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PREVALENCE OF DISEASE

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INFLUENZA PREVALENCE IN THE UNITED STATES

In California, where the outbreak of influenza apparently started, the reports for the week ended December 15, 1928, showed a decided reduction in the number of cases as compared with the preceding week.

Generally, however, there was more than the usual seasonal increase in the prevalence of influenza throughout the United States with the possible exception of the northeastern section. The increase over the preceding week was especially noticeable in Kansas, which reported nearly 69,000 cases for the week ended December 15; Missouri, reporting nearly 12,000 cases; North Dakota, with 7,000; and Indiana and Illinois, with more than 2,000 reported cases in each State. (See table on page 3442.)

It is evident that many cases are not reported, owing partly, at least, to the very mild nature of the disease.

The Department of Health of the State of Ohio sent a questionnaire to local health officers in that State. Estimates received from 104 out of 181 districts totaled 47,000 cases of influenza. A bulletin dated December 15, 1928, issued by the State Department of Health of Ohio states that "the type of influenza generally prevailing is quite mild and has led to a confusing differentiation of diagnosis of colds, la grippe, and influenza. It is the general belief that the present form is not a pneumonia-developing type and very few cases of pneumonia have been reported."

A telegraphic report from San Francisco, Calif., dated December 12, says that there was no marked resemblance between the cases in San Francisco this year and cases which have occurred during severe pandemics. The disease in California was said to resemble the mild cases seen in 1916 and in nonpandemic outbreaks since 1919.

A report from Montana states that as the number of cases decreased in some places the percentage of severe cases became somewhat greater.

The table on pages 3437 to 3439 shows the numbers of deaths from influenza and pneumonia in 78 large cities of the United States from October 28 to December 15, 1928, by weeks.

In 63 large cities of the United States the general death rate from all causes for the week ended December 15 was 15.2 per 1,000 population. This is a considerable increase over the rate for the preceding week (13.3 per 1,000), but, in view of the widespread prevalence of influenza, it seems to indicate that the disease is comparatively mild in type.

PRINCIPAL CAUSES OF DEATH, 1927

The Department of Commerce announces that 1,236,949 deaths occurred in 1927 within the death registration area of continental United States, representing a death rate of 11.4 per 1,000 population—the lowest since 1900.

This area in 1927 comprised 42 States, the District of Columbia, and 21 cities in nonregistration States, with a total estimated population on July 1, 1927, of 108,327,000, or 91.3 per cent of the estimated population of the United States.

The principal decreases in death rates in 1927 were from pneumonia (all forms) from 103 to 81 per 100,000 population; influenza, from 41 to 23; tuberculosis (all forms), from 87 to 81; diarrhea and enteritis (under 2 years), from 27 to 22; nephritis, from 98 to 93; measles, from 8 to 4; and diseases of the heart, from 199 to 196.

An increase is shown in 1927 in the death rate from automobile accidents, from 18 to 20 per 100,000 population.

The following table shows for the death registration area in continental United States in 1926 and 1927 the number of deaths and the death rates per 100,000 population from leading causes.

Cause of death	Deaths in registration area			
	Number		Rate per 100,000 estimated population	
	1927	1926	1927	1926
All causes [1]	1,236,949	1,285,927	1,141.9	1,222.7
Typhoid and paratyphoid fever	5,905	6,826	5.5	6.5
Malaria	2,875	2,006	2.7	1.9
Smallpox	145	377	0.1	0.4
Measles	4,433	8,607	4.1	8.2
Scarlet fever	2,440	2,662	2.3	2.5
Whooping cough	7,445	9,317	6.9	8.9
Diphtheria	8,426	7,856	7.8	7.5
Influenza	24,471	42,809	22.6	40.7
Dysentery	2,605	2,921	2.4	2.8
Erysipelas	2,567	2,680	2.4	2.5
Lethargic encephalitis	1,326	1,499	1.2	1.4
Meningococcus meningitis	1,705	1,413	1.6	1.3
Tuberculosis (all forms)	87,567	91,568	80.8	87.1
Of the respiratory system	77,195	80,375	71.3	76.4
Of the meninges, central nervous system	3,583	3,788	3.3	3.6
Other forms	6,839	7,405	6.3	7.0
Syphilis [2]	15,976	16,466	14.7	15.7
Cancer and other malignant tumors	103,578	99,823	95.6	94.9

[1] Exclusive of stillbirths.
[2] Includes tabes dorsalis (locomotor ataxia) and general paralysis of the insane.

Cause of death	Deaths in registration area			
	Number		Rate per 100,000 estimated population	
	1927	1926	1927	1926
Rheumatism	4,177	4,219	3.9	4.0
Pellagra	5,418	3,854	5.0	3.7
Diabetes mellitus	18,937	18,881	17.5	18.0
Meningitis (nonepidemic)	3,084	3,219	2.8	3.1
Cerebral hemorrhage and softening	91,001	90,832	84.0	86.4
Paralysis without specified cause	5,006	5,732	4.6	5.5
Diseases of the heart	211,976	209,370	195.7	199.1
Diseases of the arteries, atheroma, aneurysm, etc	23,615	23,698	21.8	22.5
Bronchitis	5,851	6,961	5.4	6.6
Pneumonia (all forms)	87,230	107,797	80.5	102.5
Respiratory diseases other than bronchitis and pneumonia (all forms)	9,111	9,202	8.4	8.7
Diarrhea and enteritis	29,899	35,296	27.6	33.6
Diarrhea and enteritis (under 2 years)	23,382	28,374	21.6	27.0
Diarrhea and enteritis (2 years and over)	6,517	6,922	6.0	6.6
Appendicitis and typhlitis	16,205	15,751	15.0	15.0
Hernia, intestinal obstruction	11,309	11,734	10.4	11.2
Cirrhosis of the liver	8,098	7,591	7.5	7.2
Nephritis	100,163	103,332	92.5	98.3
Puerperal septicemia	5,715	5,518	5.3	5.2
Puerperal causes other than puerperal septicemia	9,145	9,540	8.4	9.1
Congenital malformations and diseases of early infancy	73,365	75,239	67.7	71.5
Suicide	14,356	13,410	13.3	12.8
Homicide	9,470	9,210	8.7	8.8
Accidental and unspecified external causes	84,980	82,715	78.4	78.7
Burns (conflagration excepted)	6,089	6,487	5.6	6.2
Accidental drowning	7,296	6,661	6.7	6.3
Accidental shooting	2,741	2,593	2.5	2.5
Accidental falls	15,152	14,681	14.0	14.0
Mine accidents	2,690	2,825	2.5	2.7
Machinery accidents	2,124	2,224	2.0	2.1
Railroad accidents	6,892	7,026	6.4	6.7
Collision with automobile	1,676	1,556	1.5	1.5
Other railroad accidents	5,216	5,470	4.8	5.2
Street-car accidents	1,452	1,621	1.3	1.5
Collision with automobile	476	464	.4	.4
Other street-car accidents	976	1,157	.9	1.1
Automobile accidents (excluding collision with railroad trains and street cars)	21,160	18,871	19.5	17.9
Injuries by vehicles other than railroad trains, street cars, and automobiles [1]	1,593	1,507	1.5	1.4
Excessive heat (burns excepted)	530	646	.5	.6
Other external causes	17,261	17,573	15.9	16.7
All other defined causes	118,314	117,278	109.2	111.5
Unknown or ill-defined causes	19,060	18,708	17.6	17.8

[1] Includes airplane, balloon, and motor-cycle accidents.

MORTALITY FROM AUTOMOBILE ACCIDENTS, 1927

The Department of Commerce announces that in the registration area in continental United States there were 21,160 accidental deaths in 1927 charged to automobiles and other motor vehicles (excluding motor cycles), and that the death rate from this cause was 19.5 per 100,000 population against 17.9 in 1926, 17 in 1925, 15.7 in 1924, and 14.9 in 1923.

It should be noted, however, that the deaths assigned to automobile accidents do not include those due to collisions of automobiles with street cars and with railroad trains. Therefore, as in 1927 there were 476 deaths due to collisions of automobiles with street cars and 1,676 due to collisions with railroad trains, these deaths if

added to the 21,160 assigned to automobile accidents would make for the registration area a grand total of 23,312 deaths due to accidents in which automobiles were involved and would raise the rate from 19.5 to 21.5 per 100,000 population.

As in 1927 the registration area included only 91.3 per cent of the total population of the United States, by assuming that the number of deaths from automobile accidents reported in the registration area comprises 91.3 per cent of the number of deaths from automobile accidents in the entire United States, it may be estimated that the total number of deaths in that year due to accidents in which automobiles were involved was approximately 25,533.

In the 37 States for which data are available for the 5-year period 1923 to 1927, the number of these deaths as shown in the attached table increased from 13,812 in 1923 to 19,555 in 1927, and the corresponding rates were 15 and 19.8.

In the 68 cities for which similar data are available, the number of deaths increased from 5,617 in 1923 to 7,246 in 1927, and the rate increased from 19.1 to 23.

As has been frequently pointed out, uncorrected figures of deaths from automobile accidents, especially in cities, may be very misleading, because fatal accidents frequently occur outside city limits, though the injured are hurried to the city hospitals and so increase the city death rate. The third and fourth columns in the table show how many such deaths are known to have occurred in 1927 and 1926, but for many of the cities these figures should undoubtedly be much larger, since the place of the accident is not always reported on the death certificate. How important this factor may be, however, is well illustrated by the figures for Camden, N. J., Hartford and New Haven, Conn., and Wilmington, Del., for 1927, and for Camden and Trenton, N. J., and Wilmington, Del., in 1926, which show that more than half of the deaths were due to accidents which occurred outside of the city.

Deaths and death rates in the registration area in continental United States, registration States, and 68 cities, from accidents caused by automobiles, motor trucks, and commercial motor vehicles: 1923 to 1927

[For each year total deaths are shown regardless of place of accident. For 1926 and 1927 deaths are also shown where accidents are known to have occurred outside of State or city limits]

NUMBER OF DEATHS

State	Total		From accidents outside*		Total		
	1927	1926	1927	1926	1925	1924	1923
Registration area	21,160	18,871	----------	----------	17,751	15,528	14,411
Registration States[1]	20,704	18,419	3	----------	17,149	15,221	14,157
Alabama	361	319	----------	----------	252	(2)	(2)
Arizona	140	116	2	4	(2)	(2)	(2)
Arkansas	170	(2)	3	(2)	(2)	(2)	(2)
California	1,628	1,464	1	2	1,327	1,254	1,239
Colorado	234	175	1	2	146	158	157
Connecticut	327	307	2	4	340	277	249
Delaware	62	50	1	2	37	46	55
Florida	425	515	2	3	449	242	170
Georgia	(3)	(3)	(3)	(3)	(3)	307	259
Idaho	76	77	1	1	56	54	51
Illinois	1,512	1,338	5	13	1,268	1,065	1,031
Indiana	665	547	4	6	509	480	433
Iowa	284	264	5	6	271	211	242
Kansas	253	241	2	4	240	169	217
Kentucky	299	277	6	4	237	197	166
Louisiana	295	271	----------	2	241	210	158
Maine	112	100	----------	1	98	91	91
Maryland	330	312	5	4	271	246	243
Massachusetts	696	682	8	7	729	685	611
Michigan	1,266	1,112	----------	3	955	863	738
Minnesota	369	326	6	7	361	366	328
Mississippi	243	215	3	4	170	125	78
Missouri	517	493	6	10	509	449	398
Montana	73	93	1	2	84	69	49
Nebraska	198	154	4	5	125	113	123
New Hampshire	71	68	4	6	87	61	59
New Jersey	973	792	5	9	771	746	672
New York	2,384	2,178	11	8	2,111	1,985	1,930
North Carolina	503	455	4	2	376	328	258
North Dakota	72	70	----------	3	59	45	(2)
Ohio	1,494	1,317	13	13	1,285	1,024	1,078
Oregon	194	187	----------	1	144	144	120
Pennsylvania	1,860	1,734	15	23	1,576	1,535	1,592
Rhode Island	131	127	1	11	133	113	97
South Carolina	279	192	1	----------	179	167	119
Tennessee	345	312	23	11	278	232	171
Utah	79	80	----------	1	89	81	60
Vermont	60	45	----------	----------	56	48	46
Virginia	376	303	6	6	271	240	200
Washington	365	342	1	3	299	265	240
West Virginia	298	231	6	15	208	(2)	(2)
Wisconsin	511	384	2	3	397	363	292
Wyoming	66	56	----------	1	67	59	51

* As the place of accident was not always reported, the figures given as outside State or city limits are doubtless too small in some cases. Therefore, the figures in the third and fourth columns must be regarded merely as minimum numbers.

[1] Including District of Columbia.

[2] Not added to the registration area until a later date.

[3] State registration law declared unconstitutional; State excluded from area in 1925.

Deaths and death rates in the registration area in continental United States, registration States, and 68 cities, from accidents caused by automobiles, motor trucks, and commercial motor vehicles: 1923 to 1927—Continued

RATE PER 100,000 ESTIMATED POPULATION

State	1927	1926	1925	1924	1923
Registration area	19.5	17.9	17.0	15.7	14.9
Registration States [1]	19.4	17.8	16.9	15.6	14.8
Alabama	14.2	12.6	10.1	[2]	[2]
Arizona	30.5	26.1	[2]	[2]	[2]
Arkansas	8.8	[2]	[2]	[2]	[2]
California	36.7	33.9	31.7	32.0	32.6
Colorado	21.8	16.5	14.0	15.7	15.9
Connecticut	20.0	19.1	21.6	18.4	16.9
Delaware	25.5	20.8	15.5	19.8	23.9
Florida	31.2	39.1	35.5	19.7	16.2
Georgia	[3]	[3]	[3]	10.1	8.6
Idaho	14.2	14.8	11.0	11.2	10.8
Illinois	20.7	18.6	17.9	15.5	15.2
Indiana	21.1	17.5	16.4	15.8	14.4
Iowa	11.7	10.9	11.2	8.7	9.8
Kansas	13.8	13.2	13.2	9.4	12.1
Kentucky	11.8	11.0	9.4	8.0	6.7
Louisiana	15.3	14.1	12.7	11.3	8.5
Maine	14.1	12.7	12.5	11.7	11.7
Maryland	20.7	19.7	17.4	16.2	16.1
Massachusetts	16.4	16.2	17.6	16.7	15.2
Michigan	28.2	25.3	22.3	21.2	18.6
Minnesota	13.7	12.3	13.8	14.5	13.1
Mississippi	13.6	12.0	9.5	7.0	4.4
Missouri	14.7	14.1	14.6	13.0	11.6
Montana	10.2	13.4	12.5	11.0	8.0
Nebraska	14.2	11.1	9.1	8.4	9.2
New Hampshire	15.6	15.0	19.2	13.6	13.2
New Jersey	26.0	21.5	21.4	21.7	19.9
New York	20.9	19.3	18.9	18.0	17.8
North Carolina	17.4	15.9	13.4	12.0	9.6
North Dakota	11.2	10.9	9.2	7.0	[1]
Ohio	22.3	20.0	19.9	16.5	17.6
Oregon	21.8	21.3	16.7	17.3	14.6
Pennsylvania	19.1	18.0	16.6	16.7	17.5
Rhode Island	18.6	18.3	19.6	16.9	15.5
South Carolina	15.1	10.5	9.9	9.5	6.8
Tennessee	13.9	12.6	11.4	9.6	7.1
Utah	15.1	15.6	17.7	16.7	12.6
Vermont	17.0	12.8	15.9	13.6	13.1
Virginia	14.8	12.0	10.9	9.9	8.3
Washington	23.4	22.2	19.8	18.2	16.7
West Virginia	17.6	13.8	12.7	[2]	[2]
Wisconsin	17.5	13.3	13.9	13.1	10.7
Wyoming	27.4	23.7	29.3	27.2	24.1

[1] Including District of Columbia.
[2] Not added to the registration area until a later date.
[3] State registration law declared unconstitutional; State excluded from area in 1925.

NUMBER OF DEATHS

City	Total		From accidents outside [1]		Total		
	1927	1926	1927	1926	1925	1924	1923
Total of the 68 cities of 100,000 population or more in 1920	7,246	6,699	1,011	1,018	6,413	5,886	5,617
Akron	75	62	27	13	60	39	40
Albany	36	41	18	17	35	28	27
Atlanta	65	68	15	17	65	53	55
Baltimore	171	178	30	42	158	129	131
Birmingham	51	57	23	25	51	55	49
Boston	140	149	20	19	154	143	133
Bridgeport	25	31	4	10	26	21	23

[1] As the place of accident was not always reported, the figures given as outside State or city limits are doubtless too small in some cases. Therefore, the figures in the third and fourth columns must be regarded merely as minimum numbers.

Deaths and death rates in the registration area in continental United States, registration States, and 68 cities, from accidents caused by automobiles, motor trucks, and commercial motor vehicles: 1923 to 1927—Continued

NUMBER OF DEATHS—Continued

City	Total		From accidents outside		Total		
	1927	1926	1927	1926	1925	1924	1923
Buffalo	137	135	21	23	119	112	137
Cambridge	28	19	3	4	22	27	28
Camden	65	59	45	34	43	36	44
Chicago	787	693	24	20	645	560	589
Cincinnati	119	109	17	8	115	85	102
Cleveland	250	265	10	11	231	220	203
Columbus	72	70	13	14	71	59	58
Dallas	49	61	15	13	59	36	34
Dayton	44	52	21	13	44	26	27
Denver	61	48	14	11	37	40	45
Des Moines	30	30	3	5	23	17	18
Detroit	403	399	9	41	346	305	252
Fall River	11	19	3	7	17	16	22
Fort Worth	31	30	4	6	32	27	9
Grand Rapids	35	32	10	9	45	31	27
Hartford	49	46	25	19	53	33	40
Houston	57	40	17	7	31	31	25
Indianapolis	84	83	18	15	78	71	53
Jersey City	65	41	1	7	64	56	37
Kansas City, Kans	20	8	7	3	27	18	12
Kansas City, Mo	80	82	8	9	87	87	86
Los Angeles	353	286	24	74	258	267	224
Louisville	81	64	15	15	64	58	66
Lowell	16	22	4	6	26	23	18
Memphis	68	57	29	28	52	40	46
Milwaukee	121	101	20	10	102	83	62
Minneapolis	64	69	12	16	76	86	60
Nashville	46	39	13	17	38	34	28
Newark, N. J	122	109	9	11	110	104	107
New Bedford	16	11	3	2	18	13	8
New Haven	48	42	25	15	40	48	28
New Orleans	96	85	29	23	78	84	68
New York	1,099	1,082	8	8	1,060	1,000	964
Bronx Borough	156	119	1	(1)	117	122	129
Brooklyn Borough	349	338	2	(1)	341	327	279
Manhattan Borough	461	494	3	(1)	484	439	474
Queens Borough	108	102	1	(1)	102	90	66
Richmond Borough	25	29	1	(1)	16	22	16
Norfolk	35	25	15	9	24	16	13
Oakland	53	51	4	3	44	49	50
Omaha	49	33	9	9	35	29	40
Paterson	52	34	16	14	41	49	39
Philadelphia	324	329	11	7	296	263	294
Pittsburgh	215	163	39	38	166	186	146
Portland, Oreg	62	52	14	9	42	41	39
Providence	64	61	17	24	79	58	52
Reading	30	19	14	7	19	24	27
Richmond	46	37	16	17	41	33	26
Rochester	62	65	13	12	54	48	44
St. Louis	159	172	15	18	201	197	168
St. Paul	57	46	11	5	42	55	59
Salt Lake City	30	33	6	9	42	34	20
San Antonio	48	40	15	12	39	22	30
San Francisco	166	128	13	27	105	113	107
Scranton	34	32	8	8	33	24	41
Seattle	79	69	9	8	66	53	55
Spokane	21	27	4	5	21	22	15
Springfield, Mass	24	38	10	13	21	27	23
Syracuse	43	44	17	13	29	41	43
Toledo	108	74	25	24	67	46	63
Trenton	40	33	13	17	39	34	36
Washington, D. C	108	98	29	22	88	108	86
Wilmington, Del	40	29	22	17	21	29	29
Worcester	46	32	14	13	40	29	33
Yonkers	25	19	1	----------	15	16	17
Youngstown	56	42	15	11	43	39	37

[1] Not separately tabulated.

