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INFLUENZA—PREVALENCE IN THE UNITED STATES.

Mortality from influenza and pneumonia (all forms) during the week ended February 7, 1920, showed a material increase over that for the preceding week, in forty-odd large cities of the United States, considering the group of cities as a whole. A comparison of the excess mortality rate over the seasonal "normal" for the past three or four weeks with that for the first three weeks of the 1918 epidemic in the cities included in the Weekly Health Index of the Bureau of the Census indicates that, upon the basis of the 1918 epidemic, the peak in mortality of this wave of the 1920 epidemic had not been reached in these cities as a whole, but that it may be expected in the week ending February 14 or the following week. A comparison of the present epidemic with that in 1918 is presented in the following table:

Comparison of the excess¹ annual mortality rate per 100,000 from influenza and pneumonia (all forms) by weeks during the 1920 epidemic with that for corresponding weeks in the 1918 epidemic in cities included in the Weekly Health Index of the Bureau of the Census, considered as a whole.

Week ended—	Excess over corresponding week of median year.	Week ended—	Excess over corresponding week of median year.
1918-1919		1920	
Sept. 7.....	—	Jan. 3.....	—56
14.....	—6	10.....	—55
21.....	76	17.....	—27
28.....	326	24.....	184
Oct. 5.....	1,028	31.....	746
12.....	2,557	Feb. 7.....	1,234
19.....	4,592		
26.....	4,695		
Nov. 2.....	3,332		
9.....	1,832		
16.....	989		
23.....	647		
30.....	526		
Dec. 7.....	617		
14.....	792		
21.....	801		
28.....	629		
Jan. 4.....	529		
11.....	551		
18.....	625		

¹ Excess over the mortality rate from the same causes in the corresponding week of the median year in the period 1910-1916. The weekly rates for the median year for each month were plotted (thus affording a rough "normal" seasonal curve) for each city and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for the corresponding weeks in 1918 and 1920.

At the present stage of the 1920 epidemic the excess mortality rate for the cities included in the Weekly Health Index is only about 50 per cent of what it was in the corresponding stage of the 1918 epidemic, indicating that this epidemic is much less severe than the epidemic of 1918. In other respects the course of this epidemic is strikingly similar to that of the previous one.

In all except a few of the cities for which data are given in the Weekly Health Index the death rate from influenza and pneumonia (all forms) increased during the week ended February 7. In Chicago, Milwaukee, and Washington, the three cities which showed the earliest manifestations of the epidemic, a slight decline occurred, indicating that in these cities this wave of the epidemic rate has passed its peak of mortality. A comparison of the peak rates in these three cities in 1918 and 1920 affords additional encouragement. It is given below:

Excess mortality¹ from influenza and pneumonia (all forms) in peak week of 1920 epidemic compared with that of 1918 epidemic in Chicago, Milwaukee, and Washington.

City.	Annual rate per 100,000.		Per cent which 1920 rate is of 1918 rate.
	1918	1920	
Chicago.....	4,620	1,886	41
Milwaukee.....	1,915	1,434	75
Washington.....	7,989	2,072	26

¹ Excess over the mortality rate from same causes in the corresponding week of the median year in the period 1910-1916. The weekly rates for the median year have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for the corresponding week in 1918 and 1920.

The cities showing the highest mortality rate during the week ended February 7 were Kansas City, Mo., Syracuse, N. Y., St. Louis, Washington, New York, Chicago, and Dayton. While practically all cities included in the Health Index show an increase in mortality rates since January 1, 1920, no indication of an epidemic condition is afforded in the death rate for influenza and pneumonia for Fall River, Worcester, Los Angeles, and Nashville.

The following table summarizes for States the morbidity reports as furnished to the Public Health Service by State health departments.

TABLE 1.—*Influenza case reports. Number of cases of influenza occurring in various States as reported to the Public Health Service by State health departments.*

[States omitted are those from which no reports have been received. Blank spaces indicate that no report was received for the week.]

State.	Average per week in December, 1919.	Cases reported week ended—					
		Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Alabama	5				8	203	1,296
Arkansas	26	52	35	53	179	595	5,666
California	24	14	32	322	1,604	7,141	8,401
Connecticut	5	1	1	14	1,123	4,664	5,666
Delaware	3	1	1		5	21	86
District of Columbia	4	23	9	126	1,216	1,616	557
Florida	6	14	2	10	484	1,547	1,531
Georgia	25	10	27	27	95	617	3,256
Idaho			88	270	922	2,783	
Illinois	55	60	73	3,251	14,805	29,156	30,330
Indiana	41	31	18	44	1,714		¹ 5,139
Iowa	3	1	10	30	644	3,960	5,070
Kansas	11	22	17	45	1,130	8,582	16,960
Kentucky	44	41	45	75	170	178	1,535
Louisiana	13	32	52	27	123	763	1,901
Maine	2	7	1	4		387	936
Maryland							² 4,935
Massachusetts	31	41	40	51		3,730	9,731
Michigan							14,201
Minnesota						5,775	11,397
Missouri						4,043	5,359
Montana	3	2			1	67	1,847
Nebraska	1			2	1	154	1,815
New Hampshire							610
New Jersey	28	22	23	98	753	7,365	9,603
New Mexico	3	2	8	4	61	260	1,576
New York (exclusive of New York City)	36	52	31	61	555	4,755	11,616
New York City	58	42	100	384	5,690	30,456	21,674
North Carolina							12,892
North Dakota							³ 826
Oregon							1,042
Pennsylvania							16,090
South Carolina						1,661	
South Dakota	1				3	118	³ 4,004
Tennessee							2,331
Texas							11,265
Vermont	1					25	272
Virginia						3,097	6,318
Washington	1					902	6,451
West Virginia						1,667	4,732
Wisconsin	3	6	3	67	1,944	6,739	14,328
Wyoming						1,372	
Total	433	476	618	4,971	33,601	140,317	265,528
Number of States reporting	25	20	22	22	24	31	38

¹ Five days only.

² Week ended Friday.

³ Six days only.

In Table II are given the number of deaths from influenza and pneumonia (all forms) by weeks in January and February to date, as reported in the Weekly Health Index of the Bureau of the Census.

TABLE II.—Deaths from influenza and pneumonia (all forms) in certain large cities, by weeks, in January and February, 1920.

City.	Week ended—					
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Albany, N. Y.	6	3	2	3	14	19
Atlanta, Ga.	16	17	10	10	15	32
Baltimore, Md.	30	20	35	24	59	122
Birmingham, Ala.	11	11	8	16	14	22
Boston, Mass.	24	28	28	45	85	158
Buffalo, N. Y.	13	10	7	19	17	67
Cambridge, Mass.	4	8	7	8	14	22
Chicago, Ill.	98	107	153	472	1,109	1,005
Cincinnati, Ohio	18	14	12	17	25	38
Cleveland, Ohio	28	21	25	26	41	158
Columbus, Ohio	5	15	9	8	22	59
Dayton, Ohio	7	4	7	13	46	47
Denver, Colo.	15	21	18	24	49	159
Fall River, Mass.	3	7	10	5	3	5
Grand Rapids, Mich.	3	1	4	2	6	(*)
Indianapolis, Ind.	3	18	16	21	36	(*)
Jersey City, N. J.	12	14	14	24	64	(*)
Kansas City, Mo.	12	13	29	96	120	220
Los Angeles, Calif.	18	16	18	19	22	20
Louisville, Ky.	9	10	10	9	18	40
Lowell, Mass.	3	5	4	2	7	12
Memphis, Tenn.	15	12	12	11	10	22
Milwaukee, Wis.	15	25	13	45	141	134
Minneapolis, Minn.	20	12	10	9	63	131
Nashville, Tenn.	4	6	11	6	12	8
Newark, N. J.	15	17	14	30	55	116
New Haven, Conn.	11	6	8	10	19	20
New Orleans, La.	18	27	27	27	32	36
New York, N. Y.	195	218	261	511	1,308	2,077
Oakland, Calif.	7	4	8	20	24	* 38
Omaha, Nebr.	5	4	7	13	45	62
Philadelphia, Pa.	64	55	75	108	153	289
Pittsburgh, Pa.	55	47	53	55	76	168
Portland, Oreg.	14	13	18	19	15	(*)
Providence, R. I.	6	12	13	8	14	39
Richmond, Va.	6	2	9	6	21	35
Rochester, N. Y.	8	13	7	12	23	50
St. Louis, Mo.	47	57	41	73	236	401
St. Paul, Minn.	7	4	(*)	26	72	* 56
San Francisco, Calif.	20	14	26	48	59	115
Seattle, Wash.	9	12	4	7	12	32
Spokane, Wash.		4	3	3	12	* 15
Syracuse, N. Y.	6	9	8	10	31	89
Toledo, Ohio.	8	9	8	9	18	54
Washington, D. C.	32	22	27	81	181	164
Worcester, Mass.	5	10	9	7	14	15

¹ Deaths from pneumonia (all forms) only.² No report.³ Deaths from influenza only.

In Table III is presented the annual mortality rate per 100,000 from influenza and pneumonia (all forms) by weeks in January and February to date for those cities in the Weekly Health Index for which population estimates are available. For convenience in comparison the "normal" annual rate from these causes in the corresponding weeks is also shown in Table III. The method by which this "normal" rate was found is explained in the footnotes to the table.

TABLE III.—*Annual death rate per 100,000 from influenza and pneumonia (all forms), by weeks ended Jan. 3 to Feb. 7, 1920, and for corresponding weeks of the median year in the period 1910–1916.*¹

City.	In median year of the period 1910–1916.						1920.					
	Weeks ended—						Weeks ended—					
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Albany, N. Y.	332	390	407	406	399	387	278	139	93	139	649	880
Atlanta, Ga.	240	230	225	228	239	253	155	243	258	258	388	827
Baltimore, Md.	339	360	368	367	358	345	233	156	272	187	459	949
Birmingham, Ala.	295	290	294	307	325	337	290	200	211	422	369	580
Boston, Mass.	290	299	300	300	298	296	159	186	186	299	564	1,049
Buffalo, N. Y.	212	212	211	212	214	216	143	110	77	209	187	738
Cambridge, Mass.	255	263	266	267	264	258	187	374	328	374	655	1,029
Chicago, Ill.	299	333	344	344	341	337	197	215	307	948	2,227	2,018
Cincinnati, Ohio	232	246	258	266	271	275	224	175	150	212	312	474
Cleveland, Ohio	180	176	174	173	173	174	180	135	161	167	264	1,017
Columbus, Ohio	219	217	214	212	210	210	116	347	208	185	509	1,366
Dayton, Ohio	228	261	268	270	269	265	279	160	279	519	1,836	1,876
Fall River, Mass.	250	279	307	344	394	435	122	284	406	263	122	203
Grand Rapids, Mich.	130	144	152	156	154	146	115	39	154	77	231	(³)
Indianapolis, Ind.	222	261	276	276	259	233	54	323	287	377	646	(³)
Jersey City, N. J.	286	293	296	295	292	289	196	229	229	393	1,047	(³)
Kansas City, Mo.	230	247	261	275	286	294	199	216	482	1,595	1,994	3,656
Los Angeles, Calif.	181	186	188	186	183	174	165	147	165	174	202	183
Louisville, Ky.	205	218	228	234	236	239	193	215	215	193	387	859
Lowell, Mass.	288	305	313	316	308	291	143	239	191	96	335	574
Memphis, Tenn.	312	323	330	330	327	322	505	404	404	371	337	741
Milwaukee, Wis.	169	176	181	185	187	189	172	257	21, 299	517	1,621	1,541
Minneapolis, Minn.	184	204	220	223	228	220	272	163	136	122	857	1,781
Nashville, Tenn.	305	309	312	317	332	367	175	262	481	262	525	350
Newark, N. J.	259	271	276	274	261	243	182	207	170	365	669	1,411
New Haven, Conn.	370	424	438	440	432	402	370	202	269	337	640	673
New Orleans, La.	282	301	318	333	344	350	246	368	368	368	436	491
New York, N. Y.	256	260	265	270	276	282	195	218	261	510	1,308	2,076
Oakland, Calif.	186	181	174	165	153	143	170	97	195	487	584	925
Omaha, Nebr.	262	267	272	281	295	305	145	116	262	376	1,302	1,793
Philadelphia, Pa.	265	279	286	291	290	289	189	163	222	320	453	856
Pittsburgh, Pa.	363	382	391	394	388	377	483	413	466	483	668	1,476
Providence, R. I.	246	271	290	301	309	314	119	237	257	158	277	771
Richmond, Va.	325	345	362	369	373	375	195	65	292	195	681	1,136
Rochester, N. Y.	199	218	225	225	218	206	158	256	138	236	453	984
St. Louis, Mo.	299	309	313	311	300	282	314	381	274	488	1,578	2,081
St. Paul, Minn.	154	160	163	162	159	154	142	81	(³)	526	1,457	1,133
San Francisco, Calif.	222	221	216	204	181	162	218	153	283	523	643	1,253
Syracuse, N. Y.	184	191	199	208	217	224	194	291	258	323	1,001	2,875
Toledo, Ohio	140	156	176	192	202	209	159	180	159	180	358	1,074
Washington, D. C.	240	252	262	270	278	284	415	286	351	1,051	2,350	2,129
Worcester, Mass.	267	299	320	333	341	346	150	300	270	210	420	450

¹ The weekly rate for the median year in the period 1910–1916 is presented as a “normal” rate. It is of course only approximated, and was found by plotting the rate for the median year for each month (thus affording a rough “normal” seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint of each week.

² For pneumonia only.

³ No report.

⁴ For influenza only.

Table IV is based on Table III and shows the excess of the annual death rate from influenza and pneumonia (all forms), by weeks, in January and February to date, over the seasonal “normal” in the same cities.

TABLE IV.—*Excess of annual death rate per 100,000, from influenza and pneumonia (all forms), by weeks, Jan. 3 to Feb. 7, 1920, over that in corresponding week of median year (1910-1916) in certain large cities.¹*

City.	Week ended—					
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Albany, N. Y.	- 54	- 251	- 314	- 267	250	493
Atlanta, Ga.	² - 85	² 208	² 33	² 30	149	574
Baltimore, Md.	- 106	- 204	- 96	- 180	101	604
Birmingham, Ala.	- 5	² - 1	² - 83	115	44	243
Boston, Mass.	- 131	- 113	- 114	- 1	266	753
Buffalo, N. Y.	- 69	- 102	- 134	- 3	- 27	522
Cambridge, Mass.	- 68	111	62	107	391	771
Chicago, Ill.	- 102	- 118	- 37	603	1,886	1,681
Cincinnati, Ohio	- 8	- 71	- 108	- 54	41	199
Cleveland, Ohio	- 41	- 13	- 6	6	91	843
Columbus, Ohio	- 103	130	- 6	- 27	299	1,156
Dayton, Ohio	51	- 101	11	249	1,567	1,611
Fall River, Mass.	- 28	5	99	- 141	- 272	- 232
Grand Rapids, Mich.	- 15	- 105	2	- 79	77	⁽³⁾
Indianapolis, Ind.	- 168	62	11	101	386	⁽³⁾
Jersey City, N. J.	- 90	- 64	- 67	98	755	⁽³⁾
Kansas City, Mo.	- 31	- 31	221	1,320	1,708	3,362
Los Angeles, Calif.	- 16	- 39	- 23	- 13	19	9
Louisville, Ky.	- 12	- 3	- 13	- 41	151	620
Lowell, Mass.	- 145	- 66	- 122	- 220	27	283
Memphis, Tenn.	193	81	74	41	10	419
Milwaukee, Wis.	3	111	² 1,118	332	1,434	1,352
Minneapolis, Minn.	88	- 41	- 84	- 106	629	⁴ 1,561
Nashville, Tenn.	- 130	- 47	169	- 55	193	- 17
Newark, N. J.	- 77	- 64	- 106	91	407	1,188
New Haven, Conn.	2	- 222	- 169	103	208	271
New Orleans, La.	- 36	67	50	278	92	141
New York, N. Y.	- 61	- 42	4	240	1,032	1,794
Oakland, Calif.	- 16	- 84	21	395	431	⁴ 782
Omaha, Nebr.	- 117	- 151	- 70	95	1,007	1,488
Philadelphia, Pa.	- 76	- 116	- 64	29	163	567
Pittsburgh, Pa.	120	31	75	89	280	1,099
Providence, R. I.	- 127	- 34	- 33	- 143	- 32	457
Richmond, Va.	- 130	- 280	- 70	- 74	308	761
Rochester, N. Y.	- 41	38	- 87	11	235	778
St. Louis, Mo.	15	72	- 39	177	1,278	2,399
St. Paul, Minn.	- 12	- 79	⁽³⁾	364	1,298	⁴ 979
San Francisco, Calif.	- 4	- 67	67	319	462	1,091
Syracuse, N. Y.	10	100	59	115	784	2,651
Toledo, Ohio.	19	24	- 17	- 12	156	865
Washington, D. C.	175	34	89	781	2,072	1,845
Worcester, Mass.	- 117	1	- 50	- 123	79	104

¹ The weekly rates for the median year in the period (1910-1916) have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for each week in 1920. When the difference is "minus" it is so indicated.

² For pneumonia only.

³ No report.

⁴ For influenza only.

In order to facilitate the comparison of the present epidemic in the cities included in the Weekly Health Index with the epidemic of 1918 for the same cities, the excess mortality rate from influenza and pneumonia (all forms) by weeks, from September 8 to November 30, 1918, is shown. These excess rates may be compared with those given in Table IV. It should be noted that the excess rates as computed in Tables IV and V are only approximated, but they are believed to be sufficiently accurate to afford a fair basis for determining the mortality from influenza and pneumonia (all forms) which properly may be attributed to epidemic conditions.

TABLE V.—*Excess of annual death rate per 100,000, from influenza and pneumonia (all forms), by weeks, Sept. 8 to Nov. 30, 1918, over that in corresponding week of median year (1910–1916) in certain large cities.¹*

City.	Sept. 14.	Sept. 21.	Sept. 28.	Oct. 5.	Oct. 12.	Oct. 19.	Oct. 26.	Nov. 2.	Nov. 9.	Nov. 16.	Nov. 23.	Nov. 30.
Albany, N. Y.	37	.....	31	29	2,018	5,025	8,535	7,087	2,300	800	41	488
Atlanta, Ga.	110	.....	15	82	666	1,972	2,471	849	633	499	402	643
Baltimore, Md.	–37	–50	43	794	4,253	10,419	8,194	2,915	953	189	53	65
Birmingham, Ala.	–23	–26	–33	322	1,493	2,770	3,369	2,095	1,061	1,056	990	1,694
Boston, Mass.	188	1,634	5,015	7,925	6,680	3,765	1,350	753	343	143	172	156
Buffalo, N. Y.	17	56	96	444	1,892	5,752	7,880	4,894	1,723	743	217	216
Cambridge, Mass.	253	109	4,829	6,481	5,285	2,845	867	759	189	262	248	140
Chicago, Ill.	–53	–50	79	728	1,988	4,105	4,620	2,801	1,316	600	305	223
Cincinnati, Ohio	–1	–21	–4	137	749	2,291	3,386	2,957	1,882	1,046	1,337	997
Cleveland, Ohio	–26	–9	–2	44	177	928	2,818	4,282	3,256	2,132	1,403	1,113
Columbus, Ohio	–28	40	83	170	579	1,613	2,623	2,084	1,057	721	860	1,315
Dayton, Ohio	33	–9	23	132	1,155	5,248	5,352	4,463	2,535	688	45	359
Fall River, Mass.	264	715	3,863	8,095	7,730	3,663	1,533	869	447	267	128	128
Grand Rapids, Mich.	.....	.....	.....	.....	.....	.....	.....	.....	1,059	788	628	628
Indianapolis, Ind.	–6	44	111	356	745	2,210	1,963	1,402	926	735	967	1,653
Jersey City, N. J.	–65	–2	242	973	3,666	.....	6,823	.....	.....	.....	.....	.....
Kansas City, Mo.	28	.....	103	47	1,521	2,713	3,117	3,173	2,177	1,198	921	1,461
Los Angeles, Calif.	26	–14	–42	70	576	1,144	2,625	3,435	2,759	2,664	1,688	1,405
Louisville, Ky.	20	143	26	228	1,889	3,764	3,770	1,348	1,098	678	584	1,159
Lowell, Mass.	–15	311	1,451	4,358	6,644	5,441	3,902	1,311	252	242	375	73
Memphis, Tenn.	.....	.....	.....	.....	2,624	6,042	5,479	2,254	.....	392	402	–20
Milwaukee, Wis.	–4	91	108	711	1,215	1,918	1,328	971	675	427	873	873
Minneapolis, Minn.	–19	97	120	592	1,280	1,963	1,541	1,191	1,151	575	490	490
Nashville, Tenn.	21	45	124	5,538	8,327	5,420	2,206	2,135	446	464	747	747
Newark, N. J.	9	27	565	2,203	4,709	5,123	4,444	2,014	1,200	687	501	501
New Haven, Conn.	–32	401	1,102	2,479	4,996	6,033	5,519	2,615	1,439	503	621	621
New Orleans, La.	–23	–54	294	1,852	8,385	9,156	4,368	1,957	822	281	356	356
New York, N. Y.	–20	11	93	629	2,010	4,107	5,091	4,259	2,122	885	473	223
Oakland, Calif.	19	.....	–32	–9	354	936	3,271	5,679	3,728	1,603	811	164
Omaha, Nebr.	–53	31	121	1,887	4,547	4,164	2,618	.....	1,245	929	790	790
Philadelphia, Pa.	–3	31	157	2,014	7,716	13,515	8,841	3,448	986	350	154	106
Pittsburgh, Pa.	–18	14	146	430	803	3,197	4,816	5,269	6,726	4,369	3,070	2,293
Providence, R. I.	3	115	348	1,868	3,587	4,948	4,210	2,558	1,162	575	502	290
Richmond, Va.	66	31	57	1,246	4,149	6,275	4,025	2,166	760	586	243	577
Rochester, N. Y.	–42	–49	61	32	612	1,902	4,077	3,989	1,914	886	646	555
St. Louis, Mo.	15	17	57	82	478	1,135	1,436	1,581	1,378	1,358	1,089	1,374
St. Paul, Minn.	21	.....	12	–32	1,177	1,458	1,091	2,000	2,141	2,664	1,705	1,306
San Francisco, Calif.	–28	53	55	92	1,300	5,899	7,927	4,397	2,043	857	466	466
Syracuse, N. Y.	.....	1,150	4,410	6,991	8,085	4,425	2,088	784	610	83	76	76
Toledo, Ohio	–20	30	–13	101	886	2,642	2,168	1,575	769	690	421	421
Washington, D. C.	68	52	373	2,174	6,257	7,989	4,955	2,240	584	394	312	364
Worcester, Mass.	141	438	2,955	5,891	6,813	4,702	2,463	1,662	.....	272	744	462

¹ The weekly rates for the median year in the period 1910–1916 have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for each week in 1918. When the difference is "minus" it is so indicated.

BOTULISM.

PROTECTIVE MEASURES AND CAUTIONS FROM THE U. S. BUREAU OF CHEMISTRY, DEPARTMENT OF AGRICULTURE.

The Public Health Service, in common with other Federal, State, and municipal authorities charged with the enforcement of laws and regulations for the protection of the public health, has been deeply concerned because of the frequent reported fatalities in different sections of the country attributed to the consumption of food products infected with the organism known as *Bacillus botulinus*. These fatalities have quite recently been traced to the consumption of ripe olives, although some cases have also been traced to home-canned string beans, home-canned asparagus, and home-canned corn. In

making inquiries as to the activities of various Government agencies in connection with outbreaks of botulinus poisoning the Public Health Service has learned that the Bureau of Chemistry of the Department of Agriculture, which is charged with the enforcement of the Federal food and drugs act, has been particularly active in the investigation of these cases. Investigations have been directed by that bureau, not only toward an application of the safeguards provided by the terms of the law for the removal of dangerous material from the market, but also to a scientific investigation of the causes and characteristics of botulinus decomposition.

