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SICKNESS AMONG SCHOOL CHILDREN.

Loss of Time From School Among 6,130 School Children in 13 Localities in Missouri.[1]

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At the present stage of our knowledge of disease problems, any records which show the true incidence of even a few diseases in an observed population are important. Ordinary morbidity reports as furnished by physicians to local health departments do not, for well-known reasons, give an accurate picture of the incidence of any disease in a definitely enumerated population group. It is necessary, therefore, to utilize other methods for obtaining the desired information.

In a general way, the most promising directions for seeking data of this character are: (1) Records of disability among groups of insured persons associated in various kinds of sick-benefit associations; (2) records of sickness in groups of persons employed in industrial establishments where careful medical supervision and a system of disability records have been established; (3) records of sickness in groups of individuals living in institutions or attending school; and (4) special surveys of population groups made for the specific purpose of ascertaining the incidence of a given disease or group of diseases.

In various prior publications the Public Health Service has presented statistics of disability among adult wage earners who are members of sick-benefit associations, and the results of special sickness surveys. In the hope of obtaining data regarding the incidence of diseases among children, an attempt was made in connection with the field studies in child hygiene in Missouri during 1919–20, to institute a system of sickness records in connection with the schools. This was undertaken purely as an experiment, and a limited number of schools were requested to cooperate with the Public Health Service for this purpose. The results are presented in the following pages. The work is being undertaken on a larger scale, not only in Missouri but in other States for the school session of 1921–22.

[1] From Field Investigations in Child Hygiene, United States Public Health Service. The statistical part of this study was conducted in the Statistical Office of the Public Health Service.

The data here presented were collected in 13 localities in the State of Missouri. These data were entered by the teachers on cards distributed by medical officers of the Public Health Service in charge of child hygiene studies in the several communities. A card was made out for each child, showing sex, color, and age, and record, by school months, of the total possible number of days of school attendance,[1] the days present, the days absent on account of sickness, and the days absent from causes other than sickness. The card also contained a record of the diseases the child had during each month of the session.

After the cards had been completed and collected, they were carefully edited for errors, and only those which seemed to be properly and accurately used were included in the tabulation. It is believed that the necessary selection of properly filled out cards did not eliminate a disproportionate number of any particular class, such as those showing an excessive amount of absence or attendance.

The records, even after careful editing, however, can be considered only as a preliminary experiment. The data were incomplete in many ways. Records showing the specific data desired on the card were kept only after the first of the year 1920, and in some localities they were begun even later. Data for the months prior to the beginning of any special records were taken from the regular school records and, therefore, vary in completeness in the different localities. The entries showing the specific diseases causing the absence were not complete; in the majority of cases the number of days absent because of sickness was shown without specifying the disease. It was therefore decided to compute only the percentages of the total possible days of school attendance which were lost on account of sickness of all kinds and of causes other than sickness, with certain other data based on those cards reporting the specific disease causing the absence.

Table I shows the size and location of the cities from which data were drawn. They range from one to twenty thousand in population, and are fairly representative, average-sized cities of the State. No data from the larger cities were included.

[1] It was found that, according to the prevailing custom in keeping school records of enrollment, a child's name was dropped from the roll after three days' absence and reentered when he returned. In tabulating the records for the purpose of counting the absence from school on account of sickness, a child's name was not dropped from the roll except when he was permanently separated from the school, as in the case of a child who left the community, or who went to work, or some similar case. With this difference, the total possible number of days of school attendance is the total number of days enrolled during the period used for the computation.

TABLE I.—*Population and location of certain cities in Missouri and the number of children for whom sickness records were obtained in each place.*

City.	County.	Population of city, 1920.	Number of children included.
Sedalia	Pettis	21,144	1,267
Jefferson City	Cole	14,490	660
Independence	Jackson	11,686	[illegible]
Cape Girardeau	Cape Girardeau	10,252	220
Warrensburg	Johnson	4,811	446
Excelsior Springs	Clay	4,165	202
Bonne Terre	St. Francois	3,815	641
West Plains	Howell	3,178	426
Liberty	Clay	3,097	251
Farmington	St. Francois	2,685	421
Jackson	Cape Girardeau	2,114	154
Montgomery	Montgomery	1,698	16
Oregon	Holt	804	137

Table II, computed from the basic data shown in Table VII (see appended tables), shows by months the percentages of the total possible number of days of school attendance which were lost on account of sickness and of causes other than sickness. The data are shown by sex and for two age groups.

TABLE II.—*Percentages of total possible number of days of school attendance which were lost on account of sickness and of causes other than sickness for each month of the school year 1919–20, in certain localities in Missouri.*

Cause of absence, sex, and age group.	Total school year.	1919 September.	1919 October.	1919 November.	1919 December.	1920 January.	1920 February.	1920 March.	1920 April.	1920 May.
Sickness:										
Both sexes—										
All ages (6 to 18)	5.6	1.3	2.5	4.2	5.5	6.3	11.6	6.9	5.8	3.6
6 to 10	6.9	1.3	3.0	5.4	6.7	7.5	13.9	8.9	7.6	4.7
11 to 18	4.1	1.3	2.0	2.9	4.2	4.9	9.0	4.7	4.0	2.4
Boys—										
All ages (6 to 18)	5.4	1.2	2.3	4.0	4.8	6.1	11.9	6.6	5.6	3.2
6 to 10	6.7	1.2	2.7	5.0	5.7	7.4	14.0	8.7	7.5	4.1
11 to 18	3.9	1.2	2.0	3.0	3.8	4.5	9.5	4.3	3.8	2.3
Girls—										
All ages (6 to 18)	5.8	1.4	2.7	4.4	6.2	6.6	11.4	7.2	5.9	4.0
6 to 10	7.2	1.4	3.3	5.8	7.6	7.7	13.8	9.1	7.7	5.3
11 to 18	4.2	1.4	1.9	2.9	4.6	5.3	8.6	5.1	4.1	2.6
Other causes:										
Both sexes—										
All ages (6 to 18)	3.0	2.0	2.5	2.6	3.3	3.1	4.0	3.2	2.9	2.7
6 to 10	2.9	2.2	2.8	2.6	3.4	3.3	3.9	2.8	2.5	2.6
11 to 18	3.1	1.9	2.2	2.6	3.2	3.0	4.1	3.6	3.3	2.8
Boys—										
All ages (6 to 18)	3.2	2.2	2.8	2.6	3.7	3.4	4.4	3.5	3.1	3.1
6 to 10	3.1	2.2	3.2	2.7	3.8	3.6	4.3	3.0	2.6	2.8
11 to 18	3.4	2.2	2.3	2.6	3.6	3.1	4.6	4.0	3.8	3.4
Girls—										
All ages (6 to 18)	2.7	1.9	2.2	2.5	2.9	2.9	3.6	2.9	2.6	2.3
6 to 10	2.6	2.2	2.3	2.5	3.0	3.0	3.5	2.6	2.4	2.3
11 to 18	2.7	1.5	2.1	2.5	2.8	2.9	3.7	2.3	2.8	2.2

As between the sexes, absence on account of sickness is, with some exceptions, greater for girls than for boys. The differences, however, are so small that they can hardly be considered significant. The

absence from causes other than sickness is greater for boys than for girls in practically all cases. Although the differences are not great, they persist in all months and therefore seem to indicate that causes other than sickness were responsible for a greater amount of absenteeism among boys than among girls.

From the point of view of age, the younger group seems to lose more time because of sickness than the older group. The percentages of total possible days of attendance which were lost on account

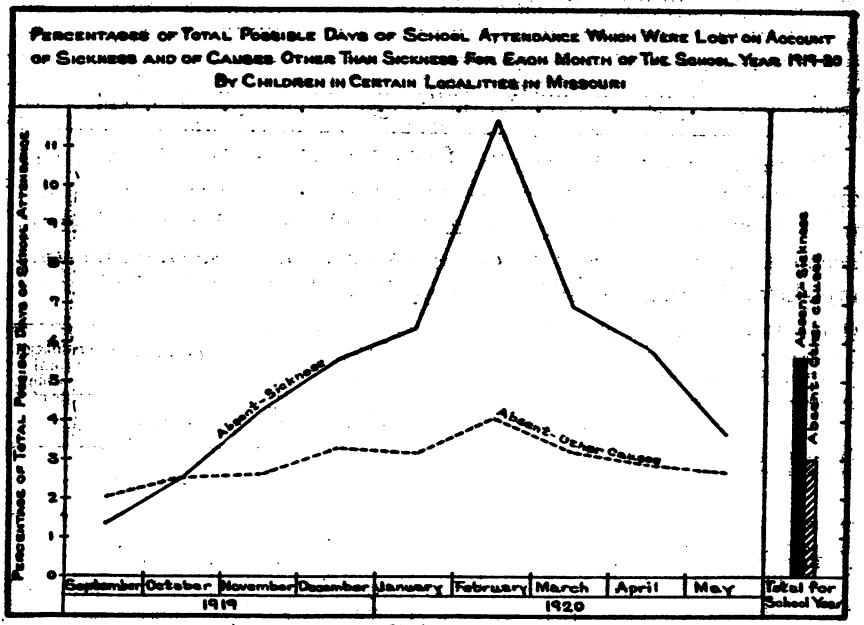

Fig. 1.

of sickness is greater for the younger group in practically all cases. The differences are large enough to be significant and suggest one of three things: that a larger number of cases of sickness occurred among the younger children, or that they recovered more slowly, or that they were kept at home for less serious illness or for a longer time after recovery than was the case with the older children. Unfortunately, the data available for this study were not in such a shape that the question could be settled as to which was actually the case.

Absence from causes other than sickness seems to differ less for the two age groups than absence from sickness. For the year as a whole, the children of the older group were absent slightly more from causes other than sickness than were those of the younger group. As to the seasonal distribution of such absence, the younger group seems to have more absence in the first half of the year, but less in the last half. However, the differences are too slight to be significant; but since the tendency is so general and applies to all groups, it is worth noting.

Figure I shows, for both sexes and all ages, the percentages of time lost from school because of sickness and of causes other than sickness for each month of the school year.

The unusually high peak in February, 1920, is obviously due to the influenza epidemic. Of the days lost on account of sickness from known diseases in that month, 46 per cent were due to influenza, and 34 per cent of the cases of illness of known cause were due to influenza. Reference to Table IV will show that the percentages of days lost and of cases of influenza were not large except in January and February; the curve, therefore, approximates sickness in a normal year except for those months.

In view of the consistently greater time lost on account of sickness by the younger of the two age groups, Table III was prepared to show the time lost on account of sickness and of causes other than sickness for children of each year of age from 6 to 16 years, inclusive, for the school session. The data are presented graphically in Figure 2.

TABLE III.—*Time lost from school on account of sickness and of other causes, by children each year of age from 6 to 16 years, inclusive, during the school year 1919–20, in certain localities in Missouri.*

Age in years.	Number of children.	Total possible number of days of school attendance.	Percentage of total possible days of school attendance lost on account of sickness.	Percentage of total possible days of school attendance lost on account of other causes.
All ages (6 to 16)	6,099	666,449	5.6	3.0
6	404	49,480	9.7	3.8
7	627	65,157	8.6	3.0
8	651	67,605	6.7	2.8
9	745	84,764	6.1	2.5
10	741	83,627	4.9	2.6
11	754	84,982	4.0	2.3
12	731	80,083	4.2	3.1
13	618	62,246	4.0	3.0
14	475	51,040	3.6	2.9
15	261	26,425	4.9	3.9
16	92	9,040	3.9	3.3

The time lost from sickness shows no great variations nor any consistent trend from 11 to 16 years of age, but decreases considerably and consistently from 6 to 11 years. Absence from causes other than sickness shows no marked differences for the different ages. If any trend whatever is shown, it indicates increasing absence for the older children, but the items are irregular and the increasing trend is slight only.