Deaths and death rates in the registration area in continental United States, registration States, and 68 cities, from accidents caused by automobiles, motor trucks, and commercial motor vehicles: 1923 to 1927—Continued

RATE PER 100,000 ESTIMATED POPULATION

City	1927	1926	1925	1924	1923
Total of the 68 cities of 100,000 population or more in 1920	23.0	21.7	21.1	19.8	19.1
Akron	(1)	(1)	(1)	(1)	(1)
Albany	30.1	34.5	29.7	23.9	23.0
Atlanta	26.1	(1)	(1)	(1)	24.7
Baltimore	20.9	22.0	19.8	16.4	16.9
Birmingham	23.4	27.1	24.8	27.4	25.0
Boston	17.7	18.9	19.8	18.4	17.3
Bridgeport	(1)	(1)	(1)	(1)	(1)
Buffalo	24.9	24.8	22.1	21.0	25.5
Cambridge	22.6	15.6	18.4	22.8	25.1
Camden	48.8	45.1	33.3	28.5	35.4
Chicago	25.4	22.7	21.5	19.0	20.4
Cincinnati	28.9	26.5	28.1	20.8	25.1
Cleveland	25.7	27.6	24.7	24.1	22.8
Columbus	24.7	24.5	25.4	22.0	22.2
Dallas	23.2	30.1	30.4	19.2	18.7
Dayton	24.3	29.4	25.4	15.4	16.3
Denver	21.0	16.8	13.2	14.5	16.5
Des Moines	20.1	20.6	16.3	12.1	12.8
Detroit	30.2	30.9	27.8	25.5	(1)
Fall River	8.3	14.5	13.2	12.5	18.2
Fort Worth	18.9	18.8	20.6	18.2	6.3
Grand Rapids	21.6	20.5	29.2	20.9	18.5
Hartford	29.1	28.0	33.1	21.1	26.3
Houston	(1)	(1)	(1)	19.4	16.1
Indianapolis	22.4	22.6	21.7	20.2	15.5
Jersey City	20.2	12.9	20.3	17.9	12.0
Kansas City, Kans	17.0	6.8	23.3	15.6	10.4
Kansas City, Mo	20.9	21.8	23.7	24.2	24.4
Los Angeles	(1)	(1)	(1)	(1)	(1)
Louisville	25.3	20.6	21.2	19.8	25.6
Lowell	14.5	19.9	23.6	20.8	15.6
Memphis	38.0	32.3	29.7	23.2	27.0
Milwaukee	22.6	19.5	20.0	16.8	12.8
Minneapolis	14.3	15.9	17.9	20.6	14.7
Nashville	33.4	28.5	27.9	27.5	22.8
Newark, N. J	26.1	23.7	24.3	23.3	24.4
New Bedford	13.4	9.2	15.1	10.9	6.2
New Haven	26.0	23.1	22.3	27.3	16.2
New Orleans	22.6	20.3	18.8	20.5	16.8
New York	18.4	18.3	18.0	17.2	16.3
Bronx Borough	16.8	13.2	13.4	14.4	15.3
Brooklyn Borough	15.3	15.1	15.5	15.1	12.9
Manhattan Borough	25.4	26.3	24.9	21.9	20.9
Queens Borough	13.3	13.4	14.3	13.4	12.3
Richmond Borough	17.1	20.3	11.6	16.3	12.5
Norfolk	19.5	14.4	14.2	(1)	8.2
Oakland	19.8	19.6	17.3	19.8	20.8
Omaha	22.4	15.3	16.5	13.9	19.6
Paterson	36.2	23.8	28.9	34.8	27.9
Philadelphia	15.9	16.4	15.0	13.5	15.3
Pittsburgh	32.3	25.6	26.3	29.7	23.5
Portland, Oreg	(1)	(1)	(1)	14.7	14.3
Providence	22.8	22.2	29.5	22.0	21.5
Reading	26.2	16.7	16.8	21.5	24.3
Richmond	24.0	19.6	22.0	18.0	14.4
Rochester	19.1	20.3	17.0	15.3	13.8
St. Louis	18.9	20.7	24.5	24.2	20.9
St. Paul	22.8	18.5	17.1	22.5	24.4
Salt Lake City	22.1	24.7	32.1	26.4	15.8
San Antonio	22.7	19.5	19.7	11.5	16.2
San Francisco	28.8	22.6	18.8	20.6	19.9
Scranton	23.6	22.4	23.2	17.0	29.2
Seattle	21.0	(1)	(1)	(1)	(1)
Spokane	19.3	24.8	19.3	21.0	14.3
Springfield, Mass	16.3	26.2	14.8	19.2	15.9
Syracuse	21.8	23.7	15.9	22.7	23.3
Toledo	35.4	25.1	23.3	16.4	23.4
Trenton	29.3	24.6	29.5	26.2	28.3
Washington, D. C	20.0	18.6	17.1	22.2	18.1
Wilmington, Del	31.6	23.3	17.2	24.2	24.6
Worcester	23.5	16.5	21.0	15.3	17.2
Yonkers	21.0	16.3	13.2	14.4	15.8
Youngstown	33.1	25.5	26.9	26.1	24.6

[1] Estimate of population unsatisfactory.

STUDIES IN PHYSICAL DEVELOPMENT AND POSTURE

I

That systematic physical exercise will increase the height, weight, and vital capacity of schoolboys is shown in a special experiment undertaken by the United States Public Health Service and reported in Public Health Bulletin No. 179, which will be issued soon.

Perhaps the most interesting result was the slight, but significant, gain in height. Growing boys may be expected to show increases in height in the course of a few months. Thus the group who were not given the special exercises, and who were requested to take as little exercise as possible, gained on the average about two-thirds of an inch. But the "experimental" group gained nearly a whole inch during the four months of the study. Out of 50 boys in the "control" group, only 4 gained as much as an inch and a half during the period; out of 68 in the "experimental" group, 18 gained that much. While it is recognized that this rate of increase could not be carried on indefinitely, it probably would be a considerable factor over a period of time.

In weight, the boys given the exercises showed an average gain of 3.3 pounds, whereas the "control" group showed a gain of 2. In the former, 26 children gained 5 pounds or more; in the latter only 5. Vital capacity (the amount of air which can be expelled from the lungs) also showed significantly greater increases in the "experimental" group.

The study was carried on primarily to ascertain whether gymnasium work would have a definite effect on the posture of boys. An improvement in muscular tone seems unquestionable, since a series of strength tests taken before and after the experiments indicated that the boys in the special classes increased more rapidly than other boys of the same ages. However, all measures of posture, including those made on photographs taken before and after the experimental period, indicated no differences in posture, from whatever point of view considered.

II

The bodily growth of boys and men from 3 to 50 years of age is shown in considerable detail in a recent bulletin issued by the United States Public Health Service (Public Health Bulletin No. 179), based on a study of 2,200 persons on whom detailed physical examinations were made together with front, back, and profile photographs of the body.

The results of each measurement are given in the report, so that an excellent idea is obtainable as to how growth proceeds, its relation to puberty, and the changes during adult life. Special attention is

given to the variability of the measurements from person to person at different ages.

The measurements divide themselves into two rather sharply contrasting groups. Weight, vital capacity, and strength begin at very low values and rise with amazing rapidity during adolescence. The other measurements show a moderate increase throughout childhood: they are, in general, linear measurements on the body. All show remarkable increases at the time of puberty.

Certain measurements reach a maximum in early adult life and thereafter decline (strength, vital capacity, chest expansions). Others are still rising more or less at 50 years (chest measurements, abdominal circumference, weight).

III

Record of tests of strength on 1,000 boys and men from 14 to 50 years of age are given an exhaustive study in Public Health Bulletin No. 179. The tests made included: Pull (strength of pulling the hands apart, recorded with a dynamometer); push (pressing the hands together); lift (lifting from floor); hand grip; lung force (height to which a column of mercury can be sent by blowing into a tube); and lung fatigue ("holding one's breath"—length of time the column of mercury can be maintained at 40 millimeters on a single breath).

Outside of the last measurement (which shows little variation with age), we find that all the strength tests rise during adolescence in much the same manner, spurt upward at puberty, reach a maximum about 30 years, and then decline slightly.

At any one age, as height and weight increase, strength increases; but it is of particular interest that for persons of the same weight strength decreases with height. For persons of the same height, strength increases markedly with weight.

All of the tests show great variability from person to person at any one age, especially lung force and lung fatigue, and there was no indication that any of them could be taken as reliable indices of physical condition.

COURT DECISIONS RELATING TO PUBLIC HEALTH

Detention of person, charged with certain offense, pending result of blood test for venereal disease upheld.—(New York Supreme Court; People ex rel. Krohn *v.* Thomas, Sheriff, 231 N. Y. S. 271; decided November 6, 1928.) The relator was arrested on a charge of the violation of subdivision 4, paragraph (f), of section 887 of the code of criminal procedure, in aiding and abetting prostitution. Section 343–n of the public health law provided:

> Every person arrested for vagrancy as defined under subdivision 3 or 4 of section 887 of the code of criminal procedure * * * shall be reported within

24 hours by the court or magistrate before whom such person is arraigned to the board of health or health officer of the health district in which the alleged offense occurred, and shall be examined [for venereal disease] in accordance with the provisions of the preceding section. For purpose of examination and diagnosis as provided in the preceding section, such person may be detained until the results of such examination are known. * * *

The magistrate, before whom the relator was arraigned, ordered that a blood test be taken of the relator and that he be detained in custody to await the result of the test. In habeas corpus proceedings instituted by the relator, the detention pending the result of the blood test was upheld, the court saying:

I am of the opinion that the learned city judge not only had jurisdiction to order the blood test and to order the relator detained in custody pending the result thereof, but that it was his duty to do so under said section 343–n.

* * * * * * *

* * * If the blood test should be negative, the city court can forthwith admit the relator to bail, and it would be the duty of that court to do so promptly.

The foregoing sections of the public health law were enacted for the benign purpose of protecting the public against the ravages of venereal diseases. These statutes should receive, therefore, a liberal interpretation. The police and the courts should be encouraged to a vigorous prosecution of this great work.

For the foregoing reasons, the writ of habeas corpus should be quashed, and the relator remanded to custody. * * *

Bovine tuberculosis eradication.—(Iowa Supreme Court; Phelps et al. *v.* Thornburg, State Secretary of Agriculture, et al., 221 N. W. 835; decided November 13, 1928.) In 1925, Muscatine County was enrolled under the county area plan for the eradication of bovine tuberculosis. One of the statutory requirements necessary to effect such enrollment was that the board of supervisors should publish for two consecutive weeks in two official county papers a notice of the date of the hearing, which hearing was to be not less than 5 not more than 10 days after the last publication. The hearing was set for August 17, 1925, and notice was published twice in two newspapers. In one paper the notice was published within the proper time, but in the other paper the dates of publication were August 6 and 13. In July, 1926, Muscatine County was declared by the State secretary of agriculture to be an accredited area. The plaintiffs brought an action for injunctive relief, which relief was granted by the supreme court. This court held that the notice published on August 13 did not comply with the statutory requirements, as but four days intervened between such publication and the hearing, and that, therefore, the county had not been properly enrolled under the county area plan. It then proceeded to hold that a county must first be properly enrolled under the county area plan before the secretary of agriculture could enroll it under the accredited area plan.

DEATH RATES IN A GROUP OF INSURED PERSONS

Rates for Principal Causes of Death, October, 1928

The accompanying table is taken from the Statistical Bulletin for November, 1928, issued by the Metropolitan Life Insurance Co., and presents the mortality experience of the industrial insurance department of the company, by principal causes of death, for October, 1928, as compared with September, 1928, and with October, 1927. The rates are based on a strength of approximately 18,500,000 persons in the United States and Canada.

The Bulletin states:

Health conditions among the industrial populations of the United States and Canada during October were by no means as favorable as in either the preceding month of this year or in the corresponding month of 1927. The death rate was 8.5 per 1,000 as compared with 7.7 in September, 1928, and 7.8 in October, 1927.

Every disease of importance, numerically, registered a higher rate than during October of last year. The most outstanding examples were heart disease and pneumonia, but noteworthy increases were recorded for influenza, tuberculosis, cancer, respiratory diseases other than pneumonia, and Bright's disease. Typhoid fever, for the first time this year, registered a higher death rate than in the corresponding month of 1927. Smaller margins of increase were recorded for scarlet fever, whooping cough, diabetes, cerebral hemorrhage, and suicides.

The mortality from accidental causes is about the same as in October, 1927, although there were a few more automobile fatalities. Up to November 24, the death rate from the latter was still running a little lower than for the corresponding period of last year,

Death rates (annual basis) per 100,000 for principal causes of death

[Industrial department, Metropolitan Life Insurance Co.]

Causes of death	Rate per 100,000 lives exposed [1]			
	October, 1928	September, 1928	October, 1927	Year 1927
Total, all causes	851.9	765.3	780.0	887.9
Typhoid fever	4.2	4.3	3.7	4.6
Measles	.3	.7	.4	4.1
Scarlet fever	1.8	1.0	1.6	3.1
Whooping cough	5.0	4.8	4.1	6.4
Diphtheria	9.5	5.6	9.7	10.6
Influenza	8.6	6.6	6.6	17.8
Tuberculosis (all forms)	83.0	78.1	75.7	93.6
Tuberculosis of respiratory system	73.1	67.8	67.4	81.9
Cancer	77.5	72.2	72.5	74.3
Diabetes mellitus	15.8	14.0	15.2	16.8
Cerebral hemorrhage	51.9	42.6	49.7	55.1
Organic diseases of heart	131.1	114.6	113.5	132.5
Pneumonia (all forms)	57.3	36.4	46.9	77.7
Other respiratory diseases	16.0	12.0	12.8	11.7
Diarrhea and enteritis	37.5	47.1	37.1	24.6
Bright's disease (chronic nephritis)	64.6	61.1	61.3	69.5
Puerperal state	12.6	12.6	12.8	15.5
Suicides	8.2	8.1	7.5	8.3
Homicides	6.5	7.0	6.9	7.3
Other external causes (excluding suicides and homicides)	63.7	61.9	63.2	63.9
Traumatism by automobiles	21.6	19.8	20.6	18.4
All other causes	196.7	174.6	178.8	190.5

[1] All figures include infants insured under 1 year of age.

PUBLIC HEALTH ENGINEERING ABSTRACTS

New Sewage Disposal Plant for Durham, N. C. Preson P. Phillips. *Public Works*, vol. 59, No. 8, August, 1928, pp. 306–309. (Abstract by John M. Henderson.)

A large increase in population, coupled with high infiltration in a 3-mile outfall sewer laid in marshy ground necessitated replacement of 300,000 g. p. d. treatment plant serving Durham residential section, with a 2-m. g. p. d. plant. Provision is made for further enlargement.

The new system consists of screen and grit chambers, preliminary clarifiers, trickling filters, final clarifiers, sludge digester and sludge beds. Flat topography at site necessitates pumping to obtain head for filters. Preliminary and final clarifiers are in battery and have same flow elevation. Filters are built above ground over old sand filter beds by making embankment wall fill. Sewage is pumped from preliminary clarifiers to dosing tanks.

Ingenious use of old equipment was made by converting an old Imhoff tank into a suction well and an old suction well into a sludge well. Details of plant are as follows: (1) Screen chamber—Dorco self-cleaning screen and Morse Boulger incinerator. (2) Grit chamber—3 chambers to provide for variable flow; 1 minute detention, 1 ft.-sec. velocity; mechanical grit removal. (3) Preliminary and final clarifiers—3 and 2 of each type respectively, in battery, all equipped with link belt clarifiers; two hours' preliminary detention. (4) Two trickling filters with a combined area of over an acre; 7 feet of 1½ to 2½ inches crushed stone over 6-inch split drain tile laid solid; 6-inch supply line; 1:1 slope concrete-lined walls. (5) Sludge digester—4 separate hopper-bottom tanks with provision for mixing ripe and green sludge; 2 cubic feet per capita capacity. (6) Sludge bed—5 compartments; 2 square feet per capita. Cost not stated.

Sludge Digestion and Gas Production. Jerry Donohue. *American City*, vol. 39, No. 4, October, 1928, pp. 95–97. (Abstract by S. H. Smith.)

The separate sludge digestion plant, constructed by Antigo, Wis., in 1926, consists of grit chamber, bar screen, clarifier tank, sprinkling filter beds, pumps, sludge digestion tank, and sludge beds. It is designed for a population of 10,000 and a sewage flow of 1,000,000 gallons per day. The present population is 9,000, of which number only 5,600 are now connected, and the present sewage flow is 650,000 gallons per day.