The first case of well-authenticated botulism among the recent group of poisoning cases occurred at Alliance, Ohio. Immediately following the report of this case, the Bureau of Chemistry began an investigation supplementing that carried on by State and municipal authorities. A comparatively short time after this first outbreak, a second occurred at Detroit, Mich. Both instances were traced to a single brand of ripe olives packed in glass, and further investigations developed the fact that the olives in both cases were packed upon the same day and taken from the very same factory batch. As soon as the identity of the batch was established, the Bureau of Chemistry, through its California agents, secured a list of the various consignees to whom olives from this batch had been shipped. These shipments were then followed to the establishments of the various consignees and the remaining portions of them were embargoed, sampled, and examined for *Bacillus botulinus*. Every suspicious lot was seized under the authority of the Federal food and drugs act. It is reasonably certain that every jar of this particular batch has been removed from all possibility of human consumption.

Following the Alliance, Ohio, and Detroit, Mich., cases another series of fatalities, attributed this time to stuffed ripe olives, occurred at Kalispell, Mont. The olives in this case were traced to another manufacturer and the Bureau of Chemistry is now taking steps through its California representatives and its agents in all sections of the United States to trace down and remove from the market all lots of the batch involved in this case. Recently reported cases traceable to ripe olives occurred in New York City, and every jar of the lot responsible for those cases has already been traced down by the bureau's agents and New York City health officials.

Investigations so far carried on have shown that fatalities due to the consumption of olives have been limited to ripe olives packed in glass. No cases have been reported from the consumption of ripe olives packed in tin. Representatives of the Bureau of Chemistry have made careful investigations of the olive-packing plants in California, and it has been found that the process of sterilization employed in the case of olives packed in glass is usually inadequate.

The jars are usually heated for a period of approximately one-half hour at the temperature of boiling water, which is not sufficient to insure the destruction of the *Bacillus botulinus* if this organism is present in ripe olives. According to investigations made to date by the Bureau of Chemistry it would appear that the public may protect itself by refraining for the present from the consumption of ripe olives packed in glass. As a further measure of precaution, no food of any description showing even the slightest unnatural odor, unnatural color, swelling of the container, signs of gas, or any evidence of decomposition, whatever should be used for food purposes. In practically every case of botulism the food was shown to have had an offensive or abnormal odor. While all spoiled food may not contain *Bacillus botulinus*, any spoiled food, even though the spoilage be slight, may contain it, and, in view of the fatal effect of very small amounts of the toxin which this organism generates, the only safe rule is to examine carefully all food products before they are served and to discard those which are even slightly suspicious.

The Bureau of Chemistry has used every possible effort and has gone to the limit of its legal authority to remove all dangerous foods from the market by seizure under the food and drugs act. Since the law authorizes seizure only when the foods are actually found to be decomposed or to contain poisonous ingredients, since only an occasional package in millions is infected with *Bacillus botulinus*, and since it is physically possible to open and examine but a comparatively few of the millions of containers entering interstate commerce, it is beyond the power of any of the authorities to protect the public completely. For this reason, the necessity for scrupulous care on the part of persons opening and serving foods to discard anything which is spoiled is emphasized.

No one knows just how the *Bacillus botulinus* gets into any particular food. It has been found in articles put up in the home by the careful housewife and in goods packed in commercial establishments. It may be present in a few packages only of any lot. There is no method, the Bureau of Chemistry states, by which the packers or home canners can assure themselves by casual examination before canning that a product does not contain the *Bacillus botulinus*. If the food were in all cases properly sterilized and perfectly sealed, the development of the poison would be impossible, but no method of preserving food has yet been found which eliminates the occasional spoiled package. Failure to sterilize may not become apparent for weeks or even months after the canning of the article. If signs of spoilage have appeared when the container is opened, it is a clear warning that the product is no longer edible.

There is no greater probability of botulinus poisoning in olives than in many other food products either commercial or domestic.

Until this year it has been more commonly found in string beans, asparagus, and the like. It was originally found in sausage. It has been found in cheese; it is present sometimes in stock food, such as moldy hay and other kinds of spoiled forage, but it has never been found in the Bureau of Chemistry's investigations in any kind of food that was not spoiled.

The most recent reports received by the Public Health Service are from the State health officer of Tennessee, stating that during the first week in February six deaths had occurred in Memphis, due to eating canned ripe olives of the same brand as that held responsible for the deaths in Detroit.

A telegram has been sent by the Public Health Service to all State health officers advising them in detail as to all reports received by the service.

DIFFICULTIES IN COMPUTING CIVIL DEATH RATES FOR 1918, WITH ESPECIAL REFERENCE TO EPIDEMIC INFLUENZA.¹

By EDGAR SYDENSTRICKER, Statistician, and MARY L. KING, Statistical Clerk, United States Public Health Service.

Abnormal Conditions Affecting the Distribution of Population in 1918.

Various conditions are known to have existed in 1918 which caused an abnormal distribution of population in the various demographic groups commonly employed in vital statistics. Mention has been made already of them, such as (1) the withdrawal of over 4,000,000 males of certain ages from civil life for the armed forces in the War with Germany, a condition which affected some localities more than others and which varied in its influence upon the sex and age composition of the population at different times during the period beginning April, 1917; (2) the movement of population, particularly of persons of industrial ages, to localities and areas where war industries were concentrated; (3) changes in the occupational status of the population, which were particularly important from the points of view of sex and age, since the number of women and the number of men above the usual wage-earning age were increased in some occupations; (4) a well-defined movement of negroes of certain ages from southern into northern and eastern States.

It is obvious that, in expressing mortality rates and other ratios for the period in question, some account should be taken of these factors. Their effects are too important to be ignored or to be dismissed with the comforting guess that the more or less conflicting changes had "compensating" effects. Unfortunately, their maxi-

¹ From the Statistical Office, United States Public Health Service. Acknowledgments are made to Dr. William H. Davis, chief statistician for vital statistics, Bureau of the Census, for the use of mortality data for Indiana and for computations of rates by certain methods to which specific reference is made in this paper.

mum effect came in the latter part of 1918, when, because of the pandemic of influenza, especial interest was attached to the work of the vital statistician and the epidemiologist.

A review of the literature so far published on 1918 vital statistics and on the statistics of the influenza epidemic will show that little account has been taken of the abnormal factors affecting the distribution of population, particularly from the points of view of sex and age. In a number of instances their possible effects upon mortality rates have been noted, but rarely has there been any attempt to express these effects statistically. Two very good reasons of a practical nature can be given for this omission. One is the lack of reliable data upon which to base corrections of the usual intercensal estimates. Local estimates of additions to or subtractions from the number of persons of different sex, age, occupation, etc., in the population of a given community or section are so crude as to be almost worthless in the great majority of instances.¹ The other reason is that a decennial census will be taken as of January 1, 1920, and the natural disposition is to await the results of this enumeration before attempting to correct the preliminary computations based on estimated populations. Undoubtedly the 1920 census will afford a more accurate basis for 1918 rates than estimates based on the 1910 census, but it is important to note that the 1920 enumeration comes too late to give a true picture of the abnormal situation in 1918. Already many readjustments have taken place since 1918. Practically all of the males called to the colors in the War with Germany have returned to civil life. With the cessation of munitions making and with the reduction in the manufacture of products which were in unusual demand during the war, a movement of population away from many centers of "war industries" has set in. Even in those localities where the stimulus of war industries has continued there have doubtless occurred marked changes in the sex, age, and occupation distribution of persons employed because of displacements that have followed the replacements occasioned by the war. So that even with the results of the 1920 census before him, the vital statistician will be put to it to obtain reasonably accurate population bases for computing his ratios for 1918. Certain modifications of population figures as enumerated for 1920 will be necessary in estimating populations for 1918, and he will need all of the data that he can collect relating to purely local population changes and to males withdrawn from civil life.

In view of the fact that it will be some time before the results of the 1920 census are known in any considerable detail, and in view of the practical necessity for as correct population bases as it is possible to get for use in computing preliminary rates, some consideration has

¹ At the same time more use can be made than has been made of statistics of employment, for example, for determining changes in population in communities.

been given in this office to the question of making tentative corrections of population estimates, especially for sex and age, in computing influenza and pneumonia mortality rates for 1918. In the following pages an attempt is made to utilize such data as are available relating to the withdrawal of males of certain ages from the civil population in 1918. In order to test the probable accuracy of rates computed upon the basis of population estimates corrected, or modified, from this point of view, a method of estimating population by the use of "normal" death rates from certain causes has been applied, and the results have been compared with the mortality curve for males according to age as computed from data collected among specially canvassed "sample" populations.

Correction of Population Estimates by Taking into Account the Withdrawal of Males from Civil Life in 1918.

The most complete information so far published relating to the number of males withdrawn from civil life during 1917 and 1918 is furnished in the Second Report of the Provost Marshal General.¹ From these data several tables have been compiled in the belief that they may be of value to officers of health departments and others interested in vital statistics, and are presented herewith.

TABLE I.—*Number of males withdrawn from civil life in the United States from April 1, 1917, to January 1, 1919, by months, and the percentages they were of total population, of males of all ages, and of males of ages 18-45, inclusive.*

Months (1917-18).	Males withdrawn from civil life—Ages 18-45.				
	Number.		Cumulative per cent of—		
	By months.	Cumulative.	Total population.	Males.	
				All ages.	Ages 18-45.
Total.....	4,178,172	4,178,172	100.00	100.00	100.00
1917—April.....	113,633	113,633	.11	.21	.48
May.....	146,868	260,501	.25	.49	1.10
June.....	150,249	410,750	.40	.77	1.73
July.....	85,838	496,588	.48	.93	2.09
August.....	66,172	562,760	.54	1.05	2.36
September.....	324,248	887,008	.85	1.66	3.72
October.....	210,382	1,097,400	1.05	2.05	4.60
November.....	90,395	1,187,795	1.14	2.22	4.97
December.....	194,700	1,382,495	1.32	2.58	5.78
1918—January.....	93,522	1,476,017	1.41	2.75	6.16
February.....	121,693	1,597,710	1.53	2.97	6.66
March.....	169,791	1,767,501	1.69	3.28	7.36
April.....	220,079	1,987,580	1.89	3.68	8.26
May.....	423,466	2,416,046	2.30	4.47	10.03
June.....	431,582	2,847,628	2.71	5.26	11.80
July.....	452,417	3,300,045	3.13	6.10	13.66
August.....	346,924	3,646,969	3.46	6.72	15.08
September.....	273,080	3,920,049	3.71	7.22	16.18
October.....	249,185	4,169,234	3.94	7.67	17.19
November.....	8,938	4,178,172	3.94	7.67	17.21

¹ Crowder, E. H., Second Report of the Provost Marshal General on the Operations of the Selective Service System to Dec. 20, 1918, Government Printing Office, Washington, D. C., 1919. This report covers the period from May 18, 1917, the date of the selective service act, to Dec. 20, 1918, and contains also information relating to voluntary enlistments in the Army, Navy, and Marine Corps for the same period.

TABLE I-A.—*Estimated number of persons of specified sex and ages in total population of the United States.*

Age and sex.	July 1, 1917.	July 1, 1918.
All ages:		
Both sexes.....	103,635,306	105,253,300
All ages:		
Males.....	53,268,547	54,100,196
Males:		
Ages 18-45.....	23,757,772	24,128,687

In Table I is shown the monthly increments and total increase of the armed forces of the United States (inductions through the selective service, and enlistments in the Army, Navy, and Marines) during the period April, 1917, to November, 1918, exclusive of the inductions in October and November, 1918, which were on account of the third registration. The last inductions mentioned were nearly all of students in schools and colleges, made just before the armistice was signed, and, for practical purposes, the men so inducted need not be considered as withdrawn from civil life. Taking the male population of the age group 18 to 45, inclusive, in the United States, estimated as of July 1, 1917, and July 1, 1918, as the bases, the cumulative per cent withdrawn from civil life at the end of each month from April 1, 1917, to November 30, 1918, has been computed. In Figure I the monthly increments as well as the cumulative totals and the percentages referred to have been plotted. It will be noted that at the time of the influenza epidemic in October and November, 1918, the civil population had been decreased by something over 4,000,000 persons. This was equivalent to nearly 4 per cent of the entire population, nearly 8 per cent of the entire male population, and about 17 per cent of males in the ages 18 to 45, as estimated for July 1, 1918. While the figures are not absolutely accurate, particularly in that no account can be taken of the discharge of soldiers from camps or of commissioned officers,¹ they are sufficiently correct to show that the number of males of these ages in civil life was so considerably decreased that any computation of specific mortality rates, for example, according to age, based on the estimated population without allowing for withdrawals on account of military duty, would be seriously erroneous.

Since neither the total population nor the number of males of all ages nor the number of males of specific ages in continental United States is ordinarily used in computing mortality rates, Table I does not afford any data for practical use except the cumulative percentages by months. Similar data for States or smaller divisions are not afforded,

¹ It appears that 8.1 per cent of men actually inducted into service during the period Feb. 10-Nov. 1, 1918, were later rejected on physical examinations after reaching camp (Second Report of the Provost Marshal General, p. 420, Table 56-A). How large a percentage of enlisted men was rejected for this reason is not stated, so far as the writers are able to ascertain. The figures given in Table I are therefore somewhat high. On the other hand, about 230,000 commissioned officers are not included in Table I.

but the monthly cumulative percentages for the country as a whole can be applied to the State totals (as given in Table II) or to totals for localities that can be determined from State enlistment figures and from the returns from local exemption boards which are published in the report referred to. Upon the assumption that the population

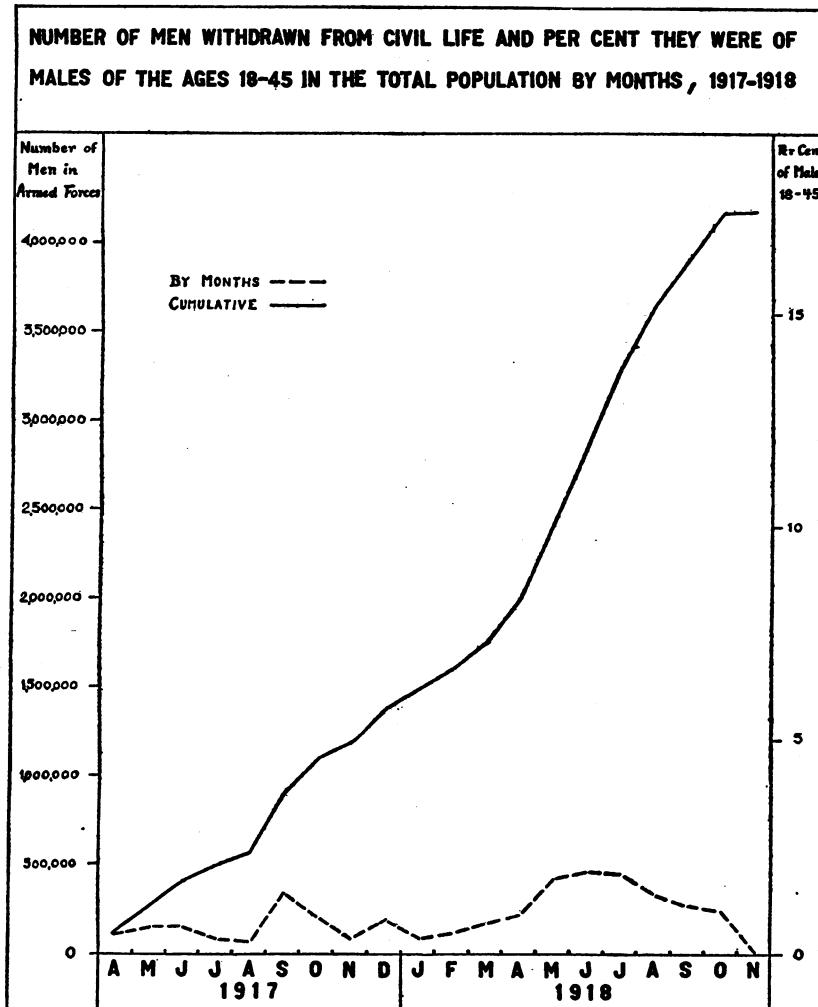


FIGURE 1.

in each locality or larger division was affected in about the same way as the population of the country at large, a rough approximation can be made of the number of withdrawals of males from civil life at the end of any month in the locality or section in question. This approximation, of course, can be used in connection with the percentage distribution of males actually withdrawn (see Tables III and IV)

and some crude estimate can be made of the population in different age groups remaining in civil life at the end of any month in the period from April 1, 1917, to November 30, 1918.

In Table II are given the total increments to November, 1918, from various sources in each State. The figures for white and colored combined are available for men inducted but not for men enlisted. Since only 1.5 per cent of enlisted men were colored, however, the number of colored males for practical purposes is negligible.

TABLE II.—*Enlistments and inductions, Apr. 2, 1917, to Oct. 31, 1918, under first and second registrations, compared by States.*¹

Locality.	Total increment.	Total inducted.	Total enlisted.	White.				Colored inducted.	
				Total.	Inducted.	Enlisted.			
						Army.	Navy.		
United States	4,034,743	2,666,867	1,367,876	3,667,033	2,299,157	877,458	437,527	52,891	367,710
Alabama	73,543	59,755	13,788	47,669	33,881	9,562	3,938	288	25,874
Arizona	11,410	8,113	3,297	11,333	8,036	1,854	1,269	174	77
Arkansas	65,311	49,312	15,999	47,767	31,768	11,699	4,025	275	17,544
California	121,494	67,067	44,641	170,565	66,148	38,992	23,058	2,367	919
Colorado	38,751	22,858	15,893	38,380	22,487	9,670	5,075	1,148	371
Connecticut	55,218	32,539	22,679	54,277	31,598	13,151	9,319	209	941
Delaware	7,985	4,993	2,992	6,620	3,628	2,003	919	70	1,365
District of Columbia	17,945	9,631	8,314	13,945	5,631	4,442	3,500	372	4,000
Florida	36,211	24,916	11,295	23,307	12,012	6,834	4,375	86	12,904
Georgia	86,973	66,841	20,132	52,670	32,538	14,160	5,382	590	34,303
Idaho	20,467	12,566	7,901	20,372	12,471	4,955	2,450	496	95
Illinois	272,235	177,483	64,752	263,481	168,729	61,938	28,264	4,550	8,754
Indiana	104,973	69,749	35,224	100,394	65,170	25,847	8,313	1,064	4,579
Iowa	101,638	66,864	34,774	100,709	65,935	26,389	7,832	553	929
Kansas	66,645	41,905	24,740	64,518	39,778	18,217	5,907	616	2,127
Kentucky	77,983	58,330	19,653	66,663	47,010	13,934	5,163	556	11,320
Louisiana	71,271	56,205	15,066	42,560	27,494	7,570	6,782	714	28,711
Maine	26,602	15,266	11,336	26,552	15,216	7,290	4,025	21	50
Maryland	51,700	33,867	17,833	42,488	24,655	10,141	6,913	776	9,212
Massachusetts	157,101	76,567	80,534	155,901	75,367	41,985	36,884	1,065	1,200
Michigan	142,397	96,480	45,917	140,002	94,085	32,403	11,463	2,051	2,395
Minnesota	106,918	73,680	33,238	106,407	73,169	20,272	10,588	2,378	511
Mississippi	56,740	43,362	13,378	32,674	19,296	9,044	4,069	235	24,066
Missouri	140,257	92,843	47,414	131,038	83,624	29,863	14,132	3,419	9,219
Montana	39,049	27,340	11,709	38,851	27,142	7,331	3,281	1,097	198
Nebraska	49,614	29,807	19,807	49,972	29,165	14,416	4,944	447	642
Nevada	5,488	3,164	2,324	5,462	3,138	1,888	350	86	26
New Hampshire	14,970	8,404	6,506	14,943	8,377	4,408	2,100	58	27
New Jersey	118,350	71,390	46,960	113,487	66,527	28,333	17,457	1,170	4,863
New Mexico	13,586	8,862	4,724	13,535	8,811	3,649	1,050	25	51
New York	410,569	253,589	196,980	404,376	247,396	89,031	61,779	6,170	6,193
North Carolina	74,705	58,441	16,264	54,623	38,359	10,573	5,250	441	20,082
North Dakota	27,253	18,595	8,658	27,166	18,508	6,611	1,838	209	87
Ohio	205,852	138,148	67,704	197,991	130,287	48,885	14,176	4,643	7,891
Oklahoma	84,909	64,941	19,968	79,215	59,247	14,103	5,513	350	5,694
Oregon	34,430	16,158	18,272	34,362	16,090	12,626	6,694	952	68
Pennsylvania	313,297	201,211	112,086	297,905	185,819	78,671	29,446	3,969	15,392
Rhode Island	22,270	11,176	11,094	21,979	10,885	5,436	5,600	58	291
South Carolina	54,284	44,059	10,225	28,486	18,261	6,505	3,675	45	25,798
South Dakota	30,130	21,255	8,875	30,068	21,193	7,083	1,663	120	62
Tennessee	80,139	59,578	20,261	62,365	42,104	13,563	5,425	1,273	17,774
Texas	174,061	117,395	56,666	142,555	85,889	37,704	16,389	2,073	31,506
Utah	19,421	10,788	8,633	19,344	10,711	5,335	2,494	804	77
Vermont	11,223	6,620	4,594	11,201	6,607	3,088	1,488	18	22
Virginia	78,524	58,337	20,187	54,983	34,796	10,556	9,144	487	23,541
Washington	55,433	28,686	26,747	55,260	28,513	12,761	12,382	1,604	173
West Virginia	55,895	45,355	10,540	50,403	39,883	7,359	2,625	556	5,402
Wisconsin	101,696	70,982	30,714	101,472	70,758	22,349	7,569	796	224
Wyoming	12,223	7,923	4,300	12,128	7,828	3,554	656	90	95
Alaska	2,105	1,962	143	2,100	1,957	143	-----	-----	5
Hawaii	5,733	5,466	267	5,733	5,466	267	-----	-----	-----
Porto Rico	16,490	15,734	756	16,490	15,734	756	-----	-----	-----
Not located	1,286	-----	1,286	1,286	-----	254	394	638	-----

¹ Compiled from the second report of the Provost Marshal General, pp. 468 and 459.

The report of the Provost Marshal General already referred to shows for each local exemption board the number of men accepted at camp, but it does not give the number of enlisted men from each locality. Here again rough approximation must be resorted to. The number of men withdrawn from a given locality by enlistments can be estimated by using the ratio of inductions to enlistments for the particular State and applying it to the inductions from the locality. This, however, will afford rather doubtful results except possibly for the large population centers.

Since the males withdrawn from the civil population were almost entirely within the ages 18 to 45, and principally within the ages 21 to 31, corrections of population estimates for males of specific ages or age groups are especially important. Unfortunately, no tabulation by years of age of the number of men inducted into or enlisted in the armed forces has as yet been published.¹ About the closest approximations that can be made are from the percentage distribution of registered men actually placed in Class I for the country as a whole,² and from Army and Navy estimates (based on sampling) of the number of enlisted men who were of the ages under 21 and over 30.³ Since no statistics are available as to the distribution of enlisted men in the age group 21 to 30, we must assume that the distribution was the same as for the selective service men who were actually placed in Class I. Without presenting the detailed computations, the approximations arrived at are presented in Table III, which shows the number of men of each age and the percentage they were of totals inducted and enlisted in the various services in the United States as a whole. For reasons that are apparent, the figures thus obtained are approximations only, but it is believed that they afford reasonably accurate percentages of distribution which can be utilized in making estimates for States or smaller geographic divisions. Since 5-year age groups ordinarily are utilized in computing rates, the percentage distribution given in Table III is summarized by 5-year age groups in Table IV.

¹ The Provost Marshal General's second report gives in detail the number of men by years of age who were registered for selective service in each State, but not the number of men by years of age who were actually inducted or who had enlisted. A tabulation is presented showing, for men inducted in 1917, the proportions of registered males for each year of age from 21 to 30, inclusive, who were placed in Class I for the country as a whole (Id. p. 189, Table 67). The percentages varied from 46.3 for those 21 years of age to 22.1 for those 30 years of age. If it can be assumed that these ratios held for any State (and probably they are sufficiently accurate for the purpose), the number of men placed in Class I can be estimated for each year of age. It is not believed, however, that this method would yield more accurate estimates than the one which is immediately suggested.

² Id. p. 189, Table 67.

³ Id. p. 317.

TABLE III.—Number of males withdrawn from civil life for service in the armed forces, and estimated number in each age, during 1917 and 1918, in the United States.