The specific diseases causing absence were reported in 2,326 cases, resulting in 14,373 days' absence from school (see appended Tables VIII and IX). On the basis of these known cases, certain computations were made as to the relative importance of certain diseases as a cause of absence in each month of the school year. Because of the fact that the influenza epidemic made certain

Fig. 2. Fig. 3. Fig. 4.

months of this school year exceptional, the cases of and the absences due to influenza were deducted from this total number, and the proportion of cases of and of days lost from all diseases, exclusive of influenza, were computed for each disease for each month of the school year. For example, absence because of sickness of known cause in March was 2,528 days; but of this total, 223 days were due to influenza, leaving 2,305 days due to other known diseases. Of this total absence from known diseases, 543 days, or 23.6 per cent, were due to measles. Similar percentages were worked for other diseases and for each month to show the relative importance of certain diseases in causing absence from school at different seasons of the year after eliminating the abnormal condition resulting from influenza. Table IV shows the results of these computations.

TABLE IV.—*Percentages of total number of days lost from school on account of all illness of known cause (exclusive of influenza), and percentages of total cases of illness of known cause (exclusive of influenza) due to certain diseases, among children 6 to 18 years of age, in certain localities in Missouri during 1919–20.*

Disease.	Total school year.	1919				1920				
		September.	October.	November.	December.	January.	February.	March.	April.	May.
PERCENTAGE DUE TO EACH DISEASE.										
Days lost:										
All diseases (exclusive of influenza)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Colds	32.5	47.1	41.3	34.1	50.8	52.3	33.0	33.1	16.7	15.6
Measles	23.5	.....	.....	.....	.8	.4	16.0	23.6	54.7	48.1
Mumps	12.8	.....	1.4	1.4	2.6	16.2	11.6	19.7	15.3	13.6
Scarlet fever	7.5	14.3	30.1	29.4	19.7	7.4	5.9	2.7	.7	.7
Whooping cough	4.4	.....	5.9	7.8	7.7	4.4	5.4	3.6	.5	6.6
Chicken pox	3.6	.....	2.3	9.7	3.2	2.7	6.9	4.5	.7	.....
Tonsillitis	2.6	.....	1.0	3.5	2.8	2.3	3.1	2.2	2.5	2.8
Pneumonia	2.3	.....	1.4	1.3	.....	5.1	5.0	1.9	1.1	.....
Toothache	2.3	2.1	3.0	3.3	1.8	2.2	3.0	1.8	2.2	2.1
Diphtheria	.8	.....	.....	2.0	3.4	.....	.9	.....	.7	.5
Smallpox	.5	.....	.....	.....	.....	.....	.7	.9	.2	1.4
Other diseases	7.2	36.5	13.6	7.5	7.2	7.0	8.5	6.0	4.7	8.6
Cases:										
All diseases (exclusive of influenza)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Colds	57.0	71.2	70.1	61.0	75.3	72.6	56.1	53.9	36.6	41.0
Measles	12.1	.....	.....	.....	.5	.3	8.7	11.5	23.1	27.7
Mumps	10.3	.....	1.3	1.6	3.0	10.7	10.1	13.8	13.5	15.1
Scarlet fever	2.8	6.5	9.1	13.0	7.1	2.2	2.5	.7	.3	.....
Whooping cough	1.1	.....	2.6	1.6	.5	.9	1.7	.7	.3	2.4
Chicken pox	2.7	.....	1.3	6.5	2.5	1.9	4.8	3.5	.8	.....
Tonsillitis	2.4	.....	1.3	2.4	1.5	2.2	3.1	2.8	2.2	2.4
Pneumonia	.7	.....	1.3	.....	.....	1.9	.8	.....	1.1	.....
Toothache	6.1	3.2	9.1	9.0	4.6	3.8	6.2	5.4	7.8	7.2
Diphtheria	.3	.....	.....	.8	1.0	.....	.3	.....	.3	.6
Smallpox	.2	.....	.....	.....	.....	.....	.6	.2	.....	.6
Other diseases	4.3	16.1	3.9	4.1	4.0	3.5	5.1	4.5	4.0	3.0
PERCENTAGE OF TOTAL DAYS LOST FROM ILLNESS OF KNOWN CAUSE AND OF TOTAL CASES OF ILLNESS OF KNOWN CAUSE DUE TO INFLUENZA.										
Days lost:										
Influenza	17.7	3.6	.....	2.1	4.6	18.1	46.3	8.8	2.8	.....
Cases:										
Influenza	11.2	3.1	.....	1.6	3.9	12.2	33.9	3.8	1.9	.....

It is a striking fact that colds were the greatest single assigned cause of absence in every month of the school year. The other infectious diseases are more or less seasonal in character; measles was an important cause of absence from February to May, scarlet fever from September to December. Seasonal variation was not such an outstanding fact in the other cases, but existed for most of the common infectious diseases.

Children are more disposed to some diseases at certain ages, and therefore the relative importance of those diseases as causes of absence from school varies with age. In order to show this variation, Tables V and VI were prepared, showing by age groups the percentages of the total number of days lost from sickness of known cause which were due to certain diseases. Similar computations were made for the percentages of cases and the days lost per case of these diseases.

TABLE V.—*Percentage of days lost from diseases of known cause and of cases of illness of known cause due to certain diseases among children in certain localities in Missouri, by age groups.*

Disease.	Days lost.			Cases.		
	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.
PERCENTAGE OF ALL ILLNESS FROM KNOWN CAUSE (EXCLUSIVE OF INFLUENZA, DUE TO CERTAIN DISEASES.						
All diseases (exclusive of influenza)	100.0	100.0	100.0	100.0	100.0	100.0
Colds	32.5	28.4	41.0	57.0	52.8	63.2
Measles	23.5	28.6	12.9	12.1	18.7	5.5
Mumps	12.8	12.0	14.5	10.3	10.9	9.5
Scarlet fever	7.5	8.2	6.0	2.8	3.2	2.3
Whooping cough	4.4	6.3	.3	1.1	1.7	.1
Chicken pox	3.6	4.2	2.5	2.7	3.5	1.4
Tonsillitis	2.6	1.4	5.0	2.4	1.3	4.0
Toothache	2.3	1.6	3.8	6.1	5.0	7.8
Pneumonia	2.3	2.2	2.4	.7	.7	.7
Diphtheria	.8	.5	1.4	.3	.2	.4
Smallpox	.5	.6	.4	.2	.2	.1
Other diseases	7.2	6.0	9.3	4.3	3.8	5.0
PERCENTAGE OF ALL ILLNESS FROM KNOWN CAUSE DUE TO INFLUENZA.						
Influenza	17.7	15.0	21.0	11.2	10.5	12.2

TABLE VI.—*Average number of days lost from school per case of certain diseases among children in certain localities in Missouri, by age groups.*

Disease.	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.
All diseases	6.2	6.9	5.1
Whooping cough	23.5	24.1	9.5
Pneumonia	19.2	22.1	15.3
Diphtheria	15.9	14.0	17.8
Scarlet fever	15.1	16.5	12.2
Smallpox	14.5	14.3	15.0
Measles	11.1	11.2	10.7
Influenza	9.7	10.5	8.8
Chicken pox	7.8	7.7	7.8
Mumps	7.1	7.1	7.1
Tonsilitis	6.2	7.1	5.8
Colds	3.3	3.5	3.0
Toothache	2.2	2.1	2.2
Other diseases	9.6	10.2	8.9

Figure 3 shows graphically the relative importance of these diseases as measured in days lost and in cases of illness among children of 6 to 18 years of age, inclusive. Figure 4 shows the severity of cases of various diseases as measured in the average time lost from school per case.

For the year as a whole, the children lost, on account of sickness, an average of 5.6 per cent of the days that school was in session. Assuming that this percentage of days of sickness is representative of the whole year, it means an average of slightly over 20 days of sickness per child per year. Boys were absent on account of sickness almost as much as girls, the difference being only 0.4 of 1 per cent, which, on an annual basis, would mean about 20 days of sickness for boys and about 21 for girls.

The data presented here are, of course, insufficient to afford conclusions of a general nature, but it is believed that they do suggest that the use of school records for obtaining facts as to disease incidence among children is practicable. Such facts, it is unnecessary to say, would be of great value, not only to those who are interested in epidemiology, but to school and health administrators.

TABLE VII.—*Number of children included in the study, total possible number of days of school attendance, and days absent on account of sickness and of causes other than sickness, by months, for the school year 1919–20, in certain localities in Missouri.*

Age and sex.	Total school year.	1919.				1920.				
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.
All ages:										
Both sexes—										
Number of children	6,130	2,701	2,793	2,856	2,920	3,340	3,608	5,348	5,494	4,377
Total possible days of school attendance	669,214	54,020	55,860	57,120	58,400	66,700	72,160	107,765	110,269	86,920
Days absent—Sickness	37,368	717	1,401	2,422	3,219	4,226	8,391	7,424	6,430	3,138
Days absent—Other causes	19,802	1,099	1,402	1,470	1,915	2,094	2,902	3,438	3,162	2,320
Boys—										
Number of children	2,870	1,332	1,382	1,413	1,447	1,650	1,779	2,512	2,624	2,115
Total possible days of school attendance	325,150	26,640	27,640	28,260	28,940	33,000	35,580	50,601	52,633	41,856
Days absent—Sickness	17,442	326	646	1,138	1,396	2,000	4,228	3,333	3,020	1,346
Days absent—Other causes	10,555	583	769	744	1,066	1,111	1,575	1,764	1,649	1,294
Girls—										
Number of children	3,260	1,369	1,411	1,443	1,473	1,690	1,829	2,836	2,870	2,262
Total possible days of school attendance	344,064	27,380	28,220	28,860	29,460	33,700	36,580	57,164	57,636	45,064
Days absent—Sickness	19,926	391	755	1,284	1,823	2,226	4,163	4,091	3,401	1,792
Days absent—Other causes	9,247	516	633	726	849	983	1,327	1,674	1,513	1,026
6 to 10 years:										
Both sexes—										
Number of children	3,173	1,421	1,476	1,516	1,542	1,808	1,923	2,801	2,821	2,229
Total possible days of school attendance	351,313	28,420	29,520	30,320	30,840	36,160	38,460	56,244	56,496	44,853
Days absent—Sickness	24,413	376	884	1,634	2,059	2,724	5,347	4,991	4,290	2,108
Days absent—Other causes	10,078	623	813	787	1,035	1,186	1,507	1,570	1,408	1,149
Boys—										
Number of children	1,497	692	720	743	753	885	946	1,322	1,375	1,091
Total possible days of school attendance	170,611	13,840	14,400	14,860	15,080	17,700	18,920	26,576	27,552	21,703
Days absent—Sickness	11,352	167	384	737	863	1,305	2,649	2,299	2,065	883
Days absent—Other causes	5,360	303	460	400	567	638	814	800	706	612
Girls—										
Number of children	1,676	729	756	773	789	923	977	1,479	1,446	1,138
Total possible days of school attendance	180,702	14,580	15,120	15,460	15,780	18,460	19,540	29,668	28,944	23,150
Days absent—Sickness	13,061	209	500	897	1,196	1,420	2,698	2,692	2,224	1,225
Days absent—Other causes	4,778	320	353	387	468	548	693	770	702	537
11 to 18 years:										
Both sexes—										
Number of children	2,957	1,280	1,317	1,340	1,378	1,532	1,685	2,547	2,673	2,148
Total possible days of school attendance	317,901	25,600	26,340	26,800	27,560	30,540	33,700	51,521	53,773	42,067
Days absent—Sickness	12,955	341	517	788	1,160	1,502	3,044	2,433	2,140	1,030
Days absent — Other causes	9,724	476	589	683	880	908	1,395	1,868	1,754	1,171
Boys—										
Number of children	1,573	640	662	670	694	765	833	1,190	1,249	1,024
Total possible days of school attendance	154,539	12,800	13,240	13,400	13,880	15,300	16,660	24,025	25,081	20,153
Days absent—Sickness	6,090	159	262	401	533	695	1,579	1,034	964	463
Days absent — Other causes	5,255	280	309	344	499	473	761	964	943	682
Girls—										
Number of children	1,584	640	655	670	684	767	852	1,357	1,424	1,124
Total possible days of school attendance	163,362	12,800	13,100	13,400	13,680	15,240	17,040	27,496	28,692	21,914
Days absent—Sickness	6,865	182	255	387	627	806	1,465	1,399	1,177	567
Days absent — Other causes	4,469	196	280	339	381	435	634	904	811	439