Nine advantages of the separate sludge digestion method are set forth, the most important of which is claimed to be the gas collection feature. The average amount of gas produced daily is 4,300 cubic feet, or 0.75 cubic foot per capita. The gas has a heating value of 640 B. t. u. per cubic foot. This gas is used to maintain the temperature in the digestion tank. The minimum temperature in this tank has been 65° F., while the minimum raw sewage temperature has been 47° F., and the atmospheric temperature −30° F., resulting in extending the digestion period from a normal of two months to twelve months. Burning the gas also eliminated much of the usual odor.

Experimental Studies of Bacterial Death Rates in Polluted Waters. C. T. Butterfield. *Journal of Bacteriology*, vol. 16, No. 4, October, 1928, pp. 257–267. (Abstract by C. T. Butterfield.)

In an attempt to better understand the processes of natural purification as observed in streams, the Stream Pollution Investigations Laboratory of the United States Public Health Service has devoted considerable study to comparing the bacterial changes which take place in waters under various laboratory conditions with the changes occurring in the stream. In these studies water collected from the Ohio River at Cincinnati was used. The bacterial changes occurring in the Ohio River between Cincinnati and Louisville have been determined.

The bacterial changes taking place with four experimental set-ups are given as follows: (1) Samples were stored in glass bottles in the incubator at temperatures of 10, 20, and 37° C.; (2) samples were held in wooden buckets at air temperatures, with intermittent agitation and exposed to diffuse daylight; (3) results are given from samples stored suspended in the river at the site of collection, and (4) bacterial changes have been followed in water pumped from the river and detoured through artificial channels constructed on the laboratory grounds.

Under the first three conditions the bacterial changes were not comparable with those observed in the stream. In the fourth set-up the changes observed simulate those in the natural stream.

The article is accompanied with tables of detailed analytical data and descriptive charts.

Observations on Acid Mine Drainage in Western Pennsylvania. R. D. Leitch. Report of Investigations, Department of Commerce, Bureau of Mines, Serial No. 2889, September, 1928, 18 pages. (Abstract by Arthur P. Miller.)

This paper relates the results of an attempt by the Bureau of Mines to "determine some of the factors contributing to formation of acid mine waters, the yearly variations in quantity and quality of drainage, effect of mining methods, and various other questions arising in connection with the problem."

Two streams receiving mine drainage, one in a high-sulphur and the other in a low-sulphur bituminous coal district, were selected for study. One stream was 16 miles long and had on it 17 active, 6 inactive, and 2 abandoned mines, while the other was 35 miles long and had 7 active, 7 inactive, and 15 abandoned mines on it. With three exceptions all mines were drift mines. The coal beds worked are given and also figures on drainage volumes.

Data were gathered in both spring and fall wet seasons and dry summer season. Acidity and pH determinations were made from samples taken at regular points. Effort was made also to get samples from all places where different kinds of waters were found.

On the first stream, the water was acid from the point of entrance of first drainage to mouth. Mine samples showed wide variations in acidity, but fresh working faces were usually alkaline or faintly acid. Water from inactive mines was invariably acid. Gobbed material is an important source of acid water. If it could be kept dry and sealed off, the minimum formation of acid might be expected. The presence or absence of limestone floor in a mine seems to have no effect on the acidity of the water. High-sulphur beds produce more acidity than low-sulphur beds.

Chemical neutralization of mine water by mixing it with limestone or lime can be accomplished but installations to do it would be so costly as to probably force a great many companies to cease production. It is therefore primarily a question of economics. However, much improvement can be had by sealing abandoned workings, thereby cutting off one source of much acid water.

Housing. J. S. Purdy. *Journal of the Royal Sanitary Institute*, vol. 49, No. 2, August, 1928, pp. 58–64. (Abstract by F. J. Moss.)

It is generally recognized that the overcrowding of persons into houses and the congestion of houses on an area have a deleterious effect on the health of the people.

In none of the six Australian capital cities is there any high density of population to the acre comparable to conditions in the older cities in Great Britain, Europe, or the United States. Thus the city of Sidney has a density of only 31.9 to the acre, and the most closely built suburb, Darlington, has a density of 87 to the acre. In the metropolitan area of Sidney there is room for improvement, but it is mainly in the industrial suburbs contiguous to the city proper that the more congested areas still obtain.

Conditions resulting from the shifting of population are discussed, and also the question of tenements, flats, individual residences, and the need of open spaces for use as recreation grounds for persons of all ages.

House property should be considered from the same standpoint of other property, and should not be expected to last and to yield an income forever. When houses cease to be reasonably habitable and incapable of repair, they should be wiped out and not allowed to remain as a source of danger to the public health. The principle of community responsibility for housing should be recognized, for it is as much a communal duty to provide such a public utility as to provide water, sewerage, gas or electricity.

The Bacterial Examination of Water in Public Swimming Baths. G. K. Bowes. *Journal of State Medicine*, vol. 36, No. 9, September, 1928, pp. 521–545. (Abstract by C. T. Butterfield.)

The author reviews the literature of transmission of disease by swimming baths and of bacterial standards. Practically all of the standards considered are of United States origin.

Experimental results obtained from a number of places in England during the years 1925–26 are given. These data include bacterial results, methods of operating the bathing pools, number of persons using baths and effects of temperature.

The author concludes in part that: (1) Pollution is less in cold weather than in warm, regardless of methods; (2) continuous filtration is superior to occasional emptying and filling with fresh water; (3) the standard adopted should be as stringent as that for drinking water (U. S. Treasury), and, (4) it is not possible to maintain this standard without continuous disinfection with some agent such as chlorine.

Swimming Bath Purification by Chlorine. Anon. *Contract Record and Engineering Review*, vol. 42, No. 23, June 6, 1928, pp. 615–616. (Abstract by Rudolph E. Thompson.)

A brief description of the purification plant in operation for the city of Bradford, England, at its Windsor Central Baths. The pool is 100 feet by 30 feet, and has a capacity of 102,000 gallons. The treatment plant consists of a rough strainer, 3 pressure filters, aerator (compressed air), chlorinating apparatus and calorifier. A coagulant, such as alumino-ferric and soda ash, will be employed. The capacity of the plant is equivalent to complete replacement of the pool water every 3½ hours.

Variations in British and American Practice in Rapid Sand Filtration. S. W. Farrington. *Surveyor*, vol. 73, No. 1895, May 18, 1928, pp. 545–546. (Abstract by H. W. Streeter.)

In discussing American practice in rapid sand filtration, the author notes certain points of variance between British and American methods, notably in respect to: (*a*) Proportioning the flow of chemical solutions; (*b*) Use of "flocculation" tanks; (*c*) Rates of filtration; and (*d*) Washing of filters. Taking the municipal water filtration plant at Cork, Ireland, as an example, he points out that in Great Britain automatic proportioning devices for chemical feed are more widely used, flocculation tanks less used, and lower rates of filtration practiced (averaging 75 gallons per square foot per hour as compared with about 100 gallons in the United States). At the Cork plant, the low rate of upward wash, which is 6¼ gallons per square foot minute, is stated to be permissible because the wash water is carried off over a low weir, rather than through elevated troughs. He contrasts this method with that described at Cambridge, Mass., where high upward velocities of washing, with frequent hand raking, are practiced. Noting that the hand raking is necessary to prevent formation of mud balls, he states that at Cork, where back flushing with water is supplemented by scouring

with compressed air, no difficulties of this kind have occurred. He attributes this result to the continued use of the air scouring process.

Impounding Reservoirs. F. M. Veatch. *The American City*, vol. 39, No. 2, August, 1928, pp. 125–126. (Abstract by J. B. Harrington.)

The writer in this article has described briefly impounding reservoirs as a source for a suitable water supply for cities unable to obtain satisfactory water by any other method. Southern Iowa, central Illinois and parts of Kansas, Missouri, Oklahoma, and Texas must of necessity use impounded supplies.

The design of impounding reservoirs, the yield for certain drainage areas, and the treatment of impounded supplies are described briefly. The following is a summary given at the close of the article: (1) That the impounding reservoir is an important and widely used source of municipal water supply; (2) that in many districts, as in southern Iowa, the impounding reservoir offers the only really satisfactory solution to the water-supply problem; (3) that in Iowa it is possible to develop water supplies to the extent of 125,000 to 150,000 persons per day per square mile of drainage area, provided suitable dam sites and drainage areas are available; (4) that impounded water in general requires more careful and complete treatment than river water, but if treated properly it is entirely satisfactory for municipal use and is usually of a much softer quality than the ground water available.

Providence Installs a New Garbage Disposal System. Frank E. Waterman. *The American City*, vol. 39, No. 2, August, 1928, pp. 83–86. (Abstract by J. B. Harrington.)

Following thorough investigation of the various methods of garbage disposal, the city of Providence in 1927 began construction of a 2-unit, heavy duty Decarie incinerator of 160 tons capacity per 24 hours.

For successful collection the city has been divided into sixteen routes during the winter and 21 routes during the summer. The winter schedule requires sixteen 2½-ton trucks, the summer schedule requires the same number of trucks and five 2-horse teams. Collections are made twice a week. The trucks upon arrival at the plant are weighed and the gross, tare, and net weight recorded. A traveling crane of 5,000 pounds capacity lifts the containers from the trucks to the hoppers on the second floor. Refuse is dumped and clean containers returned to the trucks.

After the refuse is dumped into the hoppers, it goes directly into the furnaces and is held in a basket grate until dried by the fire on the fire grate. Two attendants release the dried refuse from the basket grate to the fire grate. Forced draft is afforded by two steam driven induction fans and a 175-foot chimney. To the rear of each furnace is a combustion chamber in which odors and smoke are burned. Ashes are dumped from the grates about every four hours into cooling chambers in the basement.

Complete reports and operating records are kept, as shown by the plates accompanying the article. A brief discussion of the personnel, the office and repair shop, and the costs is also given.

Refuse Incineration at Louisville, Ky. J. L. Eschrich. *The American City*, vol. 38, No. 5, May, 1928, pp. 127–128. (Abstract by J. B. Harrington.)

The new Heenan type incinerator constructed at Twenty-seventh and Lewis Streets, Louisville, Ky., at a cost of $170,000 is a 3-story structure 50 by 75 feet. The furnace room occupies the first floor; charging takes place on the second; and office rooms, showers, etc., are located on the third floor. The furnaces, preheaters for air, chargers, and other equipment are described somewhat in detail. The plant consists of two units each with a 50-ton capacity for 10 hours. No additional fuel other than the garbage collected is ever used in the incinerator. The cost of burning the garbage is approximately $1.00 per ton. No odors have been noticeable from the operation of the plant.

DEATHS FROM INFLUENZA AND PNEUMONIA IN LARGE CITIES

Deaths from influenza and pneumonia in 78 large cities during seven weeks ended December 15, 1928. (From the Weekly Health Index December 19, 1928, issued by the Bureau of the Census, Department of Commerce.)

INFLUENZA DEATHS

City	Week ended—						
	Nov. 3	Nov. 10	Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15
Total	49	76	80	86	191	284	379
Akron	0	0	0	0	0	0	2
Albany	0	0	0	0	0	2	1
Atlanta	0	0	1	0	2	10	10
Baltimore	2	0	3	1	5	4	6
Birmingham	1	3	0	0	0	2	4
Boston	0	0	2		2	0	2
Bridgeport	0	1	1	0	1	2	0
Buffalo	0	1	1	1	0	0	
Cambridge [1]							
Camden	0	0	1	1	0	0	4
Canton [1]							
Chicago	4	4	6	2	10	10	33
Cincinnati	0	2	2	0	2	0	6
Cleveland	4	2	2	1	1	2	
Columbus	0	1	0	1	1	0	0
Dallas	1	3	0	2	1	2	0
Dayton	0	1	0	0	1	1	
Denver	1	1	2	1	15	28	58
Des Moines	2	0	0	0	0	2	6
Detroit	2	1	4	0	4	3	4
Duluth	0	0	0	0	0	2	5
El Paso	0	2	1	1	4	1	4
Erie	0	0	0	1	1	0	
Fall River	0	0	0	1	0	1	0
Flint [1]							
Fort Worth	0	0	0	1	2	1	3
Grand Rapids	1	1	1	0	1	1	11
Houston	0	1	0	1	0	1	2
Indianapolis	1	0	0	1	0	3	6
Jersey City	0	1	0	0	0	2	2
Kansas City, Kans	0	0	0	0	0	1	
Kansas City, Mo	2	0	1	0	1	12	35
Knoxville	0	1	1	1	1	2	1
Los Angeles					55	70	
Louisville				2			
Lowell	0	0	0	0	1	0	0
Lynn [1]							
Memphis	1			2	1	2	
Milwaukee	1	3	0	0	0		3
Minneapolis	0	0	1	0	2	2	2
Nashville [1]							
New Bedford [1]							
New Haven	0	0	0	1	0	1	2
New Orleans	2	2	5	4		5	12
New York		11	8	14	11	15	16
Newark, N. J	0	1	2	0	0	0	1
Oakland	4	2	3	5	11	3	1
Oklahoma City			3	1		3	
Omaha	0	0	0	0	0	0	0
Paterson	0	0	0	0	1	1	0
Philadelphia	3	8	6	7	4	14	16
Pittsburgh	1	3	1	8	4	5	17
Portland, Oreg	0	1	0	3	4	1	9
Providence	0	0	1	0	1	0	0
Richmond	0	0	0	0	0	1	3
Rochester	0	0	0	0	0	0	0
St. Louis	0	0	0	0	0	1	0
St. Paul	0	0	0	1	0	0	2
Salt Lake City	1	2	4	3	14	18	13
San Antonio	2	3	1	1	3	6	6
San Diego	0	1	1	0	6	11	16
San Francisco	6	11	11	10	7	9	9
Schenectady [1]							
Seattle	2	1	1	1	6	5	15
Somerville	0	0	0	0	0	0	

[1] No report of influenza deaths received

Deaths from influenza and pneumonia in 78 large cities during seven weeks ended December 15, 1928. (From the Weekly Health Index December 19, 1928, issued by the Bureau of the Census, Department of Commerce)—Continued

INFLUENZA DEATHS—Continued

City	Week ended—						
	Nov. 3	Nov. 10	Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15
Spokane	0	1	0	1	0	6	
Springfield, Mass	0	0	0	0	0	0	1
Syracuse [1]							
Tacoma	0	0	0	0	0	0	1
Toledo	4	0	1	4	2	5	21
Trenton	0	0	1	0	1	1	
Utica	0	0	0	0	1	0	
Washington, D. C	1	0	1	1	0	4	7
Waterbury	0	0	0	0	1	0	0
Wilmington, Del	0	0	0	0	0	0	0
Worcester [1]							
Yonkers	0	0	0	0	0	0	1
Youngstown [1]							

PNEUMONIA DEATHS

Total	567	587	687	791	853	1009	1114
Akron	4	3	1	4	5	8	8
Albany	5	3	3	7	8	8	4
Atlanta	6	6	4	5	10	8	14
Baltimore	15	17	24	32	25	35	37
Birmingham	6	6	6	6	10	9	9
Boston	17	12	20	22	17	24	24
Bridgeport	2	5	4	6	1	3	3
Buffalo	8	13	15	11	15	15	24
Cambridge	2	0	2	2	2	1	3
Camden	0	1	3	5	4	5	12
Canton	2	2	2	2	5	3	6
Chicago	54	38	49	71	70	85	129
Cincinnati	10	13	10	15	14	13	11
Cleveland	12	16	7	13	14	17	
Columbus	2	6	5	4	4	6	5
Dallas	0	2	1	2	4	2	1
Dayton	2	1	9	2	0	7	
Denver	6	6	4	9	12	22	51
Des Moines	1	1	1	0	0	4	2
Detroit	19	24	31	25	38	39	35
Duluth	0	1	2	1	1	5	1
El Paso	2	4	2	3	2	5	
Erie	0	0	7	2	4	2	3
Fall River	1	0	1	2	0	3	1
Flint	3	6	4	5	9	11	
Fort Worth	1	2	3	6	1	3	3
Grand Rapids	2	0	1	5	2	5	5
Houston	6	3	2	11	4	8	12
Indianapolis	6	4	11	18	14	19	33
Jersey City	6	4	11	12	6	8	12
Kansas City, Kans	1	2	5	1	5	5	31
Kansas City, Mo	9	5	3	5	15	15	29
Knoxville	2	4	3	6	1	4	1
Los Angeles	16	25	18	41	57	69	
Louisville	10	6	10	3	7	14	10
Lowell	4	2	2	3	1	2	4
Lynn	3	1	0	1	2	0	3
Memphis	3	4	8	7	3	17	
Milwaukee	8	8	5	3	8	8	4
Minneapolis	8	9	16	4	6	15	8
Nashville	5	6	3	2	5	10	3
New Bedford	0	1	3	1	2	4	3
New Haven	6	3	5	2	3	1	6
New Orleans	14	14	12	9	12	15	16
New York	111	137	137	150	157	173	202
Newark, N. J	8	5	7	10	8	14	10
Oakland	3	5	6	4	11	6	8
Oklahoma City	2	4	7	6	2	6	8
Omaha	2	5	7	5	7	10	34
Paterson	2	5	3	2	2	3	3
Philadelphia	25	30	46	43	54	70	83
Pittsburgh	12	17	27	27	30	16	40

[1] No report of influenza deaths received.

Deaths from influenza and pneumonia in 78 large cities during seven weeks ended December 15, 1928. (From the Weekly Health Index December 19, 1928, issued by the Bureau of the Census, Department of Commerce)—Continued

PNEUMONIA DEATHS—Continued

City	Week ended—						
	Nov. 3	Nov. 10	Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15
Portland, Oreg.	4	2	7	5	3	4	11
Providence	2	4	8	3	8	7	6
Richmond	3	0	2	6	5	4	4
Rochester	3	2	8	6	7	3	7
St. Louis	14	8	19	22	23	22	35
St. Paul	9	4	5	5	6	5	10
Salt Lake City	3	1	4	3	5	6	7
San Antonio	3	3	0	6	10	5	
San Diego	3	4	3	6	5	4	8
San Francisco	11	12	8	12	19	12	18
Schenectady	0	2	2	1	1	2	
Seattle	6	4	2	7	5	10	9
Somerville	2	1	2	1	2	2	3
Spokane	3	0	2	3	4	4	
Springfield, Mass	4	3	0	3	5	6	3
Syracuse	3	8	7	8	7	9	4
Tacoma	1	2	1	1	1	3	
Toledo	5	3	4	6	8	8	7
Trenton	2	1	0	3	2	1	4
Utica	3	4	5	7	4	3	
Washington, D. C.	15	6	13	12	8	11	10
Waterbury	3	0	0	5	3	3	1
Wilmington, Del.	2	3	3	6	0	4	3
Worcester	1	4	0	4	2	3	
Yonkers	2	6	2	4	6	5	4
Youngstown	6	3	2	3	5	3	6

Blank spaces indicate that no report has been received.