Age.	Total.		Enlistments.								Inductions.	
			Army.		Navy.		Marines.		Total enlistments.			
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
All ages	4,034,743	100.0	877,458	100.0	437,527	100.0	52,891	100.0	1,367,876	100.0	2,666,867	100.0
18	62,210	1.5	35,537	4.0	21,611	5.0	2,062	3.9	62,210	4.6	.....	.....
19-20	352,526	8.8	201,377	23.0	139,461	31.9	11,688	22.1	352,526	25.8	(1)	.....
21	819,577	20.3	73,522	8.4	32,158	7.4	4,510	8.5	110,190	8.1	709,387	26.6
22	403,718	10.0	66,520	7.6	29,096	6.6	4,080	7.7	99,696	7.3	304,022	11.4
23	374,888	9.3	61,519	7.0	26,908	6.2	3,773	7.2	92,200	6.7	282,688	10.6
24	335,807	8.3	55,017	6.3	24,064	5.5	3,374	6.4	82,455	6.0	253,352	9.5
25	294,061	7.3	48,515	5.5	21,220	4.8	2,976	5.6	72,711	5.3	221,350	8.3
26	268,646	6.7	44,013	5.0	19,251	4.4	2,700	5.1	65,964	4.8	202,682	7.6
27	247,398	6.1	40,512	4.6	17,720	4.0	2,485	4.7	60,717	4.4	186,681	7.0
28	243,981	6.1	40,012	4.6	17,501	4.0	2,451	4.6	59,967	4.4	184,014	6.9
29	209,067	5.2	34,510	3.9	15,095	3.4	2,117	4.0	51,722	3.8	157,345	5.9
30	219,317	5.4	36,011	4.1	15,751	3.7	2,209	4.2	53,971	3.9	165,346	6.2
Over 30	203,547	5.0	140,393	16.0	54,691	12.5	8,463	16.0	1,203,517	14.9	.....	.....

¹ 143,429 were inducted from the third registration, presumably college students enrolled in student Army camps. They are not included here.

TABLE IV.—Approximated percentages of males enlisted in the Army, Navy, and Marines, and inducted during 1917-18, who were in specified age groups.

Age groups.	Enlisted.				Inducted.
	Army.	Navy.	Marines.	Total.	
All ages	100.0	100.0	100.0	100.0	100.0
15-19	15.5	21.6	15.0	17.5	.....
20-24	40.8	41.6	40.8	41.0	58.1
25-29	27.7	24.3	28.2	26.6	35.7
30 and over	16.0	12.5	16.0	14.9	6.2

With these data before us, the following method of utilizing them in correcting population estimates for the latter part of 1918, from the single point of view of withdrawals of males from civil life, seems to be logical and practicable:

For a given State, find the number of males inducted (Table II) and multiply this number by the percentages for different ages for inducted men (Table III or Table IV). The resulting figures are the estimated number of males of different ages or age groups withdrawn from civil life by the selective service law. Proceed in the same manner for men enlisted in each of the different services (Army, Navy, and Marines). Summate for each age or age group the number of men withdrawn by inductions and enlistments, and subtract from the estimated male population as of July 1, 1918, in corresponding ages or age groups. The remainder will be an estimate of the male population of the ages specified who were in civil life at the time under consideration.

Population Estimates on the Basis of Normal Death Rate from Selected Causes.

For localities or sections where no other causes are known to have affected distribution of population according to age, occupation, etc., in an appreciable degree, a correction of the effect of withdrawals of males for military service will be sufficient. The vital statistician must, of course, determine from such information as he can obtain whether or not any other important causes were at work.

It is safe to say, however, that in a number of States and localities abnormal conditions other than the withdrawal of males for military service did affect the population. In any event, it is highly desirable to have some criterion by which the combined influences of the various possible conditions may be expressed statistically. Sampling by means of actual enumerations was not resorted to, except in a few instances for special purposes. Is there any other method simple enough for every day use? We are indebted to the division of vital statistics of the Bureau of the Census for a method which has been used in checking estimates arrived at by conventional procedure.

A death rate is made up of two factors: The number of persons in the group considered and the number of deaths occurring among those persons from the cause or causes in question. The usual formula is

$$\frac{\text{Number of deaths} \times 1,000}{\text{Population}} = \text{Rate}$$

If the death rate during a normal period from certain causes be used as the divisor and the number of deaths (multiplied by 1,000) from the same causes during the period for which a population estimate is desired be the dividend, the quotient will be the desired estimate of the population. To illustrate:

Let the number of deaths from all causes, other than acute infections diseases, among males of the age group 20 to 24 during the period September-December, 1918, = 300. Let the death rate from the same causes among males of the same ages during a period which is assumed to be normal; e. g., the average for September-December for the years 1909-1911 = 2 per 1,000. Then

$$\frac{300 \times 1,000}{2} = 150,000$$

which is an estimate of the number of males in September-December, 1918. Of course this estimate involves several assumptions, important among which is that the death rate of 2 per 1,000 from the causes specified did not change from 1909-1911 to 1918. But grant-

ing that this estimate is fairly accurate, the specific rate for any disease for 1918 may be computed.¹

A Comparison of Rates Derived from Different Population Estimates made by the Various Methods Described.

It will be of interest now to compare the results derived by the use of the various methods described.

The deaths from influenza and pneumonia (all forms) during the four months' period, September 1 to December 31, 1918, among males of different ages in Indiana are used (Table V). Three sets of annual rates are computed; namely, (1) a rate based on the number of males in each age group as estimated for July 1, 1918, by the usual arithmetic method for intercensal years; (2) a rate based on the number of males in each age group as estimated in (1), but after subtracting, for certain age groups, the number of males withdrawn from civil life up to November 30, 1918; (3) a rate based on the normal death rate from all causes except pneumonia (all forms), computed according to either of the two methods used by the vital statistics division of the Bureau of the Census. For convenience we may denote them as rate 1, rate 2, and rate 3.

TABLE V.—*Number of deaths from influenza and pneumonia (all forms) and from all other causes among males in Indiana Sept. 1-Dec. 31, 1918.*

Age groups.	Influenza and pneumonia (all forms).	All other causes.
Under 5.....	833	1,042
5 to 9.....	187	107
10 to 14.....	166	103
15 to 19.....	360	161
20 to 24.....	371	143
25 to 29.....	611	188
30 to 34.....	619	199
35 to 39.....	452	227
40 to 44.....	214	224
45 to 49.....	117	262
50 to 54.....	87	261
55 to 59.....	61	286
60 to 64.....	66	423
65 and over.....	209	1,380

¹ This method involves a good deal of arithmetical labor, and practically the same result is obtained by a shorter procedure employed by the vital statistics division of the Bureau of the Census. This procedure involves exactly the same principle as the one described above, but the actual computation of a new estimate of population is eliminated. For example, in checking the accuracy of the calculated death rates from influenza and pneumonia in Indiana during September-December, 1918, rough death rates were found as follows: Graduated data of 1909, 1910, and 1911 were first used to find a set of normal death rates by age and sex as in the construction of a life table. To make these rates more nearly accord with rates based on all deaths except influenza and pneumonia (all forms) to total deaths, the percentages of deaths from pneumonia (all forms) to total deaths by ages and sex in 1910 were calculated and the life-table rates reduced to corresponding amounts. (No allowance was made for influenza deaths in 1910 as this was considered an unnecessary refinement for this rough calculation.) The resulting death rates were assumed to represent the death rates from all causes except influenza and pneumonia (all forms) as primary causes in the last four months of 1918, and rough death rates were then calculated in the following manner: The per cent of total deaths in the last four months of 1918 which were from influenza and pneumonia (all forms) was divided by the per cent which were from all other causes. The quotient was then multiplied by the assumed normal annual death rate from all causes except pneumonia (all forms) based on graduated data of 1909, 1910, and 1911. The product is a rough annual death rate from influenza and pneumonia (all forms) for the last four months of 1918 among persons of a specific sex and age.

In computing rates 1 and 2, the detailed population estimates are presented for purposes of illustration in Table VI. The number of males in each age group as estimated by the usual arithmetic method for intercensal years is shown in the first column. In the next five columns are shown the number of males withdrawn from civil life, approximated according to the procedure previously outlined. In the last column is given the estimated number of males in each age group after allowing for these withdrawals.

TABLE VI.—*Number of males of different ages in Indiana, estimated as of July 1, 1918, by arithmetic method and after deducting therefrom males withdrawn from civil life in 1917 and 1918.*

Age groups.	Male population, estimated as of July 1, 1918.	Number of males withdrawn from civil life.					Male-population estimates, less males withdrawn from civil life.	
		Total.	Inducted.	Enlisted.				
				Army.	Navy.	Marines.		
All known ages.....	1,459,353	104,973	69,749	25,847	8,313	1,064	1,354,380	
Under 5.....	148,043						148,043	
5 to 9.....	142,066						142,066	
10 to 14.....	136,535						136,535	
15 to 19.....	138,586	5,963		4,007	1,796	160	132,623	
20 to 24.....	133,999	54,961	40,524	10,545	3,458	434	79,038	
25 to 29.....	123,154	34,380	24,900	7,160	2,020	300	89,774	
30 to 34.....	106,605	9,669	4,325	4,135	1,039	170	96,936	
35 to 39.....	103,154						103,154	
40 to 44.....	90,604						90,604	
45 to 49.....	77,681						77,681	
50 to 54.....	75,345						75,345	
55 to 59.....	55,955						55,955	
60 to 64.....	45,797						45,797	
65 and over.....	81,829						81,829	

In Table VII are shown the annual rates computed by the three methods. These rates are plotted in Figure 2.

TABLE VII.—*Annual death rate per 1,000 males of different ages in Indiana from influenza and pneumonia (all forms), September–December, 1918, computed upon the bases of various estimates of population.*

Age groups.	Based on population as estimated by arithmetic method.	1	2	3
		Same as 1, but after allowing for withdrawal of males from civil life.	Based upon normal death rate from all causes other than pneumonia.	
Under 5.....		16.8	16.8	20.4
5 to 9.....		3.9	3.9	4.7
10 to 14.....		3.6	3.6	3.7
15 to 19.....		7.8	8.1	8.2
20 to 24.....		8.3	14.0	13.8
25 to 29.....		14.8	20.4	16.8
30 to 34.....		17.3	20.1	18.4
35 to 39.....		13.1	13.1	12.8
40 to 44.....		7.1	7.1	7.2
45 to 49.....		4.5	4.5	4.3
50 to 54.....		3.5	3.5	3.8
55 to 59.....		3.3	3.3	3.8
60 to 64.....		4.3	4.3	4.0
65 and over.....		7.6	7.6	8.6

February 13, 1920.

It will be observed that the rates are practically identical for all ages except those between 15 and 35, thus indicating the fact that certain conditions existed which disturbed the normal age distribution of the male population of those ages. Which of the three rates

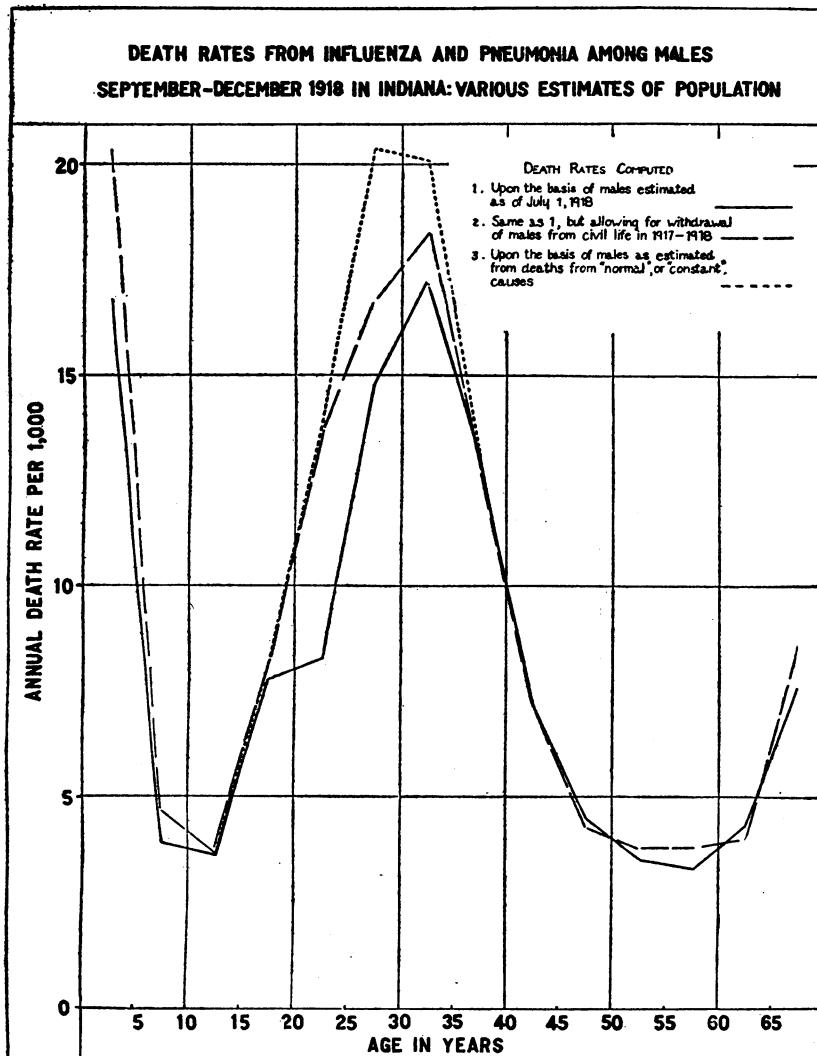


FIGURE 2.

is the correct one? Or, rather, which of the three rates most nearly approximates the correct rate? Rate 1 is much lower, particularly in the age group 20 to 24, than rates 2 and 3, suggesting the conclusion that the computation of a mortality rate upon the basis of an estimated

population without taking into account the withdrawal of males from civil life is quite inaccurate. As between rates 2 and 3, the suggestion is offered that rate 2 is too high because the withdrawal of males from civil life may have been compensated by an abnormal addition of

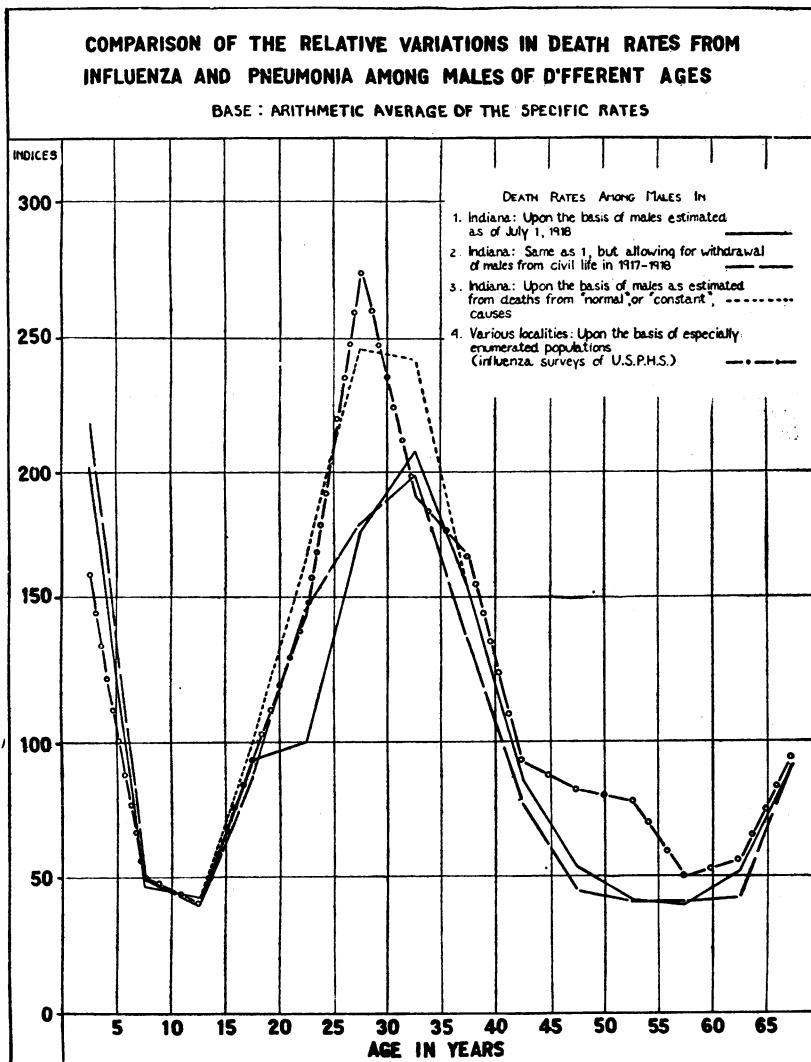


FIGURE 3.

males in certain occupations. In weighing the relative accuracy of rates 2 and 3, however, we must take into consideration other possible conditions, as, for example, the demand in Indiana for males of these ages for employment in the so-called war industries. As a matter of

fact, Indiana was a State where comparatively few war industries were located and there was a tendency toward emigration rather than toward an immigration.

In order to test this assumption the various curves already computed may be compared with the mortality curve among males of a canvassed population. Accordingly, in Figure 3 the rates have been reduced to a relative basis, and a fourth curve—that of mortality from influenza and pneumonia among males of different ages who were actually canvassed in the course of special influenza surveys made in various localities in the United States by the Public Health Service—has been fitted in. This fourth curve, which we may denote as rate 4, is considered as the normal.

If it be true that rate 4 can properly be regarded as a normal one for the period of the influenza epidemic, it is clearly indicated that (Table VIII and Fig. 3) the rate which most closely approximates it for Indiana is rate 2.¹

TABLE VIII.—*Comparison of the relative variations in death rates from influenza and pneumonia (all forms), computed by various methods for males of different ages in Indiana, September–December, 1918, with that in areas where special surveys were made.*

[Base: Arithmetic average of the specific rates.]

Age groups.	1 Population estimated by usual method.	2 Same as 1, but after allowing for males withdrawn from civil life.	3 By census method.	4 Localities canvassed.
Under 5.	202	202	219	149
5 to 9.	47	47	51	37
10 to 14.	43	43	40	27
15 to 19.	94	98	88	78
20 to 24.	100	169	148	133
25 to 29.	178	246	181	261
30 to 34.	208	242	198	178
35 to 39.	158	153	138	155
40 to 44.	86	86	77	80
45 to 49.	54	54	46	69
50 to 54.	42	42	41	65
55 to 59.	40	40	41	37
60 to 64.	52	52	43	43
65 and over.	92	92	92	82

A similar result has been found in comparing rates computed upon the various bases for other sections and localities.

In this connection it may be noted that if the ratio be computed for each age group of the number of males and of females enumerated in the special influenza survey made in Baltimore, Md., during December, 1918, to that enumerated in the 1910 census of the same

¹ The divergences of the rates in the ages 40 and over are probably due to a paucity of data, since the number of deaths and the number of persons in those ages in the special surveys were rather small.

city, it will be seen that a very marked depletion of males of the ages 18 to 35 occurred. This has been done in Table IX and plotted in Figure 4. While the number of persons included in the survey was relatively small (about 32,000), and the sample is not large enough to afford as great regularity in results as would be desirable, the

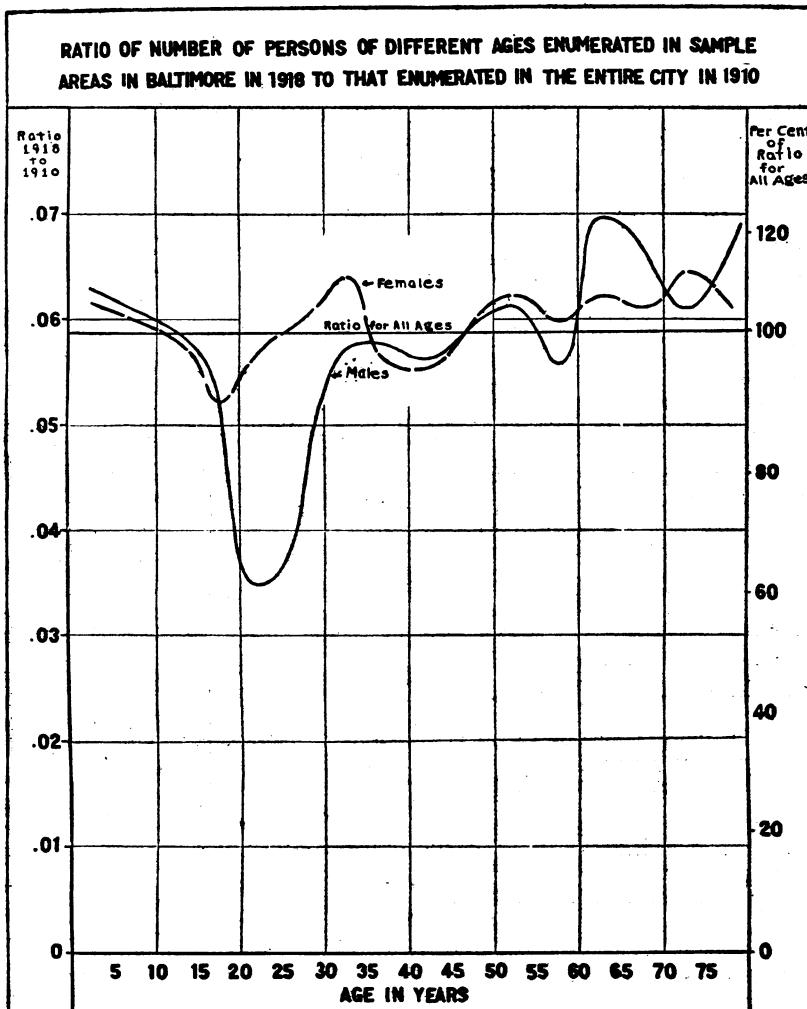


FIGURE 4.

great divergence of the distribution of males in the ages 18 to 34 from that of males and females in the same ages in 1910 in December, 1918, is unmistakably manifest. Here, therefore, in a center of industrial activity the depletion of the male population of military age far outweighed accretions.

TABLE IX.—*Ratio of number of persons of different ages enumerated in sample areas in Baltimore in 1918 to that enumerated in the entire city in 1910.*

Age period.	Population.						Ratio, 1918 to 1910.			Indices of ratios.		
	Both sexes.		Male.		Female.		Both sexes.	Male.	Female.	Both sexes.	Males.	Females.
	1910	1918	1910	1918	1910	1918						
All ages.	557,790	31,697	267,897	14,677	289,893	17,020	0.0568	0.0548	0.0587	100	.....	.....
Under 5.	51,986	3,226	26,189	1,641	25,797	1,585	0.0621	0.0627	0.0614	109	111	108
5 to 9.	49,617	2,988	24,739	1,500	24,878	1,488	0.0602	0.0606	0.0598	106	107	105
10 to 14.	48,507	2,826	23,564	1,375	24,943	1,451	0.0583	0.0584	0.0582	103	103	102
15 to 19.	54,253	2,813	25,124	1,304	29,129	1,511	0.0519	0.0519	0.0519	91	91	91
20 to 24.	58,713	2,749	27,373	950	31,340	1,790	0.0468	0.0350	0.0571	82	62	101
25 to 29.	54,311	2,826	26,127	1,138	28,184	1,688	0.0520	0.0436	0.0599	92	77	105
30 to 34.	45,604	2,758	22,193	1,260	23,409	1,498	0.0605	0.0568	0.0640	107	100	113
35 to 39.	43,163	2,445	21,029	1,207	22,134	1,238	0.0566	0.0574	0.0559	100	101	98
40 to 44.	36,963	2,057	17,852	1,000	19,111	1,057	0.0557	0.0560	0.0553	98	99	97
45 to 49.	31,627	1,880	15,367	912	16,260	968	0.0594	0.0593	0.0595	105	104	105
50 to 54.	26,510	1,631	12,856	784	13,654	847	0.0615	0.0610	0.0620	108	107	109
55 to 59.	18,607	1,071	8,987	499	9,620	572	0.0576	0.0555	0.0595	101	98	105
60 to 64.	14,351	936	6,541	452	7,810	484	0.0652	0.0691	0.0620	115	122	109
65 to 69.	10,454	663	4,662	311	5,792	352	0.0634	0.0667	0.0608	112	117	107
70 to 74.	6,647	417	2,800	170	3,847	247	0.0627	0.0607	0.0642	110	107	113
75 and over.	6,477	409	2,492	165	3,985	244	0.0631	0.0662	0.0612	111	117	108

Unless in a given locality there are known to have been considerable accretions to the male population of the ages under consideration, which offset the depletion due to withdrawals for military service, rates based on the estimated number of total males or females in each age group, after allowing for withdrawals for military service, will be more accurate than rates which do not take into account these withdrawals. Probably they will be more nearly correct than rates computed on the basis of "normal" death rates.