TABLE VIII.—*Number of days lost from school on account of sickness of known cause and number of cases of known diseases among school children 6 to 18 years of age, in certain localities in Missouri during 1919–20.*[1]

Disease.	Total school year.	1919				1920				
		September.	October.	November.	December.	January.	February.	March.	April.	May.
Days lost:										
All known diseases	14,373	98	356	793	1,176	1,764	4,008	2,528	2,533	1,117
All known diseases (exclusive of influenza)	11,832	95	356	777	1,122	1,445	2,154	2,395	2,461	1,117
Influenza	2,541	3	.....	16	54	319	1,854	223	72	.....
Cases:										
All known diseases	2,326	32	77	125	206	361	537	444	378	166
All known diseases (exclusive of influenza)	2,065	31	77	123	198	317	355	427	371	166
Influenza	261	1	.....	2	8	44	182	17	7	.....

[1] Data given here are for only the small part of the total absence from sickness in which the specific disease was reported.

TABLE IX.—*Number of days lost from school on account of sickness of known cause and number of cases of each known disease causing absence among children 6 to 18 years of age, in certain localities in Missouri during 1919–20.*[1]

Disease.	Days lost.			Cases.		
	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.	All ages (6 to 18).	6 to 10 years of age.	11 to 18 years of age.
All known diseases	14,373	9,523	4,850	2,326	1,376	950
All known diseases (exclusive of influenza)	11,832	8,001	3,831	2,065	1,231	834
Influenza	2,541	1,522	1,019	261	145	116
Cold	3,843	2,273	1,570	1,177	650	527
Measles	2,785	2,290	495	251	205	46
Mumps	1,512	955	557	213	134	79
Scarlet fever	891	659	232	59	40	19
Whooping cough	516	506	10	22	21	1
Chicken pox	427	333	94	55	43	12
Tonsillitis	305	113	192	49	16	33
Toothache	275	129	146	126	61	65
Pneumonia	269	177	92	14	8	6
Diphtheria	96	42	54	6	3	3
Smallpox	58	43	15	4	3	1
Other diseases	855	481	374	89	47	42

[1] Data given here are for only the small part of the total absence from sickness in which the specific disease was reported.

DISINFECTANT TESTING BY THE HYGIENIC LABORATORY METHOD.

The following method for determining the phenol coefficient of disinfectants supersedes the methods described in previous publications of the Public Health Service and is the present Hygienic Laboratory method.

No single method can serve as a means of comparing the value in practice of disinfectants of greatly diverse composition and destined

for a variety of applications. However, disinfectants which are chemically related to phenol, which are to be used against organisms reacting similarly to the manner in which the typhoid bacillus reacts and which are destructive within the time and temperature limits of this test, may be compared as to their disinfecting properties within these limitations by means of this test. The results may be useful in the selection of a potent product, in making comparisons of cost in terms of service rendered, and in checking successive batches of the same product.

This method was submitted to several different laboratories for trial before its adoption, and the results seem to justify the belief that the personal equation in the performance of the tests does not play an inordinate rôle.

THE TEST CULTURE.

The test culture is a culture of *Bacillus typhosus*, Hopkins strain. Between periods of testing it is maintained on nutrient agar stabs, transferred at monthly intervals.

For at least 5 days before the test the culture is transferred at 24-hour intervals to successive tubes of the meat extract broth described below and incubated at 37° C. Transfers are made with one standard loopful. The culture is filtered through sterile filter paper just before using. The test is performed with a 24-hour culture.

THE PHENOL.

The phenol must comply with the requirements of the Eighth United States Pharmacopoeia. Particularly the congealing point must not be below 40° C. The crystals are kept in tightly stoppered amber-colored bottles in a dark and relatively cool place.

A 5 per cent original solution is made by adding 1 part by weight of phenol, liquefied by warming the bottle, to 19 parts of distilled water. A fresh solution is made for each day's use.

THE CULTURE MEDIUM.

Make meat extract medium as follows:

Beef extract (Liebig's)	3 gm.
Peptone (Armour's for disinfectant testing)	10 gm.
Sodium chloride	5 gm.
Water, distilled	1,000 c. c.

Boil for 15 minutes.
Make up to original weight by addition of water.
Filter through paper.
Tube, 10 c. c. to each tube.
Sterilize.
The p_H value of this medium should be between 6.0 and 7.0.

GLASSWARE AND APPARATUS.

Glassware for measuring must be accurately graduated. It must be clean, dry, and sterile at the time of use. There will be needed—

1 c. c. capacity pipettes.
5 c. c. capacity pipettes.
1 c. c. delivery pipettes, graduated in tenths.
5 c. c. delivery pipettes.
100 c. c. measuring cylinders, graduated in 1 c. c., glass stoppered.
Seeding tubes, 1 x 3 inches, flared tops, round bottoms.

Racks consisting of blocks of wood with rows of holes for both the seeding tubes (before they are placed in the water bath) and the subculture tubes.

Wire loops must be carefully made and kept from damage. They are made as follows: A close cylindrical spiral is made by winding a piece of platinum wire, No. 23, B. & S. gauge, as tightly as possible about a piece of steel or other hard wire having a diameter of 0.072 inch (No. 13, B. & S. gauge) to complete a little more than four full turns. The long end of the wire is then bent sharply at right angles to the wound portion and parallel to the steel wire. The core is removed and the short end of the wire is clipped off so as to leave exactly four full turns to the coil. The successive turns of the spiral must touch one another continuously. The long end of the wire is attached to an aluminum handle.

A convenient support is provided on which to rest the loops so that a batwing Bunsen burner may be placed under each one successively.

A constant temperature bath is provided, capable of maintaining the seeding tubes at 20° C. during the time of the test. A well-insulated bath of large volume relative to the surface exposed is sufficient without thermoregulating appliances.

Disinfectant testing machine.—The use of a disinfectant testing machine is optional. One is described in Reprint No. 462 from the Public Health Reports. A few modifications have proved useful. For example, the use of platinum instead of nichrome loops, and the practice of sterilizing the subculture tubes covered with padded inverted troughs in the racks.

DILUTIONS.

Dilutions of phenol and of disinfectants are made from the original liquid on the day of the test. For the dilutions of the disinfectant, a 5 per cent solution is made by adding 5 c. c. of the disinfectant to 95 c. c. of sterile distilled water. A standardized 5 c. c. capacity pipette is used for this purpose. After filling the pipette, all excess of the disinfectant on the outside of the pipette is wiped off with

sterile gauze. The contents of the pipette are then delivered into a cylinder containing 95 c. c. of sterile distilled water and the pipette is washed out as clean as possible by aspiration and blowing out the contents into the cylinder. The contents of the cylinder are then thoroughly shaken and the dilutions up to 1:500 are made from it, using delivery pipettes for measuring. For those disinfectants which do not readily form a 5 per cent solution, make a 1 per cent solution, and from this make the dilutions greater than 1:100 in accordance with the second table of dilutions. If greater dilutions than 1:500 are to be made, a 1 per cent solution is made from the 5 per cent solution and the higher dilutions are made from this.

For the higher dilutions, delivery pipettes may be used. The following scale is used for making dilutions:

For dilutions up to 1:70, increase or decrease by a difference of 5 (i. e., 5 parts of water); from 1:70 to 1:160, by a difference of 10; from 1:160 to 1:200, by a difference of 20; from 1:200 to 1:400, by a difference of 25; from 1:400 to 1:900, by a difference of 50; from 1:900 to 1:1800, by a difference of 100; from 1:1800 to 1:3200, by a difference of 200; and so on if higher dilutions are necessary.

It is important that the cylinders used for making the dilutions be correctly graduated. It is preferable to use standardized cylinders and pipettes. For making the dilutions in accordance with the above scheme, the following tables are of service:

Tables useful in making dilutions.

[5 c. c. of disinfectant + 95 c. c. of distilled water = Solution A.]

Dilution.	c. c. of A.	c. c. of dist. water.	c. c. of A.	c. c. of dist. water.	c. c. of A.	c. c. of dist. water.
1:20 =	20 +	0	or 10 +	0	or 4 +	0
1:25 =	20 +	5	or 10 +	2½	or 4 +	1
1:30 =	20 +	10	or 10 +	5	or 4 +	2
1:35 =	20 +	15	or 10 +	7½	or 4 +	3
1:40 =	20 +	20	or 10 +	10	or 4 +	4
1:45 =	20 +	25	or 10 +	12½	or 4 +	5
1:50 =	20 +	30	or 10 +	15	or 4 +	6
1:55 =	20 +	35	or 10 +	17½	or 4 +	7
1:60 =	20 +	40	or 10 +	20	or 4 +	8
1:65 =	20 +	45	or 10 +	22½	or 4 +	9
1:70 =	20 +	50	or 10 +	25	or 4 +	10
1:70 =	20 +	50	or 10 +	25	or 4 +	10
1:80 =	20 +	60	or 10 +	30	or 4 +	12
1:90 =	20 +	70	or 10 +	35	or 4 +	14
1:100 =	20 +	80	or 10 +	40	or 4 +	16
1:110 =	20 +	90	or 10 +	45	or 4 +	18
1:120 =	20 +	100	or 10 +	50	or 4 +	20
1:130 =	20 +	110	or 10 +	55	or 4 +	22

Dilution.	c. c. of A.	c. c. of dist. water.	c. c. of A.	c. c. of dist. water.	c. c. of A.	c. c. of dist. water
1:140 =	20 +	120	or 10 +	60	or 4 +	24
1:150 =	20 +	130	or 10 +	65	or 4 +	26
1:160 =	20 +	140	or 10 +	70	or 4 +	28
1:170 =	20 +	150	or 10 +	75	or 4 +	30
1:180 =	20 +	160	or 10 +	80	or 4 +	32
1:200 =	20 +	180	or 10 +	90	or 4 +	36
1:200 =	20 +	180	or 4 +	36	or 2 +	18
1:225 =	20 +	205	or 4 +	41	or 2 +	20½
1:250 =	20 +	230	or 4 +	46	or 2 +	23
1:275 =	20 +	255	or 4 +	51	or 2 +	25½
1:300 =	20 +	280	or 4 +	56	or 2 +	28
1:325 =	20 +	305	or 4 +	61	or 2 +	30½
1:350 =	20 +	330	or 4 +	66	or 2 +	33
1:375 =	20 +	355	or 4 +	71	or 2 +	35½
1:400 =	20 +	380	or 4 +	76	or 2 +	38
1:450 =	20 +	430	or 4 +	86	or 2 +	43
1:500 =	20 +	480	or 4 +	96	or 2 +	48

Tables useful in making dilutions—Continued.