DEATHS DURING WEEK ENDED DECEMBER 15, 1928

Summary of information received by telegraph from industrial insurance companies for the week ended December 15, 1928, and corresponding week of 1927. (From the Weekly Health Index December 19, 1928, issued by the Bureau of the Census, Department of Commerce.

	Week ended Dec. 15, 1928	Corresponding week, 1927
Policies in force	70, 124, 082	69, 626, 833
Number of death claims	13, 619	12, 573
Death claims per 1,000 policies in force, annual rate	10. 2	9. 4

Deaths from all causes in certain large cities of the United States during the week ended December 15, 1928, infant mortality, annual death rate, and comparison with corresponding week of 1927. (From the Weekly Health Index, December 19, 1928, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Dec. 15, 1928		Annual death rate per 1,000 corresponding week, 1927	Deaths under 1 year		Infant mortality rate, week ended Dec. 15, 1928 [2]
	Total deaths	Death rate [1]		Week ended Dec. 15, 1928	Corresponding week, 1927	
Total (63 cities)	8,288	15.2	12.7	735	687	[3] 66
Akron	34			3	4	32
Albany [4]	36	15.6	24.9	2	5	42
Atlanta	90	18.4	18.0	7	10	
White	49		14.3	3	6	
Colored	41	(5)	26.8	4	4	
Baltimore [4]	254	16.0	13.2	26	21	83
White	194		12.1	18	16	72
Colored	60	(5)	19.5	8	5	124
Birmingham	72	16.9	15.8	12	9	102
White	30		11.0	7	1	96
Colored	42	(5)	23.4	5	8	112
Boston	211	13.8	14.3	23	19	63
Bridgeport	30			5	2	84
Buffalo	171	16.1	13.8	16	14	70
Cambridge	27	11.2	8.4	3	1	54
Camden	50	19.3	13.3	7	1	112
Canton	22	9.8	10.1	4	1	93
Chicago [4]	945	15.6	11.4	96	78	82
Cincinnati	154			12	7	71
Columbus	78	13.6	11.5	4	7	37
Dallas	50	12.0	12.3	4	10	
White	41		11.6	2	9	
Colored	9	(5)	17.1	2	1	
Denver	190	33.8	18.2	14	9	
Des Moines	51	17.6	12.3	4	3	71
Detroit	309	11.7	9.7	49	41	77
Duluth	33	14.8	7.3	4	2	93
El Paso	45	20.0	20.2	2	4	
Erie	39			8	1	170
Fall River [4]	30	11.7	12.6	0	4	0
Flint	22	7.7	9.9	6	5	78
Fort Worth	36	11.0	9.2	4	2	
White	31		9.8	4	2	
Colored	5	(5)	5.3	0	0	
Grand rapids	69	22.0	9.3	9	5	130
Houston	78			13	8	
White	54			10	7	
Colored	24	(5)		3	1	
Indianapolis	148	20.3	12.0	13	6	101
White	129		11.2	13	6	117
Colored	19	(5)	17.5	0	0	0
Jersey City	68	10.9	10.1	8	6	62
Kansas City, Kans	69	30.5	13.3	12	2	286
White	56		13.0		1	
Colored	13	(5)	14.8		1	
Kansas City, Mo	179	23.9	12.8	3	10	24
Knoxville	25	12.4	12.8	4	7	88
White	20		12.8	4	7	98
Colored	5	(5)	12.8	0	0	0
Los Angeles	442			29	28	83
Louisville	96	15.2	13.4	8	4	65
White	77		11.7	6	3	56
Colored	19	(5)	22.4	2	1	126
Lowell	30			3	1	65
Lynn	21	10.4	9.0	1	4	27
Memphis	72	19.8	18.9	5	5	59
White	41		14.9	4	3	76
Colored	31	(5)	26.3	1	2	31
Milwaukee	127	12.2	13.2	18	16	80
Minneapolis	104	11.9	14.3	4	8	24

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.
[3] Data for 67 cities.
[4] Deaths for week ended Friday.
[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended December 15, 1928, infant mortality, annual death rate, and comparison with corresponding week of 1927. (From the Weekly Health Index, December 19, 1928, issued by the Bureau of the Census, Department of Commerce)—Continued

City	Week ended Dec. 15, 1928		Annual death rate per 1,000 corresponding week, 1927	Deaths under 1 year		Infant mortality rate, week ended Dec. 15, 1928
	Total deaths	Death rate		Week ended Dec. 15, 1928	Corresponding week, 1927	
Nashville	53	19.9	20.4	9	4	150
White	36		21.1	3	3	67
Colored	17	(3)	18.8	6	1	388
New Bedford	23			3	3	64
New Haven	46	12.8	10.4	3	2	44
New Orleans	169	20.6	22.0	9	27	45
White	110		17.3	4	10	30
Colored	59	(3)	35.5	5	17	76
New York	1,508	13.1	11.8	142	115	58
Bronx boro	200	11.0	9.6	20	13	60
Brooklyn boro	519	11.8	10.5	57	40	58
Manhattan boro	601	17.9	15.9	50	52	60
Queens boro	145	8.9	8.9	12	9	49
Richmond boro	43	14.9	11.7	3	1	53
Newark, N. J	109	12.0	11.6	13	10	68
Oakland	69	13.2	14.0	4	4	43
Oklahoma City	34			0	3	
Omaha	104	24.4	16.7	6	8	70
Paterson	26	9.4	14.5	1	4	18
Philadelphia	582	14.7	12.6	39	50	53
Pittsburgh	237	18.4	15.0	23	27	77
Portland, Oreg	105			5	3	54
Providence	75	13.7	8.5	9	8	78
Richmond	51	13.7	15.5	3	11	41
White	34		13.0	3	4	63
Colored	17	(3)	21.6	0	7	0
Rochester	97	15.5	10.3	7	9	57
St. Louis	283	17.4	13.5	15	16	51
St. Paul	59			3	2	29
Salt Lake City [4]	56	21.2	16.1	5	4	81
San Antonio	69	16.5	15.0	11	14	
San Diego	78	34.1	22.2	3	2	57
San Francisco	184	16.4	13.4	7	11	44
Schenectady	21	11.8	9.5	4	1	125
Seattle	119	16.2	12.1	2	8	21
Somerville	18	9.2	3.6	3	1	84
Spokane	68	32.6	19.6	1	2	26
Springfield, Mass	40	14.0	10.6	0	2	0
Syracuse	54	14.2	12.7	5	5	61
Tacoma	33	15.6	16.5	1	3	26
Toledo	97	16.2	13.0	5	6	48
Trenton	43	16.2	16.0	7	5	120
Washington, D. C	151	14.3	11.0	10	2	58
White	98		9.6	7	1	59
Colored	53	(3)	15.3	3	1	55
Waterbury	11			2	2	50
Wilmington, Del	38	15.5	11.1	3	1	73
Worcester	43	11.4	12.8	7	3	85
Yonkers	25	10.8	10.5	2	2	45
Youngstown	42	12.6	9.5	4	1	53

[4] Deaths for week ended Friday.

[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

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

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended December 15, 1928, and December 17, 1927

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended December 15, 1928, and December 17, 1927

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927
New England States:								
Maine	----	4	----	14	----	35	----	0
New Hampshire	3	2	----	----	18	7	0	0
Vermont	----	4	1	----	----	3	0	0
Massachusetts	123	116	21	9	645	579	2	2
Rhode Island	12	20	1	2	32	4	0	0
Connecticut	36	59	14	9	174	43	5	0
Middle Atlantic States:								
New York	78	357	[1] 68	[1] 12	782	337	24	3
New Jersey	139	172	54	9	97	59	6	0
Pennsylvania	275	188	----	----	1,210	471	7	1
East North Central States:								
Ohio	137	117	718	7	353	74	6	1
Indiana	35	45	2,280	26	138	31	0	0
Illinois	253	188	2,196	28	277	25	11	12
Michigan	124	94	244	4	40	263	9	1
Wisconsin	30	50	583	64	160	104	5	4
West North Central States:								
Minnesota	22	25	1,238	----	68	4	3	1
Iowa	13	12	----	----	----	26	1	0
Missouri	75	48	11,683	7	88	23	24	3
North Dakota	11	3	7,355	----	15	4	9	2
South Dakota	----	1	167	4	35	39	0	2
Nebraska	13	20	2,590	4	6	9	1	0
Kansas	23	35	68,843	7	12	29	2	3
South Atlantic States:								
Delaware	----	4	4	4	10	1	0	0
Maryland [2]	31	30	72	24	23	78	0	1
District of Columbia	20	13	29	----	1	1	0	0
West Virginia	29	31	461	14	56	34	0	1
North Carolina	121	84	----	----	28	1,344	0	0
South Carolina	45	49	8,912	670	3	473	0	0
Georgia	17	33	4,462	154	88	51	1	0
Florida	15	19	93	11	5	8	0	1

[1] New York City only.

[2] Week ended Friday.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended December 15, 1928, and December 17, 1927—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927
East South Central States:								
Kentucky	55	14	3,946	0	-------	34	-------	0
Tennessee	33	37	2,559	65	1	217	1	0
Alabama	49	69	622	130	28	142	0	0
Mississippi	24	33	2,038	-------	-------	-------	1	-------
West South Central States:								
Arkansas	28	16	412	81	16	27	0	0
Louisiana	47	23	136	15	40	15	1	1
Oklahoma [3]	59	75	994	104	5	79	1	3
Texas	105	75	37	92	14	18	1	2
Mountain States:								
Montana	1	-------	6,060	-------	72	1	10	0
Idaho	1	1	79	-------	7	-------	4	0
Wyoming	-------	1	450	-------	-------	9	0	5
Colorado	1	26	1,146	-------	2	28	8	2
New Mexico	11	8	1,757	-------	1	16	1	0
Arizona	10	23	2,615	-------	28	1	0	4
Utah [2]	-------	10	224	-------	2	-------	8	0
Pacific States:								
Washington	12	11	407	-------	37	132	2	1
Oregon	11	18	1,851	24	88	23	2	2
California	76	147	6,655	25	14	46	19	2

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927
New England States:								
Maine	-------	2	-------	51	-------	0	-------	2
New Hampshire	0	0	35	7	0	0	1	0
Vermont	0	0	12	5	1	0	0	0
Massachusetts	1	11	251	310	0	0	5	2
Rhode Island	0	1	16	35	0	0	0	0
Connecticut	2	2	55	70	0	0	0	1
Middle Atlantic States:								
New York	8	6	447	462	1	6	18	21
New Jersey	1	2	110	144	0	0	3	6
Pennsylvania	1	6	520	426	0	2	24	31
East North Central States:								
Ohio	1	6	250	222	53	6	4	26
Indiana	0	3	107	77	35	76	6	7
Illinois	1	2	346	283	84	15	11	15
Michigan	1	2	293	224	13	27	4	5
Wisconsin	1	0	146	153	16	19	1	1
West North Central States:								
Minnesota	2	0	143	121	5	4	3	4
Iowa	1	8	91	96	70	58	1	1
Missouri	1	0	102	99	35	49	6	4
North Dakota	1	1	42	27	10	2	2	0
South Dakota	0	0	12	38	6	11	1	0
Nebraska	1	2	45	46	44	17	2	1
Kansas	0	1	100	88	11	78	2	7
South Atlantic States:								
Delaware	0	0	11	5	0	0	0	1
Maryland [3]	0	2	61	35	0	0	4	14
District of Columbia	0	0	14	36	0	0	1	2
Virginia	2	-------	-------	-------	-------	-------	-------	-------
West Virginia	0	3	61	79	35	48	1	55
North Carolina	1	0	78	62	3	22	1	2
South Carolina	3	3	22	7	0	2	18	M
Georgia	0	0	34	18	0	0	9	11
Florida	1	0	21	18	0	1	3	1

[1] Week ended Friday.
[2] Figures for 1928 are exclusive of Oklahoma City and Tulsa and for 1927 are exclusive of Tulsa.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended December 15, 1928, and December 17, 1927—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927	Week ended Dec. 15, 1928	Week ended Dec. 17, 1927
East South Central States:								
Kentucky	0	4	84	42	4	12	23	16
Tennessee	0	0	31	42	3	4	4	10
Alabama	0	4	45	26	0	2	4	31
Mississippi	0	1	20	12	0	0	3	6
West South Central States:								
Arkansas	0	1	42	11	2	1	12	9
Louisiana	0	0	28	17	9	13	8	10
Oklahoma [3]	3	1	42	56	44	147	32	26
Texas	0	5	66	59	15	18	4	8
Mountain States:								
Montana	0	0	14	22	18	29	3	1
Idaho	0	1	7	13	27	0	0	0
Wyoming	0	0	13	37	1	4	0	0
Colorado	0	1	9	51	3	6	0	1
New Mexico	0	0	14	16	0	1	1	12
Arizona	0	0	4	2	0	0	2	2
Utah [2]	0	0	6	7	3	29	0	0
Pacific States:								
Washington	4	10	24	52	55	53	1	4
Oregon	1	10	40	22	46	29	1	6
California	3	22	179	156	24	26	4	5

[1] Week ended Friday.
[3] Figures for 1928 are exclusive of Oklahoma City and Tulsa and for 1927 are exclusive of Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
October, 1928										
Kansas	2	137	14	7	20	----	4	380	53	34
November 1928										
Iowa	0	68	----	----	7	----	5	344	181	8
Maine	3	30	31	----	479	----	4	98	51	10
Massachusetts	10	359	31	----	1,620	3	14	769	2	30
Michigan	----	395	11	3	135	1	8	888	68	39
New Jersey	10	566	36	----	379	----	1	363	1	31
North Dakota	4	57	19	----	22	----	8	156	4	25
Ohio	16	484	72	3	724	----	24	957	94	66
Tennessee	3	205	219	142	2	14	0	235	7	106
Vermont	0	8	----	----	117	----	5	81	4	0

October, 1928

Kansas:	Cases
Chicken pox	287
German measles	2
Lethargic encephalitis	1
Mumps	97
Paratyphoid fever	1
Septic sore throat	1
Vincent's angina	2
Whooping cough	189

November, 1928

Anthrax:	Cases
Massachusetts	2
Chicken pox:	
Iowa	330
Maine	192
Massachusetts	935
Michigan	1,414
New Jersey	1,171
North Dakota	101

November, 1928—Continued

	Cases
Chicken pox—Continued	
Ohio	2,664
Tennessee	149
Vermont	139
Dysentery:	
Massachusetts	3
Ohio	5
Tennessee	8
German measles:	
Maine	6
Massachusetts	31
Michigan	13
Ohio	16
Vermont	8
Lead poisoning:	
Massachusetts	4
New Jersey	3
Ohio	26
Lethargic encephalitis:	
Massachusetts	5
Michigan	6
North Dakota	1
Ohio	5
Mumps:	
Iowa	237
Maine	143
Massachusetts	232
Michigan	333
North Dakota	2
Ohio	191
Tennessee	10
Vermont	183
Opthalmia neonatorum:	
Massachusetts	107
New Jersey	3
Ohio	73
Paratyphoid fever:	
New Jersey	2
Ohio	2
Tennessee	1

November, 1928—Continued

	Cases
Puerperal septicemia:	
Ohio	4
Rabies in man:	
Michigan	1
Scabies:	
North Dakota	2
Septic sore throat:	
Maine	4
Massachusetts	9
Michigan	28
Ohio	81
Tetanus:	
Massachusetts	1
Ohio	2
Trachoma:	
Massachusetts	4
New Jersey	1
Ohio	5
Tennessee	9
Tularaemia:	
Iowa	1
Undulant fever:	
Iowa	11
North Dakota	1
Ohio	1
Vincent's angina:	
Maine	4
North Dakota	11
Whooping cough:	
Iowa	87
Maine	82
Massachusetts	425
Michigan	1,181
New Jersey	446
North Dakota	50
Ohio	968
Tennessee	58
Vermont	101

Number of Cases of Certain Communicable Diseases Reported for the Month of October, 1928, by State Health Officers

	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Maine	78	17	234	49	105	12	27	10	92
New Hampshire		4			36	0		4	
Vermont	110	26	22	96	25	3	13	0	118
Massachusetts	421	413	796	149	532	0	498	40	336
Rhode Island	8	71	64	1	54	0	[1] 22	5	35
Connecticut	161	103	118	51	87	0	112	9	154
New York	1,008	632	806	355	661	2	1,818	411	1,033
New Jersey	408	453	184		248	1	349	47	372
Pennsylvania [2]									
Ohio	1,188	453	361	188	780	41	626	141	717
Indiana [2]									
Illinois	793	676	340	160	829	65	917	156	397
Michigan	743	389	177	115	573	55	735	47	850
Wisconsin	867	100	230	119	376	35	150	18	414
Minnesota	747	144	142		354	5	317	35	138
Iowa	167	75	4	89	266	34	31	16	39
Missouri	152	231	43	37	313	26	270	91	122
North Dakota	28	37	10	1	79	0	22	6	25
South Dakota	51	19	4	2	85	23	1	4	16
Nebraska	33	150	56	11	189	11	[1] 12	6	80
Kansas	287	137	20	97	380	53	214	34	189
Delaware	3	6	7	3	12	0	[1] 9	21	28
Maryland	110	149	76	65	166	0	279	128	311
District of Columbia	14	250	11		49	0	131	11	32
Virginia	176	552	207		446	5	[1] 130	118	168
West Virginia	119	142	63		287	10	32	122	69
North Carolina	161	957	85		558	17		148	252
South Carolina	34	653	22	14	78	4	135	180	148
Georgia	16	170	20	15	104	3	38	96	40
Florida [2]									

[1] Pulmonary.

[2] Report not received at time of going to press.

Number of Cases of Certain Communicable Diseases Reported for the Month of October, 1928, by State Health Officers—Continued

	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Kentucky [3]									
Tennessee	58	311	9	14	206	5	139	240	74
Alabama	25	447	29	17	176	5	405	132	59
Mississippi	226	233	134	173	149	2	235	105	543
Arkansas	44	116	18	31	122	2	24	76	57
Louisiana	5	127	31	1	54	5	[1] 128	83	24
Oklahoma [4]	17	353	18	2	162	25	58	222	25
Texas [3]									
Montana	197	20	49	5	46	68	16	17	23
Idaho	16	11	7	1	83	34	[1] 3	10	2
Wyoming	86	17	5	23	93	32	[1] 1	3	8
Colorado [3]									
New Mexico [3]									
Arizona	9	16	7	3	3	2	46	19	10
Utah [3]									
Nevada [3]									
Washington	398	37	116	156	124	116	119	44	60
Oregon	115	66	66	23	145	99	75	16	8
California	699	434	88	791	707	101	1,064	78	826

[3] Report not received at time of going to press.
[4] Exclusive of Oklahoma City and Tulsa.
[5] Reports received weekly.
[6] Reports received annually.