At best, such corrections as can be made of population estimates for 1918 are very rough approximations. The foregoing may prove suggestive to health departments as rather simple methods for making corrections for the withdrawal of males of certain ages from civil life, and for testing rates based upon "corrected" and "uncorrected" population estimates.

PRINCIPAL CAUSES OF DEATH IN UNITED STATES REGISTRATION AREA.

CENSUS BUREAU SUMMARIZES MORTALITY STATISTICS FOR 1918.¹

The Census Bureau's annual compilation of mortality statistics for the death-registration area in continental United States shows 1,471,367 deaths as having occurred in that area in 1918, representing a rate of 18.0² per 1,000 population, the highest rate on record in the Census Bureau—due to the influenza pandemic.

¹ A similar summary for 1917 was published in Public Health Reports for July 4, 1919, pp. 1474-78.

² If the death rate from all causes had been 14.2, the same rate which obtained in 1917, the number of deaths in the registration area for 1918, comprising a population of 81,868,104, would have been 1,162,527, indicating an excess of deaths in 1918 over 1917 of 308,840.

The death registration area in 1918 comprised 30 States, the District of Columbia, and 27 registration cities in nonregistration States, with a total estimated population of 81,868,104, or 77.8 per cent of the estimated population of the United States. The Territory of Hawaii is now a part of the registration area, but the figures given in this summary relate only to continental United States. (In 1917 the death-registration area of the United States comprised 27 States, the District of Columbia, and 43 cities in nonregistration States, with a total estimated population of 75,000,000, or about 73 per cent of the estimated population of the United States.)

Of the total deaths, 477,467, or over 32 per cent, were due to influenza and pneumonia (all forms), 380,996 having occurred in the last four months of the year during the influenza pandemic. The rate for influenza and pneumonia (all forms) is 583.2 per 100,000. Influenza caused 244,681 deaths and pneumonia (all forms) 232,786, showing rates of 298.9 and 284.3 per 100,000 respectively, these being the highest rates which have ever appeared for these causes. The rate in 1917 for influenza was 17.2 and for pneumonia (all forms) was 149.8. In fact, the difference (416.2 per 100,000 population) between the 1917 and 1918 rates corresponds with the excess mortality which occurred in the last four months of the year from the influenza pandemic.

The next most important causes of death were organic diseases of the heart, tuberculosis (all forms), acute nephritis and Bright's disease, and cancer, which together were responsible for 391,391 deaths, or nearly 27 per cent of the total number.

The deaths from organic diseases of the heart numbered 124,668, or 152.3 per 100,000 population. The death rate from this cause shows a slight decrease as compared with 1917, when it was 153.2 per 100,000. There have been fluctuations from year to year, but in general there has been a marked increase since 1900, the earliest year for which annual mortality statistics were published, when the rate for organic diseases of the heart was 111.2 per 100,000 population.

Tuberculosis in its various forms caused 122,040 deaths, of which 108,365 were due to tuberculosis of the lungs. The death rate from all forms of tuberculosis was 149.1 per 100,000, and from tuberculosis of the lungs, 132.4. The rate from tuberculosis of all forms declined continuously from 200.7 per 100,000 in 1904 to 141.6 in 1916, the decrease amounting to nearly 30 per cent; but for 1917 and 1918 increases are shown, the 1918 rate being somewhat higher than the rate for 1917, when it was 146.4. Until 1912 more deaths were due to tuberculosis than to any other single cause, but in that year and during the period 1914-1918 the mortality from tuberculosis was less than that from heart diseases.

Bright's disease and acute nephritis caused 79,343 deaths, or 96.9 per 100,000. This is a noticeable decrease as compared with 1917, when the rate was 107.4 per 100,000.

Cancer and other malignant tumors were responsible for 65,340 deaths, of which number 24,783, or nearly 38 per cent, resulted from cancer of the stomach and liver. The rate (79.8) is a decrease from 1917, when it was 81.6. With the exceptions of the years 1906, 1907, 1911, 1917 and 1918, there has been a continuous increase in the death rates from these diseases.

Apoplexy was the cause of 64,904 deaths, or 79.3 per 100,000. This rate, too, declined, having been for 1917, 82.9.

Diarrhea and enteritis caused 59,109 deaths, or 72.2 per 100,000, a decrease from the rate (79.0) for 1917. More than four-fifths of the total deaths charged to these causes in 1918 were of infants under 2 years of age.

Arterial diseases of various kinds—atheroma, aneurism, etc.—resulted in 19,027 deaths, or 23.2 per 100,000, which rate is somewhat less than that for 1917 (25.3).

Deaths from diabetes numbered 12,927, or 15.8 per 100,000. The rate from this disease increased almost continuously from 9.7 in 1900 to 17.0 in 1916, but since 1916 a slight decrease for each year is apparent. The rate for 1917 was 16.9.

Bronchitis caused 12,783 deaths, or 15.6 per 100,000. This rate is lower than that for any preceding year. The proportional decline from 1900, for which year the bronchitis rate was 45.7, to 1918, amounted to 66 per cent.

The rate for diphtheria is 13.8, representing 11,280 deaths. As compared with 1917, when the rate was 16.5, there is a perceptible decrease.

Typhoid Fever.

Typhoid fever resulted in 10,210 deaths, or 12.5 per 100,000. The mortality rate from this cause has shown a remarkable reduction since 1900, when it was 35.9, the proportional decrease amounting to 65 per cent. This highly gratifying decline demonstrates in a striking manner the efficacy of improved sanitation and of the modern method of prevention—the use of the antityphoid vaccine.

Whooping Cough and Measles.

Whooping cough and measles together were responsible for 22,534 deaths of adults and children, or 27.6 per 100,000. The rates for these diseases were respectively, 16.8 and 10.8, as compared with 10.4 and 14.3 for 1917.

External Causes.

Deaths due to external causes of all kinds—accidental, suicidal, and homicidal—numbered 82,349 in 1918, corresponding to a rate of 100.6 per 100,000 population. This is a noticeable decrease, the rate for 1917 being 108.8. In fact, except for automobile and machinery

accidents and injuries, all the external causes showed a general decrease in 1918.

The greatest number of deaths charged to any one accidental cause—10,330, or 12.6 per 100,000—is shown for falls.

Next to falls, the greatest number of accidental deaths—8,610, or 10.5 per 100,000—resulted from railroad accidents and injuries.

Deaths from automobile accidents and injuries in 1918 totaled 7,525, or 9.2 per 100,000 population. This rate has risen rapidly from year to year, which strongly suggests the need for better traffic regulations and better enforcement of those we now have.

Burns—excluding those received in conflagrations—were responsible for 6,638 deaths, or 8.1 per 100,000.

Accidental drowning caused 5,633 deaths, or 6.9 per 100,000. This rate is considerably less than that for any preceding year since 1910.

Deaths due to accidental asphyxiation (except in conflagrations) numbered 3,371, or 4.2 per 100,000. This rate is slightly less than that, 4.5, for the previous year, but is somewhat higher than the rate for any year during the preceding 10-year period.

Mine accidents and injuries resulted in 2,497 deaths, or 3.1 per 100,000.

Machinery accidents caused 2,371 deaths, or 2.9 per 100,000, a rate greater than that for any year covered by the Bureau's mortality records.

Deaths resulting from street-car accidents numbered 2,366, corresponding to a rate of 2.9 per 100,000.

Deaths due to injuries by vehicles other than railroad cars, street cars, and automobiles numbered 2,337, or 2.7 per 100,000.

The number of suicides reported for 1918 was 9,937, or 12.1 per 100,000, the rate being the lowest shown for any year since 1903.

Other deaths due to external causes totaled 20,834, or 25.4 per 100,000.

The following table shows, for the death-registration area in continental United States in 1918, the total number of deaths and the death rate, by leading causes, together with the percentage which each cause contributed to the total:

Cause of death.	Number.	Rate per 100,000 population.	Per cent of total.
All causes.....	1,471,367	1,797.2	100.0
Influenza.....	244,681	298.9	16.6
Pneumonia (all forms).....	232,780	284.3	15.8
Organic diseases of the heart.....	124,668	152.3	8.5
Tuberculosis (all forms).....	122,040	149.1	8.3
Tuberculosis of lungs.....	108,365	132.4	7.4
Tuberculous meningitis.....	5,910	7.2	.4
Other forms of tuberculosis.....	7,765	9.5	.5
External causes.....	82,349	100.6	5.6
Accidental falls.....	10,330	12.6	.7
Suicide.....	9,937	12.1	.7
Railroad accidents and injuries.....	8,610	10.5	.6
Automobile accidents and injuries.....	7,525	9.2	.5
Burns (excluding those due to conflagrations).....	6,638	8.1	.5
Accidental drowning.....	5,633	6.9	.4
Homicide.....	5,508	6.7	.4
Accidental absorption of deleterious gases, except in conflagrations.....	3,371	4.2	.2

Cause of death.	Number.	Rate per 100,000 population.	Per cent of total.
All causes—Continued.			
External causes—Continued.			
Mine accidents and injuries.....	2,497	3.1	0.2
Machinery accidents and injuries.....	2,371	2.9	.2
Street-car accidents and injuries.....	2,366	2.9	.2
Injuries by vehicles, other than railroad cars, street cars, and automobiles.....	2,237	2.7	.2
Effects of heat, other than burns.....	1,146	1.4	.1
Other external causes.....	14,180	17.3	1.0
Acute nephritis and Bright's disease.....	79,543	96.9	5.4
Cancer.....	67,349	79.8	4.4
Cerebral hemorrhage (apoplexy).....	64,904	79.3	4.4
Congenital debility and malformations.....	63,375	77.4	4.3
Diarrhea and enteritis.....	79,109	72.2	4.0
Arterial diseases—atheroma, aneurism, etc.....	19,027	23.2	1.3
Whooping cough.....	13,728	16.8	.9
Diabetes.....	12,927	15.8	.9
Puerperal affections other than puerperal septicemia.....	12,927	15.8	.9
Bronchitis.....	12,783	15.6	.9
Senility.....	12,251	15.0	.8
Diphtheria.....	11,280	13.8	.8
Respiratory diseases, other than pneumonia and bronchitis.....	10,391	12.7	.7
Typhoid fever.....	10,210	12.5	.7
Appendicitis and typhlitis.....	9,912	12.1	.7
Hernia and intestinal obstructions.....	9,370	11.4	.6
Measles.....	8,806	10.8	.6
Meningitis.....	8,064	9.8	.5
Cirrhosis of the liver.....	7,808	9.5	.5
Syphilis.....	7,004	9.3	.5
Paralysis without specified cause.....	7,183	8.8	.5
Acute endocarditis.....	6,694	8.2	.5
Angina pectoris.....	6,443	7.4	.4
General paralysis of the insane.....	5,890	7.2	.4
Puerperal septicemia.....	5,250	6.4	.4
Dysentery.....	4,725	5.8	.3
Anemia chlorosis.....	4,25	5.5	.3
All other defined causes.....	109,747	134.1	7.5
Unknown or ill-defined causes.....	15,647	19.1	1.1

HARRISON NARCOTIC DRUG ACT CONSTRUED.

In a prosecution of a physician under the Harrison drug act for obtaining opium for his own personal use by means of the prescribed order forms, the United States District Court for the District of Montana has decided¹ that such conduct is not an offense under that part of section 2 of the act which reads as follows:

“It shall be unlawful for any person to obtain by means of said order forms any of the aforesaid drugs for any purpose other than the use, sale, or distribution thereof by him in the conduct of a lawful business in said drugs or in the legitimate practice of his profession.”

The court pointed out that one of the objections to the contention that such conduct was a crime was that “Congress having no power to directly prohibit the purchase of opium for personal use, it can not indirectly do so by incorporation of such prohibition in a revenue measure, the prohibition having no reasonable relation to the revenue.” The court further stated as follows:

Section 2 must be construed to be in aid of the only object of the act that is constitutional, viz, to create and safeguard revenue. How the purchase herein alleged could in anywise affect the revenue is inconceivable.

Nothing in section 2 forbids purchases for any lawful use. Among such may be purchase to destroy, or to absorb the supply, or to prevent purchase by others, or to obstruct illegal traffic, all of which are lawful purposes, and none of which are within section 2, even as purchase for personal use is not.

¹ *United States v. Parsons*, 261 Fed. 223.

DEATHS DURING WEEK ENDED FEB. 7, 1920.

[From the "Weekly Health Index," Feb. 10, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Feb. 7, 1920, infant mortality (per cent), annual death rates, and comparison with corresponding week of preceding years.

City.	Population July 1, 1918, esti- mated.	Week ended Feb. 7, 1920.		Average annual death rate per 1,000. ²	Per cent of deaths under 1 year.	
		Total deaths.	Death rate. ¹		Week ended Feb. 7, 1920.	Previous year or years. ³
Albany, N. Y.....	112,565	52	24.1	C 17.6	9.6	C 7.9
Atlanta, Ga.....	201,732	90	23.3	C 20.2	11.1	C 11.5
Baltimore, Md.....	³ 669,981	351	27.3	A 20.2	13.1	A 14.3
Birmingham, Ala.....	197,670	72	19.0	A 16.9	9.7	A 11.0
Boston, Mass.....	785,245	408	27.1	A 17.4	10.0	A 15.9
Buffalo, N. Y.....	473,229	200	22.0	C 20.5	13.0	C 21.0
Cambridge, Mass.....	111,432	46	21.5	A 17.1	6.5	A 13.4
Chicago, Ill.....	2,596,681	1,945	39.1	A 16.1	13.1	A 19.2
Cincinnati, Ohio.....	418,022	156	19.5	C 19.6	6.4	C 11.5
Cleveland, Ohio.....	810,306	366	23.6	C 13.0	7.1	C 15.8
Columbus, Ohio.....	225,296	136	31.5	C 15.0	5.1	C 9.2
Dayton, Ohio.....	130,655	88	35.1	C 21.6	8.0	C 7.4
Denver, Colo.....		261			4.6	
Fall River, Mass.....	128,392	38	15.4	C 14.2	21.1	C 20.0
Grand Rapids, Mich.....	135,450	68	25.4	C 15.4	9.1	C 20.0
Indianapolis, Ind.....	290,389	169	30.3	C 17.1	9.5	C 14.7
Kansas City, Mo.....	313,785	370	61.5	C 20.3	9.2	C 9.0
Los Angeles, Calif.....	568,495	210	19.3	A 15.3	7.6	A 9.5
Louisville, Ky.....	242,707	118	25.4	C 26.0	5.1	C 9.9
Lowell, Mass.....	109,081	39	18.6	A 17.1	25.6	A 19.8
Memphis, Tenn.....		82		C 25.3	13.4	C 13.3
Milwaukee, Wis.....	453,481	300	34.5	A 13.6	9.3	A 24.5
Minneapolis, Minn.....	383,442	294	40.0	C 10.7	6.5	C 16.5
Nashville, Tenn.....	119,215	38	16.6	C 21.0	15.8	C 6.3
Newark, N. J.....	428,684	235	28.6	C 15.4	14.0	C 11.8
New Haven, Conn.....	154,865	66	22.2	C 18.5	12.1	C 23.6
New Orleans, La.....	382,273	147	20.1	A 22.1	15.6	A 12.6
New York, N. Y.....	5,215,879	3,502	35.0	C 17.7	10.4	C 15.4
Oakland, Calif.....	214,206	110	26.8	A 12.9	10.9	A 8.5
Omaha, Nebr.....	180,264	86	24.9	C 11.0	11.6	C 10.5
Philadelphia, Pa.....	1,761,371	747	22.1	A 17.9	8.8	* 13.8
Pittsburgh, Pa.....	593,303	336	29.5	C 20.4	12.8	C 17.2
Portland, Oreg.....		100			9.0	C 18.2
Providence, R. I.....	263,613	100	19.8	C 17.0	13.0	C 17.4
Richmond, Va.....	160,719	114	37.0	C 19.1	15.8	C 22.0
Rochester, N. Y.....	264,856	121	23.8	C 15.6	7.4	C 11.4
St. Louis, Mo.....	779,951	665	44.5	C 16.5	6.2	C 12.1
St. Paul, Minn.....	257,699	153	31.0	C 10.7	7.8	C 20.8
San Francisco, Calif.....	478,530	231	25.2	C 14.6	4.3	C 7.5
Seattle, Wash.....		98			3.1	A 11.6
Spokane, Wash.....		57			7.0	C 10.7
Syracuse, N. Y.....	161,404	146	47.2	C 16.2	6.2	C 20.0
Toledo, Ohio.....	262,234	132	26.2	A 12.7	9.8	A 17.3
Washington, D. C.....	401,681	292	37.9	A 18.8	7.2	A 9.9
Worcester, Mass.....	173,650	72	21.6	C 17.1	15.3	C 8.8

¹ Annual rates per 1,000 estimated population.

² "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1917.

³ Population estimated as of July 1, 1919.

⁴ Data are based on statistics of 1915, 1916, and 1917.

Summary of information received by telegraph from industrial insurance companies for week ended Feb. 7, 1920.

Policies in force.....	42,660,172
Number of death claims.....	10,623
Death claims per 1,000 policies in force, annual rate.....	13.0

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 STATE SUMMARIES.

Telegraphic Reports for Week Ended Feb. 7, 1920.

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

ALABAMA.	Cases.	CALIFORNIA—continued.	Cases.
Chicken pox.....	12	Lethargic encephalitis:	
Diphtheria.....	12	San Francisco.....	1
Influenza.....	1,296	Oakland.....	1
Malaria.....	8	Poliomyelitis:	
Measles.....	33	Stanislaus County.....	1
Mumps.....	11	Smallpox:	
Pneumonia (all forms).....	23	Fresno County.....	4
Scarlet fever.....	15	Los Angeles County.....	10
Smallpox.....	43	Santa Barbara.....	27
Tuberculosis (pulmonary).....	16	San Francisco.....	8
Typhoid fever.....	16	Scattering.....	46
Whooping cough.....	31	Typhoid fever.....	6
ARKANSAS.			
Cerebrospinal meningitis.....	2	CONNECTICUT.	
Chicken pox.....	84	Chicken pox.....	50
Diphtheria.....	11	Diphtheria:	
Lethargic encephalitis.....	1	Fairfield County—Bridgeport.....	14
Malaria.....	89	Hartford County—Hartford.....	11
Measles.....	34	Litchfield County—	
Ophthalmia neonatorum.....	1	Torrington.....	4
Pellagra.....	5	Watertown.....	4
Pneumonia.....	22	New Haven County—	
Poliomyelitis.....	1	New Haven.....	4
Scarlet fever.....	16	Wallingford.....	6
Smallpox.....	59	Waterbury.....	5
Trachoma.....	8	Scattering.....	25
Tuberculosis.....	17	German measles.....	2
Typhoid fever.....	3	Influenza:	
Whooping cough.....	60	Fairfield County.....	1,124
CALIFORNIA.		Hartford County.....	1,713
Cerebrospinal meningitis:		Litchfield County.....	349
Sacramento.....	1	Middlesex County.....	131
San Francisco.....	3	New Haven County.....	1,741
Influenza.....	8,401	New London County.....	356
		Tolland County.....	93
		Windham County.....	159
		Lethargic encephalitis.....	1

CONNECTICUT—continued.		Cases.	DELAWARE—continued.		Cases.
Measles:	Fairfield County—		Typhoid fever	2	
	Bridgeport	26	Whooping cough	3	
	Monroe	5			
	Norwalk	9			
	Stamford	9			
Hartford County—	Enfield	13	Diphtheria	8	
	Farmington	5	Influenza	1,581	
	Hartford	4	Malaria	7	
	New Britain	4	Pneumonia	60	
	Plainville	8	Poliomyelitis	1	
	Simsbury	5	Scarlet fever	7	
Litchfield County—	Litchfield	15	Smallpox	6	
	Winchester	8	Typhoid fever	9	
New Haven County—	Ansonia	23			
	Hamden	7	GEORGIA.		
	New Haven	50	Chicken pox	30	
	Orange	4	Conjunctivitis (acute infectious)	3	
New London County—New London		7	Diphtheria	12	
Windham County—Woodstock		8	Dysentery (amebic)	4	
Scattering		29	Hookworm	11	
Mumps		23	Influenza	3,256	
Pneumonia		139	Malaria	22	
Scarlet fever:	Fairfield County—		Measles	56	
	Bethel	5	Mumps	14	
	Bridgeport	6	Paratyphoid fever	1	
Hartford County—	Canton	4	Pellagra	1	
	Hartford	17	Pneumonia	86	
	New Britain	6	Poliomyelitis	1	
Litchfield County—Torrington		7	Scarlet fever	23	
New Haven County—	Meriden	6	Septic sore throat	5	
	New Haven	10	Smallpox	61	
	Waterbury	17	Tuberculosis (pulmonary)	29	
Scattering		24	Typhoid fever	8	
Tuberculosis		16	Whooping cough	35	
Whooping cough		36			
DELAWARE.					
Chicken pox		1			
Diphtheria:		1	ILLINOIS.		
	Claymont	1	Cerebrospinal meningitis:		
	Wilmington	5	Christian County—Locust Township	1	
Influenza:		17	Peoria	1	
	Claymont	4	Diphtheria:		
	Delaware City	16	Chicago	128	
	Delmar	8	Granite City	4	
	Hockessin	5	Scattering	29	
	Middletown	6			
	Millfor	6	influenza:		
	Port Penn	18	Chicago	4,650	
	Townsend	4	Scattering	25,680	
	Wilmington	8			
	Scattering	12	Lethargic encephalitis:		
Measles		92	Chicago	12	
Mumps		1	Aurora	1	
Pneumonia		18	LaGrange	1	
Scarlet fever:			Pneumonia:		
	Lincoln	16	Chicago	1,842	
	Wilmington	8	Scattering	836	
Smallpox		5			
Tuberculosis		6	Poliomyelitis:		
		6	Chicago	2	
		18	Scarlet fever:		
		4	Chicago	339	
		8	Scattering	95	
		12	Smallpox:		
		12	Bartonville	5	
		92	Elizabethtown	12	
		1	Hamilton County—		
			Bacon Creek Township	5	
			Monmouth	5	
		1	Pike County—		
		8	‘ Cincinnati Township	14	
		2	Scattering	57	
		6	Typhoid fever	14	

INDIANA.

Cerebrospinal meningitis:	Cases.
St. Joseph County.....	1
Diphtheria:	
Elkhart County.....	39
Fayette County.....	24
Lake County.....	10
St. Joseph County.....	6
Scattering.....	17
Scarlet fever:	
Boone County.....	21
Carroll County.....	5
Elkhart County.....	22
Greene County.....	7
Howard County.....	7
Huntington County.....	5
Jasper County.....	6
Kosciusko County.....	4
Laporte County.....	15
Marion County.....	27
Putnam County.....	4
St. Joseph County.....	37
Tippecanoe County.....	4
Wayne County.....	8
White County.....	4
Scattering.....	28
Smallpox:	
Dearborn County.....	4
Gibson County.....	20
Howard County.....	16
Jackson County.....	30
Lake County.....	9
Marion County.....	13
St. Joseph County.....	26
Tippecanoe County.....	5
White County.....	5
Scattering.....	25
Typhoid fever:	
Lake County.....	6
Scattering.....	8

IOWA.

Cerebrospinal meningitis:	
Jasper County.....	2
Pottawattamie County.....	1
Chicken pox.....	19
Diphtheria:	
Des Moines.....	4
Marshall County.....	4
Waterloo.....	13
Scattering.....	12
Influenza.....	5,070
Measles:	
Boone.....	12
Guttenberg.....	5
Mason City.....	10
Scattering.....	7
Pneumonia:	
Anamosa.....	5
Avoca.....	5
Dubuque.....	19
Grinnell.....	5
Maxwell.....	5
Scattering.....	12
Scarlet fever:	
Des Moines.....	6
Emmet County.....	5

IOWA—continued.