1 c. c. of disinfectant + 99 c. c. of distilled water = Solution B.

Dilution.	c. c. of B.	c. c. of dist. water.	c. c. of B.	c. c. of dist. water.	c. c. of B.	c. c. of dist. water.
1:100	100	+ 0	or 10	+ 0		
1:110	100	+ 10	or 10	+ 1		
1:120	100	+ 20	or 10	+ 2		
1:130	100	+ 30	or 10	+ 3		
1:140	100	+ 40	or 10	+ 4		
1:150	100	+ 50	or 10	+ 5		
1:160	100	+ 60	or 10	+ 6		
1:160	100	+ 60	or 10	+ 6		
1:180	100	+ 80	or 10	+ 8		
1:200	100	+ 100	or 10	+ 10		
1:200	100	+ 100	or 10	+ 10	or 4	+ 4
1:225	100	+ 125	or 10	+ 12½	or 4	+ 5
1:250	100	+ 150	or 10	+ 15	or 4	+ 6
1:275	100	+ 175	or 10	+ 17½	or 4	+ 7
1:300	100	+ 200	or 10	+ 20	or 4	+ 8
1:325	100	+ 225	or 10	+ 22½	or 4	+ 9
1:350	100	+ 250	or 10	+ 25	or 4	+ 10
1:375	100	+ 275	or 10	+ 27½	or 4	+ 11
1:400	100	+ 300	or 10	+ 30	or 4	+ 12
1:400	10	+ 30	or 4	+ 12	or 2	+ 6
1:450	10	+ 35	or 4	+ 14	or 2	+ 7
1:500	10	+ 40	or 4	+ 16	or 2	+ 8
1:550	10	+ 45	or 4	+ 18	or 2	+ 9
1:600	10	+ 50	or 4	+ 20	or 2	+ 10
1:650	10	+ 55	or 4	+ 22	or 2	+ 11
1:700	10	+ 60	or 4	+ 24	or 2	+ 12
1:750	10	+ 65	or 4	+ 26	or 2	+ 13
1:800	10	+ 70	or 4	+ 28	or 2	+ 14
1:850	10	+ 75	or 4	+ 30	or 2	+ 15
1:900	10	+ 80	or 4	+ 32	or 2	+ 16
1:900	5	+ 40	or 4	+ 32	or 2	+ 16
1:1,000	5	+ 45	or 4	+ 36	or 2	+ 18
1:1,100	5	+ 50	or 4	+ 40	or 2	+ 20
1:1,200	5	+ 55	or 4	+ 44	or 2	+ 22
1:1,300	5	+ 60	or 4	+ 48	or 2	+ 24
1:1,400	5	+ 65	or 4	+ 52	or 2	+ 26
1:1,500	5	+ 70	or 4	+ 56	or 2	+ 28
1:1,600	5	+ 75	or 4	+ 60	or 2	+ 30
1:1,700	5	+ 80	or 4	+ 64	or 2	+ 32
1:1,800	5	+ 85	or 4	+ 68	or 2	+ 34
1:1,800	5	+ 85	or 4	+ 68	or 2	+ 34
1:2,000	5	+ 95	or 4	+ 76	or 2	+ 38
1:2,200	5	+ 105	or 4	+ 84	or 2	+ 42
1:2,400	5	+ 115	or 4	+ 92	or 2	+ 46
1:2,600	5	+ 125	or 4	+ 100	or 2	+ 50
1:2,800	5	+ 135	or 4	+ 108	or 2	+ 54
1:3,000	5	+ 145	or 4	+ 116	or 2	+ 58
1:3,200	5	+ 155	or 4	+ 124	or 2	+ 62

METHOD.

This description applies to the hand method. For the use of the machine, follow the procedure of Reprint No. 462 from the Public Health Reports.

The object is to add 0.1 c. c. of typhoid culture to 5 c. c. of successive dilutions of the disinfectant and of phenol, and, after this addition, to transfer a loopful of each mixture to a separate subculture tube at periods of 5, 7½, 10, 12½, and 15 minutes. The subculture tubes are then incubated for 48 hours at 37° C., and readings of growth or no growth are made and recorded.

Dilutions are made to cover the expected range of the disinfectant, and 5 c. c. of each dilution is placed in a seeding tube. Dilutions of phenol are made as follows: 1:80, 1:90, 1:100, 1:110, 1:120, and 1:130, and 5 c. c. of each is placed in a seeding tube.

The seeding tubes are placed in the water bath at 20° C. and a few minutes are allowed for their contents to reach this temperature.

To each seeding tube 0.1 c. c. of culture is then added seriatim, allowing 15 seconds for each addition. If there are 10 tubes of disinfectant dilutions, this will occupy 2½ minutes. At the end of 5 minutes from the time of adding the disinfectant to the first seeding tube, a oopful of the mixture is transferred from this tube to a subculture tube, and this is done from each successive seeding tube at 15-second intervals. This procedure is repeated after the lapse of 7½, 10, 12½, and 15 minutes from the time of the first addition of culture to the seeding tube. Each loop is placed on the support and flamed with the Bunsen burner immediately after use, and the use of

several loops permits them to cool before they are needed again. The operator is therefore obliged to make a transfer every 15 seconds for 10 minutes.

The culture is best added to the seeding tube by holding the latter in a slanting position and touching the tip of the 1 c. c. pipette to the wetted surface exposed on its upper side. One-tenth c. c. is run in at the proper time and thorough admixture is assured by gentle shaking.

The dilutions of phenol are next treated in the same manner as those of the disinfectant.

The tubes are properly labeled and are placed in the incubator for 48 hours, at the end of which time readings of growth or no growth are made and entered in a table as + or − signs, respectively.

In the nature of the test it is unavoidable that discrepancies in the even oblique slant of the plus signs across the chart will occasionally be encountered; but if these are numerous, a faulty technique is indicated and the test should be discarded. The same applies to accidentally contaminated tubes.

DETERMINATION OF COEFFICIENT.

The coefficient is the arithmetic mean of the sum of three ratios, expressed decimally. These ratios are, the denominator of the highest dilution of the disinfectant in whose subculture tube no growth occurs, divided by the corresponding figure for phenol, for the 5, 10, and 15 minute intervals, respectively.

Example:

Sample.	Dilution.	Time of exposure in minutes.				
		5	7½	10	12½	15
Disinfectant	1:700	−	−	−	−	−
	1:800	+	−	−	−	−
	1:900	+	+	−	−	−
	1:1,000	+	+	+	+	−
	1:1,100	+	+	+	+	+
Phenol	1:80	−	−	−	−	−
	1:90	+	−	−	−	−
	1:100	+	+	+	+	−
	1:110	+	+	+	+	−
	1:120	+	+	+	+	+
	1:130	+	+	+	+	+

$$\text{Coefficient} = \frac{\frac{700}{80} + \frac{900}{90} + \frac{1000}{110}}{3} = \frac{8.7 + 10.0 + 9.0}{3} = 9.2$$

ECONOMIC DEPRESSION AND PELLAGRA INCIDENCE.

The fear expressed by officers of the Public Health Service last fall,[1] that the economic depression was likely to be followed by an increase of pellagra in the summer of 1921, is being realized. Observations and inquiries by officers of the service indicate a markedly increasing prevalence of the disease in many localities. The information at hand is as yet too incomplete to permit of generalization but it seems probable that the number of cases will be more than double what they were last year (1920) in the localities for which information is at hand.

It is evident that economic pressure is producing an unfavorable effect on the diet. The animal foods are being excessively reduced, thus bringing about an unbalanced diet consisting too largely of cereals. Unless this tendency to an unbalancing of the diet is stopped at once by keeping up the supply of milk, cheese, lean meat (fish, fowl, pork), and fresh vegetables, there is serious danger of a return of the alarming conditions experienced in 1915 following the depression resulting from the outbreak of the World War in 1914.

SERIES OF TYPHOID CASES ORIGINATING IN A BACILLUS CARRIER.

In a report from Asst. Surg. Gen. L. L. Williams, at Marine Hospital No. 19, San Francisco, Calif., dated June 16, 1921, an account is given of the occurrence of nine cases of typhoid fever among the members of the crew of the steamship *Lake Gunni*, which evidently originated in a carrier who was a member of the crew.

The carrier (H. L.), a fireman, was admitted to the hospital for observation on May 30, and the typhoid bacillus was demonstrated in his urine. He informed the medical officer in charge that he had had typhoid fever in New Orleans, where he was discharged from the hospital on April 26, and had shipped on the *Lake Gunni* on the following day. The nine cases from the vessel were all admitted to the hospital between May 25 and June 6.

The vessel was visited by a medical officer of the Public Health Service, who examined the water and ice with negative results. The information secured from each of the patients suggested no other common source of infection; and so there seems to be little doubt that this group of cases originated in the typhoid bacillus carrier.

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[1] Public Health Reports, vol. 35, No. 46, 1920, Reprint No. 621.

A THERMOMETER BASKET.

A CONVENIENT DEVICE IN USE AT UNITED STATES PUBLIC HEALTH SERVICE HOSPITAL NO. 56, FORT McHENRY, MD.

To facilitate the taking of a large number of temperatures, especially of tuberculous patients, the accompanying cut shows an arrangement whereby sterile thermometers as well as soiled ones may be conveniently carried in test-tube holders. An ordinary mechanic can make a number of these baskets from materials that are at hand in practically every Public Health Service hospital.

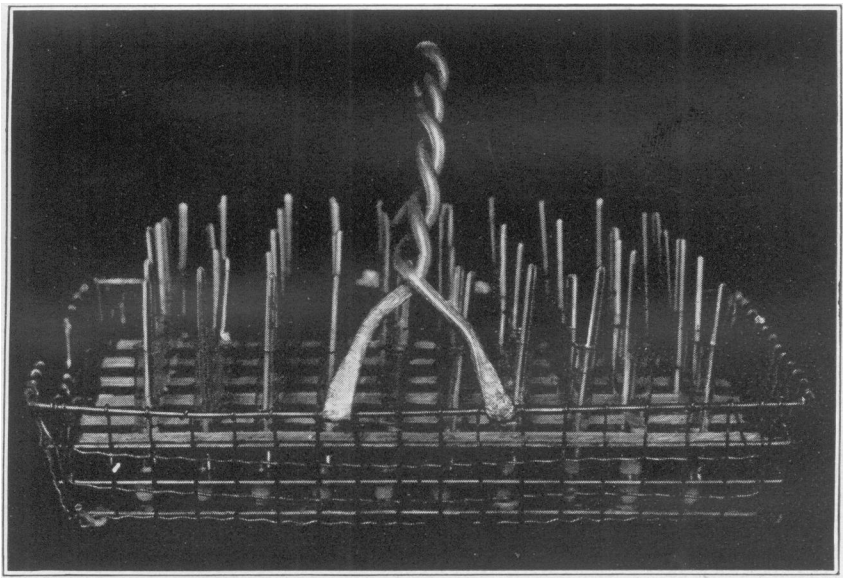
DETAILS.

