-Chowfu.....	Mar. 29-Apr. 4.....	.....	.....	Present.
Hongkong.....	Nov. 2-Apr. 4.....	383	281	Apr. 30-May 6: Cases, 203.
Hwelan.....	Apr. 6.....	.....	.....	About 4 deaths daily per week. 30 miles from Amoy.
Shanghai.....	Oct. 1-7.....	1	.....	Apr. 22, 1 case.
Cuba:				
Artemisa.....	Apr. 23.....	1	.....
Habana.....	Mar. 5-May 6.....	17	3	
Dutch East Indies:				
Java.....				Total in East Java,* year 1913: Cases, 11,218; deaths, 10,556.
Provinces—				
Kediri.....	Nov. 1-Dec. 31.....	547	481	
Do.....	Jan. 1-Feb. 28.....	406	380	
Madioan.....	Nov. 1-Dec. 31.....	151	140	
Do.....	Jan. 1-Feb. 28.....	284	251	
Paseroean, including Malang.....	Nov. 1-Dec. 31.....	1,550	1,463	
Do.....	Jan. 1-Feb. 28.....	1,481	1,295	
Surabaya.....	Nov. 1-Dec. 31.....	93	93	
Do.....	Jan. 1-Feb. 28.....	99	90	
Ecuador:				
Babahoyo.....	Nov. 1-Dec. 31.....	1	.....
Duran.....	Dec. 1-31.....	1	.....
Do.....	Jan. 1-31.....	1	1	
Guayaquil.....	Nov. 1-Dec. 31.....	349	157	
Do.....	Jan. 1-Feb. 28.....	71	32	
Manta.....	Dec. 1-31.....	8	.....
Milagro.....	Nov. 1-Dec. 31.....	2	1	
Naranjito.....	.....do.....	3	1	
Yaguachi.....	Nov. 1-30.....	2	2	
Do.....	Jan. 1-31.....	1	.....
Egypt.				Jan. 1-Dec. 24, 1913: Cases, 654; deaths, 304. Jan. 1-Apr. 16: Cases, 23, deaths, 10.
Alexandria.....	Feb. 19.....	1	1	
Cairo.....	Feb. 13-22.....	2	.....
Port Said.....	Feb. 10-Apr. 6.....	4	3	
Provinces—				
Assiout.....	Jan. 5.....	1	1	
Assouan.....	Dec. 10.....	1	.....
Do.....	Jan. 5.....	1	1	
Dakahlia.....	Mar. 23.....	1	.....
Fayoum.....	Feb. 10-Apr. 15....	2	.....
Garbleh.....	Dec. 11.....	1	.....
Do.....	Jan. 15-Apr. 3.....	8	2	
Menouf.....	Mar. 31-Apr. 2.....	2	2	
Minieh.....	Dec. 9-24.....	3	1	
Do.....	Jan. 8-Apr. 16.....	4	2	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
German East Africa:				
Dar-es-Salaam.....	Mar. 13.....	1	1	Pneumonic.
Hawaii:				
Kukuihaele.....	Apr. 18.....		1	
India.....				Total Jan. 1, 1913-Jan. 3, 1914: Cases, 238,198; deaths, 198,875. Jan. 4-Mar. 31: Cases, 147,995; deaths, 123,362.
Bassein.....	Jan. 4-Mar. 15.....	161	136	Total, Jan. 1, 1913-Jan. 3, 1914: Cases, 304; deaths, 283.
Bombay.....	Nov. 9-Mar. 28.....	666	576	
Calcutta.....	Nov. 2-Mar. 28.....		93	
Karachi.....	Nov. 9-Apr. 4.....	625	544	
Madras.....	Nov. 16-Feb. 14.....	5	3	
Moulmine.....	Jan. 4-24.....		18	Jan. 1, 1913-Jan. 3, 1914: Cases, 574; deaths, 576.
Negapatam.....	Feb. 1-Mar. 14.....	41	41	
Rangoon.....	Oct. 26-Dec. 31.....	74	68	
Do.....	Jan. 1-Feb. 28.....	328	311	
Indo-China.....				Year 1913: Cases, 4,038; deaths, 3,805. Jan. 1-Feb. 10: Cases, 330; deaths, 303.
Saigon.....	Nov. 11-Apr. 6.....	41	3	
Japan.....				Total Jan. 1-Dec. 31: Cases, 27; deaths, 20; exclusive of Taiwan. Apr. 18-20: 11 cases in Komi- kawa Cho, and Katori-Gun Chiba, near Tokyo.
Kobe.....	Dec. 1-7.....	1		
Taiwan—				
Kagi.....	Feb. 1-Apr. 12.....	107	89	
Tokyo.....	Apr. 18-May 4.....	20		Apr. 18: 5 cases in the vicinity.
Yokohama.....	Jan. 4-10.....	1	1	Total Sept. 19-Jan. 10: Cases, 22; deaths, 18.
Mauritius.....	Jan. 1-Feb. 19.....	40	23	Total year 1913: Cases, 30; deaths, 183.
Morocco:				
Casablanca.....	Jan. 7.....	1	1	
El-Arish (Larache).....	Sept. 17.....	1		Among the military.
Fedala.....	Mar. 16-Apr. 4.....	5	1	
New Caledonia:				
Bourail.....	Sept. 1-Oct. 14.....	8	2	In a school of the tribe of the Azaren.
Persia:				
Lingah.....	Mar. 25.....	1		
Peru.....				Deaths not reported. Total year 1913: Cases, 869; deaths, 450.
Ancachs—				
Casma.....	Feb. 9-15.....	2		Dec. 1-Feb. 8, present.
Nepena.....	Nov. 1-Jan. 18.....			Do.
Arequipa—				
Mollendo.....	Dec. 1-Feb. 22.....	14		Apr. 4, present.
Cajamarca—				
Contumaza.....	Jan. 19-24.....	12		Feb. 8, present.
Callao—				
Callao.....	Jan. 19-Feb. 22.....	7		
Lambayeque—				
Chiclayo.....	Dec. 1-Feb. 15.....	72		
Ferrenaje.....	Dec. 1-Feb. 8.....	18		
Guadalupe.....	Dec. 1-Feb. 22.....	21		Dec. 1-Feb. 8, present.
Pacasmayo.....	Jan. 25-Feb. 15.....	5		
Libertad—				
San Pedro.....	Dec. 1-Feb. 8.....	34		
Salaverry.....	Feb. 16-22.....	3		Mar. 17-25: Cases, 3; deaths, 1.
Trujillo.....	Dec. 1-Feb. 22.....	73		Apr. 14, 9 cases in hospital.
Lima.....	Dec. 1-Jan. 18.....	6		
Lima.....	Dec. 1-Feb. 22.....	48		
Pisco.....	Dec. 1-Jan. 18.....	2		
Monsefu.....	do.....	2		
Piura—				
Catacaos.....	Dec. 1-Feb. 15.....	13		
Piura.....	Dec. 1-Jan. 24.....	10		Feb. 8, present.
Philippine Islands:				
Manila.....	Nov. 23-Mar. 14.....	12	11	Third quarter, 1913: Cases, 2; deaths, 1. Fourth quarter, 1913: case, 1; death, 1.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Saratov.....	Feb. 11.....	1		Total Oct. 20-Nov. 10: Cases, 212; deaths, 170; and 2 fatal cases from Issum Tube.
Ural territory.....				
Djakisabevsk district..	Mar. 2-13.....	16	16	In Assaukurt, Baichurek, Biskuduk, and Djamankuduk.
Djumarta.....	Nov. 9-10.....	5	1	
Djantayu.....	Nov. 8-10.....	2	2	
Kizilu.....	Nov. 8.....	1	1	
Fourteenth village.....	Nov. 7-9.....	6		
Sarbas.....	Nov. 8-10.....	13	7	
Kaziljar district.....	Nov. 5-10.....	39	24	
Lbistchensky district.	Mar. 2-13.....	16	15	
Issum Tube.....	Oct. 20-Nov. 10..	138	127	
Kaimikov.....	Nov. 4-10.....	6	6	
Siam:				
Bangkok.....	Nov. 2-Mar. 21..		26	
Tripoli:				
Bengazi.....	Jan. 31.....			Present.
Turkey in Asia:				
Beirut.....	Dec. 10-23.....	2	2	
Jiddah.....	Feb. 2-Mar. 11..	5	2	
Venezuela:				
Caracas.....	Apr. 7.....		1	Of case reported Apr. 12.
Zanzibar.....	Dec. 31-Jan. 21..	5	3	On s. s. President from Dar-es-Salaam.

SMALLPOX.