Case Rates per 1,000 Population (Annual Basis) for the Month of October, 1928

	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Maine	1.16	0.25	3.48	0.73	1.56	0.18	0.40	0.15	1.37
New Hampshire		.10			.93	.00		.10	
Vermont	3.69	.87	.74	3.22	.84	.10	.44	.00	3.95
Massachusetts	1.16	1.14	2.19	.41	1.46	.00	1.37	.11	.92
Rhode Island	.13	1.17	1.06	.02	.89	.00	[1] .36	.08	.58
Connecticut	1.14	.73	.84	.36	.62	.00	.79	.06	1.09
New York	1.03	.65	.82	.26	.68	.00	1.86	.42	1.06
New Jersey	1.26	1.40	.57		.77	.00	1.08	.15	1.15
Pennsylvania [2]									
Ohio	2.06	.78	.62	.33	1.35	.07	1.08	.24	1.24
Indiana [2]									
Illinois	1.27	1.08	.54	.26	1.32	.10	1.46	.25	.63
Michigan	1.91	1.00	.46	.30	1.47	.14	1.89	.12	2.19
Wisconsin	3.47	.40	.92	.48	1.50	.14	.60	.07	1.66
Minnesota	3.24	.62	.62		1.54	.02	1.37	.15	.60
Iowa	.81	.36	.02	.43	1.29	.17	.15	.08	.19
Missouri	.51	.77	.14	.12	1.05	.09	.90	.30	.41
North Dakota	.52	.68	.18	.02	1.45	.00	.41	.11	.46
South Dakota	.86	.32	.07	.03	1.43	.39	.02	.07	.27
Nebraska	.28	1.26	.47	.09	1.58	.09	[1] .10	.05	.25
Kansas	1.85	.88	.13	.62	2.44	.34	1.38	.22	1.22
Delaware	.15	.29	.34	.15	.58	.00	.44	1.02	1.35
Maryland	.80	1.09	.56	.47	1.21	.00	2.04	.94	2.27
District of Columbia	.30	5.35	.24		1.05	.00	2.80	.24	.68
Virginia	.81	2.53	.95		2.04	.02	[1] .60	.54	.77
West Virginia	.81	.97	.43		1.97	.07	.22	.84	.47
North Carlina	.65	3.85	.34		2.24	.07		.59	1.01
South Carolina	.22	4.14	.14	.09	.49	.03	.86	1.14	.94
Georgia	.06	.63	.07	.06	.38	.01	.14	.35	.15
Florida [2]									

[1] Pulmonary.
[2] Report not received at time of going to press.

Case Rates per 1,000 Population (Annual Basis) for the Mouth of October, 1928—Continued

	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Kentucky [3]	.27	1.47	.04	.07	.97	.02	.66	1.13	.35
Tennessee	.11	2.05	.13	.08	.81	.02	1.86	.61	.27
Alabama	1.49	1.54	.88	1.14	.98	.01	1.55	.69	3.58
Mississippi	.27	.70	.11	.19	.74	.01	.15	.46	.35
Arkansas	.03	.77	.19	.01	.33	.03	[1] 1.78	.50	.15
Louisiana	.09	1.94	.10	.01	.89	.14	.32	1.22	.14
Oklahoma [4]									
Texas [3]									
Montana	4.24	.43	1.05	.11	.99	1.46	[1] .34	.37	.49
Idaho	.35	.24	.15	.02	1.79	.74	.06	.22	.04
Wyoming	4.11	.81	.24	1.10	4.45	1.53	[1] .05	.14	.38
Colorado [3]									
New Mexico [3]									
Arizona	.22	.40	.17	.07	.07	.05	1.15	.47	.25
Utah [3]									
Nevada [5]									
Washington	2.96	.28	.86	1.16	.92	.86	.89	.33	.45
Oregon	1.51	.86	.86	.30	1.90	1.30	.98	.21	.10
California	1.81	1.12	.23	2.05	1.83	.26	2.76	.20	2.14

[1] Report not received at time of going to press.
[3] Reports received weekly.
[4] Exclusive of Oklahoma City and Tulsa.
[5] Reports received annually.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 99 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,440,000. The estimated population of the 93 cities reporting deaths is more than 30,750,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended December 8, 1928, and December 10,, 1927

	1928	1927	Estimated expectancy
Cases reported			
Diphtheria:			
44 States	2,330	2,655	
99 cities	988	1,203	1,280
Measles:			
43 States	3,722	4,746	
99 cities	860	1,337	
Poliomyelitis:			
44 States	42	166	
Scarlet fever:			
44 States	3,867	3,734	
99 cities	1,202	1,082	1,164
Smallpox:			
44 States	685	778	
99 cities	25	77	50
Typhoid fever:			
44 States	265	360	
99 cities	52	64	70
Deaths reported			
Influenza and pneumonia:			
93 cities	1,209	709	
Smallpox:			
93 cities	0	0	

City reports for week ended December 8, 1928

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1919 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1926, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	76,400	11	2	0			38	1	2
New Hampshire:									
Concord	[1] 22,546	0	1	0			0	0	2
Vermont:									
Barre	[1] 10,008		0						
Burlington	[1] 24,089	7	1	0		0	2	9	2
Massachusetts:									
Boston	787,000	105	54	24	5	0	16	6	8
Fall River	131,000	2	5	3	2	1	135	1	3
Springfield	145,000	19	5	13			89	1	4
Worcester	193,000		6						
Rhode Island:									
Pawtucket	71,000	7	2	5	0	0	5	1	3
Providence	275,000	0	12	21	2	0	11	0	7
Connecticut:									
Bridgeport	([2])	5	10	7	3	2	3	1	2
Hartford	164,000	11	9	9			0	3	1
New Haven	182,000	13	3	2		1	2	0	1
MIDDLE ATLANTIC									
New York:									
Buffalo	544,000	29	25	20		0	2	0	15
New York	5,924,000	289	202	200	36	15	63	52	173
Rochester	321,000	21	11	2		0	3	14	2
Syracuse	185,000	18	6	0		0	2	0	9
New Jersey:									
Camden	131,000	15	7	9		0	3	1	5
Newark	459,000	73	17	36	16	0	2	37	13
Trenton	134,000	8	6	1	1	1	0	0	1
Pennsylvania:									
Philadelphia	2,008,000	133	84	36	6	14	10	7	70
Pittsburgh	637,000	86	34	17		5	1	3	16
Reading	114,000	22	4	5		0	9	2	2
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	411,000	21	18	19	2	0	0	0	13
Cleveland	960,000	181	59	22	23	2	106	11	17
Columbus	285,000	20	12	6	0	0	8	1	6
Toledo	295,000	142	13	4	32	5	2	5	8
Indiana:									
Fort Wayne	99,900	10	6	8		1	0	0	0
Indianapolis	367,000	156	14	6		3	3	1	19
South Bend	81,700	1	2	0		0	0	0	1
Terre Haute	71,900	0	2	1		2	0	0	1
Illinois:									
Chicago	3,048,000	245	96	173	85	10	50	11	85
Springfield	64,700	4	2	0	2	2	0	0	0
Michigan:									
Detroit	[3] 1,242,044	237	78	47	5	3	6	22	39
Flint	136,000	16	12	1		0	1	4	11
Grand Rapids	156,000	6	5	0		1	6	1	5

[1] Estimated, July 1, 1925. [2] No estimate made. [3] Special census.

City reports for week ended December 8, 1928—Continued

Division, State, and city	Population July 1, 1926, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST NORTH CENTRAL—continued									
Wisconsin:									
Kenosha	52,700	8	2	0	-------	0	7	1	0
Milwaukee	517,000	207	30	6	4	3	89	15	8
Racine	69,400	24	3	2	-------	0	10	1	1
Superior	[1] 39,671	1	1	0	-------	0	0	0	1
WEST NORTH CENTRAL									
Minnesota:									
Duluth	113,000	18	1	0	-------	2	1	9	5
Minneapolis	434,000	327	29	5	-------	2	47	22	15
St. Paul	248,000	118	19	0	-------	0	3	17	9
Iowa:									
Davenport	[1] 52,469	16	1	0	-------	-------	0	0	-------
Des Moines	146,000	0	5	2	-------	-------	0	0	-------
Sioux City	78,000	12	3	0	-------	-------	0	8	-------
Waterloo	36,900	11	0	2	-------	-------	1	103	-------
Missouri:									
Kansas City	375,000	40	13	2	44	12	23	3	15
St. Joseph	78,400	9	2	0	8	0	0	0	4
St. Louis	830,000	63	51	48	3	1	2	2	-------
North Dakota:									
Fargo	[1] 26,403	21	0	0	-------	0	0	0	0
Grand Forks	[1] 14,811	0	0	0	-------	-------	2	0	-------
South Dakota:									
Aberdeen	[1] 15,036	9	0	0	-------	-------	0	0	-------
Sioux Falls	[1] 30,127	0	0	0	-------	-------	0	0	-------
Nebraska:									
Omaha	216,000	4	6	15	-------	0	0	0	10
Kansas:									
Topeka	56,500	33	3	3	16	3	22	0	0
Wichita	92,500	4	7	1	-------	1	0	0	4
SOUTH ATLANTIC									
Delaware:									
Wilmington	124,000	2	3	1	-------	0	11	0	4
Maryland:									
Baltimore	808,000	124	41	7	8	4	0	63	35
Cumberland	[1] 33,741	1	1	0	-------	0	7	1	0
Frederick	[1] 12,035	0	1	1	-------	0	0	0	0
District of Columbia:									
Washington	528,000	22	22	24	3	4	0	0	11
Virginia:									
Lynchburg	30,500	9	3	4	-------	0	0	9	1
Norfolk	174,000	6	3	4	2	0	1	1	3
Richmond	189,000	0	14	7	-------	1	0	0	2
Roanoke	61,900	6	4	5	-------	4	0	0	
West Virginia:									0
Charleston	50,700	10	2	0	15	2	0	0	1
Wheeling	[1] 56,208	9	3	0	0	0	11	30	0
North Carolina:									
Raleigh	[1] 30,371	0	2	7	-------	3	0	0	0
Wilmington	37,700	0	2	7	-------	0	0	0	3
Winston-Salem	71,800	1	3	0	-------	0	0	0	10
South Carolina:									
Charleston	74,100	0	2	0	89	0	0	0	2
Columbia	41,800	3	1	1	-------	0	0	8	4
Greenville	[1] 27,311	0	0	0	-------	1	0	1	2
Georgia:									
Atlanta	(2)	1	6	7	557	10	0	0	8
Brunswick	[1] 16,809	0	0	0	4	0	0	0	1
Savannah	94,900	0	2	4	19	0	0	0	6
Florida:									
Miami	[3] 131,286	1	3	3	-------	0	3	0	1
St. Petersburg	[3] 47,629	-------	0	-------	-------	0	-------	2	1
Tampa	102,000	1	3	0	-------	0	0	0	1

[1] Estimated, July 1, 1925. [2] No estimate made. [3] Special census.

City reports for week ended December 8, 1928—Continued

Division, State, and city	Population July 1, 1926, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST SOUTH CENTRAL									
Kentucky:									
Covington	58,500	2	2	1	-------	1	0	0	3
Louisville	311,000	3	9	5	3	0	1	0	14
Tennessee:									
Memphis	177,000	18	9	8	-------	2	1	0	17
Nashville	137,000	3	4	0	-------	2	0	0	10
Alabama:									
Birmingham	211,000	11	7	3	23	2	1	3	9
Mobile	66,800	0	2	3	-------	4	0	0	1
Montgomery	47,000	0	2	5	4	-------	0	0	-------
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	31,643	4	2	1	-------	-------	0	2	-------
Little Rock	75,900	4	2	2	1	0	0	3	4
Louisiana:									
New Orleans	419,000	0	12	8	14	5	1	0	15
Shreveport	59,500	7	2	0	-------	0	1	0	6
Oklahoma:									
Oklahoma City	(2)	0	3	20	4	3	0	0	3
Tulsa	133,000	11	5	7	-------	-------	0	3	-------
Texas:									
Dallas	203,000	3	16	17	4	2	3	0	2
Fort Worth	159,000	12	5	17	1	0	0	1	3
Galveston	49,100	0	1	3	0	0	0	0	3
Houston	[1] 164,954	1	8	25	-------	1	0	0	8
San Antonio	205,000	1	4	8	-------	5	5	1	5
MOUNTAIN									
Montana:									
Billings	[1] 17,971	1	0	0	9	1	0	0	0
Great Falls	[1] 29,883	21	0	0	1,632	4	20	3	2
Helena	[1] 12,037	3	0	0	2,150	1	1	0	6
Missoula	[1] 12,668	0	0	0	24	4	0	0	1
Idaho:									
Boise	[1] 23,042	0	0	0	-------	0	0	0	0
Colorado:									
Denver	285,000	32	14	2	1,530	28	0	11	22
Pueblo	43,900	0	2	0	-------	1	0	0	1
New Mexico:									
Albuquerque	[1] 21,000	0	0	1	5	0	0	1	0
Utah:									
Salt Lake City	133,000	66	4	2	-------	18	0	20	6
Nevada:									
Reno	[1] 12,665	0	0	0	8	1	0	0	0
PACIFIC									
Washington:									
Seattle	(2)	25	7	8	-------	-------	1	6	-------
Spokane	109,000	84	3	5	7	-------	4	0	-------
Tacoma	106,000	29	3	5	-------	0	1	39	3
Oregon:									
Portland	[1] 282,383	36	11	17	120	1	27	3	4
California:									
Los Angeles	(2)	24	47	13	3,993	70	9	10	69
Sacramento	73,400	4	3	2	106	5	0	17	6
San Francisco	567,000	16	20	6	137	12	2	2	9

[1] Estimated, July 1, 1925.

[2] No estimate made.

City reports for week ended December 8, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	2	4	0	0	0	0	1	0	0	0	14
New Hampshire:											
Concord	1	0	0	0	0	0	0	0	0	0	10
Vermont:											
Barre	1		0				0				
Burlington	1	1	0	1	0	0	0	0	0	0	13
Massachusetts:											
Boston	63	56	0	[1]1	0	15	1	0	0	34	214
Fall River	8	4	0	0	0	1	1	0	0	2	28
Springfield	7	5	0	0	0	2	0	0	0	4	35
Worcester	12		0				0				
Rhode Island:											
Pawtucket	0	3	0	0	0	0	0	0	0	0	23
Providence	8	15	0	0	0	2	0	0	0	0	65
Connecticut:											
Bridgeport	8	1	0	0	0	2	0	1	0	1	26
Hartford	6	3	0	0	0	0	0	1	0	4	40
New Haven	6	3	0	0	0	3	1	0	0	4	35
MIDDLE ATLANTIC											
New York:											
Buffalo	24	27	0	0	0	6	2	1	0	61	145
New York	164	134	0	0	0	86	16	7	0	52	1,460
Rochester	10	3	0	0	0	2	1	0	0	35	66
Syracuse	12	12	0	0	0	1	0	0	0	34	58
New Jersey:											
Camden	4	12	0	0	0	0	0	1	0	13	33
Newark	18	8	0	0	0	7	1	0	0	21	109
Trenton	2	0	0	0	0	3	0	1	0	1	46
Pennsylvania:											
Philadelphia	76	46	0	0	0	38	3	4	0	104	550
Pittsburgh	37	47	0	0	0	7	1	1	1	18	154
Reading	2	1	0	0	0	1	0	0	0	3	33
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	15	30	0	0	0	8	1	3	0	8	134
Cleveland	35	31	1	0	0	9	1	1	0	60	186
Columbus	12	5	0	0	0	3	0	1	0	6	87
Toledo	14	18	0	0	0	7	1	1	0	40	80
Indiana:											
Fort Wayne	3	10	0	0	0	1	0	0	0	2	24
Indianapolis	14	10	4	1	0	4	0	1	0	19	109
South Bend	3	0	0	2	0	0	0	0	0	1	10
Terre Haute	4	2	0	0	0	0	0	0	0	0	17
Illinois:											
Chicago	116	108	0	11	0	53	4	3	1	44	841
Springfield	2	9	0	0	0	2	0	0	0	3	24
Michigan:											
Detroit	87	109	1	0	0	23	2	2	1	154	302
Flint	12	9	0	0	0	2	0	0	0	7	39
Grand Rapids	10	8	0	0	0	1	0	0	0	9	42
Wisconsin:											
Kenosha	2	2	0	0	0	0	0	0	0	1	6
Milwaukee	22	56	1	1	0	2	1	0	0	111	94
Racine	5	7	1	0	0	2	0	0	0	0	8
Superior	2	1	0	0	0	1	0	0	0	0	11
WEST NORTH CENTRAL											
Minnesota:											
Duluth	8	11	0	0	0	1	0	0	0	1	23
Minneapolis	50	20	5	0	0	3	1	0	0	28	92
St. Paul	25	19	6	0	0	3	1	0	0	32	54
Iowa:											
Davenport	1	0	0	1			0	0		0	
Des Moines	8	36	0	0			0	0		0	31
Sioux City	4	0	1	0			0	0		1	
Waterloo	3	24	0	0			0	0		16	

[1] Nonresident.