Wire letter basket: Top measurements, 14 by 10 inches; bottom measurements, 13 by 9 inches; bottom covered with aluminum $\frac{1}{8}$ inch thick. Two trays of aluminum, one directly over the other, each fitted with 60 holes, 10 lengthwise, 6 crosswise; middle tray, $13\frac{1}{4}$ by $9\frac{1}{4}$ inches; top tray, $13\frac{3}{4}$ by $9\frac{1}{2}$ inches; two cleats, or extensions on each end, the cleats of the middle tray being bent over the first wire from the bottom, and those of the top tray bent over the first wire from the top of the basket, holding the trays in proper positions. The handle is made of two pieces of aluminum wire, twisted together and bent around the wire rim at the sides of the basket.

DEATHS DURING WEEK ENDED JUNE 25, 1921.

Summary of information received by telegraph from industrial insurance companies for week ended June 25, 1921, and corresponding week, 1920. (From the "Weekly Health Index," June 28, 1921, issued by the Bureau of the Census, Department of Commerce.)

	Week ended June 25, 1921.	Corresponding week, 1920.
Policies in force	47,225,626	44,055,769
Number of death claims	7,787	8,117
Death claims per 1,000 policies in force	8.6	9.6



Thermometer basket in use in tuberculosis wards at U. S. P. H. S. Hospital No. 56, Fort McHenry, Md.

Deaths from all causes in certain large cities of the United States during the week ended June 25, 1921, infant mortality, annual death rate, and comparison with corresponding week of preceding years. (From the "Weekly Health Index," June 28, 1921, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population, July 1, 1921.	Week ended June 25, 1921.		Average annual death rate per 1,000.[2]		Deaths under 1 year.			Infant mortality rate, week ended June 25, 1921.[3]
		Total deaths.	Death rate.[1]			Week ended June 25, 1921.	Previous year or years.[2]		
Akron, Ohio	229,195	25	5.7		[4]9.5	4		[4]7	38
Albany, N. Y.	115,071	34	15.4	C	17.4	3	C	4	67
Atlanta, Ga.	207,473	66	16.6	C	18.5	13	C	11	.....
Baltimore, Md.	732,963	185	12.8	A	14.0	31	A	31	87
Birmingham, Ala.	186,133	51	14.3	A	21.1	9	A	12	.....
Boston, Mass.	757,634	204	14.0	A	15.8	24	A	34	65
Bridgeport, Conn.	149,967	24	8.3	A	15.1	6	A	8	76
Buffalo, N. Y.	519,608	109	10.9	C	10.5	22	C	11	85
Cambridge, Mass.	110,444	29	13.7	A	10.7	5	A	3	89
Camden, N. J.	119,672	32	13.9	.....	.....	8	.....	.....	.....
Chicago, Ill.	2,780,655	551	10.3	A	13.2	84	A	107	.....
Cincinnati, Ohio.	403,418	124	16.0	C	14.8	12	C	19	79
Cleveland, Ohio.	831,138	157	9.9	C	10.3	29	C	17	78
Columbus, Ohio.	245,358	51	10.8	C	10.9	.....	C	5	.....
Dallas, Tex.	165,282	21	6.6	A	15.7	5	A	5	.....
Dayton, Ohio.	158,119	29	9.6	C	9.1	4	C	5	66
Denver, Colo.	263,152	69	13.7	A	12.8	4	.....	.....	.....
Detroit, Mich.	1,070,450	189	9.2	C	12.0	42	C	50	79
Fall River, Mass.	120,668	24	10.1	C	14.7	3	C	5	45
Grand Rapids, Mich.	141,197	34	12.6	C	11.6	5	C	8	85
Houston, Tex.	144,340	44	15.9	.....	.....	8	.....	.....	.....
Indianapolis, Ind.	325,215	78	12.5	C	15.1	6	C	12	47
Jersey City, N. J.	302,788	58	10.0	C	9.7	12	C	4	.....
Kansas City, Kans.	103,884	20	10.0	C	5.1	3	C	1	72
Kansas City, Mo.	336,157	79	12.3	C	14.3	11	C	13	.....
Los Angeles, Calif.	611,921	162	13.8	A	14.1	16	A	12	76
Louisville, Ky.	236,083	93	20.5	C	11.5	12	C	0	138
Lowell, Mass.	113,757	16	7.3	A	13.8	4	A	7	64
Memphis, Tenn.	165,389	73	23.0	C	23.0	8	C	7	.....
Milwaukee, Wis.	468,386	80	8.9	A	10.1	11	A	13	53
Minneapolis, Minn.	392,815	86	11.4	C	11.3	7	C	7	40
Nashville, Tenn.	122,036	40	17.1	C	15.4	2	C	8	.....
New Bedford, Mass.	125,012	23	9.6	A	15.2	2	A	5	31
New Haven, Conn.	167,007	34	10.6	C	13.0	7	C	4	83
New Orleans, La.	394,657	126	16.6	A	17.4	13	A	17	.....
New York, N. Y.	5,751,867	1,147	10.4	C	10.8	150	C	192	59
Newark, N. J.	424,885	98	12.0	C	13.5	12	C	13	.....
Norfolk, Va.	121,260	22	9.5	.....	.....	0	.....	.....	0
Oakland, Calif.	226,472	40	9.2	A	10.1	4	A	4	51
Omaha, Nebr.	197,066	37	9.8	.....	.....	4	.....	.....	.....
Paterson, N. J.	137,463	34	12.9	.....	.....	7	.....	.....	.....
Philadelphia, Pa.	1,866,212	380	10.6		[4]12.7	44		[4]54	53
Pittsburgh, Pa.	602,452	126	10.9	C	14.2	23	C	31	82
Portland, Oreg.	264,859	58	11.4	C	11.2	4	C	4	40
Providence, R. I.	239,645	57	12.4	C	13.1	10	C	11	.....
Richmond, Va.	175,696	59	17.5	C	17.2	14	C	6	170
Rochester, N. Y.	305,229	47	8.0	C	10.1	9	C	9	70
St. Louis, Mo.	786,164	146	9.7	C	13.1	14	C	15	.....
St. Paul, Minn.	237,781	48	10.5	C	9.5	5	C	6	50
Salt Lake City, Utah[1]	121,595	16	6.9	A	9.4	2	.....	.....	31
San Francisco, Calif.	520,546	149	14.0	C	10.4	5	C	7	29
Seattle, Wash.	327,227	43	6.9	A	8.8	3	A	6	25
Spokane, Wash.	104,442	29	14.5	C	13.0	4	C	2	87
Springfield, Mass.	135,877	25	9.6	C	11.5	4	C	4	60
Syracuse, N. Y.	177,285	39	11.5	C	11.4	9	C	6	108
Toledo, Ohio.	253,696	52	10.7	A	15.0	9	A	8	91
Trenton, N. J.	122,760	28	11.9	A	17.2	7	A	6	.....
Washington, D. C.	454,026	118	13.6	A	16.3	12	A	13	70
Wilmington, Del.	113,408	30	13.8	C	13.1	3	.....	.....	.....
Worcester, Mass.	184,972	34	9.6	C	12.4	8	C	6	86
Yonkers, N. Y.	103,324	13	6.6	A	11.5	2	A	3	45
Youngstown, Ohio.	139,432	26	9.7	C	12.0	10	C	9	127

[1] Annual rate per 1,000 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 1920.
[3] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1920. Cities left blank are not in the registration area for births.
[4] Data based on statistics of 1915, 1916, and 1917.

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 July 2, 1921.

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

ALABAMA.

	Cases.
Diphtheria	8
Hookworm	179
Malaria	10
Measles	15
Mumps	21
Ophthalmia neonatorum	1
Pellagra	4
Scarlet fever	17
Smallpox:	
Houston County	28
Jefferson County	11
Scattering	17
Tetanus	2
Tuberculosis	29
Typhoid fever	44
Whooping cough	3

ARKANSAS.

Chicken pox	14
Diphtheria	7
Malaria	179
Measles	11
Pellagra	17
Scarlet fever	4
Smallpox	4
Tuberculosis	6
Typhoid fever	34
Whooping cough	20

CALIFORNIA.

Cerebrospinal meningitis:	
Los Angeles	1
Los Angeles County	1
San Francisco	2
Influenza	8
Lethargic encephalitis—San Francisco	1
Rabies in man—Los Angeles	1

CALIFORNIA—continued

Smallpox:	Cases.
San Francisco	16
Scattering	18
Typhoid fever:	
San Lorenzo	8
Scattering	5

COLORADO.

(Exclusive of Denver.)

Chicken pox	2
Diphtheria	16
Lethargic encephalitis	1
Measles	26
Scarlet fever	6
Smallpox	25
Typhoid fever	3
Whooping cough	1

CONNECTICUT.

Chicken pox	14
Conjunctivitis (infectious)	2
Diphtheria	29
German measles	1
Measles:	
Hartford	9
Willimantic	10
Scattering	22
Mumps	30
Pneumonia (lobar)	11
Poliomyelitis	2
Scarlet fever	16
Tuberculosis (pulmonary)	22
Typhoid fever	7
Whooping cough	62

FLORIDA.

Diphtheria	11
Influenza	1
Malaria	13

FLORIDA—continued.

	Cases.
Measles	12
Pneumonia	1
Smallpox	22
Typhoid fever	8

GEORGIA.

Chicken pox	7
Diphtheria	9
Dysentery (bacillary)	10
Hookworm	10
Influenza	1
Malaria	66
Measles	14
Mumps	4
Paratyphoid fever	1
Pneumonia	3
Poliomyelitis	1
Scarlet fever	4
Septic sore throat	4
Smallpox	17
Tuberculosis (pulmonary)	6
Typhoid fever	90
Whooping cough	7

ILLINOIS.

Cerebrospinal meningitis:	
Augusta	1
Chicago	2
Monmouth	1
Diphtheria:	
Chicago	114
Scattering	39
Influenza	2
Lethargic encephalitis—Chicago	3
Pneumonia	79
Poliomyelitis:	
Chicago	1
Kincaid	1
Lake County—Libertyville Township	3
Springfield	3
Waukegan	2
Scarlet fever:	
Chicago	43
Scattering	23
Smallpox:	
Wayne County—Mount Erie Township	8
Scattering	38
Typhoid fever	27

INDIANA.

Diphtheria	24
Poliomyelitis	1
Scarlet fever	42
Smallpox	36
Typhoid fever	12

IOWA.

Diphtheria	21
Poliomyelitis	1
Scarlet fever	32
Smallpox	84

KANSAS.

Chicken pox	19
Diphtheria	29
Dysentery (bacillary)	2
Measles	45

KANSAS—continued.

	Cases.
Mumps	4
Pellagra	2
Pneumonia	1
Scarlet fever	24
Smallpox	46
Tetanus	1
Tuberculosis	67
Typhoid fever	13
Whooping cough	69

LOUISIANA.

Diphtheria	5
Scarlet fever	2
Smallpox	6
Typhoid fever	19

MAINE.

Chicken pox	9
Diphtheria	15
German measles	1
Measles	46
Mumps	4
Pneumonia	3
Scarlet fever	10
Smallpox	7
Typhoid fever	1
Whooping cough	4

MARYLAND.[1]

Corebrospinal meningitis	2
Chicken pox	31
Diphtheria	36
Diarrhea (acute)	2
Dysentery	10
German measles	6
Influenza	1
Malaria	5
Measles	64
Mumps	16
Ophthalmia neonatorum	2
Pneumonia (all forms)	20
Poliomyelitis	4
Scarlet fever	14
Tuberculosis	72
Typhoid fever	25
Whooping cough	122

MASSACHUSETTS.

Anthrax	1
Cerebrospinal meningitis	3
Chicken pox	108
Conjunctivitis (suppurative)	10
Diphtheria	118
German measles	10
Influenza	2
Lethargic encephalitis	1
Measles	292
Mumps	79
Ophthalmia neonatorum	13
Pneumonia (lobar)	46
Poliomyelitis	4
Scarlet fever	81
Septic sore throat	1
Tetanus	1
Tuberculosis (all forms)	203
Typhoid fever	13
Whooping cough	146

[1] Week ended Friday.