Scarlet fever—Continued.	Cases.
Malvern.....	5
Onawa.....	9
Waterloo.....	10
Scattering.....	44
Smallpox:	
Davenport.....	25
Eldora.....	7
Maple River.....	6
Mason City.....	8
Muscatine County.....	9
Storm Lake.....	18
Waterloo.....	85
Scattering.....	38
Whooping cough.....	4
KANSAS.	
Diphtheria.....	30
Influenza.....	16,960
Scarlet fever.....	79
Smallpox.....	80
LOUISIANA.	
Diphtheria.....	13
Influenza.....	1,901
Pneumonia.....	52
Smallpox.....	53
Typhoid fever.....	12
MAINE.	
Chicken pox.....	9
Diphtheria.....	5
Influenza:	
Auburn.....	30
Bath.....	16
Brewer.....	20
Brunswick.....	15
Castle Hill.....	13
Kennebunk.....	20
Lagrange.....	17
Oakland.....	15
Portland.....	424
South Berwick.....	17
Waterville.....	172
West Brook.....	87
Winslow.....	12
Scattering.....	78
Measles:	
Oxford.....	8
Portland.....	6
Sanford.....	1
South Berwick.....	6
Mumps.....	34
Pneumonia.....	17
Scarlet fever:	
East Livermore.....	10
Portland.....	12
Scattering.....	19
Smallpox:	
Coplin Plantation.....	6
Scattering.....	7
Tuberculosis.....	4
Typhoid fever:	
Ashland.....	4
Scattering.....	6
Whooping cough.....	31

MARYLAND. ¹		NEW JERSEY.	
	Cases.		Cases.
Cerebrospinal meningitis.....	2	Influenza.....	9,603
Chicken pox.....	69	Pneumonia.....	1,233
Diphtheria.....	54	NEW MEXICO.	
Erysipelas.....	7	Chicken pox.....	8
Influenza.....	4,935	Diphtheria.....	5
Measles.....	252	German measles.....	1
Mumps.....	18	Influenza.....	1,576
Pneumonia (all forms).....	352	Malaria.....	1
Poliomyelitis.....	1	Measles.....	35
Scarlet fever.....	92	Mumps.....	17
Smallpox.....	3	Pneumonia.....	71
Tuberculosis.....	55	Scarlet fever.....	8
Typhoid fever.....	4	Septic sore throat.....	2
Whooping cough.....	42	Smallpox:	
		San Juna County.....	7
MINNESOTA.		Scattering.....	20
Smallpox:		Tuberculosis.....	25
Becker County—		Typhoid fever.....	2
Lake Eunice Township.....	4	Whooping cough.....	13
Stearns County—		NEW YORK.	
Fairhaven Township.....	11	(Exclusive of New York City.)	
Scattering.....	27	Cerebrospinal meningitis:	
MONTANA.		Kingston.....	1
Diphtheria.....	6	Diphtheria.....	64
Influenza.....	1,847	Influenza.....	11,616
Pneumonia.....	18	Measles.....	840
Scarlet fever.....	23	Pneumonia.....	1,203
Smallpox.....	23	Scarlet fever.....	213
NEBRASKA.		Smallpox:	
Cerebrospinal meningitis:		Buffalo.....	7
Clarkson.....	2	Scattering.....	2
Chicken pox.....	12	Typhoid fever.....	13
Diphtheria:		Whooping cough.....	196
Lincoln.....	5	NORTH CAROLINA.	
Omaha.....	6	Cerebrospinal meningitis.....	1
Scattering.....	8	Chicken pox.....	103
Influenza.....	3,998	Diphtheria.....	33
Measles.....	7	German measles.....	2
Mumps.....	5	Measles.....	75
Pneumonia.....	6	Pneumonia (all forms).....	205
Scarlet fever:		Poliomyelitis.....	1
Atkinson.....	7	Scarlet fever.....	30
Bayard.....	4	Septic sore throat.....	3
Callaway.....	6	Smallpox.....	108
Cozad.....	4	Typhoid fever.....	4
Decatur.....	5	Whooping cough.....	105
Geneva.....	6	OHIO.	
Lincoln.....	5	Diphtheria:	
Omaha.....	19	Akron.....	8
Pawnee City.....	5	Columbus.....	22
Scattering.....	12	Scarlet fever:	
Smallpox:		Akron.....	83
Alliance.....	10	Cincinnati.....	65
Chappell.....	8	Columbus.....	47
Lincoln.....	14	Larue.....	8
Lodge Pole.....	4	Mahoning County—	
Morrill.....	5	Beaver Township.....	13
Omaha.....	13	Norwood.....	9
Sidney.....	7	Summit County—	
York.....	5	Springfield Township.....	9
Scattering.....	21	Smallpox:	
Tuberculosis.....	15	Akron.....	13
Typhoid fever.....	1	East Youngstown.....	17
Whooping cough.....	34		

¹ For week ended Feb. 6.

OHIO—continued.

Smallpox—Continued.		Cases.
Miami County—		
Newberry Township.....	11	
Piqua.....	6	
Portsmouth.....	15	
VERMONT.		
Chicken pox.....	22	
Diphtheria.....	2	
Influenza.....	272	
Measles.....	154	
Mumps.....	211	
Pneumonia.....	24	
Scarlet fever.....	20	
Typhoid fever.....	1	
Whooping cough.....	58	
VIRGINIA.		
Influenza:		
Charlottesville.....	52	
Danville.....	62	
Harrisonburg.....	72	
Lynchburg.....	39	
Norfolk.....	71	
Portsmouth.....	81	
Pneumonia.....	6	
Smallpox:		
Bedford County.....	1	
Bland County.....	4	
Rockingham County, several.		
WEST VIRGINIA.		
Diphtheria.....	17	
Measles:		
Wheeling.....	14	
Scattering.....	7	

WEST VIRGINIA—continued.

Scarlet fever:		Cases.
Grafton.....		5
Scattering.....		9
Smallpox:		
Bluefield.....		15
Scattering.....		7
Typhoid fever.....		13
WISCONSIN.		
Milwaukee:		
Cerebrospinal meningitis.....		5
Chicken pox.....		25
Diphtheria.....		25
Influenza.....		421
Measles.....		31
Scarlet fever.....		17
Smallpox.....		18
Tuberculosis.....		27
Typhoid fever.....		1
Whooping cough.....		34
Scattering:		
Cerebrospinal meningitis.....		5
Chicken pox.....		58
Diphtheria.....		22
Erysipelas.....		4
Influenza.....		13,907
Measles.....		314
Scarlet fever.....		79
Smallpox.....		223
Tuberculosis.....		9
Typhoid fever.....		3
Whooping cough.....		95

ANTHRAX.

City Reports for Week Ended Jan. 24, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Binghamton, N. Y.....	1		New York, N. Y.....		
Camden, N. J.....	1		Philadelphia, Pa.....	2	1
New Orleans, La.....	1			1	

CEREBROSPINAL MENINGITIS.

City Reports for Week Ended Jan. 24, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	2		Mankato, Minn.....	1	
Baltimore, Md.....	1	1	Milwaukee, Wis.....	1	
Birmingham, Ala.....	1		New Orleans, La.....	1	1
Butte, Mont.....	1		New York, N. Y.....	4	2
Chicago, Ill.....	4	3	North Adams, Mass.....	1	
Columbus, Ohio.....	1		Orange, N. J.....	1	1
Fall River, Mass.....	1		Providence, R. I.....	1	
Gary, Ind.....		1	St. Louis, Mo.....	1	1
Grand Rapids, Mich.....	1		St. Paul, Minn.....	1	
Greenwich, Conn.....	1	1	San Francisco, Calif.....		2
Harrison, N. J.....	1		Savannah, Ga.....		2
Huntington, Ind.....	1	1	Springfield, Mass.....	2	
Kansas City, Mo.....	1	2	Staunton, Va.....	1	
Louisville, Ky.....	1	1	West New York, N. Y.....		1
Lynn, Mass.....	1	1			

DIPHTHERIA.

See Telegraphic weekly reports from States, p. 351, and Weekly reports from cities, p. 366.

INFLUENZA.¹

City Reports for Weeks Ended Jan. 17, 24, and 31, and Feb. 7, 1920.

Place.	Cases week ended—				Deaths week ended—			
	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Akron, Ohio		19	120					
Alameda, Calif.	32	85	170		3	1	7	
Alexandria, Va.	6	88	65	26				
Alliance, Ohio		2	16	54				
Alpena, Mich		5	4					
Alton, Ill.	1	13	272	428		1		11
Anaconda, Mont			45					
Anderson, Ind.			25				1	
Ann Arbor, Mich		33	267	152		1	3	1
Anniston, Ala.	1		30	69				
Ansonia, Conn			97	363				1
Appleton, Wis		21	90					
Arlington, Mass		3	52	68			1	1
Asbury Park, N. J.		2	20	23				
Ashland, Ky.		5	28	131				
Ashtabula, Ohio		18	117				1	
Atchison, Kans		15						
Atlanta, Ga.	11	20	242	1,868	1		1	16
Atlantic City, N. J.		28	50			1	1	
Attleboro, Mass		8	46					
Auburn, Me.		2	6	24				
Auburn, N. Y.	1		5					
Austin, Tex							1	
Baltimore, Md.	17	161	1,651	3,412	1		14	44
Barberton, Ohio		7	2		1			1
Baton Rouge, La.		2	1			2	1	
Battle Creek, Mich	1			111				
Bayonne, N. J.	1	50	168	108				
Beaumont, Tex		3						1
Bedford, Ind.			4	4				
Belleville, N. J.	3	41						
Beloit, Wis	3	100	226					
Benton Harbor, Mich		24	200	150				
Berkeley, Calif.	9	117	326		2	3	7	
Beverly, Mass		2	14	55				1
Billings, Mont		3	101	53				
Binghamton, N. Y.		9						
Birmingham, Ala		2	47		1	2	4	11
Bloomfield, N. J.		16	21	11		1	1	
Bloomington, Ill.		9	33	201			2	
Bluefield, W. Va.	1		25	100				
Boise, Idaho	127	268	153					
Boston, Mass	23	174	1,003			2	25	
Brazil, Ind.		6	1	2				
Bridgeport, Conn		8	406				7	
Bristol, Conn		5	45	95			1	1
Brookline, Mass			54	46				3
Brockton, Mass		2		60				
Brunswick, Ga.			8	18				
Buffalo, N. Y.	1	49	470			2	8	
Burlington, Iowa		25	95	83		1		1
Burlington, Vt.			2	1				
Butler, Pa.			28	77				
Butte, Mont			18	112				2
Cairo, Ill.		1	14					
Cambridge, Mass	2	32	256	501			2	4
Camden, N. J.	1	8						
Cape Girardeau, Mo.		12	151					
Canton, Ill.							2	
Canton, Ohio				398			15	19
Cedar Rapids, Iowa		23	142	97			1	
Centralia, Ill.		7	92	107				
Chanute, Kans			16					
Charleston, S. C.		2	219	826			1	2
Charleston, W. Va.		2	(0)	340	921			
Charlotte, N. C.		2	102	237		1		4
Chattanooga, Tenn		9	57	170		1	1	1
Chelsea, Mass		27	107	148			1	5
Cheyenne, Wyo	18	5	4				2	

INFLUENZA—Continued.

City Reports for Weeks Ended Jan. 17, 24, and 31, and Feb. 7, 1920—Continued.

Place.	Cases week ended—				Deaths week ended—			
	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Chicago Heights, Ill.	58							
Chicago, Ill.	1,027	10,712	9,955	4,641	21	200	586	560
Chicopee, Mass.			3	4				
Chillicothe, Ohio.			8					
Cincinnati, Ohio.	3	16	105	388	1	1	1	19
Cleveland, Ohio.	5	50	1,084	2,243	1	4	16	79
Coffeyville, Kans.			8	33				
Cohoes, N. Y.			73	245		1	1	
Colorado Springs, Colo.	3		378					
Columbia, S. C.		2	101	313				
Columbus, Ga.	1	1	10	152				
Columbus, Ohio.		24			2	1		
Cortland, N. Y.		7	29					
Council Bluffs, Iowa.		6	1	47	1	1	1	8
Covington, Ky.		7	15	101			2	
Cranston, R. I.	2	2	15			1		
Cumberland, Md.		19	112	423				2
Dallas, Tex.	31	466	1,569		1	1	14	
Danbury, Conn.			152	254				
Danville, Ill.		16	1,000					
Danville, Va.			1	61	298		1	
Davenport, Iowa.	4	73	310	132		1	1	
Dayton, Ohio.		20	25	19		2	10	13
Decatur, Ill.	2	32	460				5	
Dedham, Mass.		5	1					
Denver, Colo.						1	19	74
Des Moines, Iowa.	3	42	18					
Detroit, Mich.	34	2,473	6,922			9	134	
Dover, N. H.			5	13				
Duluth, Minn.		6	324	425			2	18
East Chicago, Ind.			1			1	4	
Easthampton, Mass.							2	3
East Orange, N. J.	1	26	293	169				
East Providence, R. I.			1					
East St. Louis, Ill.		124	476			2	6	
Eau Claire, Wis.		6						
Elgin, Ill.	46	28	101	6				1
Elkhart, Ind.	11		82	32			2	
El Paso, Tex.			1			1		3
Englewood, N. J.		3	34	14			1	
Erie, Pa.			401	2,587			1	29
Eureka, Calif.		1						
Evanston, Ill.	12	300	187	67				
Everett, Mass.		16	119	117				
Fairmount, W. Va.		4	39	178				
Fall River, Mass.		7	34	185				2
Fargo, N. Dak.		413	649			4	18	
Findlay, Ohio.			24					
Flint, Mich.	1		569					
Fond du Lac, Wis.			89				3	
Fort Dodge, Iowa.	4		12					
Fort Scott, Kans.			2					
Fort Smith, Ark.			521					
Fort Wayne, Ind.						1		
Fort Worth, Tex.							3	
Fostoria, Ohio.			12	40				
Framingham, Mass.			15	51				
Freeport, Ill.	63					18	118	
Fremont, Nebr.						1		
Fremont, Ohio.			12	4				
Fresno, Calif.					2			
Galesburg, Ill.		26		101			1	
Galveston, Tex.			71	274				1
Gardner, Mass.		2						1
Gary, Ind.								
Grand Rapids, Mich.	2	26	301				12	7
Granite City, Ill.		22		116				1
Great Falls, Mont.		6	10	48			1	
Green Bay, Wis.		23	36					
Greenfield, Mass.		2	30	108				
Greenwich, Conn.		60	131	127			2	1
Hackensack, N. J.		9	175	118				
Hammond, Ind.		2	3		7		2	
Harrison, N. J.								

¹ Including pneumonia.

INFLUENZA—Continued.

City Reports for Weeks Ended Jan. 17, 24, 31, and Feb. 7, 1920—Continued.

Place.	Cases week ended—				Deaths week ended—			
	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Hartford, Conn.		35	550	602		1	4	22
Haverhill, Mass.	5	21	129	380		1	1	8
Hibbing, Minn.		70						
Hoboken, N. J.		1	49				2	
Holland, Mich.	1	2	24	16				
Holyoke, Mass.		4	29	37			1	
Hot Springs, Ark.		8	30	135				
Houston, Tex.		8				3		
Huntington, Ind.		71	30					1
Huntington, W. Va.			10	626				
Hutchinson, Kans.		16	50	40				
Indianapolis, Ind.	1		481				6	
Ironwood, Mich.		2	5					
Irvington, N. J.		69						
Ishpeming, Mich.			1					
Ithaca, N. Y.		2	51	248			2	
Jacksonville, Ill.	1	1	130	251				1
Jamestown, N. Y.		38	573					
Janesville, Wis.		20	136				3	
Jersey City, N. J.	7	93	766					
Joplin, Mo.		5	20	185				
Kalamazoo, Mich.	5	106		283				4
Kankakee, Ill.		8	34					
Kansas City, Kans.	2	101	745	722			3	
Kansas City, Mo.	9	408	1,354	720	3	43	72	32
Kearny, N. J.	10	46	175	147		1	1	
Keene, N. H.			10					
Kenosha, Wis.	16	106	308					
Knoxville, Tenn.			431					
Lackawanna, N. Y.		2		103				1
La Crosse, Wis.		13	230					
La Fayette, Ind.	1	5	13	56			1	1
Lancaster, Pa.			20	123				
La Salle, Ill.		8	141					
Lawrence, Kans.	9	27	39					
Lawrence, Mass.	3	8	47	109				1
Leavenworth, Kans.			17					
Leominster, Mass.		1	15	33				
Lexington, Ky.			3	44				
Lincoln, Nebr.	10	76				1		
Lincoln, R. I.		1	8	16				1
Little Rock, Ark.	3	41	150					
Lockport, N. Y.			22	136				
Long Beach, Calif.	1	4	53					
Lorain, Ohio.		4	103	200			2	2
Los Angeles, Calif.	9	93	675			1	8	
Louisville, Ky.	3	32	220	492			2	7
Lowell, Mass.		12	70	214			1	
Lynchburg, Va.			33	207			1	1
Lynn, Mass.	1	10	133				1	
McKeesport, Pa.					2			
Macon, Ga.		11						
Madison, Wis.		37	336				14	
Malden, Mass.			154			1		
Manchester, Conn.		31	148				2	
Manchester, N. H.			64				1	
Manitowoc, Wis.		21	170					
Mankato, Minn.			6			1	2	14
Marinette, Wis.	13	113						
Marion, Ind.			19	60				
Marion, Ohio.		17	61	14				
Marlboro, Mass.			7					
Marquette, Mich.	3		67					
Martins Ferry, Ohio.			1	12				
Mason City, Iowa		2						
Mattoon, Ill.			45	82				
Melrose, Mass.			31	52			1	
Memphis, Tenn.		78	753	1,333	1		1	7
Meriden, Conn.	1	118	158	150	1			2
Methuen, Mass.		7	22	46				
Middletown, N. Y.	3	15		89			2	
Middletown, Ohio.								
Milwaukee, Wis.	91	1,085	796		1			
Minneapolis, Minn.		83	2,074		3	2	46	
Mishawaka, Ind.		2	1	125			5	2
Missoula, Mont.			70					1

¹ Including pneumonia.

INFLUENZA—Continued.

City Reports for Weeks Ended Jan. 17, 24, 31, and Feb. 7, 1920—Continued.

Place.	Cases week ended—				Deaths week ended—			
	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Mobile, Ala.		1	8	302			1	4
Monroe, La.			6					
Montgomery, Ala.						1		
Morgantown, W. Va.	2	4	50	347				
Morristown, N. J.	3	5	50	66				1
Moundsville, W. Va.	233	284	102					
Mount Vernon, N. Y.	1	104	20	280		1	5	2
Muncie, Ind.		1	20	43		1		
Muscatine, Iowa			14				1	
Nanticoke, Pa.		1						
Nashua, N. H.			75					
Nashville, Tenn.		1	15	29	3	2	2	2
New Bedford, Mass.		8	8	170				
New Britain, Conn.		32	357	659		1	1	3
New Brunswick, N. J.		21	160	165				
Newburgh, N. Y.			9					
Newburyport, Mass.		1	12	43				
New Haven, Conn.		37	242	278		1	8	11
New Orleans, La.		9	246	502		4	9	4
Newport, R. I.			64	585				
Newton, Mass.		9	83	152				1
New York, N. Y.	384	5,690	30,456	21,388	18	116	557	965
Niagara Falls, N. Y.		12						
Norfolk, Va.		49	280	602		1	2	1
Northampton, Mass.			15	53				1
North Little Rock, Ark.			36					
Northport, Ala.		19						
North Tonawanda, N. Y.			30	127				
Norwalk, Conn.		2	22	20			2	
Norwich, Conn.		6	176	59			3	
Norwood, Ohio			1	16				
Oakland, Calif.	21	89	438		2	3	12	
Oak Park, Ill.	46	206	129	41		1		
Ogden, Utah			312				3	
Oklahoma City, Okla.	2	296	724	264		1	4	8
Omaha, Nebr.	2	103	400	144	1	1	12	30
Orange, N. J.		11	120	131				4
Oshkosh, Wis.		94	265					
Paducah, Ky.		9	24					
Parkersburg, W. Va.		8	40	146				2
Parsons, Kans.		14	32	113				
Pasadena, Calif.		15	107					
Passaic, N. J.		24	216				1	
Paterson, N. J.		22	270	296				
Pawtucket, R. I.			26				1	
Pekin, Ill.	1	50						
Pecoria, Ill.		24	320	333		1		
Perth Amboy, N. J.		7	90				1	
Petersburg, Va.		7	80	182				
Philadelphia, Pa.	5	29	1,321	2,627	5	3	16	107
Pine Bluff, Ark.	1	2	35	127				8
Pittsfield, Mass.		22	120	181				
Plainfield, N. J.	21	149				1		
Pocatello, Idaho	2							
Pontiac, Mich.		39	300	308				
Port Chester, N. Y.	1	6	51					
Port Huron, Mich.		1	206			2	1	
Portland, Me.	6	50	294	545		1	1	7
Portland, Oreg.			215				2	
Portsmouth, N. H.		1	17	49				
Portsmouth, Ohio			197				1	
Portsmouth, Va.		10						
Poughkeepsie, N. Y.	2	50	200	52	1	2	2	3
Providence, R. I.	2	91	574	1,488		1	2	13
Pueblo, Colo.						1	1	1
Quincy, Mass.	1	1	86	84			1	
Racine, Wis.	4	105	202					
Railway, N. J.			18					
Raleigh, N. C.		9	526	689				
Reading, Pa.			375				2	
Red Wing, Minn.			28					
Reno, Nev.		2	6	59				
Richmond, Ind.		1	24	49				1
Richmond, Va.	11	210	1,866	2,516			10	23
Riverside, Calif.			3	65				

INFLUENZA—Continued.

City Reports for Weeks Ended Jan. 17, 24, and 31, and Feb. 7, 1920—Continued.

Place.	Cases week ended—				Deaths week ended—			
	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.
Roanoke, Va.	2							
Rochester, N. Y.	3	41	1,217	1,357			9	25
Rock Island, Ill.		45	165					
Rocky Mount, N. C.		10	100	250				
Rome, Ga.		2	17	148				
Rome, N. Y.		6	58					
Sacramento, Calif.		63	222	271			8	5
St. Cloud, Minn.		3	57					
St. Joseph, Mo.		6	219	884		1	2	4
St. Paul, Minn.	14	311	1,071			12	55	
Salem, Oreg.	1							
Salem, Mass.			13					
Salt Lake City, Utah.		76	1,233	1,288			6	48
Sandusky, Ohio.			62	101				
San Diego, Calif.		12						
Sanford, Me.		3	52					
San Francisco, Calif.		186	789		5	16	27	
Santa Ana, Calif.		1						
Santa Barbara, Calif.		32	110				1	
Saratoga Springs, N. Y.	4	3	49				1	
Saugus, Mass.	2	14				1		
Savannah, Ga.		2	24				1	
Schenectady, N. Y.		4	38				3	
Seattle, Wash.		1						
Sioux Falls, S. Dak.		4	253	286			1	5
Somerville, Mass.	1		161	396			5	
South Bend, Ind.				25			5	
Southbridge, Mass.		1	6					
Spartanburg, S. C.		57	153				4	
Springfield, Ill.	1	7	56					
Springfield, Mass.		4	36	183			1	4
Springfield, Mo.							1	
Springfield, Ohio		21	139					
Staunton, Va.	1	8	67	122				
Steelton, Pa.			4	45			1	
Steubenville, Ohio.			5	4				
Stockton, Calif.	9	31	115	212		1	3	
Syracuse, N. Y.		130	474	62		1	8	32
Taunton, Mass.		1	11	34				4
Terre Haute, Ind.		2	4	34				
Tiffin, Ohio.			33	56				
Toledo, Ohio.		62	235	299		2	7	19
Topeka, Kans.		8	194				1	
Traverse City, Mich.		2	17					
Trenton, N. J.	5	24	286	380			2	5
Trinidad, Colo.			16					
Troy, N. Y.		1	60					
Tuscaloosa, Ala.			60					
Tyler, Tex.			71					
Virginia, Minn.			26					
Waco, Tex.		24	63					
Waltham, Mass.		56		290				2
Washington, D. C.	126	1,216	1,616	557	2	28	77	62
Watertown, Mass.			32	35				
Watertown, N. Y.			9	154				
Wausau, Wis.	8		115	346				
Webster, Mass.			7					
West Hoboken, N. J.		14		91				2
West New York, N. J.		8	19	5			15	1
West Orange, N. J.	3	28	114				2	
Wheeling, W. Va.		10	27	82				1
White Plains, N. Y.	1	36	231				1	
Wichita, Kans.	2	19	214				2	
Wilkes-Barre, Pa.						1	2	10
Wilmington, N. C.			54	41		1		
Winona, Minn.	2	18	15				1	
Winston-Salem, N. C.					1,810	1	2	7
Winthrop, Mass.			55	73				2
Worcester, Mass.	2	30	206	463			4	7
Yonkers, N. Y.	2	21	148	55	2	1	1	6

¹ Including pneumonia.