Algeria:				
Departments—				
Algiers.....	Sept. 1-Dec. 31..	10		Feb. 1-28: Cases, 5; deaths, 4.
Do.....	Jan. 1-Feb. 28..	3		
Constantine.....	Oct. 1-Dec. 31..	15		
Do.....	Jan. 1-Feb. 28..	1		
Oran.....	Sept. 1-Nov. 30..	216		
Do.....	Jan. 1-Feb. 28..	117		
Arabia:				
Aden.....	Nov. 25-Mar. 9...	6	6	Dec. 20, present. Nov. 30, present; Mar. 7, still present.
Maskat.....	Nov. 30-Dec. 6...	10		
Matarah.....	Dec. 23-Jan. 10..	9		
Argentina:				
Buenos Aires.....	Nov. 1-30.....		1	
Rosario.....	Dec. 1-31.....	1		
Australia:				
New South Wales.....				Total July 1, 1913-Jan. 31, 1914: Cases, 1,078.
Sydney, metropolitan area.				July 1, 1913-Jan. 8, 1914: Cases, 1,032. Feb. 1-Mar. 13: 17 cases in the metropolitan area of Sydney and 15 cases at Singleton.
Western Australia—				Dec. 2: 1 fatal case on R. M. S. Malwa, from London via Port Said, Aden, and Colombo.
Fremantle.....				
Victoria—				At Point Napean quarantine station, Jan. 19: 1 case from F. M. S. Caledonian from Noumea via Sydney.
Melbourne.....				
Austria-Hungary:				
Coastland—				
Trieste.....	Jan. 25-31.....	3		
Galicia.....	Feb. 15-21.....	1		
Krain.....	Mar. 1-14.....	4		
Lower Austria—				
Vienna.....	Jan. 4-24.....	6		
Moravia.....	Jan. 18-Feb. 21..	5		
Silesia.....	Feb. 15-18.....	1		
Tyrol and Vorarlberg.	Nov. 23-Feb. 21..	6		
Upper Austria.....	Dec. 14-Feb. 21..	20		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Belgium:				
Liege.....	Mar. 1-7.....		6	
Brazil:				
Bahia.....	Nov. 23-Apr. 11...	83	1	
Para.....	Dec. 1-Apr. 11....	80	85	
Pernambuco.....	Nov. 1-Feb. 28....		78	
Rio de Janeiro.....	Nov. 9-Apr. 11....	586	121	
Canada:				
British Columbia—				
Vancouver.....	Apr. 19-25.....	1		
Manitoba—				
Winnipeg.....	Feb. 14-Apr. 18...	24		
Ontario—				
Cornwall.....	Feb. 26-Apr. 4....	1		
Fort William.....	Feb. 24-Mar. 2....	1		
Hamilton.....	Jan. 1-Apr. 30....	33		
Ottawa.....	Dec. 7-Apr. 25....	24		
Toronto.....	Dec. 7-Apr. 4....	14	1	
Quebec—				
Montreal.....	Dec. 7-May 4.....	93		
Quebec.....	Jan. 24-31.....	1		
Canal Zone:				
Panama.....				Nov. 1-30: Santo Tomas hospital, 1 case from a vessel from Callao.
Ceylon:				
Colombo.....	Nov. 30-Dec. 6....	1		
Do.....	Mar. 22-28.....	1		
China:				
Amoy.....	Dec. 14-Jan. 10....			Present.
Antung.....	Jan. 4-Mar. 29....	5	2	
Chefoo.....	Feb. 22-Mar. 7....	2	1	
Dairen.....	Dec. 7-Mar. 28....	24	6	
Hankow.....	Nov. 2-Feb. 28....	14	1	
Hongkong.....	Dec. 14-Mar. 29....	32	21	
Mukden.....	Mar. 8-15.....	3	1	
Nanking.....	Jan. 24.....			Do.
Shanghai.....	Dec. 8-Mar. 22....	18	24	Deaths among natives.
Tientsin.....	Nov. 9-15.....		1	
Ting Chow.....	Jan. 5.....			Epidemic, 130 miles from Amoy.
Tsing Tau.....	Jan. 15-Feb. 28....	4		
Tong An.....	Dec. 27.....			Present, 20 miles from Amoy.
Dutch East Indies:				
Java.....				Dec. 13-Mar. 28: 969 cases with 232 deaths in the western part, and 100 cases with 63 deaths in the interior.
Batavia.....	Nov. 27-Jan. 11....	66	69	
Besoeki.....	Oct. 19-29.....	227	47	
Madicoen.....	Oct. 19-28.....	36	12	
Surabaya.....	Oct. 28-Jan. 31....	6		
Surakarta.....	Oct. 19-Dec. 6....	481	91	
Sumatra—				
Padang.....	Jan. 1-31.....			Present.
Egypt:				
Alexandria.....	Nov. 26-Apr. 15....	32	13	
Cairo.....	Nov. 19-Apr. 1....	243	94	
Port Said.....	Dec. 3-Mar. 25....	9	1	
France:				
Bordeaux.....	Mar. 8-14.....		1	
Marseille.....	Nov. 1-Mar. 31....		118	
Nantes.....	Feb. 1-Apr. 11....	6	2	
Nice.....	Nov. 1-Dec. 31....	2		
Paris.....	Nov. 23-Apr. 11....	48		
St. Etienne.....	Nov. 16-Mar. 14....	12	4	
Toulon.....	Jan. 1-31.....		1	
Germany.....				Dec. 7-Mar. 28: Cases, 26.
Berlin.....	Feb. 8-14.....	2		
Bremen.....	do.....	1		
Breslau.....	do.....	1		
Hamburg.....	Dec. 11-25.....	4		
Kehl.....	Jan. 1-31.....		1	
Lubeck.....	Feb. 15-21.....	1		
Gibraltar.....	Dec. 1-Mar. 22....	6		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Aberdeen.....	Feb. 22-Mar. 21...	6	1	
Cardiff.....	Feb. 16-21.....	1		
Edinburgh.....	Mar. 1-7.....		1	
Liverpool.....	Mar. 15-21.....	1		From a vessel.
London.....	Jan. 18-Mar. 22.....	6		
Nottingham.....	Dec. 21-27.....	28		
Southampton.....	Feb. 2-28.....	1		
Greece.....				Jan. 28-Feb. 12: Present in the barracks at Athens and at the surrounding country.
Achaia and Elis, Province.....	Mar. 8-14.....	7	5	Jan. 29, present.
Piræus.....	Jan. 18-Feb. 12.....	19	11	
Grenada.....	Mar. 18.....	3		In St. Andrews Parish, 20 miles from St. Georges.
St. Georges.....	Mar. 22-28.....	4		
Guadeloupe:				
Pointe à Pitre quarantine station, Islet à Cosson.....	Feb. 16-23.....	10	1	From among returned troops from s. s. Perou from Havre via Bordeaux and Santander.
Guatemala:				
Guatemala.....	Apr. 21.....			Present.
India:				
Bombay.....	Nov. 23-Feb. 28.....	78	35	
Calcutta.....	Nov. 2-Mar. 7.....		142	
Karachi.....	Nov. 2-Mar. 14.....	25	5	
Madras.....	Nov. 2-Mar. 21.....	53	16	
Rangoon.....	Jan. 1-Feb. 28.....	18	1	
Indo-China:				
Saigon.....	Nov. 11-24.....	1	1	
Italy:				
Genoa.....	Mar. 1-15.....	1	1	
Leghorn.....	Dec. 21-27.....	1		
Naples.....	Jan. 3.....	1		
Turin.....	Dec. 22-28.....	1		
Japan.....				Total Jan. 1-Dec. 31, 1913: Cases, 108; deaths, 39, exclusive of Taiwan. Total Jan. 1-Feb. 28: Cases, 17; deaths, 3.
Fukuoka ken.....	Dec. 1-31.....	2		
Nagasaki.....	Jan. 1-Mar. 22.....	3	1	Mar. 6-19: Cases 6, deaths 3.
Taiwan.....	Mar. 22-Apr. 11.....	3		
Tokyo.....	Nov. 1-Mar. 7.....	10		
Yokohama.....	Jan. 6-12.....	1	1	
Mauritius.....	Oct. 2-25.....	60	4	
Mexico:				
Acapulco.....	Dec. 6-Apr. 18.....	5	6	
Aguascalientes.....	Dec. 1-Mar. 29.....		112	
Chihuahua.....	Dec. 29-Apr. 26.....		20	
Cruz.....	Apr. 2.....			Epidemic in vicinity.
Durango.....	Apr. 1-May 31.....		77	
Guadalajara.....	Jan. 11-Feb. 14.....	89	46	
Imuris.....	Dec. 29-Jan. 4.....	5		
Juarez.....	Feb. 15-Apr. 4.....	1	4	
Llano.....	Jan. 17.....	8		
La Paz.....	Jan. 16-22.....	3	1	
Manzanillo.....	Mar. 21-27.....	2		
Mexico.....	Oct. 26-Jan. 17.....	129	40	
Monterey.....	Nov. 17-Apr. 19.....	12	8	
Nogales.....	Apr. 27.....	2		
Salina Cruz.....	Jan. 18-24.....	1	1	
San Luis Potosí.....	Nov. 2-Jan. 24.....	4	7	
Tampico.....	Dec. 24-Mar. 10.....	200	58	Feb. 1-24; 22 cases, with 16 deaths.
Vera Cruz.....	Dec. 6-Apr. 25.....	73	30	Apr. 25; 2 cases among refugees.
Morocco:				
Casablanca.....	Mar. 7.....			Present.
Tangier.....	Apr. 11.....			Present.
Netherlands, The.....	Feb. 8-14.....	1	1	
New Zealand.....				Apr. 8, 1913, to Jan. 7 1914: Cases, 2,000, including report, p. 2863, vol. 28.
Norway:				
Trondhem.....	Nov. 1-Feb. 28.....	19		
Peru:				
Callao.....	Jan. 26.....			Still epidemic, Mar. 7, improving.
Lima.....	do.....			Do.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to May 15, 1914—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila.....				Third quarter, 1913: Cases, 15. Fourth quarter, 1913: Cases, 18.
Portugal:				
Lisbon.....	Nov. 16-Apr. 18...	24		
Russia:				
Moscow.....	Dec. 14-Mar. 21...	67	18	
Odessa.....	Nov. 16-Mar. 28...	42	2	
Riga.....	Jan. 1-Apr. 4.....	43	4	Feb. 22-Mar. 28: Cases, 18.
St. Petersburg.....	Nov. 23-Mar. 21...	84	24	
Vladivostok.....	Dec. 22-Jan. 28...	5		
Warsaw.....	Oct. 5-Jan. 3.....	73	43	
Servia:				
Belgrade.....	Nov. 7-Mar. 28....	142	50	
Siam:				
Bangkok.....	Jan. 25-Mar. 22....		4	
Spain:				
Almeria.....	Nov. 1-Jan. 31.....		9	
Barcelona.....	Nov. 30-Mar. 28....		123	
Madrid.....	Nov. 1-Feb. 28.....		98	
Seville.....	do.....		2	
Valencia.....	Dec. 1-Mar. 21.....	23		
Straits Settlements:				
Penang.....	Nov. 2-Dec. 6.....	13	1	
Singapore.....	Nov. 2-22.....	2		
Sweden:				
Malmo.....	Mar. 22-28.....	13		
Switzerland:				
Canton—				
Basel.....	Nov. 23-Apr. 18....	135		
Genoa.....	Nov. 23-29.....	3	1	
Turkey in Asia:				
Adana.....	Jan. 10-24.....	2		Dec. 28, epidemic.
Beirut.....	Nov. 23-Apr. 11....	344	147	
Jaffa.....	Dec. 6-Apr. 11.....	39	7	
Jerusalem.....	Feb. 1-Mar. 31.....	9		
Mersina.....	Jan. 4-Mar. 7.....	3	3	
Smyrna.....	Nov. 16-Mar. 14....		176	
Tarsus.....	Dec. 28-Feb. 8.....			Still present.
Trebizond.....	Jan. 11-Apr. 11....			Present.
Tripoli.....	Jan. 25-Apr. 4.....	110	8	
Turkey in Europe:				
Constantinople.....	Nov. 20-Apr. 11....		24	
Saloniki.....	Dec. 1-Apr. 4.....		93	

SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

WISCONSIN.

Hotels—Sanitary Regulation. (Reg. Bd. of H., Apr. 6, 1914.)

RULE 2. Construction.—Every hotel and restaurant in this State shall be conducted in every department in a manner most conducive to the protection of the health, comfort, and safety of its guests, and it shall be constructed, equipped, and maintained with efficient plumbing, ventilation, and lighting, in accordance with standards prescribed by rules, regulations, and orders issued in conformity to law.

RULE 3. Lavatories and toilets.—(a) All hotels in cities, towns, and villages where a system of waterworks and sewers adjacent to the property is maintained for public use, shall, on or before July 1, 1915, be equipped with suitable lavatories and toilet facilities for the accommodation of its guests. The sewer must be connected with the public sewer system.

(b) All toilets, urinals, lavatories, bathtubs, sinks, and drains in hotels and restaurants shall be installed and maintained in conformity with the State Plumbing Code issued by the State board of health.

(c) Each hotel shall be provided with a public washroom, which must be supplied with clean individual towels as provided by law, also at least one public toilet for each 15 sleeping rooms or fraction thereof, that are without toilets in addition to those provided with individual toilets.

(d) Every toilet room in hotels and restaurants shall be artificially lighted during the entire period that the building is occupied, wherever and whenever adequate natural light is not available, so that all parts of the room are easily visible.

RULE 4. Outside toilets.—(a) All hotels in cities, towns, or villages not having a public sewer system or waterworks, shall have properly constructed privies, vaults, or other sanitary devices, which shall always be kept clean, properly ventilated, and well screened from insects and rodents.

(b) The wall or partition between the apartments must be tight. A separate apartment with separate entrance, properly designated and screened from public view, must be provided for each sex. All privy doors shall be self-closing.

(c) Where septic tanks are installed, they must be constructed in compliance with the State Plumbing Code.

NOTE.—For location and construction of outside toilets, see State Plumbing Code, issued by the State board of health.

RULE 5. Kitchen.—(a) Every kitchen connected with a hotel, or restaurant shall be properly lighted and ventilated, so as to remove the gases and fumes caused by the preparation of foods.

(b) Surfaces with open cracks on which food is prepared or dishes are washed shall be covered with zinc or other nonabsorbent material.

(c) The floor, walls, and ceiling must be kept clean and in good condition.

(d) All kitchen utensils in hotels and restaurants shall be thoroughly cleaned after each meal, and when not in use shall be properly protected from all dirt, insects, and rodents.

(e) No hotel or restaurant kitchen shall be used as a sleeping room or a dressing room for any employee or other person.

(f) Water-closets in any hotel or restaurant kitchen are prohibited.

(g) The use of tobacco by any employee while on duty in hotel or restaurant kitchens is strictly prohibited.

(h) No person suffering from any communicable disease shall be employed in any capacity in the kitchen or dining room of any hotel or restaurant.

(i) The State board of health declares the following as communicable diseases: Asiatic cholera (cholerae), yellow fever, smallpox, typhus fever, leprosy, bubonic plague, diphtheria, scarlet fever (scarlatina), typhoid fever, measles, including rotheln, whooping cough, cerebrospinal meningitis, acute anterior poliomyelitis, ophthalmia neonatorum, gonorrhea, syphilis, tuberculosis, and other communicable skin diseases.

(j) Any person who has been afflicted with typhoid fever within three years shall not be employed in the dining room or kitchen of any hotel or restaurant until it has been definitely determined that such person is not a typhoid carrier.

(k) Every hotel or restaurant kitchen must be equipped with a suitable washroom or wash basin, soap, clean water, and towels, and all employees who in any way handle or come in contact with the foods to be prepared or served must, before beginning work, after using toilets, and at all other times when necessary, wash their hands with clean water and soap.

RULE 6. Foods.—(a) All places and receptacles where prepared food or food served in its raw state is kept or stored must be mouse and rat proof, and be thoroughly screened against flies, cockroaches, and other vermin.

(b) Decayed, contaminated, or unwholesome meats, vegetables, or other food products shall not be served in any hotel or restaurant, nor shall they be stored in any hotel or restaurant storeroom.

(c) All places where foods are prepared or stored shall be kept in a clean and sanitary condition.

(d) The drains from ice boxes and refrigerators must be properly trapped.

RULE 7. Water and ice.—(a) All water for drinking and culinary purposes in hotels and restaurants shall be free from contamination.

(b) The use of contaminated, unwholesome, or impure ice in drinks or for cooling of food by direct contact is prohibited in hotels and restaurants.

RULE 8. Garbage.—(a) All garbage and kitchen refuse must be kept in water-tight metal cans provided with close-fitting metal covers, unless otherwise protected from flies and other vermin, and the contents must be removed as often as necessary to prevent decomposition and overflow. The use of wooden containers is prohibited.

(b) Where garbage chutes or conveyors are used, they must be constructed so as to exclude from the building all odors arising from such garbage.

(c) No waste water (including dishwater) shall be discharged on or near the premises so as to create a nuisance.

RULE 9. Dining room.—(a) The dining rooms and all places where meals are served in hotels and restaurants shall be kept clean, well ventilated, heated, lighted, and in a sanitary condition. This shall include the proper cleaning of the floor, ceiling, walls, tables, chairs, trays, and all other dining-room equipment.

(b) The dining room shall be equipped with serviceable furniture.

(c) Tablecloths and pads must be kept clean.

(d) Napkins, when provided, must be washed and ironed after being used by any guest.

(e) The use of dirty or cracked dishes or glassware in which food or drink is prepared or served or dirty silverware in hotels and restaurants is prohibited.

(f) All dishes, silverware, glasses, finger bowls, and all other dining-room utensils must be thoroughly cleaned after being used by any individual.

(g) Finger bowls, when used, must be filled with fresh, pure water for each guest.

RULE 10. *Sleeping accommodations.*—(a) Every sleeping room shall be of sufficient size to afford at least 400 cubic feet of air space for each occupant over 12 years of age, and 200 cubic feet for each occupant under 12 years of age. No greater number of occupants than thus established shall be permitted to sleep in any one room.

(b) Sleeping rooms must be kept in good repair. The ceiling, walls, and floor shall be free from dirt.

(c) No room shall be used for a sleeping room in any hotel heretofore constructed which does not have an adequate opening, other than a transom over the door, to the outside of the building or to well-ventilated light wells, air shafts, courts, or hallways. Light wells, air shafts, and courts in such hotels must be open at the top or provided with approved ventilators to furnish proper ventilation.