City reports for week ended December 8, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST NORTH CENTRAL—continued											
Missouri:											
Kansas City	13	20	1	0	0	9	2	0	0	12	130
St. Joseph	3	0	1	1	0	0	0	0	0	9	19
St. Louis	36	20	1	0	0	19	2	2	0	34	232
North Dakota:											
Fargo	3	3	0	0	0	1	0	0	0	2	7
Grand Forks	0	0	0	0	---	---	0	0	---	0	---
South Dakota:											
Aberdeen	1	0	0	0	---	---	0	0	---	0	---
Sioux Falls	2	0	0	0	---	---	0	0	---	0	5
Nebraska:											
Omaha	7	3	2	0	0	3	0	0	0	5	33
Kansas:											
Topeka	2	9	0	0	0	0	0	0	0	7	24
Wichita	5	6	0	0	0	0	0	0	0	4	25
SOUTH ATLANTIC											
Delaware:											
Wilmington	4	3	0	0	0	2	0	0	0	2	21
Maryland:											
Baltimore	25	27	0	0	0	16	3	2	1	80	228
Cumberland	1	1	0	0	0	0	1	0	0	0	7
Frederick	1	0	0	0	0	0	1	0	0	5	2
District of Columbia:											
Washington	20	12	0	0	0	8	2	0	1	12	122
Virginia:											
Lynchburg	2	1	0	0	0	0	0	0	0	3	10
Norfolk	2	0	0	0	0	0	0	0	0	0	---
Richmond	7	10	0	0	0	2	1	0	0	2	48
Roanoke	2	7	0	0	0	4	0	1	0	0	23
West Virginia:											
Charleston	2	2	0	0	0	0	0	0	0	3	27
Wheeling	2	0	0	0	0	0	1	0	0	0	8
North Carolina:											
Raleigh	1	0	0	0	0	2	0	0	0	3	23
Wilmington	0	1	0	0	0	1	0	0	0	0	15
Winston-Salem	2	5	0	0	0	0	0	0	0	4	19
South Carolina:											
Charleston	1	2	0	0	0	1	1	1	0	0	24
Columbia	0	1	1	0	0	1	0	0	0	0	24
Greenville	0	2	0	0	0	3	0	0	0	5	12
Georgia:											
Atlanta	5	19	1	0	0	3	1	---	0	4	93
Brunswick	0	0	0	0	0	0	0	0	0	0	7
Savannah	1	1	0	0	0	2	1	0	0	1	34
Florida:											
Miami	1	2	0	0	0	3	0	0	0	0	21
St. Petersburg	0	1	0	---	0	1	0	---	0	---	13
Tampa	0	0	1	0	0	1	0	0	0	3	21
EAST SOUTH CENTRAL											
Kentucky:											
Covington	2	6	0	4	0	0	0	0	0	0	21
Louisville	6	15	0	0	0	1	1	2	1	5	91
Tennessee:											
Memphis	6	12	0	0	0	5	1	0	0	8	93
Nashville	1	2	0	0	0	11	1	1	1	1	64
Alabama:											
Birmingham	4	12	1	0	0	3	1	1	0	2	66
Mobile	0	2	0	0	0	1	0	0	0	0	41
Montgomery	0	3	0	0	---	---	0	0	---	0	---

City reports for week ended December 8, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	1	3	0	0	----	----	0	0	----	0	----
Little Rock	2	13	0	0	0	5	0	1	0	0	----
Louisiana:											
New Orleans	7	11	0	0	0	12	1	6	1	0	150
Shreveport	2	3	0	0	0	1	1	3	0	2	39
Oklahoma:											
Oklahoma City	3	5	1	0	0	0	0	0	0	0	8
Tulsa	2	5	0	0	----	----	0	0	----	1	----
Texas:											
Dallas	6	13	0	1	0	2	1	0	0	4	48
Fort Worth	2	11	0	2	0	0	0	0	0	0	43
Galveston	0	1	0	0	0	0	1	0	0	0	13
Houston	2	8	1	0	0	2	0	2	1	0	64
San Antonio	2	2	0	0	0	4	1	0	2	0	52
MOUNTAIN											
Montana:											
Billings	1	0	0	0	0	0	0	0	0	2	4
Great Falls	2	0	0	0	0	0	0	0	0	0	14
Helena	1	2	0	0	0	1	0	0	0	0	8
Missoula	1	0	1	0	0	0	0	0	0	0	8
Idaho:											
Boise	1	1	1	0	0	0	0	0	0	0	9
Colorado:											
Denver	13	2	0	0	0	8	0	0	0	2	127
Pueblo	2	0	0	0	0	1	0	0	0	0	11
New Mexico:											
Albuquerque	1	1	0	0	0	1	0	0	0	1	3
Utah:											
Salt Lake City	3	4	2	0	0	2	1	0	0	0	67
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	3
PACIFIC											
Washington:											
Seattle	9	4	2	0	----	----	0	0	----	21	----
Spokane	10	16	7	3	----	----	0	1	----	0	----
Tacoma	3	7	3	0	0	0	0	0	0	0	29
Oregon:											
Portland	8	14	7	17	0	3	1	0	0	0	68
California:											
Los Angeles	27	19	3	0	0	19	2	1	0	34	441
Sacramento	2	15	1	0	0	4	0	0	0	2	49
San Francisco	14	16	0	0	0	10	1	0	0	10	169

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
Maine:									
Portland	0	1	0	0	0	0	0	0	0
Massachusetts:									
Boston	0	0	1	1	0	0	1	2	0
Connecticut:									
Bridgeport	0	0	1	1	0	0	0	0	0
MIDDLE ATLANTIC									
New York:									
Buffalo	2	1	0	0	0	0	0	0	0
New York City	28	11	3	2	0	0	2	1	1
New Jersey:									
Newark	1	0	0	0	0	0	1	0	0
Pennsylvania:									
Philadelphia	0	1	0	0	0	0	0	0	0
Pittsburgh	3	2	0	0	0	0	0	0	0

City reports for week ended December 8, 1928—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
EAST NORTH CENTRAL									
Ohio:									
Cleveland	3	1	0	1	0	0	0	0	1
Columbus	0	0	1	1	0	0	0	0	0
Toledo	1	0	0	0	0	0	0	0	0
Illinois:									
Chicago	8	3	1	0	6	0	0	0	0
Michigan:									
Detroit	7	3	2	0	0	0	1	0	0
Flint	1	1	0	0	0	0	0	0	0
Wisconsin:									
Milwaukee	3	1	0	0	0	0	0	0	0
Racine	1	0	0	0	0	0	0	0	0
WEST NORTH CENTRAL									
Minnesota:									
St. Paul	0	0	0	2	0	0	0	0	0
Iowa:									
Des Moines	0	0	0	0	0	0	0	1	0
Missouri:									
Kansas City	1	0	0	0	0	0	1	0	0
St. Louis	4	1	0	0	0	0	0	0	0
North Dakota:									
Fargo	0	0	1	0	0	0	0	0	0
SOUTH ATLANTIC									
Maryland:									
Baltimore	1	0	0	2	0	0	1	1	0
District of Columbia:									
Washington	0	0	0	0	1	1	0	0	0
Virginia:									
Richmond	1	0	0	0	0	0	0	0	0
South Carolina:									
Charleston [1]	0	0	0	0	2	1	0	0	0
Columbia	0	0	0	0	0	1	0	0	0
Greenville	0	0	0	0	0	1	0	0	0
Georgia: [2]									
Atlanta	0	0	0	0	3	2	0	0	0
EAST SOUTH CENTRAL									
Tennessee:									
Memphis	0	0	0	0	1	0	0	0	0
Alabama:									
Mobile	0	0	0	0	0	2	0	0	0
Montgomery	0	0	0	0	2	0	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock	1	0	0	0	0	0	0	0	0
Louisiana:									
New Orleans	1	0	0	0	2	2	0	0	0
Shreveport	0	0	0	0	0	2	0	0	0
Texas:									
Dallas	1	0	0	0	0	0	1	0	0
MOUNTAIN									
Idaho:									
Boise	2	0	0	0	0	0	0	0	0
Colorado:									
Denver	4	2	0	0	0	0	0	0	0
Utah:									
Salt Lake City	2	1	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Spokane	0	0	0	0	0	0	0	1	0
Oregon:									
Portland	1	0	0	0	0	0	1	1	1
California:									
Los Angeles	1	1	0	0	0	0	0	0	0
Sacramento	0	1	0	0	0	0	0	0	0
San Francisco	4	0	2	1	0	0	0	0	0

[1] Dengue; 5 cases at Charleston, S. C.

[2] Typhus fever; 2 cases at Savannah, Ga.

The following table gives the rates per 100,000 population for 101 cities for the 5-week period ended December 8, 1928, compared with those for a like period ended December 10, 1927. The population figures used in computing the rates are approximate estimates as of July 1, 1928 and 1927, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 31,657,000 in 1928 and 31,050,000 in 1927. The 95 cities reporting deaths had nearly 30,961,000 estimated population in 1928 and nearly 30,370,000 in 1927. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, November 3 to December 8, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927 [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Nov. 10, 1928	Nov. 12, 1927	Nov. 17, 1928	Nov. 19, 1927	Nov. 24, 1928	Nov. 26, 1927	Dec. 1, 1928	Dec. 3, 1927	Dec. 8, 1928	Dec. 10, 1927
101 cities	152	[2] 215	159	228	[3] 164	203	[4] 151	232	[5] 164	204
New England	122	160	159	163	140	170	195	267	[5] 213	216
Middle Atlantic	109	204	134	233	137	212	131	251	159	228
East North Central	169	253	166	251	183	219	185	220	190	227
West North Central	210	160	197	152	185	178	164	178	148	129
South Atlantic	242	189	207	216	[3] 223	195	121	224	139	189
East South Central	180	208	100	238	130	122	140	167	125	71
West South Central	272	294	240	343	268	302	220	269	256	215
Mountain	71	278	239	206	124	170	[4] 53	143	35	143
Pacific	79	[2] 224	97	222	105	162	72	259	100	167

MEASLES CASE RATES

101 cities	73	[2] 96	94	124	[3] 108	136	[4] 115	189	[5] 143	225
New England	402	342	382	391	582	500	605	539	[5] 757	539
Middle Atlantic	42	124	69	93	59	128	46	180	46	199
East North Central	57	27	86	54	105	60	132	121	187	140
West North Central	43	16	62	22	101	24	66	24	193	49
South Atlantic	56	135	84	281	[3] 60	200	63	307	53	525
East South Central	5	76	15	147	5	162	0	20	15	365
West South Central	8	12	12	70	4	87	16	120	40	132
Mountain	177	18	203	72	239	27	[4] 441	27	186	36
Pacific	43	[2] 76	51	212	15	175	72	227	43	178

SCARLET FEVER CASE RATES

101 cities	164	[2] 150	169	177	[3] 176	158	[4] 171	184	[5] 200	184
New England	175	205	193	249	211	181	186	277	[5] 238	321
Middle Atlantic	95	110	108	152	109	122	102	155	141	156
East North Central	233	177	245	201	227	195	238	192	260	216
West North Central	253	186	224	232	283	204	220	249	263	206
South Atlantic	142	182	105	155	[3] 143	171	137	173	165	133
East South Central	160	152	249	112	244	86	145	147	259	81
West South Central	176	103	196	103	144	165	184	141	216	116
Mountain	88	152	97	233	106	179	[4] 123	359	80	305
Pacific	169	[2] 117	143	154	194	131	261	128	197	151

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1928, and 1927, respectively.
[2] Seattle, Wash., and Spokane, Wash., not included.
[3] Greenville, S. C., not included.
[4] Denver, Colo., not included.
[5] Barre, Vt., and Worcester, Mass., not included.

Summary of weekly reports from cities, November 3 to December 8, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927—Continued

SMALLPOX CASE RATES

	Week ended—									
	Nov. 10, 1928	Nov. 12, 1927	Nov. 17, 1928	Nov. 19, 1927	Nov. 24, 1928	Nov. 26, 1927	Dec. 1, 1928	Dec. 3, 1927	Dec. 8, 1928	Dec. 10, 1927
101 cities	4	[2] 16	3	19	[2] 7	22	[4] 6	17	[5] 4	13
New England	0	0	0	0	0	0	5	0	[5] 3	0
Middle Atlantic	0	0	0	0	0	0	0	0	0	0
East North Central	7	4	4	6	21	1	12	10	10	4
West North Central	6	156	2	160	2	202	8	115	2	75
South Atlantic	0	5	2	9	[3] 0	2	5	5	0	7
East South Central	0	0	5	5	15	0	0	10	20	5
West South Central	4	4	0	4	8	4	12	8	4	8
Mountain	9	27	88	27	0	54	[4] 71	45	0	99
Pacific	15	[2] 3	3	29	18	44	8	39	8	39

TYPHOID FEVER CASE RATES

101 cities	9	[2] 15	10	15	[2] 9	10	[4] 7	9	[5] 9	11
New England	9	16	16	23	7	14	5	7	[5] 5	12
Middle Atlantic	7	15	10	14	9	10	7	10	7	8
East North Central	5	9	6	7	5	6	5	5	7	9
West North Central	4	28	14	20	16	14	8	12	4	14
South Atlantic	16	20	11	25	[3] 11	9	9	16	7	9
East South Central	30	5	10	15	25	15	5	15	20	30
West South Central	40	33	20	29	12	12	16	21	48	21
Mountain	27	9	18	18	9	27	[4] 18	9	0	9
Pacific	3	[2] 7	5	13	13	5	3	5	5	13

INFLUENZA DEATH RATES

95 cities	12	8	15	9	[3] 16	10	[4] 30	12	[5] 48	12
New England	5	2	9	5	9	2	9	5	[5] 10	9
Middle Atlantic	12	9	9	7	15	10	10	11	17	7
East North Central	9	5	10	2	3	5	14	9	18	9
West North Central	2	2	6	10	6	6	12	4	43	6
South Atlantic	7	16	14	20	[3] 12	13	29	13	51	16
East South Central	26	16	16	21	21	48	21	48	58	58
West South Central	37	17	33	34	33	34	53	42	53	47
Mountain	27	18	53	36	44	18	[4] 353	27	513	9
Pacific	41	0	64	3	95	7	240	14	294	3

PNEUMONIA DEATH RATES

95 cities	91	104	102	112	[3] 122	95	[4] 134	113	[5] 157	110
New England	80	95	57	102	106	60	85	100	[5] 83	51
Middle Atlantic	105	113	124	119	128	97	141	123	149	119
East North Central	77	89	82	96	106	89	120	103	135	97
West North Central	65	75	73	81	69	87	100	70	126	99
South Atlantic	74	117	124	157	[3] 161	144	140	146	165	135
East South Central	146	144	162	154	131	133	162	207	282	154
West South Central	90	127	70	140	127	110	140	106	176	102
Mountain	97	143	115	99	159	99	[4] 159	54	336	215
Pacific	125	100	98	76	169	38	240	103	294	110

[2] Seattle, Wash., and Spokane, Wash., not included.
[3] Greenville, S. C., not included.
[4] Denver, Colo., not included.
[5] Barre, Vt., and Worcester, Mass., not included.

Number of cities included in summary of weekly reports, and aggregate population of cities of each group, approximated as of July 1, 1928 and 1927, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1928	1927	1928	1927
Total	101	95	31,657,000	31,050,300	30,960,700	30,369,500
New England	12	12	2,274,400	2,242,700	2,274,400	2,242,700
Middle Atlantic	10	10	10,732,400	10,594,700	10,732,400	10,594,700
East North Central	16	16	7,991,400	7,820,700	7,991,400	7,820,700
West North Central	12	10	2,683,500	2,634,500	2,566,400	2,518,500
South Atlantic	21	21	2,981,900	2,890,700	2,981,900	2,890,700
East South Central	7	6	1,048,300	1,028,300	1,000,100	980,700
West South Central	8	7	1,307,600	1,260,700	1,274,100	1,227,800
Mountain	9	9	591,100	581,600	591,100	581,600
Pacific	6	4	2,046,400	1,996,400	1,548,900	1,512,100

FOREIGN AND INSULAR

THE FAR EAST

Report for the week ended December 1, 1928.—The following report for the week ended December 1, 1928, was transmitted by the eastern bureau of the health section of the secretariat of the League of Nations, located at Singapore, to the headquarters at Geneva.

Plague, cholera, or smallpox was reported at the following ports:

PLAGUE

Ceylon.—Colombo.
India.—Bombay.
Indo-China.—Pnompenh.

CHOLERA

India.—Calcutta, Madras, Rangoon, Tuticorin.
Siam.—Bangkok.
French India.—Pondicherry.

SMALLPOX

India.—Bombay, Madras, Negapatam, Calcutta, Moulmein.
French India.—Pondicherry.
Indo-China.—Pnompenh.
Dutch East Indies.—Samarinda.
Hong Kong.
China.—Shanghai.

CANADA

Provinces—Communicable diseases—Week ended December 8, 1928.—The Department of Pensions and National Health reports cases of certain communicable diseases from seven Provinces of Canada for the week ended December 8, 1928, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	Total
Influenza	18				1			19
Poliomyelitis			2	2	2		1	7
Smallpox			20	2	1	11	13	47
Typhoid fever	1	3	8	18	1		1	32

Quebec Province—Communicable diseases—Week ended December 8, 1928.—The Bureau of Health of the Province of Quebec reports cases of certain communicable diseases for the week ended December 8, 1928, as follows:

Disease	Cases	Disease	Cases
Chicken pox	118	Poliomyelitis	2
Diphtheria	66	Scarlet fever	106
German measles	9	Smallpox	12
Influenza	77	Tuberculosis	32
Measles	27	Typhoid fever	8
Mumps	25	Whooping cough	25

CUBA

Habana—Communicable diseases—November, 1928.—During the month of November, 1928, communicable diseases were reported in Habana, Cuba, as follows:

Disease	New cases	Deaths	Disease	New cases	Deaths
Cerebrospinal meningitis	1		Measles	108	1
Diphtheria	5		Scarlet fever	2	
Leprosy	1		Typhoid fever	28	4
Malaria	144	4			

Provinces—Communicable diseases—August 26–October 27, 1928.—During the nine weeks from August 26 to October 27, 1928, communicable diseases were reported from the six Provinces of Cuba as follows:

Disease	Pinar Del Rio	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Chicken pox		5		3		2	10
Diphtheria	4	18	6	6		6	40
Malaria	1	142		5	77	137	362
Measles	3	160	2	12		1	178
Paratyphoid fever	4	3	9	19	2	1	38
Scarlet fever	1	14	1			1	17
Tetanus (infantile)		2		1			3
Typhoid fever	33	121	41	105	35	51	386

ITALY

Communicable diseases—September 3–16, 1928.—During the two weeks ended September 16, 1928, communicable diseases were reported in the Kingdom of Italy as follows:

Disease	Sept. 3-9		Sept. 10-16	
	Cases	Communes affected	Cases	Communes affected
Anthrax	61	46	106	73
Cerebrospinal meningitis	2	2	8	7
Chicken pox	36	24	40	22
Diphtheria	250	150	288	172
Dysentery	66	39	73	36
Lethargic encephalitis	3	3	6	5
Measles	465	147	458	146
Poliomyelitis	23	16	11	8
Scarlet fever	303	121	300	120
Typhoid fever	1,544	661	1,689	718

TRINIDAD

Vital statistics—Port of Spain—October, 1928, comparative.—The following statistics for the month of October, 1928, with comparisons for October of the years 1924 to 1928, are taken from a report issued by the Public Health Department of Port of Spain:

Vital statistics of Port of Spain for October, 1924, 1925, 1926, 1927, and 1928

Year	Births	Birth rate per 1,000 population	Deaths	Death rate per 1,000 population	Infant mortality rate per 1,000 births
1924	147	27.42	109	20.33	129.25
1925	164	30.19	115	21.17	158.54
1926	161	29.37	139	25.36	161.49
1927	187	33.86	119	21.55	128.34
1928	163	29.35	121	21.64	98.16

Estimated population June 30, 1927—65,573.