MINNESOTA.

	Cases.
Cerebrospinal meningitis:	
Vicinity of Sebeka	32
Chicken pox	10
Diphtheria	38
Measles	27
Poliomyelitis:	
Vicinity of Ada	8
Scattering	2
Scarlet fever	30
Smallpox	71
Tuberculosis	50
Typhoid fever	6

MISSISSIPPI.

Diphtheria	3
Scarlet fever	13
Smallpox	17
Typhoid fever	53

MISSOURI.

Cerebrospinal meningitis	1
Chicken pox	6
Diphtheria	34
Epidemic sore throat	1
Measles	19
Mumps	8
Scarlet fever	32
Smallpox	25
Tetanus	1
Tuberculosis	43
Typhoid fever	21
Whooping cough	97

MONTANA.

Diphtheria	3
Scarlet fever	5
Smallpox	28
Typhoid fever	1

NEBRASKA.

Chicken pox	9
Diphtheria:	
Anselmo	8
Scattering	4
Measles	18
Mumps	1
Poliomyelitis	3
Scarlet fever	18
Smallpox	17
Trachoma	2
Typhoid fever	1
Whooping cough	15

NEW JERSEY.

Cerebrospinal meningitis	3
Chicken pox	80
Diphtheria	53
Influenza	1
Malaria	3
Measles	199
Pneumonia	45
Poliomyelitis	2
Scarlet fever	95
Trachoma	1
Typhoid fever	13
Whooping cough	177

NEW MEXICO.

	Cases.
Cerebrospinal meningitis	1
Chicken pox	2
Diphtheria	20
Dysentery	1
Malaria	1
Measles	2
Mumps	2
Pellagra	1
Pneumonia	2
Scarlet fever	1
Smallpox	1
Tuberculosis	49
Typhoid fever	6
Whooping cough	9

NEW YORK.

(Exclusive of New York City.)

Diphtheria	133
Measles	629
Pneumonia	94
Scarlet fever	129
Smallpox	10
Typhoid fever	19
Whooping cough	354

NORTH CAROLINA.

Chicken pox	12
Diphtheria	15
Measles	72
Poliomyelitis	4
Scarlet fever	16
Septic sore throat	1
Smallpox	25
Typhoid fever	120
Whooping cough	156

SOUTH DAKOTA.

Chicken pox	2
Diphtheria	3
Measles	20
Scarlet fever	7
Smallpox	16
Tuberculosis	1
Typhoid fever	1
Whooping cough	3

TEXAS.

Diphtheria	18
Measles	32
Mumps	19
Scarlet fever	18
Smallpox	16
Typhoid fever	7
Typhus fever—Temple	2
Whooping cough	36

VERMONT.

Chicken pox	49
Diphtheria	8
Measles	93
Mumps	7
Pneumonia	6
Scarlet fever	21
Smallpox	3
Typhoid fever	6
Whooping cough	67

VIRGINIA.

	Cases.
Smallpox—Scott County	3

WASHINGTON.

Chicken pox	23
Diphtheria	29
Measles	78
Mumps	10
Scarlet fever	17
Smallpox	43
Tuberculosis	5
Typhoid fever	8
Whooping cough	32

WEST VIRGINIA.

Diphtheria:	
Wheeling	12
Scattering	7
Measles—Wheeling	8
Scarlet fever	6
Smallpox	3
Typhoid fever	3

WISCONSIN.

	Cases.
Milwaukee:	
Cerebrospinal meningitis	1
Chicken pox	17
Diphtheria	24
Measles	11
Scarlet fever	8
Smallpox	5
Tuberculosis	28
Typhoid fever	3
Whooping cough	28
Scattering:	
Chicken pox	59
Diphtheria	38
Measles	45
Poliomyelitis	1
Scarlet fever	44
Smallpox	92
Tuberculosis	20
Typhoid fever	4
Whooping cough	144

Reports for Week Ended June 25, 1921.

DISTRICT OF COLUMBIA.

	Cases.
Chicken pox	11
Diphtheria	4
Measles	79
Scarlet fever	6
Tuberculosis	22
Typhoid fever	5
Whooping cough	21

KENTUCKY.

Chicken pox	3
Diphtheria	6
Dysentery	8
German measles	1
Influenza	1

KENTUCKY—continued.

	Cases.
Lethargic encephalitis—Jefferson County	2
Measles:	
Jefferson County	10
Scattering	10
Mumps	6
Pneumonia	4
Scarlet fever	6
Septic sore throat	1
Smallpox	6
Trachoma	1
Tuberculosis:	
Jefferson County	12
Scattering	5
Typhoid fever	17
Whooping cough	10

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
MAY, 1921.										
California	7	576	137	17	1,796	3	8	465	424	47
Colorado	2	214	1	.....	541	.....	.....	243	360	40
Delaware	1	14	.....	2	5	.....	.....	71	.....	2
Hawaii	2	26	4	.....	30	.....	.....	1	.....	17
Kansas	2	142	10	.....	1,472	.....	2	395	786	33
New York	4	2,362	73	.....	5,376	.....	1	2,240	74	85
North Carolina	6	72	.....	.....	1,444	.....	1	71	353	128
Ohio	12	657	13	1	1,418	.....	6	964	1,084	150
Oregon	2	48	3	1	344	.....	.....	39	132	2
Pennsylvania	15	1,354	.....	1	4,058	.....	1	1,823	14	125
Virginia	5	90	467	315	1,694	13	2	173	139	113
Washington	.....	99	.....	.....	347	.....	.....	127	579	35

PLAGUE.[1]

HUMAN CASES OF PLAGUE REPORTED.

Place.	Period covered.	Cases.	Deaths.	Remarks.
California:	1921.			
San Benito County	Feb. 7		1	
	June 11	1		

[1] A summary of the reports received of the occurrence of plague and the finding of plague-infected rodents in the United States during 1920 was published in Public Health Reports, Jan. 7, 1921, p. 15.

PLAGUE-INFECTED RODENTS.

Place.	Period covered.	Rodents found plague infected.
California:	1921.	
San Benito County	May 15 to June 4	[1]8
	June 5–18	0
Florida:		
Pensacola	Jan. 1 to Apr. 18	5
	Apr. 19 to July 2	0
Louisiana:		
New Orleans	Jan. 1 to May 26	38
	May 27 to July 2	0
Texas:		
Galveston	Jan. 1 to May 28	1
	May 29 to July 2	0

[1] Ground squirrels, *Citellus beecheyi*.

TYPHUS FEVER.

Navajo Indian Reservation, Shiprock, N. Mex.—June 27, 1921.

Between June 16 and June 27, 3 deaths from typhus fever occurred on the Navajo Indian Reservation near Shiprock, N. Mex. No new cases were reported during that period.

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921.

ANTHRAX.[1]

City.	Cases.	Deaths.
Massachusetts:		
Lynn	1	
New York:		
New York	1	

[1] Report of one case of anthrax at Cleveland, Ohio, Public Health Reports, June 10, 1921, p. 1240, was an error, further investigation having shown that the case was not one of anthrax.

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended June 18, 1921.		City.	Median for previous years.	Week ended June 18, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Michigan:			
Birmingham	0	1	1	Detroit	2	2	1
Montgomery	0	1	1	Highland Park	0	1	.....
California:				Missouri:			
Los Angeles	0	2	1	Springfield	0	.....	1
Connecticut:				New York:			
Waterbury	0	1	1	Buffalo	0	1	1
Georgia:				New York	10	8	3
Macon	0	.....	1	Pennsylvania:			
Maryland:				Philadelphia	1	3	1
Baltimore	1	.....	1	Tennessee:			
Massachusetts:				Nashville	0	1	1
Boston	2	1	.....	Virginia:			
Everett	0	1	.....	Danville	0	.....	1
Peabody	.....	1	1	Richmond	0	1	1

DIPHTHERIA.

See p. 1578; also Telegraphic weekly reports from States, p. 1568, and Monthly summaries by States, p. 1571.

INFLUENZA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			New York:		
Berkeley	1	.....	Buffalo	2	.....
Long Beach	2	.....	Cohoes	1	.....
Oakland	3	.....	New York	11	6
Georgia:			Saratoga Springs	3	.....
Atlanta	1	.....	Ohio:		
Illinois:			Columbus	2	.....
Chicago	6	1	Pennsylvania:		
Oak Park	1	1	Philadelphia	3	2
Maryland:					
Baltimore	4	1			

LETHARGIC ENCEPHALITIS.

California:			Oregon:		
San Francisco	2	2	Portland	1	.....
Ohio:					
Mansfield	1	.....			

MALARIA.

Alabama:			New York:		
Anniston	1	.....	New York	7	.....
Birmingham	1	.....	Pennsylvania:		
Georgia:			Philadelphia	1	.....
Brunswick	11	.....	South Carolina:		
Savannah	.....	1	Charleston	.....	4
Illinois:			Texas:		
Oak Park	1	1	Beaumont	.....	1
Louisiana:			Dallas	3	.....
New Orleans	1	.....	Waco	1	.....
New Jersey:			Vermont:		
Paterson	1	.....	Rutland	1	.....

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

MEASLES.

See p. 1578; also Telegraphic weekly reports from States, p. 1568, and Monthly summaries by States, p. 1571.

PELLAGRA.

City.	Cases.	Deaths.
Georgia:		
Atlanta		1
Brunswick		1
Louisiana:		
Monroe		1
New Orleans	1	1
Massachusetts:		
Boston	1	
North Carolina:		
Charlotte		1
Wilmington		1
Pennsylvania:		
Philadelphia	1	1
South Carolina:		
Charleston		2
Tennessee:		
Nashville	1	
Texas:		
Dallas	1	1

PNEUMONIA (ALL FORMS).