NOTE.—In rooms having an outside window, or a window opening on a well-ventilated light well, air shaft, or court, proper ventilation can be secured if the window is opened at top and bottom and an adjustable shield is placed at the bottom to prevent drafts.

(d) At least one window in each sleeping room must be so constructed to permit it to be raised from the bottom or lowered from the top at any time. If storm windows are used, at least one for each sleeping room shall be either suspended from the top or hinged from the sides, so that it can be opened and closed readily.

(e) Doors to sleeping rooms shall be provided with proper facilities for locking.

(f) Each room must be provided with at least one chair, two clothes hooks, and, where an individual toilet is not available, with a chamber, and where running water is not supplied, must be furnished with clean wash-water pitcher, washbowl, and a slop jar.

(g) Clean individual towels must be supplied in all cases.

(h) All bedroom furnishing must be kept clean and free from odor, and each guest must be provided with clean wash water, and upon request, with pure, wholesome drinking water.

(i) Rugs and carpets shall be kept clean and thoroughly renovated at least once a year, and oftener when deemed necessary by the hotel inspector.

NOTE.—Rugs are recommended for use in sleeping rooms in place of carpets.

(j) Where sleeping and dressing rooms are provided for employees they shall be properly lighted, heated, ventilated, and kept clean.

(k) All hotels not equipped with all-night illumination must provide each sleeping room with a serviceable lamp or candle and matches.

NOTE.—For rules regulating artificial lighting of new buildings see State Building Code, issued by the State industrial commission. For lighting of hallways and exits of old buildings, see general orders of industrial commission.

RULE 11. *Bedding.*—(a) All hotels shall hereafter provide each bed, bunk, cot, or other sleeping place for the use of transient guests with white cotton or linen pillow slips, top and under sheets, also mattress, and a reasonably sufficient quantity of bedding.

(b) The under sheet to be of sufficient size to completely cover the mattress and fold under on sides and ends.

(c) The top sheet must be at least of equal width, and, on and after January 1, 1915, it must be not less than 96 inches long, after being laundered.

(d) The long top sheet is to be folded back at the head of the bed so as to cover all top coverings, at least 12 inches.

(e) All bedding, including mattresses, quilts, blankets, pillows, sheets, and comforts used in any hotel, must be thoroughly aired and kept clean. No bedding shall be used which is worn out and unfit for further use. Pillow slips and sheets must be washed and ironed as often as they shall be assigned to a different guest.

NOTE.—Bedquilts are difficult to wash and keep clean, and with the best of care they can not be kept in proper condition. When they become worn they are especially objectionable. All bedcovers should be made of washable material. Washable blankets and bedspreads should, whenever possible, be substituted for quilts. Such changes are earnestly recommended.

RULE 12. *Communicable diseases*.—Whenever a room in any hotel has been occupied by a guest ill with a communicable disease, it shall be thoroughly fumigated and disinfected, in accordance with the rules of the State board of health, before being occupied by another guest.

RULE 13. *Sample-display rooms*.—All sample-display rooms shall be kept clean and provided with sufficient light, heat, and ventilation.

RULE 14. *Screens*.—(a) All windows, doors, and other unprotected openings to the outside of the building, in kitchens, dining rooms, cellars, and public offices of every hotel and restaurant, must be properly screened against flies and other insects.

(b) All sleeping rooms in every hotel having a window opening to the outside of the building must be provided with a suitable screen, and in rooms having more than one window, screens shall be provided for at least two windows in every such room.

RULE 15. *Premises*.—All premises connected with or used by any hotel or restaurant shall be kept in a sanitary condition, and it shall be the duty of the local health officer, either upon his own initiative or upon the complaint of any citizen, deputy State health officer, or hotel inspector, to take such action as may be necessary to abate any nuisance, source of filth, or cause of sickness existing on the premises, as required by section 1414 of the statutes.

RULE 16. *Fire escapes and new buildings*.—For the construction of new buildings and fire escapes, consult the State building code, issued by the industrial commission.

RULE 17. *General provisions*.—(a) In all hotels and restaurants where bubbling fountains are not installed, clean individual drinking cups or glasses shall be provided for each guest upon request.

(b) Chapter 274, Laws of 1913, makes it unlawful for any person, firm, or corporation to sweep or permit sweeping in hotels, restaurants, and other public places where the public is invited unless the floor is first sprinkled with water, moist sawdust, or other substance to prevent the raising of dust. When vacuum cleaners or properly filled reservoir dustless brushes are used, the sprinkling or use of moist sawdust is not required.

(c) All floors and interior woodwork in hotels and restaurants shall be cleaned as often as may be necessary to keep them in a sanitary condition.

(d) All cuspidors, wherever used, must be cleaned daily and kept free from odor.

RULE 18. *Permits*.—The hotel or restaurant permit and at least one copy of the official rules and regulations governing the sanitary and safe conditions of hotels and restaurants shall be conspicuously displayed in each hotel and restaurant.

Penalty.—Chapter 648, Laws of 1913,¹ provides that any person, firm, or corporation owning, leasing, managing, or conducting any hotel or restaurant in violation of any of the provisions of this section, or in violation of any rule or regulation of the State board of health shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than \$25 nor more than \$200; and any person, firm, or corporation conducting a hotel or restaurant in violation of any order of the State board of health after such order shall have been served upon or directed to such person, firm, or corporation, shall be deemed guilty of a misdemeanor and upon conviction thereof shall forfeit \$5 for each and every day for such noncompliance

with such order: *Provided*, That if any action to modify or set aside such order shall have been commenced pursuant to subsection 7 of this section, such forfeiture shall not be exacted, or commence to run until after the lapse of a reasonable time after the termination of said proceeding.

Industrial Camps—Sanitary Regulation. (Reg. Bd. of H., Jan. 9, 1914.)

REGULATION 1. Hereafter operators, contractors, and all other persons who may establish an industrial camp or camps for the purpose of logging, ice cutting, or any like industry, or for the purpose of construction of any road, railroad, or other work requiring the maintenance of camps for men engaged in such work, or any other temporary or permanent industrial camp of whatever nature, shall report to the State health officer concerning the location of such camp or camps, and shall arrange and maintain such camp or camps in a sanitary condition as outlined in these regulations.

REG. 2. The term "camp" as used in these regulations shall include any lumbering, mining, railway construction, or other camp where men are employed and housed in temporary quarters, such as cars, tents, buildings, or other inclosures other than the bona fide homes of the employees.

REG. 3. Every camp must be located on a site that is high, well drained, and shall be selected with regard to its healthfulness.

REG. 4. The general scheme of the structure of the camps should be as follows: Stable and kitchens should be separated by a distance as great as consistent with the natural topography of the land and so located as to prevent any pollution of the water supply with the necessity for convenient access to the stables. The stables and toilets for the men in the camp must be so located that their natural drainage is away from the water supply.

REG. 5. The use of the toilets provided for the men should be made obligatory and instant discharge of any employees polluting the soil must be rigidly enforced.

REG. 6. Every building, car, tent, or other inclosure occupied as sleeping quarters by the employees engaged in any camp or works shall contain at least 225 cubic feet of air space for every occupant thereof, and shall be supplied with windows for purposes of light and ventilation, constructed to open.

REG. 7. In addition to windows there shall be other means for ventilating sleeping, dining, and living quarters, by having inlet and outlet ducts of sufficient area provided to keep the atmosphere reasonably pure. Such provision shall be to the satisfaction and meet the approval of the State board of health.

REG. 8. The kitchen and eating house should be effectively screened when used during the summer months. The bunk houses should also be screened if used during the summer. All food supplies must be carefully screened from flies and other vermin.

REG. 9. All garbage must be collected in covered cans and incinerated, buried, fed, or hauled away to some remote place.

REG. 10. Noninflammable refuse, such as tin cans, should be collected daily and placed in a deep earth pit and covered with a light covering of earth each day, or covered with oil and burned over. During the winter season, this material as well as the garbage may be deposited at a point at least 100 feet from the camp and then properly cared for at the first opportunity in the spring.

REG. 11. Waste water from the kitchen, wash, and bunk houses in summer camps must be carried to trenches lined with quicklime and at a safe distance from water supply.

REG. 12. There must be a thorough and systematic scrubbing of kitchen and eating houses, at least once a week. The floors should be swept daily. (Dry sweeping is prohibited by law.)

REG. 13. The supply of water for the camp should be carefully decided upon, and an adequate supply free from any possible chance of contamination must be provided.

REG. 14. All sick from whatever cause must be isolated from the remainder of the crew immediately.

REG. 15. All persons engaged in the care of the premises and handling of the food, particularly cooks and helpers, should be carefully examined and particular attention paid to the point as to whether or not they have suffered from typhoid fever or tuberculosis within recent years.

REG. 16. Floors in bunk houses should be swept daily and scrubbed with hot suds at least once each week. (Dry sweeping is prohibited.)

REG. 17. All bunk houses should be provided with floors, and the lower tier of bunks should be raised at least 6 inches above the floor.

REG. 18. All blankets should be hung outside for airing at least twice a month. Bunks should be furnished with clean straw, hay, or ticks filled with same. Mattresses are not recommended as they can not be cleaned easily.