LEPROSY.

Boston, Mass., and Houston, Tex.

During the week ended January 24, 1920, one case of leprosy was reported at Boston, Mass., and one at Houston, Tex.

LETHARGIC ENCEPHALITIS.

City Reports for Week Ended Jan. 24, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Grand Rapids, Mich.....	1	1	San Francisco, Calif.....	2	2
Plainfield, N. J.....		1	Yonkers, N. Y.....	1	1

MALARIA.

City Reports for Week Ended Jan. 24, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	1		Savannah, Ga.....	1	
Dallas, Tex.....	12		Sioux Falls, S. Dak.....	1	
Newark, N. J.....	1		Stockton, Calif.....	1	
Pine Bluff, Ark.....	2		Tuscaloosa, Ala.....	1	

MEASLES.

See Telegraphic weekly reports from States, p. 351, and Weekly reports from cities, p. 366.

PELLAGRA.

City Reports for Week Ended Jan. 24, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....		2	Nashville, Tenn.....		1
Dallas, Tex.....	1		Raleigh, N. C.....		1
Montgomery, Ala.....	2				

PLAQUE (RODENT).

New Orleans, La.

The table below gives a record of rodent cases of plague at New Orleans, La., from January 23 to February 6, and is a continuation of the table printed on page 240 of the Public Health Reports dated January 30, 1920.

No case of human plague in New Orleans has been confirmed since December 30, 1919.

PLAGUE (RODENT)—Continued.

Rodent cases of plague, New Orleans, La.

Date confirmed.	Mus Alex- andri- nus and mus rattus.	Mus museu- lus.	Mus Norve- gicus.	Total rodents plague in- fected.
1920.				
Jan. 23.....	4		2	6
Jan. 24.....	4		4	8
Jan. 25.....	2			2
Jan. 26.....	1	2	2	5
Jan. 27.....	2		3	5
Jan. 28.....	1		2	3
Jan. 29.....				
Jan. 30.....	1		3	4
Jan. 31.....		1	1	2
Feb. 1.....			1	1
Feb. 2.....			1	1
Feb. 3.....		2	2	4
Feb. 4.....			1	1
Feb. 5.....				
Feb. 6.....			1	1

PNEUMONIA (ALL FORMS).

City Reports for Week Ended Jan. 24, 1920.

Place.	Cases.	Dcaths.	Place.	Cases.	Deaths.
Adams, Mass.....	1		Chelsea, Mass.....	1	1
Akron, Ohio.....	10		Chicago Heights, Ill.....		1
Alliance, Ohio.....		1	Chicago, Ill.....	1,502	272
Alpena, Mich.....	1		Cincinnati, Ohio.....		16
Alton, Ill.....	1		Cleveland, Ohio.....	65	22
Amesbury, Mass.....	1		Cohoes, N. Y.....	6	2
Anaconda, Mont.....	1		Colorado Springs, Colo.....		1
Ann Arbor, Mich.....	2	1	Columbus, Ga.....	4	1
Annis ton, Ala.....	1		Columbus, Ohio.....		6
Ansonia, Conn.....	1		Concord, N. H.....		1
Ashland, Ky.....	3		Cortland, N. Y.....	1	
Atlanta, Ga.....	4	10	Covington, Ky.....	3	4
Attleboro, Mass.....		1	Cumberland, Md.....	3	1
Aurora, Ill.....	9		Dallas, Tex.....	17	5
Baltimore, Md.....	100	24	Danville, Ill.....		2
Barberton, Ohio.....		1	Dayton, Ohio.....	11	11
Baton Rouge, La.....	1	1	Dedham, Mass.....		2
Bayonne, N. J.....	2		Denver, Colo.....		23
Beaumont, Tex.....		2	Detroit, Mich.....	162	80
Belleville, N. J.....	1		Dover, N. H.....	1	
Berkley, Calif.....	4	3	Duluth, Minn.....		6
Binghamton, N. Y.....	4	2	East Orange, N. J.....	9	1
Birmingham, Ala.....	6		East St. Louis, Ill.....		3
Bloomfield, N. J.....	7	1	Elgin, Ill.....	5	10
Bloomington, Ill.....			Elizabeth, N. J.....	12	4
Boston, Mass.....	64	43	Elkhart, Ind.....	4	2
Brazil, Ind.....	1	1	El Paso, Tex.....		10
Bridgeport, Conn.....		8	Englewood, N. J.....	1	
Bristol, Conn.....	3		Evanston, Ill.....	2	
Brockton, Mass.....	2		Everett, Mass.....	4	3
Brookline, Mass.....	3	1	Fall River, Mass.....	7	5
Brunswick, Ga.....	1	1	Findlay, Ohio.....	1	1
Buffalo, N. Y.....	18	17	Flint, Mich.....	6	7
Burlington, Iowa.....		1	Fort Dodge, Iowa.....		1
Burlington, Vt.....		2	Fort Wayne, Ind.....		5
Butte, Mont.....		1	Fort Worth, Tex.....	8	8
Cadillac, Mich.....	2		Galesburg, Ill.....		2
Cairo, Ill.....		1	Galveston, Tex.....		1
Cambridge, Mass.....	15	8	Gardner, Mass.....	1	2
Camden, N. J.....	3		Gary, Ind.....		15
Centralia, Ill.....	1		Glens Falls, N. Y.....		1
Charleston, S. C.....		6	Grand Rapids, Mich.....	3	1
Charleston, W. Va.....	1		Granite City, Ill.....		1
Charlotte, N. C.....	2	1	Great Falls, Mont.....	3	3
Chattanooga, Tenn.....		3	Greenwich, Conn.....	3	

PNEUMONIA (ALL FORMS)—Continued.

City Reports for Week Ended Jan. 24, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Hackensack, N. J.	13	3	Norwich, Conn.	1	1
Harrison, N. J.	2	—	Norwood, Ohio	1	—
Hartford, Conn.	1	7	Oakland, Calif.	—	17
Haverhill, Mass.	9	2	Oklahoma City, Okla.	9	5
Hoboken, N. J.	2	6	Olean, N. Y.	—	1
Holyoke, Mass.	3	4	Omaha, Nebr.	—	12
Houston, Tex.	—	5	Orange, N. J.	2	4
Huntington, W. Va.	—	2	Paducah, Ky.	—	—
Hutchinson, Kans.	1	—	Parkersburg, W. Va.	2	—
Ironwood, Mich.	2	—	Pasadena, Calif.	7	1
Irvington, N. J.	4	2	Passaic, N. J.	2	5
Ishpeming, Mich.	1	—	Pawtucket, R. I.	—	5
Ithaca, N. Y.	7	2	Peoria, Ill.	—	1
Jacksonville, Ill.	—	2	Perth Amboy, N. J.	—	1
Jamestown, N. Y.	2	—	Petersburg, Va.	—	1
Jersey City, N. J.	16	—	Philadelphia, Pa.	166	105
Kalamazoo, Mich.	17	2	Pine Bluff, Ark.	4	—
Kansas City, Kans.	11	—	Piqua, Ohio	—	1
Kansas City, Mo.	125	56	Pittsfield, Mass.	—	1
Kearny, N. J.	3	—	Plainfield, N. J.	24	5
Keene, N. H.	1	2	Plattsburg, N. Y.	—	1
Kokomo, Ind.	—	1	Plymouth, Mass.	—	1
Lackawanna, N. Y.	5	1	Pontiac, Mich.	7	2
La Fayette, Ind.	1	1	Port Chester, N. Y.	3	—
Lancaster, Ohio	1	1	Port Huron, Mich.	3	1
La Salle, Ill.	1	—	Portland, Me.	7	—
Lawrence, Kans.	1	1	Portland, Oreg.	—	9
Leominster, Mass.	1	—	Portsmouth, Va.	3	5
Lexington, Ky.	1	2	Poughkeepsie, N. Y.	22	3
Lima, Ohio	1	1	Providence, R. I.	—	7
Lincoln, Nebr.	—	2	Pueblo, Colo.	—	6
Little Rock, Ark.	6	—	Quincy, Ill.	—	1
Lockport, N. Y.	1	—	Quincy, Mass.	3	1
Logansport, Ind.	—	1	Richmond, Va.	4	8
Long Beach, Calif.	3	—	Riverside, Calif.	5	2
Long Branch, N. J.	—	1	Rochester, N. Y.	27	11
Louisville, Ky.	30	9	Rockford, Ill.	73	21
Lowell, Mass.	5	2	Rock Island, Ill.	7	2
Lynchburg, Va.	—	4	Rocky Mount, N. C.	—	1
Lynn, Mass.	8	6	Rome, Ga.	1	—
Macon, Ga.	1	3	Rome, N. Y.	2	—
Malden, Mass.	—	2	Sacramento, Calif.	6	7
Manchester, Conn.	1	—	Saginaw, Mich.	6	2
Manchester, N. H.	3	3	St. Paul, Minn.	3	13
Marion, Ind.	1	—	Salem, Mass.	4	3
Marion, Ohio	1	—	Salt Lake City, Utah	—	7
Marquette, Mich.	1	—	San Diego, Calif.	5	6
Martins Ferry, Ohio	1	1	Sandusky, Ohio	2	—
Mason City, Iowa	—	1	San Francisco, Calif.	51	18
Melrose, Mass.	—	1	Santa Barbara, Calif.	4	—
Meriden, Conn.	1	—	Saratoga Springs, N. Y.	3	2
Methuen, Mass.	1	—	Schenectady, N. Y.	3	2
Middletown, Ohio	—	2	Sioux Falls, S. Dak.	—	3
Milwaukee, Wis.	34	—	Somerville, Mass.	17	1
Minneapolis, Minn.	7	—	South Bend, Ind.	17	—
Mishawaka, Ind.	1	2	Southbridge, Mass.	3	—
Mobile, Ala.	—	3	Spartanburg, S. C.	4	4
Montgomery, Ala.	1	—	Springfield, Ill.	—	4
Morrantown, W. Va.	—	1	Springfield, Mass.	6	1
Morristown, N. J.	—	1	Springfield, Mo.	—	1
Moundsville, W. Va.	1	—	Springfield, Ohio	—	1
Mount Vernon, N. Y.	15	2	Stockton, Calif.	2	3
Nashville, Tenn.	4	4	Syracuse, N. Y.	19	9
Newark, N. J.	125	20	Taunton, Mass.	—	2
New Bedford, Mass.	2	11	Terre Haute, Ind.	—	5
New Britain, Conn.	1	1	Toledo, Ohio	—	7
New Brunswick, N. J.	5	—	Topeka, Kans.	4	4
New Castle, Ind.	1	—	Trenton, N. J.	10	5
New Haven, Conn.	—	9	Troy, N. Y.	4	2
New Orleans, La.	—	23	Vallejo, Calif.	—	1
Newton, Mass.	7	2	Waco, Tex.	1	3
New York, N. Y.	1,044	403	Waltham, Mass.	2	2
Niagara Falls, N. Y.	6	—	Washington, D. C.	—	53
Norfolk, Va.	4	1	Watertown, Mass.	—	1
North Adams, Mass.	2	—	Watertown, N. Y.	5	—
Northampton, Mass.	1	—	Wausau, Wis.	1	1
North Attleboro, Mass.	2	1	Webster, Mass.	3	1
North Little Rock, Ark.	1	—	Westfield, Mass.	2	1
North Tonawanda, N. Y.	1	1	West Hoboken, N. J.	—	2

PNEUMONIA (ALL FORMS)—Continued.**City Reports for Week Ended Jan. 24, 1920—Continued.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
West New York, N. J.	2	2	Wilmington, N. C.	2	2
West Orange, N. J.	1	—	Winston-Salem, N. C.	10	4
Wheeling, W. Va.	1	4	Winthrop, Mass.	2	—
White Plains, N. Y.	9	3	Worcester, Mass.	13	8
Wichita, Kans.	3	2	Yonkers, N. Y.	4	4
Wilmington, Del.	—	8	Youngstown, Ohio	—	6

POLIOMYELITIS (INFANTILE PARALYSIS).**Ashtabula, Ohio, and Kansas City, Kans.**

During the week ended January 24, 1920, one case of poliomyelitis was reported at Ashtabula, Ohio, and one at Kansas City, Kans.

RABIES IN ANIMALS.**Detroit, Mich., and Kansas City, Mo.**

During the week ended January 24, 1920, one case of rabies in animals was reported at Detroit, Mich., and two cases were reported at Kansas City, Mo.

RABIES IN MAN.**Houston, Tex., and Springfield, Mo.**

During the week ended January 24, 1920, there were reported one death from rabies at Houston, Tex., and one at Springfield, Mo.

SCARLET FEVER.

See Telegraphic weekly reports from States, p. 351, and Weekly reports from cities, p. 366.

SMALLPOX.**City Reports for Week Ended Jan. 24, 1920.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	6	—	Denver, Colo.	49	—
Alameda, Calif.	3	—	Detroit, Mich.	9	—
Alton, Ill.	1	—	Dubuque, Iowa	6	—
Appleton, Wis.	3	—	Duluth, Minn.	1	—
Atlanta, Ga.	2	—	East Cleveland, Ohio	1	—
Auburn, Me.	1	—	Eau Claire, Wis.	1	—
Beatrice, Nebr.	1	—	Eugene, Oreg.	2	—
Bellingham, Wash.	7	—	Eureka, Calif.	2	—
Birmingham, Ala.	14	—	Fargo, N. Dak.	1	—
Bloomfield, N. J.	1	—	Flint, Mich.	2	—
Bluefield, W. Va.	4	—	Fond du Lac, Wis.	9	—
Boise, Idaho	9	—	Fort Smith, Ark.	1	—
Buffalo, N. Y.	2	—	Fort Wayne, Ind.	1	—
Cape Girardeau, Mo.	6	—	Fort Worth, Tex.	5	—
Cedar Rapids, Iowa	2	—	Galesburg, Ill.	6	—
Charleston, S. C.	1	—	Gary, Ind.	1	—
Cheyenne, Wyo.	1	—	Great Falls, Mont.	2	—
Chillicothe, Ohio	1	—	Green Bay, Wis.	32	—
Cincinnati, Ohio	1	—	Hoquiam, Wash.	5	—
Columbus, Ga.	2	—	Hot Springs, Ark.	1	—
Dallas, Tex.	45	—	Houston, Tex.	4	—
Danville, Ill.	3	—	Huntington, Ind.	1	—
Davenport, Iowa	25	—	Huntington, W. Va.	2	—

SMALLPOX—Continued.**City Reports for Week Ended Jan. 24, 1920—Continued.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Indianapolis, Ind.	8		Philadelphia, Pa.	3	
Ironton, Ohio	1		Pine Bluff, Ark.	2	
Ironwood, Mich.	3		Piqua, Ohio	4	
Jacksonville, Ill.	1		Pontiac, Mich.	4	
Janesville, Wis.	2		Portland, Oreg.	74	
Kalamazoo, Mich.	3		Pueblo, Colo.	2	
Kansas City, Kans.	2		Quincy, Ill.	3	
Kansas City, Mo.	14	1	Rochester, N. Y.	1	
Kenosha, Wis.	7		Rock Island, Ill.	5	
Knoxville, Tenn.	1		Rocky Mount, N. C.	1	
Kokomo, Ind.	25		Sacramento, Calif.	1	
La Fayette, Ind.	2		St. Cloud, Minn.	3	
Lancaster, Ohio	1		St. Joseph, Mo.	64	2
Laurel, Miss.	1		St. Louis, Mo.	2	
Leavenworth, Kans.	3		St. Paul, Minn.	22	
Lexington, Ky.	1		Salt Lake City, Utah	5	
Lincoln, Nebr.	18		Sandusky, Ohio	1	
Little Rock, Ark.	2		San Francisco, Calif.	12	
Logansport, Ind.	4		Seattle, Wash.	36	
Long Beach, Calif.	5		Sioux City, Iowa	2	
Lynchburg, Va.	1		Sioux Falls, S. Dak.	1	
Madison, Wis.	3		South Bend, Ind.	2	
Manitowoc, Wis.	3		Spartanburg, S. C.	1	
Marion, Ind.	3		Spokane, Wash.	57	
Marion, Ohio	5		Stockton, Calif.	3	
Marshalltown, Iowa	28		Superior, Wis.	13	
Mason City, Iowa	9		Tacoma, Wash.	8	
Meriden, Conn.	1		Topeka, Kans.	2	
Milwaukee, Wis.	5		Traverse City, Mich.	3	
Minneapolis, Minn.	34		Trinidad, Colo.	1	
Mishawaka, Ind.	1		Tuscaloosa, Ala.	1	
Mobile, Ala.	1		Vancouver, Wash.	1	
Monmouth, Ill.	11		Waco, Tex.	6	
Montgomery, Ala.	1		Walla Walla, Wash.	2	
New Orleans, La.	8	2	Wausau, Wis.	1	
Omaha, Nebr.	9		Wilmington, N. C.	3	
Oshkosh, Wis.	2		Winston-Salem, N. C.	1	
Paducah, Ky.	4		Yakima, Wash.	9	
Peoria, Ill.	1		Youngstown, Ohio	5	

Vaccinations on Canadian Border, 1920.

Reports from Public Health Service officers on the Canadian border show that vaccinations were performed at points of entry to the United States from January 18 to February 3, inclusive, as follows:

Vaccinations.

Buffalo	800
Detroit	3,508
Niagara Falls	1,199
Ogdensburg	98
Port Huron	1,075
Sault Ste. Marie	213

TETANUS.**City Reports for Week Ended Jan. 24, 1920.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.	1		Knoxville, Tenn.	1	1
Chattanooga, Tenn.	1	1	Savannah, Ga.		
Cleveland, Ohio	1	1			

TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 351, and Weekly reports from cities. p. 366.

TYPHOID FEVER.

City Reports for Week ended Jan. 24, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		Milwaukee, Wis.	1	1
Alliance, Ohio	1		Minneapolis, Minn.	3	
Baltimore, Md.	6	2	Mobile, Ala.	2	
Berlin, N. H.	2		Montgomery, Ala.	2	
Binghamton, N. Y.	1		New Brunswick, N. J.	1	
Birmingham, Ala.	3	2	New Orleans, La.	1	
Boston, Mass.	2	1	New York, N. Y.	10	
Buffalo, N. Y.	1		Norfolk, Va.	2	
Burlington, Iowa	1		Northampton, Mass.		
Butte, Mont.	2		Oakland, Calif.	1	
Charleston, S. C.		1	Oklahoma City, Okla.	1	
Charleston, W. Va.	2		Parkersburg, W. Va.	3	
Chicago, Ill.	2	1	Philadelphia, Pa.	4	
Cincinnati, Ohio	3		Portland, Me.	2	
Cleveland, Ohio	1		Portland, Ore.	1	
Dallas, Tex.	2		Portsmouth, Va.	1	
Denver, Colo.	1		Quincy, Mass.	1	
Detroit, Mich.	4	3	Riverside, Calif.		1
Englewood, N. J.	1	1	Sacramento, Calif.	1	
Fargo, N. Dak.	1		Saginaw, Mich.	1	
Flint, Mich.	1		St. Louis, Mo.	1	
Houston, Tex.	2		San Francisco, Calif.	3	
Indianapolis, Ind.			Saratoga Springs, N. Y.	1	
Fronton, Ohio	1		Savannah, Ga.	1	
Lackawanna, N. Y.	2		Schenectady, N. Y.	1	
Lancaster, Ohio	1		Seattle, Wash.	1	
Lawrence, Mass.	2		Toledo, Ohio	1	
Lima, Ohio	1		Washington, D. C.	1	
Louisville, Ky.	4		Youngstown, Ohio	1	

TYPHUS FEVER.

Baltimore, Md.—Week Ended Jan. 24, 1920.