City.	Cases.	Deaths.
Alabama:		
Birmingham		7
Mobile		1
Arizona:		
Tucson		2
California:		
Alameda	1	
Berkeley		1
Los Angeles	15	8
Oakland	6	5
San Diego	1	
San Francisco	6	
Santa Cruz		1
Stockton		1
Colorado:		
Denver		5
Pueblo		1
Connecticut:		
Bridgeport		4
Bristol	1	
Hartford		2
Meriden	4	2
Milford	2	
New Haven		1
Waterbury		3
Delaware:		
Wilmington		2
District of Columbia:		
Washington		4
Georgia:		
Atlanta		2
Savannah		1
Illinois:		
Alton		1
Aurora		1
Bloomington		2
Blue Island		1
Chicago	73	24
Cairo	2	1
Danville		1
Decatur		1
East St. Louis		1
Freeport		1
Jacksonville		1
Oak Park	1	
Peoria		1
Springfield	1	
Indiana:		
East Chicago		1
Elkhart		2
Gary		1
Indianapolis		4
Kokomo		1
Mishawaka		1
South Bend		1
Terre Haute		2
Iowa:		
Burlington	1	
Kansas:		
Fort Scott		1
Kansas City	1	
Wichita		3
Kentucky:		
Covington		1
Lexington		3
Louisville		5
Louisiana:		
Alexandria		1
New Orleans		4
Maine:		
Bath		2
Biddeford		1
Portland		2
Maryland:		
Baltimore	28	15
Cumberland		2
Massachusetts:		
Boston	14	8
Cambridge	4	2
Chelsea	1	
Chicopee		3
Clinton	2	
Everett	3	
Fall River	4	3
Gardner		1
Greenfield		1
Haverhill	1	
Holyoke	2	
Lowell	5	
Methuen		1
New Bedford		4
Newburyport		1
Northampton	2	
Pittsfield	1	
Somerville	3	2
Springfield	3	1
Worcester	8	6
Michigan:		
Ann Arbor		1
Detroit	23	12
Flint		1
Hamtramck	1	
Highland Park	1	
Muskegon		1
Pontiac	3	
Port Huron	3	
Minnesota:		
Minneapolis		1
St. Paul		1
Missouri:		
Independence		1
Kansas City		6
Nevada:		
Reno	1	
New Hampshire:		
Manchester		1

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.
New Jersey:		
Bloomfield	1	
Elizabeth		1
Garfield	2	
Irvington	1	
Jersey City	1	
Kearny	1	
Orange	5	
Passaic		5
Paterson	1	
Trenton	3	2
New Mexico:		
Albuquerque		1
New York:		
Albany	5	
Binghamton	4	1
Buffalo	12	1
Elmira	5	
Ithaca	1	
Lackawanna	1	
Lockport	1	
Middletown	1	
Mount Vernon		1
New York	196	55
Niagara Falls	2	
Port Chester	1	
Rochester	4	3
Rome	4	
Schenectady	5	2
Syracuse	4	
Troy	2	1
Watervliet		1
Yonkers	7	2
North Carolina:		
Charlotte		1
Winston-Salem		1
Ohio:		
Akron	2	
Canton		1
Cincinnati		6
Cleveland	6	
Columbus		3
Kenmore	1	
Lorain	1	
Toledo		2
Youngstown		1
Oregon:		
Portland		2
Pennsylvania:		
Philadelphia	54	33
Rhode Island:		
Providence		4
South Carolina:		
Charleston		3
Tennessee:		
Nashville		1
Texas:		
Austin		1
Beaumont		1
El Paso		5
Utah:		
Salt Lake City		1
Vermont:		
Rutland		1
Virginia:		
Danville		1
Norfolk		1
Portsmouth		1
Richmond		3
Roanoke		1
West Virginia:		
Huntington		2
Wheeling		1

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended June 18, 1921.	
		Cases.	Deaths.
California:			
Berkeley	0	1	
San Francisco	0	1	
Illinois:			
Aurora		1	
Chicago	1	1	
East St. Louis	0	1	
Maryland:			
Baltimore	0	1	
Massachusetts:			
Newton	0	1	
Michigan:			
Saginaw	0	1	
Minnesota:			
Minneapolis	0	1	
New York:			
New York	2	1	

RABIES IN ANIMALS.

City.	Cases.
Illinois:	
East St. Louis	1
Missouri:	
Kansas City	2
North Carolina:	
Winston-Salem	1

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

City.	Cases.	Deaths.
Montana:		
Missoula	1	1

SCARLET FEVER.

See p. 1578; also Telegraphic weekly reports from States, p. 1568, and Monthly summaries by States, p. 1571.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended June 18, 1921.	
		Cases.	Deaths.
Alabama:			
Birmingham	2	12	.....
Mobile	1	8	.....
Montgomery	0	2	.....
Tuscaloosa	0	1	.....
California:			
Berkeley	0	2	.....
Los Angeles	1	1	.....
Oakland	0	2	.....
Riverside	1	13	.....
Sacramento	0	1	.....
San Francisco	0	4	.....
Colorado:			
Denver	15	24	.....
Pueblo	0	4	.....
Georgia:			
Atlanta	10	4	.....
Illinois:			
Chicago	1	9	.....
East St. Louis	1	1	.....
Pekin	1	1	.....
Peoria	1	1	.....
Indiana:			
Elkhart	0	4	.....
Fort Wayne	1	2	.....
Gary	3	1	.....
Marion	2	2	.....
South Bend	0	5	.....
Iowa:			
Burlington	0	1	.....
Clinton	0	4	.....
Council Bluffs	2	1	.....
Des Moines	3	3	.....
Mason City	0	1	.....
Muscatine	0	1	.....
Ottumwa	.....	2	.....
Sioux City	3	4	.....
Kansas:			
Atchison	4	3	.....
Coffeyville	0	1	.....
Fort Scott	1	2	.....
Hutchinson	1	4	.....
Kansas City	2	5	.....
Salina	.....	1	.....
Topeka	2	3	.....
Wichita	8	8	.....
Louisiana:			
Alexandria	0	1	.....
New Orleans	3	6	1
Michigan:			
Detroit	6	13	.....
Highland Park	1	2	.....
Ishpeming	0	2	.....
Muskegon	.....	4	.....
Pontiac	3	2	.....
Minnesota:			
Duluth	3	8	.....
Minneapolis	24	12	.....
St. Cloud	1	3	.....
St. Paul	5	18	.....
Missouri:			
Kansas City	10	9	.....
St. Louis	4	4	.....
Nebraska:			
Lincoln	4	1	.....
Omaha	9	2	.....
New Jersey:			
Atlantic City	0	1	.....
New York:			
Mount Vernon	.....	1	.....
North Carolina:			
Charlotte	0	1	.....
Winston-Salem	1	1	.....
North Dakota:			
Fargo	0	3	.....
Grand Forks	.....	2	.....
Ohio:			
Cincinnati	1	3	.....
Columbus	0	2	.....
Kenmore	.....	1	.....
Lancaster	0	4	.....
Marion	2	1	.....
Newark	0	13	.....
Youngstown	3	1	.....
Zanesville	0	2	.....
Oklahoma:			
Oklahoma City	5	6	.....
Tulsa	2	3	.....
Oregon:			
Portland	5	9	.....
South Carolina:			
Charleston	0	2	.....
Columbia	0	1	.....
Spartanburg	1	2	.....
Tennessee:			
Chattanooga	0	4	.....
Knoxville	3	7	.....
Texas:			
Beaumont	0	1	.....
Galveston	0	3	.....
Utah:			
Salt Lake City	5	9	.....
Virginia:			
Norfolk	0	1	.....
Washington:			
Bellingham	2	1	.....
Seattle	4	8	.....
Spokane	6	8	.....
Tacoma	3	5	.....
Vancouver	0	3	.....
West Virginia:			
Bluefield	3	1	.....
Fairmont	0	1	.....
Wisconsin:			
Madison	1	2	.....
Marinette	0	1	.....
Milwaukee	6	5	.....
Oshkosh	3	1	.....
Racine	0	1	.....
Superior	1	1	.....

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

TETANUS.

City.	Cases.	Deaths	City.	Cases.	Deaths.
Indiana:			South Carolina:		
Terre Haute		1	Charleston		1
Louisiana:			Tennessee:		
New Orleans		1	Knoxville	2	2
New York:			Texas:		
Yonkers	1	1	Galveston		1
North Carolina:			Virginia:		
Wilmington		1	Portsmouth		1
Ohio:					
Newark		1			

TUBERCULOSIS.

See p. 1578; also Telegraphic weekly reports from States, p. 1568.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended June 18, 1921.		City.	Median for previous years.	Week ended June 18, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Missouri:			
Anniston	0	1		Joplin	3	1	
Birmingham	6	2		Kansas City	2	1	
Mobile	0		1	St. Louis	4	2	1
Tuscaloosa	0	1		Montana:			
Arkansas:				Great Falls	1	4	
Little Rock	0	2		Nebraska:			
North Little Rock	0	2		Omaha	0	1	
California:				New Hampshire:			
Los Angeles	2	2	1	Keene	0	1	
Oakland	1	1		New Jersey:			
Sacramento	0	2	1	Montclair	0	1	
San Diego	1	1		Passaic	0	1	
San Francisco	1	4	1	New York:			
Connecticut:				Albany	0	1	
Waterbury	0	1		Binghamton	0	1	
District of Columbia:				Jamestown	0		1
Washington	4	3	1	New York	23	4	1
Georgia:				Niagara Falls	0	3	
Atlanta	2	6	3	North Tonawanda	0	1	
La Grange		3		Schenectady	1	1	
Valdosta		1		North Carolina:			
Illinois:				Durham	0	9	
Alton	0	1		Winston-Salem	2	2	
Chicago	5	4	1	Ohio:			
Indiana:				Cincinnati	1	1	
Indianapolis	2	3		Cleveland	3	8	
Kansas:				Fremont	0	1	
Kansas City	0	3		Springfield	0	1	
Leavenworth	0	1		Toledo	2	1	
Topeka	0	1		Oklahoma:			
Kentucky:				Tulsa	0	2	
Louisville	1	1		Pennsylvania:			
Paducah	0	1		Philadelphia	10	5	2
Louisiana:				South Carolina:			
Alexandria	0	1		Charleston	6	2	
New Orleans	5	2		Columbia	1	1	
Maine:				Tennessee:			
Bangor	1	1		Nashville	4	3	
Maryland:				Texas:			
Baltimore	5	4	2	Beaumont	0	1	
Cumberland	0		1	Dallas	1	1	
Massachusetts:				Waco	2		1
Boston	3	1		Virginia:			
Fall River	2	3		Alexandria	0	3	
Lawrence	0	1		Portsmouth	1	1	
Waltham	0	1		Washington:			
Worcester	0	1	1	Seattle	0	1	
Michigan:	2	2		West Virginia:			
Detroit	5	5	3	Charleston	1	2	
Minnesota:							
St. Paul	0	1					

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

TYPHUS FEVER.

City.	Cases.	Deaths.
New York:		
New York	1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston	17,734								3	
Birmingham	178,270	55	1		20	1	1		7	7
Mobile	60,151	18	1							
Montgomery	43,464	12								
Tuscaloosa	11,996						1		1	
Arizona:										
Tucson	20,292	11								2
Arkansas:										
Fort Smith	28,811		1		1		2			
Little Rock	64,997				7		1		3	
North Little Rock	14,048				21		1		1	
California:										
Alameda	28,806	4			1					
Berkeley	55,836	7	1		2					
Eureka	12,923	2					1		1	
Long Beach	55,593	16	1				1			1
Los Angeles	576,673	168	61	1	29		16	1	68	22
Oakland	216,361	50	4		1		4		3	5
Pasadena	45,354	19	1		3					
Richmond	16,843	1								
Riverside	19,341	6					2		1	1
Sacramento	65,857	10	4						1	1
San Diego	74,683	24	1		74		4		4	4
San Francisco	508,410	117	23	6	25		9		33	10
Santa Barbara	19,441	3								1
Santa Cruz	10,917	5								
Stockton	40,296	9			1		3			2
Colorado:										
Colorado Springs	30,105	11							12	5
Denver	256,369	52	16	1	11		3			12
Pueblo	42,908	20	10	1	3		2			2
Trinidad	10,906		1		1					
Connecticut:										
Bridgeport	143,538	32	11		3		8	3	2	1
Bristol	20,620	1	1						1	
Derby	11,238	1	2				1			
Fairfield (town)	11,475		1							
Hartford	138,036	33	1		10		4	3	3	2
Manchester (town)	18,370	4							1	
Meriden (city)	29,842		1							
Milford (town)	10,193		1		1					
New Haven	162,519	26	6		1		1		17	3
New London	25,688	4			1					
Norwalk	27,700	3	2				1			
Stonington	10,236	0								
Waterbury	91,410	15	2		8				5	1
Delaware:										
Wilmington	110,168	28					16			2
District of Columbia:										
Washington	437,571	103	8		69		12		18	9
Georgia:										
Atlanta	200,616	76			8		6		1	8
Brunswick	14,413	1								
Macon	52,995	20	1		2					1
Savannah	83,252	28							2	4
Valdosta	10,783	1								
Idaho:										
Boise	21,393	7	1		4		6			
Illinois:										
Alton	24,682	8			1					
Aurora	36,397	13	1		2		1			
Bloomington	28,725	10							4	