REG. 19. Privy vaults shall be so constructed at every camp that they can be effectively cleaned of the contents. Pits shall not be less than 4 feet in depth, and the contents shall be treated daily, when used during the summer season, either by a solution of milk of lime (strong whitewash of fresh slaked lime), 1 gallon to every square yard of pit, or the sprinkling of 5 pounds of powdered chloride of lime to the same area. A liberal sprinkling of fresh chloride of lime shall also be applied daily to the floors of privies and lavatories. All closets shall be at least 100 feet distant from the water supply, and so located that drainage from privy vaults toward water supply is impossible.

REG. 20. Whenever smallpox, diphtheria, or scarlet fever shall appear in any camp, it is the duty of the physician in charge, the contractor, or the superintendent of such camp to notify the local health officer in whose district such camp is located, within 24 hours, and it is the duty of such health officer when thus notified to see that said patient is removed to a proper place of isolation or place such patient or patients under quarantine at such camp, and the contractor or superintendent, when necessary, shall provide suitable accommodation for such patient or patients.

REG. 21. Copies of these regulations shall be hung or posted in every kitchen, dining room, sleeping room, or other building in camps where employees may frequent the same in order that all may be conversant with their requirements.

The following information should be furnished on the establishment of any camp and thereafter annually to the State Board of Health, Madison, Wis., by the owner or operators of all camps to which the foregoing regulations apply. Returns to be made each year during the first month of the operation of the camp.

SCHEDULE.

Name of owner or agent.....
 Name of camp or camps.....
 Location of each camp.....
 Easiest means of access to each camp.....
 Number of men employed.....
 When was camp established and how long will it be occupied.....

Slaughterhouses—Sanitary Regulation—Care of Meat. (Reg. Bd. of H., Apr. 6, 1914.)

RULE 1. *Drainage and sewerage.*—All slaughterhouses shall have an efficient system of drainage to prevent water or other refuse of any kind from soaking into the ground underneath and around the building, or be drained from the building in such a way as to become a nuisance. Blind wells, cesspools, or privy vaults within the slaughterhouse are prohibited. Sewage conduits shall be made of closed vitrified tile, cast iron with tight joints, or some similar material. Liquid wastes, where practicable, shall be drained into the city sewer, provided that this does not place an undue burden upon existing purification works, or upon the stream into which the city

sewage empties; otherwise adequate means for the disposal of the wastes shall be provided. The ground on which the slaughterhouse is situated shall be selected so that proper drainage from the building of surface water and other waste will be accomplished.

(Section 1418 of chapter 445, Laws of 1913, is published by the State board of health as part of this rule. It was printed in the Public Health Reports, December 5, 1913, p. 2668.)

RULE 2. Feeding offal prohibited.—The feeding of hogs or other animals on the refuse from slaughterhouses shall not be permitted on the premises, nor shall any such refuse be fed to any animals intended for slaughter unless it is first thoroughly cooked. In all cases when the offal is not fed it shall be rendered, buried, burned, or otherwise disposed of so as to prevent the creation of a nuisance. All yards, fences, pens, chutes, alleys, etc., belonging to the premises of such establishment, whether they are used or not, shall be maintained in a sanitary condition, and no nuisance whatsoever shall be allowed in the establishment or on the premises.

RULE 3. Water supply.—All slaughterhouses shall have an abundant supply of water from a well, spring, or other source, which is free from contamination, and which shall be available, both hot and cold, for cleansing purposes in any part of the room or rooms used for slaughtering or preparing meats for consumption as human food.

RULE 4. Floors.—All slaughter rooms shall have cement floor constructed in such manner as to be water-tight, which shall carry off into a sewer, reservoir, or cesspool, provided for that purpose, all blood and wastes; such floors shall be thoroughly scrubbed and cleaned each day after the slaughtering has been completed.

RULE 5. Walls and ceilings.—The walls of slaughtering pens and meat dressing and cooling rooms must be tight and smooth, frequently whitewashed or painted, and kept in a sanitary condition, and when necessary they shall be scraped, painted, or otherwise treated as required. Where floors or other parts of buildings, or tables or other parts of the equipment, are so old or in such poor condition that they can not be made readily made sanitary, they shall be removed and replaced by suitable materials. The building must be so constructed that screening of doors and windows will prevent ingress of flies. No carcass will be allowed to be stored in the building after dressing unless such building is properly screened from flies. Other rooms or compartments in which meat or food products are prepared, cured, stored, packed, or otherwise handled shall be kept free from flies and other vermin by screening of the doors and windows and by securely closing all openings through which flies or other vermin may enter.

RULE 6. Trucks, tables, etc.—All trucks, trays, scalding tanks, and other receptacles, all chutes, platforms, racks, tables, and all knives, saws, cleavers, and other tools, and all utensils, machinery, and vehicles used in moving, handling, cutting, chopping, mixing, canning, or other processes, shall be thoroughly cleaned before and after using.

RULE 7. Cleanliness of employees.—Managers of establishments must require employees to be cleanly. The aprons, smocks, or other outer clothing worn by employees who handle meat products shall be kept clean and made of a material that is readily cleansed. Persons who handle meat or meat food products shall keep their hands clean.

RULE 8. Healthfulness of employees.—Persons afflicted with tuberculosis or any other communicable disease shall not be employed in any of the departments or establishments where carcasses are dressed, meat is handled, or meat food products are prepared.

RULE 9. Toilet facilities.—All water-closets, toilet rooms, and dressing rooms shall be entirely separated from compartments in which carcasses are dressed, or meat or food products are cured, stored, packed, handled, or prepared. Water-closets and toilet rooms when provided in slaughterhouses shall be conveniently located, sufficient in number, ample in size, and fitted with proper lavatory accommodations. They

shall be properly lighted, suitably ventilated, and kept in a sanitary condition. No person shall commit any nuisance whatsoever in the slaughtering pens of any abattoir or slaughterhouse. A wash basin or bowl, with plenty of soap and water and clean towels, shall be conveniently located for use at all times in all slaughterhouses where other lavatory facilities are not provided.

RULE 10. *Slaughter of diseased animals.*—No animals known to be diseased shall be slaughtered in any building used as a slaughterhouse maintained to prepare meat for human consumption. If the meat of any animal after slaughtering is found to be diseased in part or in whole, such meat shall not be put upon the market until the local health officer has been notified and such carcass examined, and only such portions of carcass shall be offered for sale as the local board of health or health officer may designate.

RULE 11. *Keeping of animals.*—No animals, whether intended for slaughter or not, shall be confined or otherwise maintained within 50 feet of any slaughterhouse.

RULE 12. *Transportation of dressed meat.*—All dressed meats hauled or transported in any manner from any slaughterhouse shall be completely wrapped in a clean cotton cloth or canvas cover before removal from the building, and such cotton cloth or canvas cover shall not be used a second time for this purpose until it has been thoroughly washed and cleaned.

NOTE.—*Retail establishments.*—All retail establishments in which any meat, poultry, or other meat food product are kept for sale shall be suitable for such purposes, free from odors, screened and free from flies, shall have facilities for cleaning ice boxes, meat blocks, cleavers, saws, knives, etc., and shall have refrigerating rooms or ice boxes, with the temperature necessary for the proper preservation of such fresh products. Such ice boxes or refrigerating rooms shall be constantly kept in a clean and wholesome condition and free from odors, and no spoiled meat or poultry shall be kept therein. No poultry or meat product shall be exposed on the counters or other places where it would be subject to flies, street dust, or other contamination, and no fresh meat or poultry products shall be exposed on the counters or otherwise during the spring, summer, or fall months, or at other times when the temperature is high enough to cause any deterioration, without proper icing facilities, and all such exposure with icing facilities shall also be in such manner as to be fully protected from flies, dirt, and other contamination. No fresh meat, poultry, or meat products shall be offered for sale in a retail market which have been handled by intending purchasers. All deliveries of fresh meat, poultry, or meat products shall be so protected as to reach the consumer free from contamination.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

DANVILLE, VA.

Communicable Diseases—Morbidity Reports—Quarantine—Disinfection. (Reg. Bd. of H., Oct. 6, 1913.)

Report of cases.—1. Any physician, osteopath, chiropractor, Christian Science healer, or any other person allowed by law to practice the art of healing in the city of Danville, shall, within 24 hours after making a diagnosis, report in writing, upon forms supplied by the health department, or by telephone, to the health department, giving the name, color, age, sex, and address, all cases of plague, leprosy, cholera, yellow fever, smallpox, typhus fever, typhoid fever, diphtheria, and membranous croup, scarlet fever, chicken pox, measles, mumps, whooping cough, tuberculosis, pellagra, poliomyelitis, and epidemic cerebrospinal meningitis, which he is called upon to attend.

2. The head of any household, or guardian of any person afflicted with any of the above diseases, who does not have a physician to see the patient, shall, himself, report such case or cases to the health department. The keeper or manager of any hotel or boarding house in which a case of contagious disease, or suspected contagious disease occurs, shall report the fact at once to the health department.