Deaths from diseases, October, 1928.—The following table shows the number of deaths from certain diseases in Port of Spain during the month of October, 1928:

Disease	Deaths	Disease	Deaths
Cancer and other malignant tumors	5	Tuberculosis, pulmonary	14
Diphtheria	2	Typhoid fever	3
Dysentery	2	Venereal diseases:	
Influenza	1	Syphilis	4
Malaria	4	Other venereal diseases	1
Pneumonia and broncho-pneumonia	3		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From medical officers of the Public Health Service, American consuls, health section of the League of Nations, and other sources. The reports contained in the following table must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given:

CHOLERA

[C indicates cases; D, deaths; P, present]

Place		Mar. 11–Apr. 7, 1928	Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928 6	13	20	27	November, 1928 3	10	17	24	Dec. 1, 1928
Ceylon:																		
Colombo	C					1												
	D					1												
Ingiriya Province	C															1		
	D															1		
China:																		
Canton	C	2		1	2	8	4	1					1					
	D	2		1	2	8	2	1										
Kwantung—Dairen	C							3										
	D							1										
Shanghai	C						3	2										
	D							3		1	1	1						
Swatow	C				3	7												
Dutch East Indies: Java—Batavia	C						1											
India	C	21,279	32,564	30,177	31,346	44,240	52,786	32,287	4,907	4,021	3,598							
	D	11,877	20,432	20,162	20,114	23,216	26,967	17,731	2,935	2,239	2,293							
Bassein	D	51	41	40	8													
Bombay	C	3		1		6	9	6	9	4	1	1		1				
	D	3				11	5	4	2	3	2			1			3	
Calcutta	C	664	446	552	462	206	93	68	21	12	8		50	44				
	D	442	428	410	323	133	51	40	12	9	6	12	25	35	42	38	53	39
Madras	C	10	22	27	29	72	555	149	57		23	17	69	45	48	41		
	D	4	18	16	21	31	271	88	27	25	12	9	31	32	21	31	15	15
Madras Presidency	C	1,483		1,314	878													
	D	812		675	460													
Moulmein	D			1														
Negapatam	C							1										
	D		2		13		3	7	1								1	
Rangoon	C	22	23	7	14	1	13	2				1						
	D	16	15	5	9	1	8	2		1		1					3	2

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

CHOLERA—Continued

[C indicates cases; D, deaths; P, present]

Place		Mar. 11–Apr. 7, 1928	Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928: 6	13	20	27	November, 1928: 3	10	17	24	Dec. 1, 1928
India—Continued.																		
Tuticorin	C	10	110				1	1				1						1
	D	9	71												1			
Vizagapatam	D					7	31	5										
India (French):																		
Chandernagor	C	7				2	7	3				16		12	11	20	18	
	D	6				1	3	2				7		12	8	14	6	
Karikal	C		1				30	41	4	4	1				4	9	6	
	D		1				21	26	3	4	1				3	5	3	
Pondicherry Province	C	1	8			3	114	132	18	3	5	5	4	1	1		13	
	D	1	8			3	60	72	10	1	3	5	4	1			9	
Indo-China (see also table below):																		
Pnompenh	C					5	2	3								1		
	D					5	2	2								1		
Saigon	C	96	116	15	6	2		2								1		
	D	59	76	9	1	1		1										
Tourane	C				1													
	D				1													
Japan: Osaka	C									1								
Kwangchow-Wan (see table below).																		
Persian Gulf:																		
Island of Henjam	C					1												
Jask	C					1												
Philippine Islands:																		
Bulacan Province—																		
Malolos	C					1												
Paombong	C						1											
Cagayan Province	C					1												
	D						1											
Ballesteros	C					1	2											
	D					1												

Pamplona	C					1													
	D					1													
Sanchez-Mira	C					4													
	D					2													
Cebu (port)	C						1												
Ilocos Norte Province	C						1												
	D						1												
Manila	C						4	1											
Pangasinan Province—Bayambang	C						1												
	D						1												
Surigao Province—Surigao	C						1	3											
	D						1	2											
Siam	C	291	349	202	203	163	40	21	4	2	4	4	9	15					
	D	218	234	127	144	123	18	14	3		3	4	8	8					
Ayudhaya	C				2		29	1			3	4	9	5	1				2
	D				1		26	1			2	4	8	3	1				2
Bangkok	C	60	74	50	7	9	4	5	1	2	1			1	2	2	8		4
	D	33	35	26	4	3		1			1				1	2	7		1
Dhannapuri	C							3											
	D							3											
Smudsagara	C													9	1	17	16		12
	D													5	1	6	6		6
Trad	C				1														
Straits Settlements: Singapore	C	2	1																
	D	2	1																
On vessel:																			
S. S. Glenapp, at Yokohama, from Shanghai	C							P											
S. S. Hawaii Maru, at Singapore, from Saigon, French Indo-China	C	11																	
	D	7																	
S. S. Kambangan at Batavia from Jedda via Sabang and Palembang	C						1												
S. S. Taira at Penang from Madras via Negapatam	C						P												

Place		January-March, 1928	April-June, 1928	July, 1928	August, 1928			September, 1928			October, 1928			November, 1928	
					1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	-10	11-20
Indo-China (French) (see also table above):															
Annam	C	389	128	16		4	7	2	2		4	5	2		
Cambodia	C	312	418	155		19	19	15		1	6	19			4
Cochin-China	C	1,407	1,666	153		13	15	15	9	4	6	26	20	27	48
Tonkin	C	1	43	7		2									
Kwangchow-Wan	C		16	1			1								1

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

PLAGUE

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928				November, 1928				December, 1928	
									6	13	20	27	3	10	17	24	1	8
Algeria (see also table below):																		
Algiers	C	1											2					
Oran	C		1	2						1								
Philippeville	C									2								
Arabia: Aden	C	224	7	1														
	D	191	9	1														
Argentina:[1]																		
Avellaneda	C		1															
	D		1															
Buenos Aires[2]	C		6	1														
	D		3	2														
Catamarca Province: Recreo	C													P				9
Cordoba Province	C	5																
Canada Honda	C													14				
Entre Rios	C			5														
Loreto	C		3															
Rosario	C		1		1													
Santa Fe	C			9	1													
Santiago del Estero	C			10	1				7									
Suardi	C		2															
Tucuman Province: El Mollar	C																5	
Azores: St. Michaels Island	C	5	1	1			2	1			2	2	1					
	D	2	1	1								1						
Belgian Congo:																		
Djugu	C											2						
Lenza	C															1		
Bolivia: Valle Grande	C					P												
Brazil: Bahia	C	6	3															
	D	6	3															
British East Africa (see also table below):																		
Mombasa	C						1	1	1		1							
	D						1	1	1		1							
Plague-infected rats									1		1							

Tanganyika	C				6	1	8												
	D	10			29	1	8												
Uganda	C		84	105			102	18	26	38	24								
	D		70	85			64	17	16	33	20								
Canary Islands:																			
Arrecife	C		1																
	D		1																
Lanzarote Village	C		1																
Las Palmas	C						2			1	1								
	D						1				1								
Palma Island	C					7													
	D					3													
Teneriffe	C						5					2							1
	D						3												
Laguna	C											4							
Ceylon:																			
Colombo	C	1	4	2			3				2	1					1		
	D	1	2	2			3				1	1					1		
Jaffna	C										2		1						
	D										2								
China:																			
Amoy	C		5		P														
Hong Kong	C	2		1	1														
	D			1															
Mongolia—																			
Chien Chia Tien	C						P	P											
Tungliao	C						220	57	53	70	13	11	6	2					
Urga	C						P												
Shansi—																			
Fengchow	C									P									
Dutch East Indies:																			
Celebes—Makassar	C										1								
	D										1								
Plague-infected rats								4				2							
Java—																			
Batavia and West Java	C	47	65	61	32	46	49	12	10		7	12							
	D	47	65	61	32	46	49	12	10		7	11							
Plague-infected rats		7	9	4	2	2													
East Java and Madura	C	4			1	2	1	2		14									
	D	4			1	2	1	2		14									
Kedoe Residency	C	4			P														
Surabaya Residency	C	1						1											
	D	1						1											
Ecuador (see also table below):																			
Alausi	C		1																

[1] During the period from Nov. 10 to Dec. 11, 1928, 13 cases of plague were reported at El Mollar, Tucuman Province, Argentina. During the same period 1 case of plague was reported at Chipion and 1 at Ucacha, both in Cordoba Province, Argentina.

[2] 11 plague-infected rats were reported at Buenos Aires, Argentina, from July 1 to Oct. 25, 1928.

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

PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928				November, 1928				December, 1928	
									6	13	20	27	3	10	17	24	1	8
Egypt:																		
Alexandria	C		1		2	1	2											
	D		2				1											
Amrieh District	C					26	11	1										
	D						5		P	1								
Assiout Province	C				2	2	1		P	1			1	1	1			
	D				1		1			1			1	1	1			
Beheira Province	C					2	5			1								
	D						2			1								
Beni-Suef	C	12	79	25	25	6	16										4	
	D	3	27	9	5	2	5										1	
Cairo	D					1												
Dierout	C												1					
	D												1					
Girga	C						5									1		
	D						4									1		
Maghagha District	C	1																
	D	1																
Menoufieh Province	C		11									6	1					
	D		2															
Minieh Province	C	48	76	76	13													
	D	9	17	24	3													
Port Said	C				1	5												
	D						1											
Sidi Barani	C				12	10												
	D				8	1												
Suez	C	5	3			2												
	D	13	1															
Tanta	C		1		2	2						5						
	D		1															
Greece:																		
Athens and Piræus	C						2	2	2	1			4	1				
Corfu	C			15		1	1								1			
	D			3														

Patras	C				1	1	1											
	D				1													
Hawaii Territory: Hawaii:																		
Hamakua District—																		
Hamakua—Plague-infected rats			1			1												
Honokaa	D						2											
Plague-infected rats			1				4											
Kukuihaele	D					1												
Plague-infected rats					1													
Kukaiau—Plague-infected rats						3												
Paauilo	D				1	1												
India	C	18,518	3,272	367	587	1,936	3,354	1,258	1,443	1,605								
	D	17,074	3,183	345	340	1,037	1,573	595	711	859								
Bassein	D	13	8	14	3		1								2			
Bombay	C	43	39	14	1	8	7	1			3	2	3					
	D	69	38	8	1	6	6	1			4	1	1				5	
Plague-infected rats						7	20				13			7		10	10	
Calcutta	D					2	1											
Madras Presidency	C	21	12	54	123	217	317	88	48		60	128						
	D	12	6	25	51	105	147	42	26		29	67						
Rangoon	C	16	14	31	43	28	17		2	4	1		2					
	D	14	15	28	39	26	15		1	4			3					
Vizagapatam	D			1														
Indo-China (see also table below):																		
Pnompenh	C				4	1	6			1					1		2	
	D				4	1	4			1					1		2	
Saigon	C			5		1								1				
	D			1		1												
Plague-infected rats				2														
Iraq:																		
Baghdad	C	11	13	9	1		4				2	1	1	5	3	2	4	
	D	6	3	4			2				1	1		3	2	1	2	
Plague-infected rats		4	3															
Dulaim Liwa	C	1																
Kwangchow-Wan (see table below).																		
Madagascar (see also table below):																		
Tamatave	C		1	20	3	8	9	7	3	1	2	3	3	1				
	D			8	7		4	6	3	1			2	1				
Nigeria (see also table below):																		
Lagos	C	17	28	43	53	51	60	28	20	23	17	24	19	25	15	15		
	D	18	28	42	52	52	59	28	20	23	17	21	18	24	14	14		
Plague-infected rats		8	55	57	23		62	45	46			51	56					
Paraguay: Asuncion	C			5							3							
	D			2	2													
Peru (see table below).																		
Portugal: Lisbon	C			1														
Senegal (see also table below):																		
Thies and vicinity	C		72	52														
	D		40	40														

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

PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928				November, 1928				December, 1928	
									6	13	20	27	3	10	17	24	1	8
Siam	C	27	15	6	10													
	D	13	11	7	8													
Ayudhaya	C			2	2													
	D			1	2													
Bangkok	C	4													1			
	D	2													1			
Nagara	C		1	2														
Straits Settlements:																		
Ipoh	C						2											
	D						2											
Penang	C										1							
Syria (see table below).																		
Turkey:																		
Adalia	C				1					1					1			
Constantinople	C										1							
Union of South Africa: Orange Free State	C				P	P									P			
Union of Socialist Soviet Republics:																		
Astrakhan—																		
Axary District	C			3														
	D			2														
	D														7			
Kirghiz District	D						54											
Krasnoiarsk District	D						1											
Chita District	C						1											
Kalmouks District	C														10			
Ural Government	C												7					
	D												7					
On vessel:																		
S. S. Tymeric, at Barbados, from New Orleans	C		1															
S. S. Automedon, at Penang, Straits Settlements	C										P							

Place		January-March, 1928	April-June, 1928	July, 1928	August, 1928	September, 1928	October, 1928	November, 1928
Algeria (see also table above):								
Algiers	C	-------	1	------	------	------	------	------
British East Africa (see also table above):								
Kenya	C	65	86	97	144	15	37	3
	D	-------	5	------	34	------	------	2
Uganda	C	-------	-------	176	152	128	134	------
	D	-------	-------	151	141	98	108	------
Ecuador: Guayaquil	C	20	6	------	------	3	3	------
	D	8	2	------	------	------	2	------
Plague-infected rats		75	5	7	------	27	21	------
Indo-China (see table above)	C	12	36	7	2	6	2	------
Kwangchow Wan	C	18	27	------	------	------	------	------
Madagascar (see also table above)	C	940	199	45	65	59	88	------
	D	864	184	33	61	51	84	------
Ambositra Province	C	202	68	4	3	------	------	------
	D	191	35	4	3	------	------	------
Antisirabe Province	C	281	68	11	------	9	------	------
	D	279	67	11	------	9	------	------
Itasy Province	C	55	1	------	------	------	------	------
	D	49	1	------	------	------	------	------
Majunga	C	-------	-------	------	2	------	------	------
	D	-------	-------	------	2	------	------	------
Moramanga Province	C	56	4	2	11	3	------	------
	D	55	4	2	10	3	------	------
Tamatave	C	-------	23	10	12	8	------	------
	D	-------	14	9	7	5	------	------

Place		January-March, 1928	April-June, 1928	July, 1928	August, 1928	September, 1928	October, 1928	November, 1928
Madagascar—Continued.								
Tananarive Province	C	348	78	24	51	39	------	------
	D	292	82	23	51	34	------	------
Nigeria (see also table above)	C	41	91	53	------	------	------	------
	D	41	89	53	------	------	------	------
Peru	C	93	25	5	------	------	------	------
	D	23	6	2	------	------	------	------
Lima	C	6	4	------	------	------	------	------
	D	-------	2	------	------	------	------	------
Senegal (see also table above)	C	30	448	318	43	199	------	------
	D	17	246	164	32	127	------	------
Baol	C	-------	13	17	68	73	39	18
	D	-------	7	10	38	40	14	6
Cayor	C	-------	-------	40	46	20	17	------
	D	-------	-------	25	15	8	6	------
Fatick	C	-------	-------	------	------	------	35	------
	D	-------	-------	------	------	------	20	------
Louga	C	-------	-------	------	------	------	14	1
	D	-------	-------	------	------	------	5	1
Rufisque	C	-------	46	18	2	1	49	7
	D	-------	31	7	------	1	14	4
Thies	C	-------	345	103	151	106	51	11
	D	-------	237	64	119	78	29	------
Tivaouane	C	-------	325	84	9	------	------	------
	D	-------	175	70	------	------	------	------
Syria: Beirut	C	-------	1	5	------	------	1	3

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

PLAGUE RATS ON VESSELS

Steamship *Sicily* at Liverpool from Buenos Aires and Rosario, June 8, 1928, seven plague-infected rats.