During the week ended January 24, 1920, one case of typhus fever was reported at Baltimore, Md.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Jan. 24, 1920.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Aberdeen, S. Dak.	15,926		5				1			
Aberdeen, Wash.	21,392						1			
Adams, Mass.	14,406	2								
Akron, Ohio	93,604		32	4	124		63			
Alameda, Calif.	28,433	13	6	23					2	3
Alexandria, Va.	17,939		1						3	
Alliance, Ohio	19,581	8			9				1	
Alpena, Mich.	13,365				9					
Alton, Ill.	23,783	6			2		1		1	
Amesbury, Mass.	10,200	5								1
Anaconda, Mont.	10,631	5								
Anderson, Ind.	24,230	7								1
Ann Arbor, Mich.	15,041	9	5		5					3
Anniston, Ala.	14,326		1				1		2	
Ansonia, Conn.	16,954		1		12				1	

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

City Reports for Week Ended Jan. 24, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Appleton, Wis.	18,005	—	—	—	1	—	3	—	1	—
Arlington, Mass.	13,073	8	1	—	1	—	5	—	—	—
Asbury Park, N. J.	14,629	3	3	—	1	—	—	—	1	—
Ashland, Ky.	12,195	—	—	—	—	—	1	—	—	—
Ashtabula, Ohio	22,008	6	—	—	—	—	—	—	—	—
Atchison, Kans.	16,785	—	—	—	—	—	—	—	1	—
Atlanta, Ga.	196,144	44	2	1	14	1	6	—	3	—
Atlantic City, N. J.	59,515	12	5	—	75	—	1	—	1	—
Attleboro, Mass.	19,776	13	1	—	2	—	—	—	1	2
Auburn, Me.	16,607	—	—	—	—	—	1	—	—	—
Aurora, Ill.	34,795	18	—	—	—	—	—	—	—	—
Austin, Tex.	35,612	11	1	—	—	—	67	1	1	—
Baltimore, Md.	594,637	209	42	8	164	—	—	—	5	20
Barberton, Ohio	14,187	7	—	—	4	—	—	—	1	—
Barre, Vt.	12,401	—	1	—	1	—	—	—	—	—
Baton Rouge, La.	17,544	6	—	—	—	—	1	—	—	—
Bayonne, N. J.	72,204	—	4	—	3	—	2	—	3	—
Beatrice, Nebr.	10,437	7	—	—	—	—	1	—	—	—
Beaumont, Tex.	28,551	7	—	—	—	—	—	—	—	1
Bedford, Ind.	10,613	2	—	—	1	—	—	—	—	—
Bellefonte, N. J.	12,797	—	—	—	3	—	—	—	—	—
Bellingham, Wash.	34,362	—	—	—	1	—	2	—	—	—
Beloit, Wis.	18,547	—	—	—	—	—	8	—	—	—
Benton Harbor, Mich.	11,039	—	—	—	2	—	—	—	—	—
Berkeley, Calif.	60,427	13	—	—	86	—	7	—	1	2
Berlin, N. H.	13,892	3	—	—	—	—	—	—	—	—
Beverly, Mass.	22,128	7	—	—	1	—	6	—	—	2
Biddeford, Me.	17,760	—	—	—	—	—	—	—	—	2
Billings, Mont.	15,123	6	—	—	—	—	2	—	1	—
Binghamton, N. Y.	54,864	20	4	1	—	—	2	—	2	1
Birmingham, Ala.	189,716	63	3	—	19	—	5	—	12	5
Bloomfield, N. J.	19,013	9	4	—	1	—	—	—	—	—
Bloomington, Ill.	27,462	15	2	—	—	—	3	—	1	—
Boise, Idaho	35,551	14	—	—	—	—	2	—	—	—
Boston, Mass.	767,813	253	61	—	337	5	104	2	50	21
Brazil, Ind.	10,472	6	—	—	—	—	—	—	—	—
Bridgeport, Conn.	124,724	40	21	2	36	—	4	—	—	2
Bristol, Conn.	16,313	7	2	—	—	—	—	—	1	—
Brockton, Mass.	69,152	15	3	—	131	1	4	—	4	—
Brookline, Mass.	33,526	4	1	—	9	—	3	—	2	—
Brunswick, Ga.	10,854	4	—	—	—	—	—	—	1	—
Buffalo, N. Y.	475,781	135	72	7	23	—	13	1	12	8
Burlington, Iowa	25,144	6	1	—	—	—	6	—	4	—
Burlington, Vt.	21,802	9	1	1	—	—	—	—	—	1
Butte, Mont.	44,057	17	—	—	—	—	2	—	15	2
Cadillac, Mich.	10,158	5	1	—	10	—	—	—	—	—
Cairo, Ill.	15,695	2	2	—	13	—	—	—	—	—
Cambridge, Mass.	114,273	40	7	—	15	2	6	—	2	3
Camden, N. J.	108,117	—	2	—	13	—	6	—	7	—
Canton, Ill.	13,674	3	—	—	—	—	—	—	—	—
Cape Girardeau, Mo.	11,146	2	1	—	1	—	—	—	—	—
Cedar Rapids, Iowa	38,033	—	7	—	—	—	—	—	—	—
Centralia, Ill.	11,38	2	—	—	1	—	—	—	—	—
Chanute, Kans.	12,668	3	—	—	—	—	—	—	—	—
Charleston, S. C.	61,041	25	1	—	10	—	1	—	—	2
Charleston, W. Va.	31,060	7	3	—	2	—	2	—	—	—
Charlotte, N. C.	40,759	—	3	1	—	—	—	—	4	1
Chattanooga, Tenn.	61,575	32	1	—	—	—	1	—	—	2
Chelesa, Mass.	48,405	19	6	1	1	—	2	—	3	2
Cheyenne, Wyo.	11,320	2	—	—	10	—	—	—	1	—
Chicago Heights, Ill.	22,863	3	2	—	5	—	—	—	—	—
Chicago, Ill.	2,547,201	1,170	113	19	247	5	311	2	247	64
Chico, Mass.	29,650	12	1	—	6	—	2	—	—	—
Chillicothe, Ohio	15,625	4	—	—	—	—	—	—	—	—
Cincinnati, Ohio	414,248	146	15	—	153	—	54	—	20	20
Cleveland, Ohio	692,259	146	41	4	262	4	47	—	29	11
Clinton, Mass.	13,075	4	—	—	3	—	—	—	—	1
Coffeyville, Kans.	18,331	4	1	—	1	—	—	—	—	—
Cohoes, N. Y.	25,292	7	—	—	—	—	—	—	1	—
Colorado Springs, Colo.	38,965	8	4	—	—	—	—	—	10	5
Columbia, S. C.	35,165	—	4	—	—	—	—	—	2	—

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

City Reports for Week Ended Jan. 24, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Columbus, Ga.	26,306	12			1		1		5	3
Columbus, Ohio	220,135	68	8		23		20		4	7
Concord, N. H.	22,858	9			26				1	1
Cortland, N. Y.	13,321	4								
Council Bluffs, Iowa	31,838	10			1		3			
Covington, Ky.	59,623	16			31		4			
Cranston, R. I.	28,773	3					1			1
Cumberland, Md.	26,686	9	1	1	1					
Dallas, Tex.	129,738	35	11	1	5		1		3	
Danbury, Conn.	22,931	7	1		10					
Danville, Ill.	32,969	9	2		15		1		1	1
Davenport, Iowa	49,618		2							
Dayton, Ohio	128,939	53	5	1	2		6	1	1	
Decatur, Ill.	41,483	13			42					6
Dedham, Mass.	10,618	2			2		1			
Denver, Colo.	268,439	86	8	1	9		5	1		12
Des Moines, Iowa	104,052		5				9			
Detroit, Mich.	619,648	206	68	5	101	4	103	5	24	21
Dover, N. H.	13,276	2								
Dubuque, Iowa	40,096		1							
Duluth, Minn.	97,077	23	2		20		1		2	4
Durham, N. C.	26,160	8					2		3	1
East Cleveland, Ohio	13,844		1		23					
Easthampton, Mass.	10,656		2				2			
East Orange, N. J.	43,761	14	3		39		2		2	
East Providence, R. I.	18,485		4		1		5			
East St. Louis, Ill.	77,312	15	1		36		1		1	
Eau Claire, Wis.	18,837		2		1		1			
Elgin, Ill.	28,362	19								1
Elizabeth, N. J.	88,830		6		78		6		4	1
Elkhart, Ind.	22,273	5	2		1		2		2	
El Paso, Tex.	69,149	32	1	1	1					10
Englewood, N. J.	12,603	2			3					
Eureka, Calif.	15,142	1	7							
Evanston, Ill.	29,304	17			1		7			
Everett, Mass.	40,160		6		6		1			1
Fairmont, W. Va.	16,111		9				4			
Fall River, Mass.	129,828	33	6	2	4		1	1	4	2
Fargo, N. Dak.	17,872	4	2				7			
Findlay, Ohio	14,858	4			1					
Flint, Mich.	57,386	27	9	1	18		4			1
Fort Dodge, Iowa	21,039	1								
Fort Smith, Ark.	29,390						5			
Fort Wayne, Ind.	78,014	24	5				7		2	1
Fort Worth, Tex.	109,597	34	6				1	4	4	4
Forestoria, Ohio	10,959	1			1					
Freeport, Ill.	19,844	17							1	
Fremont, Nebr.	10,080	2		1						
Fremont, Ohio	11,034	3			5				2	
Galesburg, Ill.	24,629	8								1
Galveston, Tex.	42,650	12	1						1	1
Gardner, Mass.	17,534	6								
Gary, Ind.	56,000	35	2	1	1		2			
Glens Falls, N. Y.	17,160	6	1							
Grand Rapids, Mich.	132,861	36	5	2	2		3		1	
Granite City, Ill.	15,890	5	4		18		2			
Great Falls, Mont.	13,948	9					4		8	
Green Bay, Wis.	30,017		2				1			
Greenfield, Mass.	12,251	2	1		2					1
Greenwich, Conn.	19,594	4			2		4		2	
Hackensack, N. J.	17,412	6			17					
Harrison, N. J.	17,345		1		2					
Hartford, Conn.	112,831	37	8		2		11	1	2	3
Haverhill, Mass.	49,180	14	7		5		1		4	3
Hibbing, Minn.	17,550		8		5					
Hoboken, N. J.	78,324	21	2		20	1	1		3	1
Holyoke, Mass.	66,503	18	1		36		6		2	1
Hot Springs, Ark.	17,690	0	1							
Houston, Tex.	16,878	54	21	1	4		2		2	4
Hudson, N. Y.	12,898	2			1					

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Jan. 24, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber-culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Huntington, Ind.	10,982	7	1		1		5	1		
Huntington, W. Va.	47,686	18	2							4
Hutchinson, Kans.	21,461		1				1			
Indianapolis, Ind.	283,622	95	14		20		26		10	5
Ironton, Ohio	14,079	3	1							
Ironwood, Mich.	15,095	7								
Irvington, N. J.	16,710		1		2		3		2	1
Ishpeming, Mich.	12,448	3								
Ithaca, N. Y.	16,017	6								1
Jacksonville, Ill.	15,506	6								
Jamestown, N. Y.	37,431	5	3		1		1			
Janesville, Wis.	14,411	0								
Jersey City, N. J.	312,557		20		36		6		20	
Joplin, Mo.	33,400	4	1				1			
Kalamazoo, Mich.	50,408	24	1		2		6		3	
Kankakee, Ill.	14,270	4			1		1			
Kansas City, Kans.	102,096		9		22		3		2	
Kansas City, Mo.	305,816	197	12	1	85	3	17	4	7	7
Kearny, N. J.	24,325	5	4		20		2		1	
Keene, N. H.	10,725	4								
Kenosha, Wis.	32,833		1				1			
Kewanee, Ill.	13,607	9					1			
Knoxville, Tenn.	59,112		7	1	83		3		2	2
Kokomo, Ind.	21,929				1				1	3
Lackawanna, N. Y.	16,219	4	2		1		2			
La Crosse, Wis.	31,833		1		7				1	
La Fayette, Ind.	21,481	8					1		1	
Lancaster, Ohio	16,086	4							1	
La Salle, Ill.	12,332	2								
Laurel, Miss.	12,313		1							
Lawrence, Kans.	13,477	2	1							
Lawrence, Mass.	102,923	28	3		7		10	1	3	5
Leavenworth, Kans.	19,363	2								
Leominster, Mass.	21,365	7			1		1		1	
Lexington, Ky.	41,997	16	3		7		1		2	2
Lima, Ohio.	37,145	11	2	1	14		5			
Lincoln, Nebr.	46,957	13	3	1	1		5		1	1
Lincoln, R. I.	10,473						1			
Little Rock, Ark.	58,716		2		2		3		2	
Lockport, N. Y.	20,028	8			1		1		1	
Logansport, Ind.	21,338	6	1		9		9			1
Long Beach, Calif.	29,163	13	4		3		1			
Long Branch, N. J.	15,733	2			14					
Louisville, Ky.	240,808	60	21	3	2		5		13	6
Lowell, Mass.	114,366	31	14	4			16		2	
Ludington, Mich.	10,566	2								
Lynchburg, Va.	33,497	11	1						2	1
Lynn, Mass.	104,534	22	9	3	2		32		3	1
Macon, Ga.	46,090	12			1		3			
Madison, Wis.	31,315				17					
Malden, Mass.	52,243	13								2
Manchester, Conn.	15,859	1					2		1	
Manchester, N. H.	79,607	22	2	2	1		2		9	2
Manitowoc, Wis.	13,931				2					
Mankato, Minn.	10,365	5			4					
Marinette, Wis.	14,610						1			
Marion, Ind.	19,923	6			9		1			1
Marquette, Mich.	12,555	3					2			
Marshalltown, Iowa	14,519		2							
Martinsburg, W. Va.	12,984		4		1		1			
Mason City, Iowa	14,938	7			28					
Mattoon, Ill.	12,764				22				1	
Medford, Mass.	26,681	10	1		3		8			
Melrose, Mass.	17,724	7	1		3					1
Meriden, Conn.	29,431		2		1		6		1	
Methuen, Mass.	14,320	4					7			
Middletown, N. Y.	15,890						2			
Middletown, Ohio	16,384	9	1				1			1
Milwaukee, Wis.	445,008	136	30	4	46	2	21		16	9
Minneapolis, Minn.	373,448	76	8		17	1	13		14	6

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Jan. 24, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Mishawaka, Ind.	17,083	5	1							
Missoula, Mont.	19,075	5								
Mobile, Ala.	59,201	21	2		2		1		1	2
Monmouth, Ill.	10,346	2								
Montgomery, Ala.	44,039	13	4		1		2		1	
Morgantown, W. Va.	14,444	4			1		3			
Morristown, N. J.	13,410	5	3		1		1			
Mount Vernon, N. Y.	37,991	11	2		14		1		1	
Muncie, Ind.	25,633	8	4	1	9		4			
Muskogee, Okla.	47,173						1			
Nashua, N. H.	27,541	13	1				2			
Nashville, Tenn.	118,136	42	5	1	2		4		4	1
Newark, N. J.	418,789	140	26	1	275	1	27		27	10
New Bedford, Mass.	121,622	38	1		51	3	8		10	2
New Britain, Conn.	55,385	15	3	1	1		1	1	2	1
New Brunswick, N. J.	25,855		2				1		2	
Newburyport, Mass.	15,291	4			1		1			
New Castle, Ind.	14,144	3	1	1						
New Haven, Conn.	152,275	43	17	1	94	1	10		3	
New Orleans, La.	377,010	138	7		2		10		32	14
Newport, R. I.	30,585	4					6			
Newton, Mass.	44,345	10	7		6		4			1
New York, N. Y.	5,737,492	1,949	332	26	1,984	34	147	2	150	121
Niagara Falls, N. Y.	38,466	8	6		37				2	1
Norfolk, Va.	91,148		6				1			1
North Adams, Mass.	122,019	3								
Northampton, Mass.	20,006						1		1	
North Attleboro, Mass.	11,248	2					2			
North Tonawanda, N. Y.	14,060	4					1		4	1
Norwalk, Conn.	27,332	7			1		3		1	1
Norwich, Conn.	21,923	7	1		4					
Norwood, Ohio	23,269	3			8		10		1	
Oakland, Calif.	206,405	74	2		126		18		3	3
Ogdensburg, N. Y.	16,845	4								
Oklahoma City, Okla.	97,588	21	4		15		4			1
Olean, N. Y.	16,927	4								
Omaha, Nebr.	177,777	38	14	1	6		42			2
Orange, N. J.	33,636	18	2		1		1		2	1
Oshkosh, Wis.	36,549		1		24					
Paducah, Ky.	25,178				3					
Parkersburg, W. Va.	21,059	7	3		3					
Parsons, Kans.	15,932				2		1			
Pasadena, Calif.	49,620	8	3		2		8		6	
Passaic, N. J.	74,478	25	7		3		1		3	2
Paterson, N. J.	140,512	7	7		14		2		6	2
Pawtucket, R. I.	60,666	26	2		1		6			
Peekskill, N. Y.	19,034	6		1						
Pekin, Ill.	10,073						1			
Peoria, Ill.	72,184	25	1		2				3	2
Perth Amboy, N. J.	42,046	5	1				3		1	1
Petersburg, Va.	25,817	13							2	1
Philadelphia, Pa.	1,735,514	568	115	16	575	4	69	2	91	41
Phillipsburg, N. J.	15,879	2								
Pine Bluff, Ark.	17,777		1						1	
Piqua, Ohio.	14,275									
Pittsfield, Mass.	39,678	9								
Plainfield, N. J.	24,330	9			3				1	
Plattsburg, N. Y.	13,111	5			32					
Plymouth, Mass.	14,001	4								
Pontiac, Mich.	18,006	17	7		8		1		1	
Port Chester, N. Y.	16,727	6	1							1
Port Huron, Mich.	1,18,383	11	2		80		2			
Portland, Me.	64,720	37			2		12			2
Portland, Oreg.	308,399	68	7		3		17		7	2
Portsmouth, N. H.	11,730				1		2			
Portsmouth, Va.	40,693	27	2						1	1
Poughkeepsie, N. Y.	30,786	16	1							
Providence, R. I.	259,895	81	22	3	12		11		2	8
Pueblo, Colo.	56,984	18								2
Quincy, Ill.	36,832	10	2					3		1

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Jan. 24, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Quincy, Mass.	39,022	13	4		1		5		1	
Racine, Wis.	47,465	2	2	3	10		1		1	
Rahway, N. J.	10,361	2								
Raleigh, N. C.	20,274	13	1		1		1			2
Redlands, Calif.	14,573	1			2				1	
Reno, Nev.	15,514	3							1	1
Richmond, Ind.	25,080	3	2	90						
Richmond, Va.	158,702	66	1	96		2			3	10
Riverside, Calif.	20,496	7		1			2		2	
Rochester, N. Y.	264,714	81	26	161	1	21			2	4
Rockford, Ill.	56,739	39	1			3				2
Rock Island, Ill.	29,452	11		2						
Rocky Mount, N. C.	12,673	2								1
Rome, Ga.	15,607		3						2	
Rome, N. Y.	24,259		2	1		2		1		
Sacramento, Calif.	68,984	23	2	40		3		2		2
Saginaw, Mich.	56,469	20	1	132	1			4		1
St. Cloud, Minn.	12,013		1							
St. Joseph, Mo.	88,498	32	2			1				
St. Louis, Mo.	768,630	260	79	387	1	32	3	36		9
St. Paul, Minn.	252,465	84	9	27		15		13		5
Salem, Mass.	49,346	21	9	1		4				
Salt Lake City, Utah	121,623	28	3	1		1				
San Bernardino, Calif.	17,616	12								1
San Diego, Calif.	56,412	31		1	3			6		5
Sandusky, Ohio.	20,226	3								
Sanford, Me.	11,217	1		4				1		
San Francisco, Calif.	471,023	175	38	287	6	28		29		9
Santa Ana, Calif.	10,981			2		2				
Santa Barbara, Calif.	15,360	3						3		
Santa Cruz, Calif.	15,150	2								
Saratoga Springs, N. Y.	13,839	4								1
Saugus, Mass.	10,210	4	1					1		
Sault Ste. Marie, Mich.	14,130	2		20						
Savannah, Ga.	69,250	33		1		2		1		
Schenectady, N. Y.	103,774	19	1	1		2		6		1
Seattle, Wash.	366,445		10	250		24				
Sioux City, Iowa	59,568		1			5				
Sioux Falls, S. Dak.	16,887	4		2		11				
Somerville, Mass.	88,618	25	2	11		9		1		1
South Bend, Ind.	70,967	35		1		2		3		1
Southbridge, Mass.	14,465	4						1		
Spartanburg, S. C.	21,985									4
Spokane, Wash.	157,656		3	2		5				
Springfield, Ill.	62,623	10	1			4				1
Springfield, Mass.	108,668	30	3	8		12		2		1
Springfield, Mo.	41,169	18								2
Springfield, Ohio.	52,296	11		1		1		2		
Staunton, Va.	11,823	6								
Steubenville, Ohio.	28,259	6		3		2				
Stillwater, Minn.	110,198	4								
Stockton, Calif.	36,209	11		4		2		1		2
Superior, Wis.	47,167	5	1	7		7				
Syracuse, N. Y.	153,559	50	3	9		15	1	4		4
Tacoma, Wash.	117,446		10	10		1		1		
Taunton, Mass.	36,610	13	1	4						
Terre Haute, Ind.	67,361	24	1	1		4				2
Tiffin, Ohio.	12,962	6		18		1		1		1
Toledo, Ohio.	202,010	91	11	234	1	27		4		14
Topeka, Kans.	49,588	12	2	1		3		5		
Traverse City, Mich.	14,090	0								
Trenton, N. J.	113,974	33	8	11		2		5		3
Troy, N. Y.	78,094	29	1					5		
Tucson, Ariz.	17,324	9								
Tuscaloosa, Ala.	10,824	3		2				1		
Vallejo, Calif.	13,803	6	1	2		5				
Vancouver, Wash.	13,805		2							
Waco, Tex.	34,015	6	1	2						
Waltham, Mass.	31,011	8		6		4		1		
Washington, D. C.	369,282	220	20	3	12		21		22	14
Watertown, Mass.	15,188	3			20		1			

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Jan. 24, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Watertown, N. Y.	30,404	0					1		2	
Wausau, Wis.	19,666				10					
Webster, Mass.	13,484	2					1			
Westfield, Mass.	18,760	4	3		1		2			
West Hoboken, N. J.	44,386	8	1				4		2	
West New York, N. J.	19,613	6	2		11		4		2	
West Orange, N. J.	13,964	6	2		1		1			
Wheeling, W. Va.	43,657	15	2		10				1	1
White Plains, N. Y.	23,331	13			17		3			
Wichita, Kans.	73,597	26	3				4		8	1
Wilmington, Del.	95,369	35	11		9		2			4
Wilmington, N. C.	30,400	6	1		1		5		1	1
Windham, Conn. (town).	14,404						1			
Winona, Minn.	¹ 18,583	8			12					
Winston-Salem, N. C.	33,136	16	4	1			1		2	1
Winthrop, Mass.	13,105	2			4		1			
Woburn, Mass.	16,076									2
Worcester, Mass.	166,106	49	3		6		15	1	2	1
Yonkers, N. Y.	103,066	31	5	1	17		6			4
Youngstown, Ohio	112,282	34	5		6		13		1	

¹ Population Apr. 15, 1910.

FOREIGN AND INSULAR.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Jan. 11-20, 1920.		Remaining under treatment Jan. 20, 1920.	Disease.	Jan. 11-20, 1920.		Remaining under treatment Jan. 20, 1920.
	New cases.	Deaths.			New cases.	Deaths.	
Broncho-pneumonia.....	40	29	4	Measles.....	3	.....	12
Chicken pox.....	4	.....	3	Paratyphoid fever.....	.....	.....	1
Diphtheria.....	1	.....	4	Scarlet fever.....	.....	.....	3
Influenza.....	96	3	51	Smallpox.....	.....	.....	4
Leprosy.....	.....	.....	19	Typhoid fever.....	10	4	2
Malaria.....	15	.....	170				32

¹ From the interior 24.

² From the interior 13.

EGYPT.

Plague—Smallpox—Typhus Fever—Year 1917.

The annual report of the department of public health of Egypt for the year 1917 shows the occurrence of plague, smallpox, and typhus fever, as follows:

Plague.—The total number of plague cases reported in Egypt in 1917 was 732 as compared with 1,702 cases notified during the year 1916. The number of fatalities from plague was 399 as compared with 828 in 1916. Of the 732 cases, 608 were bubonic, 65 septicemic and 59 pneumonic. The occurrence in cities was as follows: Alexandria, 17 cases with 9 deaths; Cairo, 2 cases; Port Said, 40 cases with 25 deaths; Suez, 318 cases with 195 deaths (population of Suez, in 1917, 20,551). In the canal government 1 case each occurred at Ismailia and Kantara. The remaining cases were distributed in eight Provinces, the greatest prevalence having occurred in the Libyan desert oasis, Province of Fayoum, with 148 cases and 67 fatalities (population of Fayoum, 1917, 42,178). The total population of Egypt in 1917 was given as 12,662,700, calculated July 1, 1917, as compared with 12,148,900 in the year 1916.

The outbreak at Suez: Of the 732 cases notified in 1917, 318 occurred at Suez, the last previous outbreak there having occurred in 1907. The first case was found May 5 and the outbreak lasted to July. In April 21 cases occurred among troops and Egyptian laborers;

in camp on the canal. The epidemic was virulent in type with a mortality of 58.1 per cent. The majority of the cases were of the bubonic type. A severe epidemic among rats was noted. The following table gives the record of plague from 1899 to 1917:

Year.	Cases.	Deaths.	Case fatality rate.	Year.	Cases.	Deaths.	Case fatality rate.
1899.....	93	45	48.0	1909.....	513	207	40.3
1900.....	127	60	47.2	1910.....	1,238	615	49.7
1901.....	205	102	49.5	1911.....	1,656	1,041	62.9
1902.....	481	291	60.5	1912.....	884	441	49.9
1903.....	303	160	52.8	1913.....	654	304	46.5
1904.....	854	501	58.7	1914.....	219	111	50.7
1905.....	266	181	68.0	1915.....	235	120	51.0
1906.....	631	475	75.1	1916.....	1,702	828	48.6
1907.....	1,253	914	72.9	1917.....	732	399	54.5
1908.....	1,511	780	51.6				

Smallpox.—The number of smallpox cases reported during the year 1917 was the lowest recorded during the previous nine-year period. The following table shows the reported occurrence during the five-year period 1913–1917:

Year.	Cases.	Deaths.	Case fatality rate.	Year.	Cases.	Deaths.	Case fatality rate.
1913.....	2,934	706	24	1916.....	2,972	802	27
1914.....	7,097	1,564	22	1917.....	1,567	409	26
1915.....	5,222	1,262	24				

Typhus fever.—The number of typhus fever cases reported in Egypt in 1917 was 18,569, as compared with 30,507 cases reported in 1916. The following table shows the number of cases and deaths reported during the five-year period 1913–1917:

Year.	Cases.	Deaths.	Case fatality rate.	Year.	Cases.	Deaths.	Case fatality rate.
1913.....	4,936	1,438	29	1916.....	30,507	7,096	23.2
1914.....	9,508	2,533	26.6	1917.....	18,569	4,174	22.4
1915.....	17,096	4,216	24.6				

The continuous drop in the death rate is explained as probably due to better reporting.

INDIA.

Influenza—Madras Presidency—Year 1918.

According to data published by the Sanitary Commissioner for Madras Presidency for the year 1918, influenza was present in July of that year in mild form, becoming virulent in September and reaching its maximum in November, declining during December, and ceasing

to be epidemic in February, 1919. Under date of October, 1919, influenza was again reported present.