3. Any teacher, nurse, or other person who knows of a case of contagious disease, or a case of suspected contagious disease, in a neighbor's or other home shall report the facts in the case to the health department.

4. When a physician, attendant, parent, or guardian suspects that a patient under his care has any of the above-named diseases, such person shall report the case to the health department as a suspect. The health officer shall then take such steps as he thinks necessary, and before placarding the house shall confer with the family physician.

5. The recovery or death of all cases shall be reported in the same way as reports of cases.

6. Any person who uses the health department report forms when reporting cases shall fill out a separate report form for each case and shall not use one form for reporting two or more cases.

7. No person shall attempt in any way to conceal a case of any of the above-named diseases.

Quarantine and isolation.—1. When a physician suspects that any patient is suffering from a contagious disease he shall at once have such patient isolated or take such other measures as are necessary to prevent the further spread of the disease from the patient.

2. Upon receipt of a report of a case of contagious or infectious disease at the health department the health officer shall visit the premises on which the case is located and ascertain if necessary precautions are being observed to prevent the spread of the disease. He shall also attempt to ascertain the source of infection in the case and shall give such directions as he thinks necessary, and shall, when possible, leave printed precautions adopted by the board of health, which precautions shall be obeyed.

3. Any person suffering from diphtheria, scarlet fever, smallpox, epidemic cerebrospinal meningitis, or infantile paralysis shall be isolated in a room until all danger o

infection has ceased. No one except the nurse or attendant, the physician, and the health officer shall go into the room with the patient.

4. The person having such disease shall not be removed from the room in which he is isolated until permission is given by an official of the health department.

5. No person nursing a case of diphtheria, scarlet fever, infantile paralysis, smallpox, or epidemic cerebrospinal meningitis, shall leave the premises until the case is released and the placard removed, unless permission is secured from the health officer.

6. No person residing on the premises with a case of diphtheria, scarlet fever, infantile paralysis, smallpox, or epidemic cerebrospinal meningitis shall go into a home where there are children, to church, Sunday school, or any public gathering.

7. All children living in a home with a case of any of the above-named diseases shall remain upon the premises, except as hereafter provided:

A. In cases of scarlet fever, a child may, upon permission from the health officer, dress in clothing which has been properly disinfected and go to a home where there are no children. When such permission is given the child shall be kept upon the premises to which it goes for seven days. If the child is well at the end of that time it may return to school after securing a permit from the health officer.

B. Where a child is living in a house with a case of diphtheria and wishes to return to school, the health officer may, after securing one negative culture from its throat, give permission for such child to leave the house. The child shall then dress in clothing which has been disinfected before leaving the premises. Another negative culture shall be secured from the child's throat after it has left the premises before a permit is given by the health officer for it to return to school.

C. A child living in the house with a person having smallpox may have its clothes fumigated, and after leaving the premises, return to school, provided it has been successfully vaccinated within five years.

D. Any child who has not had measles and lives in the house with a case, shall not return to school until 15 days from date of eruption in the first case. If, at the end of that time, the child shows no cough or fever, it may return to school.

E. Any child who has not had whooping cough or mumps shall not return to school while there is a case of either of these diseases in the home. Such child may go to a home where there are no nonimmune children, but shall remain upon such premises. If it does not show symptoms of either disease in 16 days, it may return to school.

F. No child shall attend school from any home in which there is a case of infantile paralysis or epidemic cerebrospinal meningitis until three weeks from the day the patient was taken ill.

8. When a case of smallpox occurs in any home the health officer shall place in quarantine all persons residing on the premises, provided they have not been successfully vaccinated within five years. Any person who has been successfully vaccinated within that time, may, after another vaccination and after having his clothes fumigated, leave the premises. Such person shall not return to the premises during the quarantine period.

9. All breadwinners living in a house with a case of diphtheria, scarlet fever, epidemic cerebrospinal meningitis or infantile paralysis, except as provided in section 10, shall be allowed to go to their places of business, provided the patient is kept isolated and they do not go into the room with the patient. If the above precaution is not observed, they shall remain upon the premises.

10. No person having a case of diphtheria, scarlet fever, epidemic cerebrospinal meningitis or typhoid fever in his home, and residing in such home, shall be employed where bread, milk, confectionery, or other foodstuffs are prepared, stored or sold, except upon permission from the health officer. Such person shall not return to work until permitted to do so by the health officer.

11. When a case of diphtheria, scarlet fever or typhoid occurs in any building, a part of which is used for a store, the health officer may close such store until, in his opinion, there is no danger of nonimmune persons contracting the disease by entering such store.

12. No milk bottle or other milk container shall be left in any home in which there is a case of diphtheria, scarlet fever, smallpox, or typhoid fever. The placard upon the door shall be sufficient notice to the dairyman in cases of diphtheria, scarlet fever, and smallpox, and the health officer shall give notice to the dairyman of any case of typhoid fever upon his route. Milk may be left provided it is emptied into a vessel supplied by the household. Any milk bottles in a home when a case of the above diseases occurs shall be left there until the patient has recovered and it shall then be thoroughly boiled and given to the dairyman.

13. No person shall take or receive any laundry from a home in which there is a case of infectious disease, unless it has been disinfected by boiling or by the use of a proper disinfectant solution.

14. No adult shall go into a home, nor shall he allow his children to go into any home in which he knows that a case of contagious disease exists.

15. All persons allowed by these regulations to enter a room with a case of any contagious disease shall take proper precautions to prevent infecting others after leaving such room.

Quarantine period.—1. All cases of diphtheria shall be quarantined until two negative cultures are secured from the throat and nose.

2. The minimum period for quarantine of scarlet fever shall be 25 days. No case shall be released until all disquamation, nasal and ear discharges have ceased.

3. All cases of smallpox shall be quarantined not less than 21 days, and longer if all scaling has not ceased.

4. The quarantine period in measles shall be 10 days.

5. All cases of whooping cough shall remain upon the premises until the paroxysmal cough has ceased.

6. The quarantine period of epidemic cerebrospinal meningitis shall be 15 days.

7. The period of quarantine in smallpox, scarlet fever, and measles shall be reckoned from date of eruption, and in epidemic cerebrospinal meningitis from date of first symptoms.

School.—1. The health officer shall notify the principal of schools of all cases of contagious diseases reported every 24 hours. The principal shall then exclude from school all children from whom there is danger of infection.

2. Children having the following diseases shall be kept out of school:

(a) Mumps, 18 days, or until all swelling has subsided.

(b) Chicken pox, 10 days, or until all scaling has ceased.

(c) Infantile paralysis, 21 days.

During these periods all children suffering from above diseases shall remain upon the premises. Anyone who exposes others, by leaving the premises during this period, shall be placed under quarantine as provided for scarlet fever.

3. Nonimmune children exposed to the following diseases shall remain away from school:

(a) Scarlet fever, 7 days.

(b) Diphtheria, until a negative culture can be secured from throat and nose.

(c) Smallpox, 14 days.

(d) Measles, 14 days.

(e) Whooping cough, 16 days.

(f) Chicken pox, 14 days.

(g) Mumps, 14 days.

(h) Epidemic cerebrospinal meningitis, 10 days.

4. If a case of diphtheria, scarlet fever, or smallpox develops in a schoolroom, such schoolroom shall be closed and fumigated.

5. Any school books kept in a home with a case of scarlet fever, diphtheria, and smallpox shall be destroyed or thoroughly fumigated.

Release of cases.—1. In cases of diphtheria the family physician shall secure the first release culture from the throat and nose of the patient, or shall notify the health officer of the recovery of the patient and he shall take the culture. If the first culture proves negative the health officer shall secure a second culture, and if this proves negative he shall release the patient.

2. A physician shall report in writing when he discharges a patient who has had scarlet fever. The health officer shall then take charge of the quarantine and release the patient when he considers it safe to do so.

3. The health officer shall see after the quarantine and release of all cases of smallpox and epidemic cerebrospinal meningitis.

4. No person shall release any patient from quarantine except as prescribed in the preceding sections.

General measures.—1. No dog, cat, or other animal shall be allowed to go into any room in which a person having a contagious disease is isolated.

2. The health officer shall be permitted to go into any home and examine any person suspected of having a contagious disease. When a physician has previously been called to see the patient the health officer shall first confer with the physician. No person shall prevent the health officer from performing such duties.

3. All persons exposed, or possibly exposed, to a case of smallpox shall be vaccinated at once. Those directly exposed shall be vaccinated by the health officer or an assistant. Those possibly exposed may be vaccinated either by the family physician or the health officer. Where the vaccination of possibly exposed persons is done by the family physician he shall use vaccine virus secured from the health officer or which has been kept upon ice.

4. All houses in which there has been a case of diphtheria, scarlet fever, smallpox, tuberculosis, epidemic cerebrospinal meningitis, infantile paralysis, or typhoid fever shall be fumigated under the supervision of the health officer.

5. No person having a case of diphtheria, scarlet fever, smallpox, or other contagious disease shall be removed from the premises, except under the supervision of the health officer or assistant, and in such vehicle as he may direct.