SMALLPOX

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928 6	13	20	27	November, 1928 3	10	17	24	December, 1928 1	8	15
Algeria	C	12																	
Algiers	C	4	5	15	3	8	2			2	2			1	1				
Oran	C	17	5	4	8	5				20	1								
Angola (see table below).																			
Arabia: Aden	C			11		1	1								1	1			
	D					1													
Brazil (see also table below):																			
Pernambuco (Recife)	D		1																
Rio de Janeiro	C				1														
British East Africa: Kenya—Mombasa	C	1						1											
British South Africa:																			
Northern Rhodesia	C	628	195	15	48	310	382	145	4	22	24								
	D	51	17	1	5	23	22	4		2									
Southern Rhodesia	C	24	13	36	22	17	5		3	5	1	1							
	D	10		4	4														
Canada:																			
Alberta	C	12	44	9	3	25	6				4	1			3	7	1		
Edmonton	C	3			4														
British Columbia—Vancouver	C	24	11	4	11		5	8	5	3			12	9	5				
Manitoba	C	7	4	10	4						1			14		16	5		
Winnipeg and vicinity	C															13	2	1	1
New Brunswick	C		1	7		5													
Ontario	C	50	41	33	11	5	3			10	5	5		4	3	4	4		
Kingston	C	3			2	1	1					1							
Ottawa	C	4	6	1		1	6				2	2	1	2	1	1			
Sarnia	C											1							
Toronto	C	11	12	3	1														
Quebec	C	83	78	81	62	27	28	14	11	19	31	20	9	40	49	25	72		
Montreal	C	9	3	11	5	2	12				4	7	1	2			1		
Quebec	C	23	47	52	44	12	13	2	3	4	3	3	1	3	5	3			1
Sherbrooke	C			4															
Saskatchewan	C	52	28	16		6	3			1		6			4	11	12		

Moose Jaw	C	3	1		1		2								2	1			
Regina	C	8	1	1			1									2			
China:																			
Amoy	C	9	3				P			P				P					
Antung	C	3																	
Canton	C	2	2													1			
Chefoo	C		P	P	P	P	P						P			P			
Foochow	C	P		P	P	P	P		P	P	P	P	P	P					
Hong Kong	C	25	30	14	11	19	9		6	1	6	7	6	22	31	17	33		
	D	26	23	19	5	16	7		3	4	1	6		6	9	8	25		
Manchuria—																			
Changchun	C	4	6		1														
Fushun	C			6	1	2	1							1					
	D				1														
Harbin	C	10	27	31	11		1												
Kwantung—																			
Dairen	C	16	35	48	21	3	2		1			1		1					
	D			20	12	3			1										
Port Arthur	C				1	1													
	D					1													
Mukden	C	4	3	6			2			1									
	D			1															
Pensihu	C			1															
	D			1															
South Manchuria Railway Zone	C			5															
Shanghai—																			
Foreigners only	C	3	11	7	2	2	2			1	2	1	1	3	4				
Including natives	D	9	19	11	10	2				4	2	3		6	11	6	11		
Tientsin	C	17	9	14	1		1			4		4							
Chosen (see table below).																			
Curacao (alastrim)	C				2														
Dominican Republic: Santo Domingo	C	1																	
Dutch East Indies:																			
Balikpapan	C				7														
	D				2														
Belawan Deli	C			11	4	9	10		8		1	1	2	1	1	2			
	D			3	1	3	2		3			1	1			1			
Borneo—																			
Pontianak	C					5	4	1		1			1						
	D					2		1											
Samarinda	C							3					8		8	15	3		
	D												2			3	1		
Java—																			
Batavia and West Java	C	1	2		2	6	1	2	2	1	1		1						
	D							1			1								
East Java and Madura	C	2		2	3	6	5	2	2										
	D	2			3	1	6												
Surabaya	C					6	4		1		1	1							
	D					1													
Sumatra—																			
Medan	C	2	10	4	5	9	7	5	8		1	1	2						
	D	3	5		2	3		1	3			1	1						
Palembang	C				1														

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

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928				November, 1928				December, 1928		
									6	13	20	27	3	10	17	24	1	8	15
Ecuador (see table below).																			
Egypt	C	12	1		/														
	D	7	1																
Beheira Province	C				1														
France (see table below).																			
Gold Coast (see table below).																			
Great Britain:																			
England and Wales	C	1,344	1,199	1,146	681	492	430	94	130	162	128	148	122	149	162	199			
Birmingham	C	1		2	1		1												
Bradford	C	14	17	10	2		1				1								
Bristol	C	17	10	2		2													
Cardiff	C	3	2																
Castleford	C	60	24	18	14	10	5	4	1	1	2		5	1					
Hull	C			1	24	15	13	2	3	1	1	1		1	1	1			
Leeds	C	1		3	1	1	6					1							
London	C	42	25	96	19	9	8	4	5		3	4	4	4	9	5			
Manchester	C	8	5	1			3	1											
Newcastle-on-Tyne	C	4	12	6	28	2			1					1		2			
Nottingham	C	17	20	3	6	10	15	1	1	2	1	1							
Plymouth	C					6	3	2						6					
Sheffield	C	14	4	2	2	1	4							8	1	2			
Stoke-on-Trent	C	32	24	14	5	8													
Weymouth	C				1														
Scotland—																			
Arbroath	C					4	3												
Dundee	C						1				3		1	1					
Greece (see table below).																			
Hedjaz	C		6	14	18	1													
	D		2	1	6	1													
India	C	30,436	21,489	13,497	9,981	6,218	4,553	830	708	637									
	D	6,672	5,046	3,700	2,758	1,733	1,116	243	157	146									
Bassein	C	1																	
Bombay	C	200	136	71	67	28	14	7	2	12	3	5	2	1	1	1	2		
	D	118	78	46	33	21	11	7		4	1	2	2		1				

Calcutta	C	171	130	61	52	22	13	----	4	----	3	----	1	1	----	3	2	----	----
	D	130	101	50	35	17	17	----	3	----	1	----	1	1	----	2	1	----	----
Karachi	C	2	3	----	3	----	----	----	----	----	1	----	----	----	----	----	----	----	----
	D	1	1	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Madras	C	169	59	85	39	43	90	13	21	18	25	31	9	11	20	4	18	----	----
	D	38	18	10	18	10	21	6	5	7	5	5	8	3	6	4	6	----	----
Moulmein	C	----	----	1	9	9	4	----	----	2	----	----	----	----	----	2	2	----	----
	D	----	----	1	6	4	1	----	----	----	----	----	----	----	----	----	1	----	----
Negapatam	C	7	8	19	26	35	46	19	2	7	23	7	13	12	6	5	16	----	----
	D	3	1	7	4	9	10	4	1	1	5	2	3	1	2	----	2	----	----
Rangoon	C	167	36	30	7	2	----	----	----	----	----	----	----	1	----	----	----	----	----
	D	79	13	6	4	1	----	----	----	----	----	----	----	----	----	----	----	----	----
Tuticorin	C	----	3	----	----	----	----	1	----	2	----	----	----	----	----	----	----	----	----
Vizagapatam	C	2	3	8	3	1	14	----	----	1	----	----	----	----	----	----	----	----	----
	D	----	1	3	3	1	3	----	----	----	----	----	----	----	----	----	----	----	----
India (French):																			
Chandernagor	C	5	----	----	1	2	9	----	----	2	2	----	3	----	----	----	----	----	----
	D	1	----	----	1	1	2	----	----	2	2	----	3	----	----	----	----	----	----
Pondicherry Province	C	36	32	13	12	62	92	23	26	30	32	34	23	12	15	18	----	----	----
	D	36	23	13	12	45	87	17	18	18	20	27	17	11	12	16	----	----	----
Indo-China (see also table below):																			
Pnompenh	C	----	----	----	----	2	19	4	8	6	10	12	----	12	6	5	8	----	----
	D	----	----	----	----	2	15	1	5	2	2	2	----	1	2	4	4	----	----
Saigon	C	----	----	----	----	----	1	1	1	----	1	2	----	----	----	----	----	----	----
	D	----	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----
Iraq:																			
Baghdad	C	5	16	16	24	7	34	9	9	8	12	10	7	9	14	14	9	17	----
	D	3	6	10	15	2	17	3	3	3	3	8	1	4	10	9	18	13	----
Basra	C	4	3	2	6	4	1	6	1	9	7	3	9	9	14	13	12	5	----
	D	2	3	2	2	2	1	2	----	----	7	4	7	8	14	11	8	4	----
Mossoul	C	----	----	----	----	----	----	----	----	----	----	----	----	22	31	44	74	----	----
	D	----	----	----	----	----	----	----	----	----	----	----	----	6	17	19	42	----	----
Italy	C	----	1	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Palermo	C	10	6	10	4	6	----	----	----	----	----	2	----	----	----	1	2	----	----
Ivory Coast (see table below).																			
Jamaica (outside Kingston) (alastrim)	C	4	2	3	1	1	3	2	----	----	----	----	----	----	----	----	----	----	----
Kingston	C	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----
Japan:																			
Kobe	C	----	11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Nagoya	C	6	2	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Osaka	C	----	----	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Tokyo City	C	8	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	D	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Tokyo Prefecture (outside city)	C	1	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	D	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Yokohama	C	2	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	D	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Latvia (see table below).																			
Malta: Valetta	C	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----

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

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928				November, 1928				December, 1928		
									6	13	20	27	3	10	17	24	1	8	15
Mexico (see also table below):																			
Acapulco	C		2																
	D		2																
Jalisco (State)	C	P		21	1														
Guadalajara	D	12	13	10	9	7	3				1					1		1	
Mazatlan	D		3	2		3													
Mexico City and surrounding territory	C	1	2		3	2	1		1						5				
	D			1		1	1												
Reynosa	C				1														
Saltillo	D		2	2								1							
San Luis Potosi	D						1		2				1						
Tampico	C													1					
Torreon	D								1										
Morocco (see table below).																			
Nigeria (see also table below):																			
Lagos	C			1															
Southern Provinces	C			51															
	D			12															
Persia (see table below).																			
Poland	C	9	1	3	2						1				1				
	D	1													1				
Portugal (see also table below):																			
Lisbon	C	6	7	7	8	1													
	D				1	1													
Oporto	C	1																	
Senegal (see also table below):																			
Dakar	C	16	29	8															
	D	8	7																
Siam	C	10	8	3	1	3	1				3		1						
	D	3	1	1		2													
Bangkok	C	1														1			
	D		1																
Straits Settlements: Singapore	C	3		1			1	1	1										

Sudan (Anglo-Egyptian)	C	160	168	206	144	252	152	30	19	38	2	37	14	4	24	58	14	148
	D	32	20	37	35	34	34	6	6	7	----	5	7	1	----	7	13	9
Sudan (French) (see table below).																		
Syria (see table below).																		
Taiwan: Keelung	C	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Tunisia: Tunis	C	6	3	2	8	5	1	----	----	----	----	----	----	----	----	----	----	----
Union of South Africa:																		
Cape Province	C	----	----	----	----	P	P	P	P	----	P	P	----	----	----	----	----	----
Natal	C	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Orange Free State	C	----	P	P	P	----	----	P	P	----	----	----	----	----	----	----	----	----
Transvaal	C	P	P	P	----	P	P	P	----	----	----	----	----	----	----	----	----	----
Union of Socialist Soviet Republics (see table below).																		
Upper Volta	C	9	----	----	----	50	P	----	----	10	----	5	----	----	----	----	----	----
	D	----	----	----	----	8	----	----	----	----	----	----	----	----	----	----	----	----
Venezuela: Maracaibo	D	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----
On vessel:																		
S. S. Ballarat, en route to Cape Town, South Africa	C	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----
S. S. Kashgar at Kobe, from Shanghai	C	P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S. S. Ronna at Penang, from Negapatam	C	----	P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S. S. Theseus, from Jeddah to Penang	C	----	----	a	1	----	----	----	----	----	----	----	----	----	----	----	----	----
S. S. Tjileboet at Hong Kong, from Shanghai	C	P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S. S. Victoria at Nome, Alaska	C	----	----	8	----	----	----	----	----	----	----	----	----	----	----	a	----	----

Place		January-March, 1928	April-June, 1928	July, 1928	August, 1928			September, 1928			October, 1928			November, 1928	
					1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20
Indo-China (see also table above)	C	426	197	26	44	21	6	27	29	17	38	19	43	55	57
Ivory Coast	C	----	7	9	----	----	----	2	----	----	----	1	----	----	----
	D	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Senegal (see also table above)	C	----	110	----	----	----	----	4	----	----	2	----	----	----	----
	D	----	16	----	----	----	----	----	----	----	----	----	----	----	----
Dakar	C	----	43	----	----	----	----	----	----	----	----	----	----	----	----
	D	----	15	----	----	----	----	----	----	----	----	----	----	----	----
Sudan (French)	C	15	54	17	----	----	55	----	----	P	P	32	----	----	----
	D	----	6	----	----	----	33	----	----	----	----	----	----	----	----
Syria:															
Aleppo	C	1	3	----	----	4	----	----	----	----	----	----	----	----	----
Beirut	C	75	26	5	----	----	----	----	----	----	----	1	----	1	----
	D	2	----	----	----	----	----	----	----	----	----	----	----	----	----
Damascus	C	14	----	----	----	----	----	----	----	----	----	----	----	----	----

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

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		January–March, 1928	April–June, 1928	July, 1928	August, 1928	September, 1928	October, 1928
Angola	C	47	8	2			
Congo	C	36					
Cuanza-Norte	C	1					
Cuanza-Sul	C	10					
Loanda	C			1			
Brazil (see also table above):							
Porto Alegre	C	1			2	1	
Chosen	C	48	221				
	D	16	65				
Seoul	C	1					
Ecuador: Guayaquil	C	35	61	35	38	22	6
	D	1				1	3
France	C	34	31	10	6	3	3
Gold Coast	C	4					
Greece	C	36	54	9	3	6	6
	D	4	3	1			1
Latvia	C	1	1	1			
Mexico (see also table above)	D	1,064	958				
Morocco	C	132	54	55	1	4	5
Nigeria (see also table above)	C	592	739	1,059			
	D	84	156	159			
Persia	D	7					
Portugal (see also table above)	C	258	172	82		24	27
	D	30	12	10		2	3
Union of Socialist Soviet Republics:							
Railways, etc	C	59					
Other territories in Europe	C	1,717					
Transcaucasus, Siberia, and Central Asia	C	25					
Ukraine	C	27					

TYPHUS FEVER

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928: 6	13	20	27	November, 1928: 3	10	17	24	Dec. 1, 1928
Algeria:																	
Algiers	C	4	13	32	3	10	2			1		1	1	1	1		
	D	2		6													
Oran	C	11	4	7	16	4	2			1					2		
	D	1		1													

Bulgaria	C	26		16	P	8	6	5	1	1	1	1	2		1	1	
	D			2		2						1					
Sofia	C	1	20	14	1		3										
	D			6													
Chile:																	
Iquique	C				1												
	D				1												
Talcahuano	D																
Valparaiso	C			3	2												
	D			1													
China:																	
Manchuria—																	
Harbin	C	2	16	23													
Kwantung	C	17	293	539	431	60	3	2						1			
South Manchuria Railway Zone	C			10	6												
Tientsin	C		2	2		1											
Chosen (see table below).																	
Czechoslovakia (see table below).																	
Egypt	C	3	11	7													
	D	1	2	3													
Alexandria	C				1	2	2										
	D					1	1										
Assiout Province	C			2	2	2			1								
Assouan Province	C			2		1											
	D					1											
Beheira Province	C	32	43	7	2					2							
	D	7	7	2						1							
Caiso	C	4			1	1	1										
	D	4			1	1	1										
Dakalieh	C			1	1												
Gharbieh Province	C	14	5	4	1												
	D	5		3													
Kenish Province	C	38		1													
	D	7		1													
Menoumen Province	C	28	9	5			1										
	D	3	3	2			1										
Port Said	C				2	8	1	1				1					
Suez	C		1		4	4	6	1	3								
	D		1														
Great Britain: London County	C			2													
Greece: Piraeus	C			1													
Hungary: Budapest	D			2	2												
Ireland:																	
Belfast	C		2	1													
	D			1													
Irish Free State	C	1	4														
Clare County—Scariff	C													1			
Cork County	C	1															
Dublin	C						5										
Galway County—Oughterard	C				10												
Kerry County—																	
Cahirciveen	C					1											
Tralee	C						1	7									

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

TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928: 6	13	20	27	November, 1928: 3	10	17	24	Dec. 1, 1928
Japan (see also table below):																	
Hiogo	C			1													
Miyagi	C							2									
Yamagata	C		2	2	2												
Latvia (see table below).																	
Lithuania (see table below).																	
Mexico (see also table below):																	
Aguascallientes	D															1	1
Durango	D				1												
Guadalajara	D		1		4												
Mexico City, including municipalities in Federal District	C	8	19	14	10	10	15	2	3	2	2	6	2	2		3	
	D	1	2		3	3	1			1		1		1			
Morocco	C	591	280	214	153	44	3		1				1			4	
Palestine	C	6	4	8	9	14	10	4	5	1	1	2	1		3	4	4
Peru (see table below).																	
Poland	C	144	226	134	96	55	65	12	8	4	7	13	21	27	20		
	D	12	17	6	5			2	2			2	2	1	5		
Portugal: Oporto	C				1		1										
Rumania	C	142	99	80	33	16	12	2	2		7	6		2			
	D	12	8	11	1	1	3										
Syria: Aleppo	C			2		1											
Tunisia	C	19	7	7		1	7						4				
Menzel	C										1	1					
Sfax	C							11									
Union of South Africa:																	
Cape Province	C	P	P	P	P	P	P	P	P	P	P	P					
East London	C								1								
	D											1					
Natal	C	P	3	P	P		1	P									
Orange Free State	C	P	P	P	P						P	P					
Transvaal	C		1		P	P											
Union of Socialist Soviet Republics (see table below).																	
Yugoslavia (see table below).																	

Place		January-March, 1928	April-June, 1928	July, 1928	August, 1928	September, 1928	October, 1928	November, 1928
Chosen	C	896	633	5	------	------	------	------
	D	88	75	2	------	------	------	------
Chemulpo	C	2	2	------	------	------	------	------
Gensan	C	1	------	------	------	------	------	------
	D	1	------	------	------	------	------	------
Seoul	C	10	46	5	1	2	------	------
	D	1	6	2	------	1	------	------
Czechoslovakia	C	25	------	------	------	------	------	------
Greece: Athens	C	4	33	6	------	------	1	4
	D	------	5	1	------	------	------	------
Japan	C	------	21	------	------	------	------	------
Latvia	C	27	7	------	------	------	------	------
Lithuania	C	223	162	12	15	------	------	------
	D	22	7	4	2	------	------	------

Place		January-March, 1928	April-June, 1928	July, 1928	August, 1928	September, 1928	October, 1928	November, 1928
Mexico (see also table above)	D	46	------	------	------	------	------	------
Peru:								
Arequipa	D	2	1	1	------	------	------	------
La Oroya	C	P	------	------	------	------	------	------
Turkey	C	17	15	6	4	6	1	------
	D	1	2	------	2	------	------	------
Union of Socialist Soviet Republics:								
Railways, etc	C	199	------	------	------	------	------	------
Transcaucasus, Siberia, and Central Asia	C	17	------	------	------	------	------	------
Ukraine	C	1,476	------	------	------	------	------	------
Other territories in Europe	C	5,107	------	------	------	------	------	------
Yugoslavia	C	34	45	12	------	6	1	------
	D	3	5	3	------	------	------	------

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

YELLOW FEVER

[C indicates cases; D, deaths; P, present]

Place		Apr. 8–May 5, 1928	May 6–June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29–Aug. 25, 1928	Aug. 26–Sept. 22, 1928	Week ended— Sept. 29, 1928	October, 1928 6	13	20	27	November, 1928 3	10	17	24	Dec. 1, 1928
Belgian Congo: Matadi	C	2	2														
Brazil:																	
Aracaju	D		2														
Bahia	C			4			1					1					
	D					1	2										
Pernambuco (Recife)	C			1													
Rio de Janeiro	C		2	48	40	14	9	3	3			1	1			1	
	D		2	22	26	4	8	2	2			1				1	
Sao Felix	C			P													
Dahomey:																	
Grand Popo	C			3													
	D			2													
Ouidah Military Camp	C														1		1
	D														1		
Gambia: Bathurst	C												2		2	2	
	D													1		1	
Gold Coast	C		2														
Ivory Coast	C			1													
	D			1													
Abidjan	C			1													
Ferkes-Sedougou	D				1	1											
On vessel: S. S. Bernini, at Santos, Brazil	C									4							
	D									1							