During the period of its severity in 1918 influenza was present in epidemic form throughout the Presidency, with an estimated number of about 650,000 fatal cases. This number is calculated on the mortality figures for the year under the headings Fevers, Respiratory diseases, and Other Causes, compared with the average mortality figures under the same heads for the preceding five years. No district escaped the disease, the greatest prevalence being in the districts of Bellary, Salem, and Vizagapatam, where the deaths calculated on the basis noted above numbered 56,015, 52,728, and 51,197, respectively. In four districts the number of deaths varied from 30,000 to 50,000 and in 14 others from 10,000 to 30,000. Less than 10,000 deaths were reported in each of the remaining four districts. The lowest number returned was for the Nilgiris, with 3,246 deaths.

The estimated population for which vital statistics were returned for the year 1918 was 40,005,735. The estimated population of the Presidency during the year 1918 was 44,524,439. The total number of deaths registered during the year in the Presidency was 1,722,003, against 1,049,545 in 1917, an increase of 672,458 deaths.

MALTA.

Trachoma.

Information dated December 27, 1919, shows prevalence of trachoma in the Island of Malta.

MEXICO.

Leprosy—Guadalajara—December, 1919.

During the month of December, 1919, five new cases of leprosy were reported at Guadalajara, Mexico.

SWITZERLAND.

Quarantine Measures Against Importation of Plague.

A decree of the Swiss Federal Council, dated January 30, 1920, established a five-day period of quarantine detention against persons, vehicles of transport, and merchandise arriving from countries in Asia Minor, and from Greece, Russia, and Turkey, on account of the existence of plague in those countries.

INFLUENZA.

The following information was taken from reports received during the week ended February 13, 1920:

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers Department.....	Dec. 21-31.....	14	.....
Algiers.....	Dec. 1-31.....	22	.....
Oran Department.....	Dec. 21-31.....	5	.....
Bolivia:				
La Paz.....	Dec. 20-27.....	8	1	
Canada:				
Ontario—				
Sarnia.....	Jan. 25-31.....	3	.....
Toronto.....	Jan. 18-24.....	4	.....
Windsor.....	Jan. 25-31.....	.....	2	1 death of acute pneumonia. From pneumonia, 11 deaths.
Prince Edward Island—				
Summerside.....	Jan. 24-30.....	.....		Present in country district.
Ceylon.....	Oct. 1-31.....	.....	13	Oct. 1-31, 1919: Deaths, 39.
China:				
Hankow.....	Dec. 21-27.....	.....		Present.
Cuba:				
Cienfuegos.....	Jan. 11-17.....	19	2	Jan. 27: Present.
Habana.....	Jan. 11-20.....	96	3	
France:				
Cette.....	Dec. 25-31.....	.....		Present.
Great Britain:				
Gibraltar.....	Jan. 4-10.....	.....	1	Pneumonia, 3 deaths.
Spain:				
Valencia.....	Jan. 4-10.....	.....		Many cases.
Turkey:				
Constantinople.....	Dec. 14-27.....	.....		Present.

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

Reports Received During Week Ended Feb. 13, 1920.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Calcutta.....	Dec. 7-13.....	17	16	
Java:				
West Java—				
Batavia.....	Nov. 21-Dec. 12.....	8	.....	Nov. 21-Dec. 12, 1919: Cases, 8.
Siam:				
Bangkok.....	Nov. 30-Dec. 6.....	.....	22	

PLAGUE.

India.....	.....	.....	.....	Nov. 30-Dec. 6, 1919: Cases, 2,322; deaths, 1,772.
Java:				
East Java—				
Surabaya Residency...	Nov. 19-25.....	172	172	
Straits Settlements:				
Singapore.....	Dec. 7-13.....	3	3	
Turkey:				
Constantinople.....	Dec. 14-20.....	1	.....

¹From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received During Week Ended Feb. 13, 1920—Continued.
SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Departments—				
Algiers.....	Dec. 21-31.....	15	.....
Constantine.....	do.....	1	.....
Oran.....	do.....	22	.....
Bolivia:				
La Paz.....	Dec. 21-27.....	7	10	
Do.....	Dec. 28-Jan. 3.....	6	4	
Canada:				
Nova Scotia—				
Halifax.....	Jan. 21-27.....	1	.....
Ontario.....				Jan. 18-24, 1920: Cases, 310. In 28
Hamilton.....	Jan. 25-31.....	6	.....	counties, 63 localities, with 22
Peterborough.....	Dec. 21-27.....	3	.....	new centers.
Do.....	Dec. 28-Jan. 24.....	21	.....
Toronto.....	Jan. 18-24.....	142	.....
Quebec—				
Montreal.....	do.....	2	.....
Quebec.....	Jan. 23-31.....	1	.....
China:				
Amoy.....	Dec. 9-15.....	.....	2	
Canton.....	Dec. 21-27.....	.....	.....	Present. Increasing.
Chungking.....	Dec. 7-13.....	.....	.....	Present.
Hongkong.....	Dec. 25-31.....	2	2	
Shanghai.....	Dec. 22-28.....	2	.....
Finland:				Nov. 16-30, 1919: Cases, 18.
Provinces—				
Nyland.....	Nov. 16-30.....	6	.....	Helsingfors.
St. Michael.....	do.....	1	.....	Rural.
Tavastchus.....	do.....	1	.....	Do.
Vasa.....	do.....	4	.....	Do.
Viborg.....	do.....	6	.....	Urban, 2; rural, 4.
India:				
Calcutta.....	Dec. 7-13.....	33	29	
Italy:				
Messina.....	Dec. 23-28.....	11	.....	Province, cases 37.
Naples.....	Dec. 28-Jan. 4.....	6	10	
San Fratello.....	Dec. 23-28.....	10	.....
Java:				
East Java—				
Surabaya Residency.....	Nov. 19-25.....	4	.....
West Java—				
Batavia.....	Nov. 21-Dec. 12.....	22	14	Nov. 21-Dec. 12, 1919: Cases, 297; deaths, 60.
Mexico:				
Chihuahua.....	Jan. 11-17.....	.....	1	
Guadalajara.....	Dec. 1-31.....	1	.....
San Luis Potosi.....	Jan. 18-24.....	.....	1	
Tehuantepec.....	Jan. 1-15.....	3	.....
Portugal:				
Lisbon.....	Jan. 4-17.....	.....	29	
Portuguese East Africa:				
Districts—				
Gaza.....	Dec. 7-13.....	.....	.....	Present.
Inhambane.....	do.....	.....	.....	Do.
Mozambique.....	do.....	.....	.....	Do.
Quelimane.....	do.....	.....	.....	Do.
Tete.....	do.....	.....	.....	Do.
Towns—				
Inhambane.....	do.....	.....	1	
Mozambique.....	do.....	.....	1	
Quelimane.....	do.....	.....	2	
Tete.....	do.....	.....	1	
Spain:				
Valencia.....	Jan. 4-10.....	5	1	

TYPHUS FEVER.

Algeria:				
Department—				
Algiers.....	Dec. 1-31.....	1	.....
Constantine.....	do.....	2	.....
Mexico:				
Chihuahua.....	Jan. 11-17.....	.....	1	
Turkey:				
Constantinople.....	Dec. 14-27.....	17	.....

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

Reports Received from Dec. 27, 1919, to Feb. 6, 1920.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	Nov. 4-17.....		2	
Chosen (Korea).....	Oct. 1-31.....	6	4	Oct. 20-Nov. 16, 1919: Cases, 3,523; deaths, 3,144. Aug. 15-
Chemulpo.....	do.....	34	30	Nov. 16, 1919: Cases, 15,192; deaths, 9,823.
Fusan.....	do.....			
Provinces—				
Keiki.....	Aug. 15-Nov. 16.....	224	135	
Kogen.....	do.....	64	38	
Kokai.....	do.....	4,015	2,770	
North Chusei.....	do.....	1	1	
North Helan.....	do.....	3,196	2,434	
North Kankyo.....	do.....	497	275	
North Keisho.....	do.....	63	35	
North Zenra.....	do.....	1,326	692	
South Chusei.....	do.....	930	590	
South Helan.....	do.....	3,031	1,858	
South Kankyo.....	do.....	870	551	
South Keisho.....	do.....	318	156	
South Zenra.....	do.....	657	288	
Greece:				
Saloniki.....	Oct. 10.....	1		
India:				Oct. 23-Nov. 22, 1919: Deaths, 12,700.
Bombay.....	Nov. 2-8.....	1	1	
Calcutta.....	Oct. 26-Dec. 6.....	135	123	
Madras.....	Nov. 23-Dec. 13.....	7	3	
Rangoon.....	Nov. 30-Dec. 6.....	1		
Japan:				
Kobe.....	Nov. 24-30.....	2		
Taiwan.....				For entire island: Oct. 22-Nov. 30, 1919: Cases, 651; deaths, 385.
Tokyo.....	Nov. 10-20.....	1	1	
Java:				
East Java.....				Oct. 5-11, 1919: One case, 1 death. At Paserocean.
West Java.....				Nov. 5-11, 1919: Cases, 4.
Batavia.....	Nov. 5-11.....	4		
Philippine Islands:				
Manila.....	Nov. 2-Dec. 20.....	19	10	Nov. 2-Dec. 20, 1919: Cases, 1,574; deaths, 1,126.
Provinces—				
Albay.....	Nov. 2-Dec. 20.....	339	239	
Ambos Camarines.....	do.....	66	34	
Antique.....	do.....	139	102	
Batangas.....	Nov. 2-Dec. 13.....	38	28	
Bohol.....	do.....	34	27	
Cagayan.....	Nov. 3-15.....	35	20	
Capiz.....	Nov. 2-8.....	6	5	
Cavite.....	Nov. 2-Dec. 6.....	25	16	
Cebu.....	Nov. 2-Dec. 20.....	23	14	
Davao.....	Nov. 9-15.....	6	4	
Ilocos Norte.....	Nov. 2-29.....	42	40	
Ilocos Sur.....	Nov. 2-22.....	18	15	
Iloilo.....	Nov. 2-Dec. 20.....	55	33	
Isabela.....	Nov. 2-Dec. 13.....	167	77	
Laguna.....	Nov. 2-Dec. 20.....	23	17	
Mindoro.....	Nov. 2-Dec. 6.....	81	30	
Mountain.....	Nov. 2-Dec. 13.....	6	4	
Occidental Negros.....	Nov. 2-Dec. 20.....	98	50	
Pangasinan.....	Nov. 20-Dec. 20.....	60	46	
Rizal.....	do.....	41	15	
Sorsogon.....	Nov. 2-Dec. 13.....	208	139	
Tariac.....	Nov. 2-22.....	11	11	
Tayabas.....	Nov. 2-Dec. 20.....	54	33	
Union.....	Nov. 9-15.....	5	5	
Poland:				Present in November, 1919.
Garwolin.....				Do.
Kowal.....				Do.
Stryl.....				
Siam:				
Bangkok.....	Oct. 5-Nov. 29.....		60	
Straits Settlements:				
Singapore.....	Oct. 5-Nov. 28.....	14	13	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from Dec. 27, 1919, to Feb. 6, 1920—Continued.
PLAQUE.

Place.	Date.	Cases.	Deaths.	Remarks.
British East Africa:				
Kicumu.....	Sept. 28-Nov. 1.....	6	6	
Brazil:				
Bahia.....	Nov. 9-15.....	1	1	
Ceylon:				
Colombo.....	Oct. 26-Nov. 29.....	18	19	
Chile:				
Antofagasta.....	Dec. 8-14.....	1	.....
China:				
Hongkong.....	Dec. 7-13.....	1	.....
Ecuador:				
Guayaquil.....	Nov. 1-31.....	2	.....
Egypt.....				
Cities—				
Alexandria.....	Dec. 3.....	1	1	Jan. 1-Dec. 25, 1919: Cases, 867; deaths, 469.
Province—				
Assiout.....	Nov. 15-21.....	30	17	From vessel Rachid Pacha.
Greece:				
Saloniki.....	Oct. 6-Nov. 30.....	18	7	
India.....				
Bombay.....	Oct. 19-Nov. 29.....	5	5	Oct. 19-Nov. 8, 1919: Cases, 12,419 deaths, 9,382.
Karachi.....	Nov. 9-29.....	3	2	
Madras Presidency.....	Nov. 9-Dec. 13.....	839	535	
Rangoon.....	Nov. 2-22.....	13	12	Oct. 19-Nov. 1, 1919: Cases, 10; deaths, 7.
Java:				
East Java.....				Sept. 28-Nov. 18, 1919: Cases, 639; deaths, 637.
Peru:				
Salaverry (Trujillo).....	Nov. 23-Dec. 21.....	9	1	Present in surrounding country.
Senegal:				
Dakar.....	Nov. 1-30.....		146	Including Dakar and vicinity.
Straits Settlements:				
Singapore.....	Oct. 26-Nov. 8.....	2	1	
Syria:				
Beirut.....	Dec. 22.....	29	.....
Turkey:				
Constantinople.....	Nov. 14-Dec. 14.....	10	.....	Present Dec. 11, 1919. Nov. 14-20, 1919: Present in vicinity.
On vessel:				
S. S. Kaisar-i-Hind.....	Nov. 28.....	3	.....	At Port Said, Egypt. From Bombay, Nov. 15, for London.

SMALLPOX.

Algeria:	Departments—			
	Algeria.....	Nov. 11-Dec. 20.....	50	.....
	Constantine.....	do.....	14	.....
	Oran.....	do.....	68	.....
Bolivia:	La Paz.....	June 29-Dec. 20.....	206	Dec. 29, 1918-June 28, 1919: Cases, 86; deaths, 44. Dec. 14-20, 1919: Cases, 7; deaths, 5.
Brazil:				
	Bahia.....	Oct. 26-Nov. 15.....	1,226	700
	Pernambuco.....	Nov. 10-16.....	29	4
	Rio de Janeiro.....	Sept. 28-Nov. 25.....	372	105
Canada:	British Columbia—			
	Vancouver.....	Nov. 30-Dec. 6.....	1	.....
	Do.....	Jan. 4-17.....	8	.....
	Manitoba—			
	Winnipeg.....	Jan. 11-17.....	2	.....
	Nova Scotia			
	Halifax.....	Dec. 21-27.....	2	.....
	Do.....	Jan. 4-17.....	2	.....
	Sydney.....	Dec. 7-13.....	1	.....
	Do.....	Dec. 28-Jan. 10.....	2	.....
Counties—				
	Cumberland.....	Dec. 14-20.....		Present.
	Inverness.....	do.....		Do.
	Pictou.....	do.....		Do.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from Dec. 27, 1919, to Feb. 6, 1920—Continued.
SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario.....				Nov. 1-29, 1919: Cases, 1,673. Nov. 30-Dec. 6, 1919: Cases, 125, in 45 localities, exclusive of Dysart and Toronto. Dec. 1- 31, 1919: Cases, 1,414; deaths, 2. Dec. 28, 1919-Jan. 17, 1920; Cases, 613.
Gloucester County.....				Oct.-Nov., 1919: Cases, 3.
Hamilton.....	Dec. 14-20.....	3.....		
Do.....	Jan. 4-24.....	9.....		
Kingston.....	Dec. 21-27.....	1.....		
Do.....	Dec. 28-Jan. 17.....	3.....		
North Bay.....	Jan. 11-17.....	3.....		
Ottawa.....	Dec. 14-20.....	1.....		
Do.....	Dec. 28-Jan. 17.....	2.....		
Prescott.....	Jan. 4-10.....	1.....		
Sault Ste. Marie.....	Dec. 7-27.....	1.....		
Do.....	Dec. 28-Jan. 3.....	1.....		
Toronto.....	Dec. 7-27.....	727.....		
Do.....	Dec. 28-Jan. 17.....	507.....	5.....	
Windsor.....	Dec. 14-27.....	2.....		
Quebec—				
Montreal.....	Dec. 7-27.....	3.....		
Quebec.....	do.....	4.....		
Do.....	Jan. 4-17.....	8.....		
Saskatchewan—				
Moosejaw.....	Dec. 28-Jan. 31.....			
Saskatoon.....	Dec. 14-20.....	1.....		
Ceylon:				
Colombo.....	Nov. 16-22.....	9.....	9.....	
China:				
Amoy.....	Nov. 4-Dec. 8.....			Present.
Canton.....	Nov. 2-29.....			Dec. 8: One death.
Chungking.....	Nov. 2-Dec. 6.....			Present.
Foochow.....	Nov. 16-Dec. 6.....			Do.
Nanking.....	Dec. 6-20.....			Do.
Chosen (Korea):				
Fusan.....	Oct. 1-31.....	2.....	1.....	
Seoul.....	do.....	9.....	1.....	
Colombia:				
Barranquilla.....	Nov. 16-Dec. 20.....	50.....	2.....	
Egypt:				
Alexandria.....	Nov. 12-Dec. 16.....	23.....	12.....	
Cairo.....	Oct. 1-Nov. 25.....	42.....	22.....	
Port Said.....	do.....	4.....	4.....	
Finland:				
Provinces—				
Nyland.....	July 16-31.....	1.....		
Tavastehus.....	do.....	1.....		
Viborg.....	do.....	23.....		
Finland.....				Oct. 15-31, 1919: Cases, 6.
Provinces—				
Nyland.....	Oct. 15-31.....	4.....		Helsingfors.
Tavastehus.....	do.....	1.....		Rural district.
Viborg.....	do.....	1.....		Do.
Finland.....				Nov. 1-15, 1919: Cases, 27.
Provinces—				
Abo Och Borneborg.....	Nov. 1-15.....	1.....		Rural district.
Nyland.....	do.....	16.....		Helsingfors.
St. Michael.....	do.....	5.....		Rural district.
Tavastehus.....	do.....	1.....		Do.
Vasa.....	do.....	4.....		Do.
Germany.....				Oct. 5-15, 1919: Cases, 32. In ad- dition to previously reported cases, Sept. 28-Oct. 4, 1919: Cases, 26.
Greece:				
Saloniki.....	Nov. 10-22.....	9.....	8.....	
India:				
Bombay.....	Oct. 12-Nov. 29.....	18.....	8.....	
Calcutta.....	Oct. 26-Dec. 6.....	113.....	104.....	
Karachi.....	Nov. 23-29.....	6.....	1.....	
Madras.....	Nov. 2-Dec. 6.....	25.....	10.....	
Rangoon.....	Oct. 19-Nov. 22.....	29.....	13.....	

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

Reports Received from Dec. 27, 1919, to Feb. 6, 1920—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Italy:				
Genoa.				
Messina.	Nov. 10-Dec. 21.	44	8	Province: Nov. 17-Dec. 14, 1919: Cases, 15; deaths, 3.
San Fratello.	Dec. 1-20.	39	5	Province of Messina. Dec. 14-21, 1919: Cases, 31.
Japan:				
Taiwan.	Nov. 1-20.	10	2	Entire island.
Java:				
East Java:				
Residency—				Sept. 28-Nov. 18, 1919: Cases, 30.
Surabaya.	Oct. 25-Nov. 18.	18		
West Java.	Oct. 17-31.	27	8	Oct. 17-31, 1919: Cases, 274; deaths, 72.
Batavia.				
Mexico:				
Acapulco.	Nov. 9-15.	2		
Chihuahua.	Dec. 21-27.	2		
Ciudad Juarez.	Jan. 11-17.		1	
Mexico City.	Nov. 16-Dec. 6.	8		
San Luis Potosi.	Dec. 14-20.		1	
Tehuantepec.	Dec. 25-31.	6		
Newfoundland:				
St. Johns.	Dec. 20-26.	3		Dec. 13-26, at outports, 6 cases.
Do.	Dec. 27-Jan. 16.	4		Present at 8 other localities. Outports, 12 cases. Present at other localities.
Panama:				
Colon.	Dec. 15-21.	1		
Portugal:				
Lisbon.	Nov. 30-Dec. 20.		41	
Oporto.	Dec. 7-20.	5	5	
Portuguese East Africa:				
Lourenco Marques.	Nov. 23-29.	4		Present in 5 districts Nov. 9-Dec. 6, 1919, with 38 reported cases.
Spain:				
Barcelona.	Nov. 6-Dec. 9.		14	
Bilbao.	Nov. 1-Dec. 20.		4	
Cadiz.	Oct. 1-Nov. 30.		6	
Valencia.	Nov. 10-Dec. 27.	39	9	
Do.	Dec. 28-Jan. 3.	3		
Vigo.	Nov. 18-Dec. 27.	14		
Do.	Dec. 28-Jan. 3.	2	2	
Tunis:				
Tunis.	Dec. 23-29.	1		
Turkey:				
Constantinople.	Nov. 9-Dec. 14.	27		
Union of South Africa:				
Johannesburg.	Oct. 1-31.	10		
On vessel:				
S. S. Sarcoxie.	Dec. 23.	1		At Ponta Delgada, Azores. From Rotterdam for New York.

TYPHUS FEVER.

Algeria:				
Departments—				
Algers.	Dec. 11-20.	1		
Constantine.	Nov. 11-30.	2		
Oran.	Nov. 21-Dec. 11.	3		
Austria:				
Vienna.	Sept. 7-14.	5		Sept. 7-14, 1919: Cases, 7.
Bolivia:				
La Paz.	June 29-Dec. 20.	30	31	Dec. 29, 1918—June 28, 1919: Deaths, 52.
Canada:				
Ontario Province.				Dec. 1-31, 1919: One case.
Chile:				
Antofagasta.	Nov. 17-Dec. 14.	14		
Santiago.				Jan. 12-Sept. 30, 1919: Cases, 5,153; deaths, 1,023. Outbreak in October, 1918.
Valparaiso.	Nov. 9-Dec. 20.	885	95	Dec. 1-13, 1919: Cases, 700, deaths, 18.
China:				
Antung.	Nov. 3-9.	1		

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

Reports Received from Dec. 27, 1919 to Feb. 6, 1920—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt:				
Alexandria.....	Nov. 12-Dec. 16.....	6	1	
Cairo.....	Oct. 1-Nov. 4.....	59	28	
Port Said.....	do.....	1	.....
Finland:				
Province—				
Viborg.....	July 16-31.....	2	.....
Germany.....	.....	.....	.....	Oct. 5-25, 1919: Cases, 10—civil population, 3; military, 7.
Great Britain:				
Belfast.....	Dec. 28-Jan. 3.....	1	1	
Glasgow.....	Nov. 30-Dec. 6.....	2	.....
Greece:				
Cavalla.....	Nov. 17-23.....	1	.....
Drama.....	Nov. 24-30.....	1	.....
Salomiki.....	Oct. 6-Nov. 23.....	.....	41	
Hungary.....	.....	.....	.....	Aug. 25-Sept. 14, 1919: Cases, 6.
Italy:				
Trieste.....	Dec. 14-20.....	2	.....
Venice.....	Nov. 17-23.....	4	1	
Japan:				
Nagasaki.....	Dec. 1-21.....	3	.....
Mexico:				
Chihuahua.....	Dec. 21-27.....	2	.....
Mexico City.....	Nov. 16-22.....	46	.....
Saltillo.....	Nov. 1-30.....	2	1	
San Luis Potosi.....	Dec. 14-27.....	.....		Present.
Do.....	Dec. 28-Jan. 17.....	.....	.....	Do.
Paraguay:				
Asuncion.....	Nov. 30-Dec. 6.....	1	.....
Peru:				
Cerro de Pasco.....	Dec. 7-13.....	1	.....
Portugal:				
Lisbon.....	Dec. 6-12.....	.....	2	
Spain:				
Barcelona.....	Nov. 20-26.....	7	.....
Corunna.....	Nov. 24-Dec. 7.....	2	.....
Tunis:				
Tunis.....	Dec. 14-20.....	1	.....
Do.....	Dec. 29-Jan. 4.....	1	1	
Turkey:				
Constantinople.....	Nov. 14-Dec. 14.....	32	.....

YELLOW FEVER.

Brazil:				
Bahia.....	Oct. 26-Nov. 8.....	1	2	
Mexico:				
Campeche.....	Dec. 20.....	1	.....
Merida.....	Dec. 7-20.....	3	2	The cases were sent from Opi-chen, vicinity of Muna. One death in case from Muna. Total to Dec. 20: Cases, 46; deaths, 20.