6. The burial of any person dying of diphtheria, scarlet fever, smallpox, measles, whooping cough, epidemic cerebrospinal meningitis, or infantile paralysis shall be private. No children shall be allowed to come upon the premises at such time, and the funeral shall be attended only by immediate family and those necessary for handling the remains. The body of such person shall not be conveyed to an undertaking establishment for preparation, but shall be prepared for burial in the home.

7. The board of health, may, at any time, make additional rules and regulations for the prevention of contagious and infectious diseases.

Penalty.—Any person violating any of the preceding rules and regulations or any rule and regulation hereafter adopted by the board of health for the prevention of contagious and infectious diseases, or failing to comply with the directions given by the health officer or assistant or interfering in any way with such officers in the discharge of such duties as are placed upon them by the board of health, shall be punished by a fine of not less than \$10 or more than \$50, as prescribed in section 1713d (5) of the Code of Virginia as amended by act of assembly in force June 15, 1910, acts 1910, page 538.

NEW HAVEN, CONN.

Bakery Products—Protection. (Reg. Bd. of H., Feb. 1, 1913.)

SEC. 5. The conveying through the streets of the city of New Haven, or removing from a building to a wagon or from a wagon to a building, or from one building or wagon to another, any breadstuffs, cake, pie, or confectionery intended for food, shall be unlawful, except such breadstuffs, pie, or confectionery be placed in receptacles tightly constructed and so covered that the same can not be contaminated by insects, dust, dirt, and other foreign and unwholesome matter, and such receptacles shall be used for no other purpose by any person.

Foodstuffs—Covering or Screening Required when Exposed. (Reg. Bd. of H., June 27, 1913.)

SEC. 6. During the months of May, June, July, August, September, and October of each year it shall be unlawful for any individual, firm, or corporation to expose for sale in the city of New Haven any fruit or vegetables, except such as have natural coverings customarily removed before eating, any meat, fowl, fish, pastry, confectionery, or other foodstuffs that are to be eaten without further cooking, unless so covered or screened as to be impossible of contamination by flies or other insects.

MOBILE, ALA.

Milk and Cream—Production, Care, and Sale. (Ord. June 5, 1913.)

SECTION 1. That all dairymen who sell or supply milk or cream in any way to or for the people of Mobile shall be required to take out annually from the city tax collector a license of \$—, and this license shall in no way affect, interfere with, or be a substitute for any vehicle license which may be imposed by the city of Mobile.

SEC. 2. That it shall be unlawful for any person, firm, or corporation, either as principal or servant or employee, to maintain or operate a dairy farm within the police jurisdiction of the city of Mobile, or to sell, give, exchange, barter, deliver, or transport in the city of Mobile, any milk or cream without having obtained an annual permit from the board of health to do so, as hereinafter provided. Such permit shall expire on the 31st day of December of each year and shall be renewed on the 1st day of January following.

SEC. 3. That no person, himself, or his servant or agent, or as the servant or agent of another, firm, or corporation, shall sell or deliver, or have in his possession or custody with intent to sell or deliver as milk for consumption as human food, any milk or cream, or operate, until after having obtained a permit to do so from the board of health, through the city health officer. To obtain such permit the applicant shall present to the chief meat and milk inspector a written application upon a form prescribed by the board of health, through the city health officer.

As soon as possible after such application has been received at the office of the board of health, the chief meat and milk inspector or the city health officer or their authorized assistant shall visit the dairy or place of business of such applicant and make such observations and gather such information as will enable the board of health through the city health officer to properly consider such application: *Provided, however,* That if the dairy or place of business of said applicant be located outside of the police jurisdiction of the city of Mobile he shall either furnish a certificate of qualification of all dairies from which it is proposed milk be obtained, according to the requirements of this ordinance, which certificate shall be signed by the State veterinarian or any person authorized by him, or shall pay the cost and expense of making such inspection by some authorized employee of the city of Mobile. Immediately upon a favorable report from or to the city health officer by some one of the aforesaid

persons, a permit of such form prescribed by the said board of health shall be issued to the applicant free of further charge. Such permit shall be required for each dairy or other place of business from which milk is sold or delivered to the people of the city of Mobile and must be issued in the name of the owner and shall not be transferable. Such permit shall be subject at all times to revocation by the board of health for cause: *Provided, however*, The owner of said permit shall always have the right of appeal from the action of the inspector or his assistant to the board of health, which shall be required to act thereon within 48 hours after the receipt of the petition for an appeal.

SEC. 4. That if, upon investigation, the board of health shall conclude that the said applicant has conformed, and will conform to, and comply with the requirement of this ordinance, it shall issue the permit herein provided without cost to said applicant. Said permit shall be written or printed upon a form to be prescribed by the board of health.

SEC. 5. That it shall be the duty of every person, firm, association, or corporation or dairyman having a permit under this ordinance to exhibit the same conspicuously in the dairy or in the place where milk or other dairy products are kept for sale, exchange, use, or distribution. All vehicles used for such sale or distribution shall have painted thereon in a conspicuous place on both sides, the words and figures, "Health Permit No. ——" (corresponding with permit number), together with the name and location of dairy. All distributors of milk or other dairy products on foot shall carry on their person, ready for exhibition to any sanitary officer or consumer, the permit issued to him under this ordinance.

SEC. 6. That all dairy barns shall be provided with a cement floor, tight walls and ceiling, and shall also be provided with a screened milk room with cement floor, tight walls and ceiling, and no milk shall be stored, cooled, mixed, or changed into any other form of dairy product in any other place than this milk room. No milk shall be allowed to remain in the barn except in a milking pail into which the milk is being milked, and no milking pail with less than three-fourths covering for the top surface shall be used. All milk pails and other utensils used in the handling of milk and all containers in which milk is contained shall be sterilized before being used. The milk room shall at all times be kept free from flies.

SEC. 7. That milk kept for sale, use, consumption, distribution, exchange, barter, or other disposition as food for human beings, in any store, shop, restaurant, market, bakery, hotel, or other establishment, shall always be contained in a container, which shall be kept in a covered cooler, box, or refrigerator which shall be substantially constructed, lined with metal or tiles, and elevated at least 6 inches above the floor. Said cooler, box, or refrigerator shall be ventilated and properly drained and the temperature in which shall not be above 50° F.

SEC. 8. That no person, firm, association, or corporation shall deliver bottles or other receptacles containing milk or cream to any house designated by the board of health as containing any infectious or contagious diseases. The milk or cream to be delivered to such houses shall be poured into a vessel belonging to the customer.

SEC. 9. That all portions of milk or cream delivered to any house or person shall be delivered in the original packages, bottles, or cans which were put up at the dairy, and no bottles or other receptacles shall be filled from any other can or receptacle after the wagon has left the dairy.

SEC. 10. That every person, firm, association, or corporation maintaining a dairy or dairy farm shall provide for the use thereof an adequate supply of water of good quality and proper for maintaining the health and good condition of the cows, and purposes necessarily connected with the dairy, subject to the approval of the city health officer. All sources of impure water in and about the dairy or dairy farm inclosures and pasturages for cows shall be abated.

Sec. 11. That all cows found to be suffering from any disease liable to render the milk from said cows unwholesome shall be at once removed from the herd and isolated and shall not be used again for milch purposes until cured, or if said disease be tuberculosis the animal shall be disposed of as provided by law. All dairy cows shall be tested with tuberculin at least once each year for tuberculosis in accordance with the laws of the State of Alabama provided in an act passed May 2, 1911, and cows found to be tuberculous shall be condemned and disposed of as provided in said act. No milk shall be brought into the city of Mobile, held, delivered, or offered for sale in the city of Mobile from cows within three weeks before or one week after parturition.

Sec. 12. That all milkers and those who engage in the handling of milk or any other dairy product shall maintain strict cleanliness of their persons and particularly of their hands while milking or engaged about the dairy. All milkers shall wash their hands with soap and water then rinse them in water just previous to milking each cow. The udder of every cow shall be washed and dried just previous to being milked. No person suffering from or who has knowingly, within a period to be specified by the board of health of the county of Mobile, been exposed to diphtheria, scarlet fever, smallpox, anthrax, tuberculosis, or any contagious skin or venereal disease shall work or assist in or about any dairy farm in the city of Mobile or within its police jurisdiction, and it shall be the duty of any person holding any permit under this ordinance to enforce this regulation in reference to such persons as may assist him, them, or it.

Sec. 13. That all milk delivered to the people of the city of Mobile for consumption as food shall be delivered in a covered wagon or other vehicle of such construction as to protect the milk at all times from the sun or dirt or other contamination. The driver's seat in such vehicle or wagon shall be so arranged that the person or clothing of the driver shall not come in contact with the milk bottles while the wagon or vehicle is being driven. Such wagon or other vehicle shall be kept clean at all times while engaged in the transportation of milk or milk products. No person shall carry on any wagon or vehicle upon which or from which milk or other dairy product is being sold or delivered to the people of the city of Mobile, vegetable matter, garbage, refuse, swill, or any other decaying or fermenting, putrefying, foul, unwholesome, noxious, or filthy matter, or any can or other receptacle containing the same or any material with which milk or cream may be adulterated, diluted, or rendered impure, unwholesome, or unhealthy. No one shall milk a condemned cow in any place other than in an open field, and milk obtained from such cow shall be drawn directly to the ground, and not into a pail or other vessel whatsoever.

Sec. 14. That any person, firm, association, or corporation, acting either as principal or agent or through servants or employees, who shall sell, exchange, barter, deliver, or transport, or have in his or its possession for the purpose of selling, bartering, delivering, or giving away, any milk which contains more than 87.50 per cent of water or less than 3.5 per cent of butter fat, or a specific gravity of which at 60° F. shall be less than 1.029, shall be guilty and fined as provided in this ordinance. All milk of a lower grade not contained in vessels labeled or marked as required in section 15 of this ordinance, or which contains less than 9 per cent of milk solids, exclusive of butter fat, when being transported, sold, bartered, exchanged, or given away, as "skimmed" milk or "separated" milk, shall be taken and condemned and destroyed as adulterated and impure, and the vendor or person having it in his possession for the purpose aforesaid shall be fined as provided in this ordinance.

Sec. 15. That no dealer in milk or the servant or agent of such dealer shall sell, exchange, or deliver, or have in his or her or its custody with intent to sell, exchange or deliver, milk from which the cream or part of the cream has been removed, unless in a conspicuous place above the center upon the outside of every vessel, can, or package from which or in which such milk is sold the words "Skimmed milk" are distinctly marked in uncondensed Gothic letters not less than 1 inch in length. If a portion of the cream has been removed without otherwise changing the character of the milk,

such milk shall be labeled or marked "Separated milk" and the percentage of butter fat remaining designated on the label. Violation of this section shall be punished as provided for in this ordinance.

SEC. 16. That no milk shall be sold or kept for sale, transported, or delivered containing ice, chalk, borax, salicylate soda, boric acid, formaldehyde, flies, maggots, or vermin or insects of any kind, or any coloring matter of substance or visible sediment which is foreign to the milk as it comes from the cow.

SEC. 17. That whosoever shall adulterate, sell, exchange, deliver, or have in his or her or its custody or possession to sell or exchange, adulterated milk to which water or any other foreign substance has been added, or from sick or diseased cows, or whoever shall adulterate, sell, or exchange or deliver or have in his or her or its custody to sell, exchange, or offering for sale as pure milk any skimmed milk from which the cream or any part thereof has been removed except as above provided for, shall be punished as provided in this ordinance.

SEC. 18. That every person, firm, or association or corporation or dealer or vendor who sells milk shall be obliged to furnish without cost to the inspector or assistants authorized by the board of health, for inspection and analysis, on application therefor, a sample of the milk offered for sale by the said person, firm, association, corporation, dealer, or vendor, from the can or other vessel from which it is sold to the public.

SEC. 19. That whenever the chief meat and milk inspector of the city of Mobile, or person designated for that purpose, shall find that the result of the analysis of a sample of milk indicates that the milk has been adulterated or the cream or any part thereof has been taken from the milk, the same shall be prima facie evidence of such adulteration in any prosecution under this ordinance.

SEC. 20. That each and every quantity of milk sold or exposed for sale contrary to the provision of this ordinance shall constitute a separate offense.

SEC. 21. That a fee of 50 cents for each cow shall be charged for testing the cow with tuberculin for tuberculosis, provided, that if a cow shall be retested a second charge for the test shall not be made if retested within 12 months.

SEC. 22. That no dairy cow producing milk for the Mobile market shall be fed upon distillery waste, usually called "swill," or upon any substance in a state of putrefaction or rotten, or upon any other substance that is unwholesome or that will in any way affect the healthfulness of the cow. Furthermore, the cows of the dairy shall be allowed free movement in the open air. The barns, sheds, and stalls in which said cows are milked shall be properly ventilated, lighted, drained, and cleaned, all of which shall be subject to inspection by the inspector.

SEC. 23. That it shall be the duty of the inspector or his assistants to collect samples of milk from persons selling or offering for sale, milk in the city of Mobile, at such times and in such manner as may be provided for in rules and regulations made by the board of health. Furthermore, it shall be the duty of the said inspector or his assistants to inspect all dairies supplying milk to the people of the city of Mobile under such rules and regulations as may be made by the board of health of Mobile County.

SEC. 24. That the city health officer, chief meat and milk inspector or assistants of any other person authorized by the board of health, shall have the right at any time and at all times, to enter upon or into the dairy, dairy farm or any premises or inclosure connected therewith or upon or into the premises of any vendor or distributor of milk or other dairy products, and upon any wagon or vehicle used in the sale or distribution of milk or other dairy products for the purpose of examining the same and all appliances and utensils therein or thereon, and any refusal to allow such entry and such inspection on the part of such dairyman, vendor, or distributor as may be required and directed by the board of health may be punished by the revocation of the permit of such dairyman, vendor, or distributor by the said board of health.

SEC. 25. That the city treasurer of Mobile shall keep a separate account on which he shall credit all dairy licenses, fines, and fees and any other moneys collected under this ordinance, and shall make report of such account in his reports to the board of commissioners of the city of Mobile.

SEC. 26. That any violation of the foregoing sections shall be punished by a fine of not less than \$5 nor more than \$100 for each and every offense.

SEC. 27. That the board of health of Mobile County is authorized to establish such regulations as may be necessary to carry out this ordinance, and it shall be the duty of the inspector and assistants to obey such rules and regulations.

SEC. 28. That when an infected animal has been condemned by the milk inspector or his authorized assistant in accordance with the provisions of this ordinance, or the laws of the State of Alabama, it shall be unlawful for any person or the agent of any person to sell, or offer for sale, any such condemned animal or any infected part of any such animal. And any person violating the provisions of this section shall be fined by the recorder not less than \$25 nor more than \$50 for each such offense.

SEC. 29. That the board of health is authorized from time to time to adopt such rules and regulations not in conflict with this ordinance, or the laws of the State of Alabama as in the judgment of said board may be necessary to regulate and control the hygienic care and handling of milk, milking, and the care of dairy cows and dairies in the city of Mobile or in its police jurisdiction.

SEC. 30. That the milk inspector or his authorized representative may kill and destroy all infected and condemned animals, under such regulations as the board of health may from time to time adopt, not in conflict with the provisions of this ordinance, or the laws of the State of Alabama.

SEC. 31. That the owner or possessor, or his agent or representative having such infected and condemned animal or animals in his possession or under his control, within the meaning of this ordinance shall furnish such labor, conveyance, or other assistance as may be necessary, under the direction of the milk inspector or his authorized representative or representatives, to carry out the provisions of this ordinance and the regulations of the board of health; and failure to comply with the provisions of this section shall render such owner, or possessor, or agent thereof, to a fine of not less than \$25 nor more than \$50.

SEC. 32. That any dairyman or other person, firm, association, or corporation producing and vending milk, and any person, firm, association, or corporation handling and vending the milk of any dairyman who shall, in addition to the other requirements of this ordinance, ice and refrigerate the said milk to a temperature not exceeding 50° F. immediately after the same has been milked and keep the same iced or refrigerated to a temperature not exceeding 50° F. up to the time of delivery to the purchaser or consumer, shall be entitled to be registered as a dealer in guaranteed milk and may use a label containing the words, "Guaranteed and iced milk"; and any person failing to comply with this ordinance in the production of milk and who has not properly, after milking, reduced the temperature of said milk to not exceeding 50° F. and retain the said milk at the said 50° up to the time of delivery of same to the purchaser or consumer thereof shall not be entitled to use the name or label, "Guaranteed and iced milk"; the purpose of this section being to protect the public against unfair and untruthful representations in regard to the icing of milk and its other conditions and to enable the consumer to purchase at his election said guaranteed and iced milk from such dairyman or handler of milk as shall produce and ice the same in the manner named in this section.

Any dairyman, milk dealer, or other person, firm, association, or corporation who shall engage in the production and sale of milk, by himself, itself, servant, agent, or other, label or cap or otherwise mark or designate on the body or bottles or other container or containers of milk, indicating that the same is guaranteed or that the

same has been iced, or use the words, "Guaranteed and iced milk," or other equivalent words, in connection with milk to be sold or offered for sale, when the same has not been produced in the manner and to the extent and kept cold to the extent as hereinbefore required, then such person, firm, association, or corporation using such label or name shall be fined in a sum not exceeding \$100 and shall have his dairy permit revoked.

Sec. 33. That this ordinance shall and does expressly repeal all ordinances or parts of ordinances upon the subject of regulating the production, purity, or sale or delivery of milk and milk products within the city of Mobile or within its police jurisdiction, and this ordinance shall take effect and be in force upon its adoption and publication.

Milk—Bacterial Standard. (Ord. June 10, 1913.)

SECTION 1. Be it ordained by the board of commissioners of the city of Mobile: That no milk shall be sold, offered for sale, or delivered to any person, firm, association, or corporation within the city of Mobile which contains more than 100,000 bacteria per cubic centimeter.

Sec. 2. Be it further ordained, That any person, firm, association, or corporation violating section 1 of this ordinance shall be fined by the recorder in a sum of not less than \$5 nor more than \$100.

Sec. 3. Be it further ordained, That this ordinance shall take effect and be in force from and after its adoption and publication.