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

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

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois—Continued.										
Blue Island	11,424	6	3				2			
Centralia	12,491	3	1							
Chicago	2,701,705	523	155	7	254	2	70	6	231	36
Cicero	44,995	9	1							2
Danville	33,750	12					2			
Decatur	43,818	6	1		1		7			
East St. Louis	66,740	12	6	2	1					
Elgin	27,454	2			1					
Evanston	37,215	10	2		4		3			
Forest Park	10,768	1	3							
Freeport	19,669	10	2							
Galesburg	23,834	6			1					1
Jacksonville	15,713	9								2
Kewanee	16,026	5	1	2	1		1			
La Salle	13,050	0					1			
Mattoon	13,552	2					3			
Oak Park	39,830	15	3	1	14		2		1	
Pekin	12,086		1		1		4			
Peoria	76,121	16	2				2			
Rockford	65,651	15	1		5		1			2
Rock Island	35,177	5			1					1
Springfield	59,183	15			3		4			
Indiana:										
Bloomington	11,595	2								1
East Chicago	35,967	7								
Elkhart	24,277	12								
Fort Wayne	86,549	15	10		6					
Frankfort	11,585	2					2			
Gary	55,378	11			1		1			
Hammond	36,004	6	1				1			
Huntington	14,000	2	1							
Indianapolis	314,194	64		1			2	1	25	4
Kokomo	30,067	7								
La Fayette	22,486	7								1
Logansport	21,626	3					2			
Marion	23,747	5	2							
Mishawaka	15,195	3					1			
Muncie	36,624	6			3					
Richmond	26,765	16								
South Bend	70,983	14	1		1		1		3	1
Terre Haute	66,083	12	5				1		1	
Iowa:										
Cedar Rapids	45,566		1				2			
Council Bluffs	36,162	7	1				1			
Davenport	56,727		1				6			
Des Moines	126,468						4			
Dubuque	39,141		1							
Mason City	29,065						2			
Muscatine	16,068	3			1					
Kansas:										
Atchison	12,630				6		1		2	
Coffeyville	13,452	6								
Fort Scott	10,683	3	3							
Hutchinson	23,298		1		2				1	
Kansas City	101,177		2		3		1		3	
Lawrence	12,456	4								
Leavenworth	16,912		1		2					
Parsons	16,023	4	2							
Salina	15,085	3	1							
Topeka	50,022	11	1				5		4	
Wichita	72,128	19	6	1	20		1		1	
Kentucky:										
Covington	57,121	16							1	2
Lexington	41,534	9			1					
Louisville	234,891	61	3		20		7		4	6
Louisiana:										
Alexandria	17,510	3								
Lake Charles	13,068	4								
Monroe	12,575	7								
New Orleans	387,219	126	6						12	18
Maine:										
Auburn	16,985	2					1		1	
Bangor	25,978		2						1	

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

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

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine—Continued.										
Bath	14,731	7					3			
Biddeford	18,008	4								
Lewiston	31,791	8	6	3	1		8			1
Portland	69,272	28	3		8		1			1
Sanford	10,691	4								1
Waterville	13,351				2					
Maryland:										
Baltimore	733,826	213	20	1	68	2	19		21	13
Cumberland	29,837	10					3			
Massachusetts:										
Adams	12,967	4								2
Arlington	18,665	3			7		1			
Attleboro	19,731	9					4		1	2
Belmont	10,749	2	1		1					
Beverly	22,561	2			2					
Boston	748,060	161	44	1	77	1	33	3	32	13
Braintree	10,580	4					4			1
Brockton	66,138	13	2		1		2		1	
Brookline	37,748	4	2				1		2	1
Cambridge	109,694	19	8		20		1		5	3
Chelsea	43,184	7			3		1		3	
Chicopee	36,214	7					1			1
Clinton	12,979	0			1					
Dedham	10,792	4								1
Easthampton	11,261		1							
Everett	40,120	2			3		3			
Fall River	120,485	29	5		5		2		2	
Gardner	16,971	5								
Greenfield	15,462	2							1	
Haverhill	53,884	10	2		2		6		6	
Holyoke	60,203	12			1				2	3
Lawrence	94,270	17			2		3			
Leominster	10,744	2			1		2		2	
Lowell	112,479	24	6		1		1		4	1
Lynn	99,148	19	6		32				1	2
Medford	39,038	3	3		7		4			
Melrose	18,204	3								1
Methuen	15,189	5					1			
New Bedford	121,217	31	3	2			3		3	2
Newburyport	15,618	5			1				1	
Newton	46,054	9	1				2		3	
North Adams	22,282	5								
Northampton	21,951	9	1							
Norwood	12,627	0							2	
Peabody	19,552	2	1						1	
Pittsfield	41,751	9	1						1	1
Plymouth	13,045	2								
Quincy	47,876	9	2		32		1		1	1
Salem	42,529	7			1		2		2	1
Somerville	93,091	16	2	1	6		4		5	1
Southbridge	14,245	3								
Springfield	129,563	21	3	1	1		7		3	1
Taunton	37,137	16	1		1		1			
Wakefield	13,025	2			4					
Waltham	30,915	6	2		1					
Watertown	21,457	2								
West Springfield	13,443	3			14					
Westfield	18,604	4			1					1
Woburn	16,574	4								
Worcester	179,754		2		16	2	2		9	3
Michigan:										
Alpena	11,101		3	1						
Ann Arbor	19,516	9			1		1		1	
Battle Creek	36,164		7				1			
Benton Harbor	12,233								1	
Detroit	993,739	178	33	5	52	1	40	4	56	23
Flint	91,599	21	2		2		2			1
Grand Rapids	137,634	23	9		1		1		4	
Hamtramck	48,615	4	1		3		4		4	
Highland Park	46,499	8			6		6			
Ishpeming	10,500	1	2	1					1	
Marquette	12,718	3								
Muskegon	36,570	18	1						2	1
Pontiac	34,273	10	11				4			

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

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

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.										
Port Huron	25,944	6	2							
Saginaw	61,903	16	1		1		1		4	2
Sault Ste. Marie	12,096	5					3			
Minnesota:										
Austin	10,118	3								
Duluth	98,917	12	1		12		4		7	1
Hibbing	15,089				1					
Minneapolis	380,582	68	9	2	17	1	21		19	10
Rochester	13,722	13			9					
St. Cloud	15,873		5							
St. Paul	234,595	49	7		3		11	1	16	4
Missouri:										
Cape Girardeau	10,252	4								1
Independence	11,686	11								
Jefferson City	14,490	2								1
Joplin	29,853		1		1					
Kansas City	324,410	82	12		16		2		7	7
Saint Louis	772,897	181	39	2	2		26		51	10
Springfield	39,631	12								3
Montana:										
Billings	15,100	6							3	
Butte	41,611	14	1						12	1
Great Falls	24,121	4			2		1			
Missoula	12,668	7	1						1	1
Nebraska:										
Lincoln	54,934	11			1		2		1	3
Omaha	191,601	31	6	1	5		3			2
Nevada:										
Reno	12,016	2								
New Hampshire:										
Berlin	16,104	5								
Concord	22,167	8			2		1			
Dover	13,029	5								
Keene	11,210	3			2				1	
Manchester	78,384	15	6							
New Jersey:										
Asbury Park	12,400	4					1			
Atlantic City	50,682	9	4		5		7		5	
Bayonne	76,754		2				4		2	
Belleville	15,660						1			
Bloomfield	22,019	2			1		2			
Clifton	26,470	1	1		5		2		1	
Elizabeth	95,682		9		16	1	7		1	
Englewood	11,627	4	2							
Garfield	19,381	2				1	1			
Hackensack	17,667	5					2			
Harrison	15,721				1		1			
Hoboken	68,166	15	3		1		3			1
Irvington	25,480						1			
Jersey City	297,864		22		18		15		2	
Kearny	26,724	4			4		2			3
Montclair	28,810	3	2						1	
Morristown	12,548	8		1			2			
New Brunswick	32,779		3						2	
Orange	33,268	5			26		5			1
Passaic	63,824	18	4		5		3		1	
Paterson	135,866		7		5		5			
Perth Amboy	41,707	18			1		1		1	1
Phillipsburg	16,923	3								
Plainfield	27,700	10	2				5			3
Rahway	11,042	4	1						1	
Trenton	119,289	28	2		19		3		2	3
Union	20,651		1		1					
West Hoboken	40,068	5					1	1		
West New York	29,926	2	2	1			1		1	
West Orange	15,573	3	1		8		1			
New Mexico:										
Albuquerque	15,157	11			2				5	2
New York:										
Albany	113,344		7		10				4	
Binghamton	66,900	15	7	1			3		2	3
Buffalo	506,775	64	53	1	41		32	3	31	8

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

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

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York—Continued.										
Cohoes	22,987	7								1
Elmira	45,305	3			3		1			
Geneva	14,648	2								
Glens Falls	16,638	4	1							
Ithaca	17,004	1					2			
Jamestown	38,917	14	9	1	67					2
Lackawanna	17,918	1	1				1		1	
Lockport	21,308	4	4							1
Middletown	18,420				4		3			
Mount Vernon	42,726	4	5		2		1			
Newburgh	30,366	10	3							1
New York	5,621,151	1,128	311	9	220	10	211	12	[1] 230	[1] 97
Niagara Falls	50,760	6	2				8		1	1
North Tonawanda	15,482	3	1		2					
Olean	20,506	10	2		1		2	1		
Peekskill	15,868	2	2		2					
Plattsburg	10,909	5								
Port Chester	16,573	3	1		10		1			
Rochester	295,750	56	33	1	5		13		6	4
Rome	26,341		1		1		1			
Saratoga Springs	13,181	5								1
Schenectady	88,773	15	4	1	14				1	1
Syracuse	171,717	35	7		29		6		3	
Troy	72,013	17	1				1		1	1
Watervliet	16,073	2								
White Plains	21,031	4					1			
Yonkers	100,226	23	4		4		3			5
North Carolina:										
Charlotte	46,338	12			2				6	
Durham	21,719	5								1
Raleigh	24,418	13			1		1		1	2
Rocky Mount	12,742	5								
Salisbury	13,884	3								
Wilmington	33,372	11							1	1
Winston-Salem	48,395	14			2		2		5	1
North Dakota:										
Fargo	21,961		4	1	2		4			
Ohio:										
Akron	208,435	37	4		4		5		10	
Barberton	18,811	0								
Bucyrus	10,425	5	2		1					
Canton	87,091	16	5				5	1		1
Chillicothe	15,831	3								
Cincinnati	401,247	106	13	1	12		3	1	28	14
Cleveland	796,836		15		50		30			
Cleveland Heights	15,236									2
Columbus	237,031	43	10				7		3	4
Cuyhoga Falls	10,200						1			
Dayton	152,559	23	1				2		1	
East Cleveland	27,292	3	1						1	1
Elyria	20,474	7	1						1	
Findlay	17,021	3								
Hamilton	39,675	13					1			
Ironton	14,007	2					1			
Kenmore	12,683		1		1				1	
Lancaster	14,706	6							1	
Lorain	37,295		1		17				1	
Mansfield	27,824	1			1		1		1	
Middletown	23,594	3	1							
Newark	26,718	6							1	
New Philadelphia	10,718		1							
Niles	13,080	3					4	3		
Piqua	15,044	3								
Salem	10,305	2								
Sandusky	22,897	3								
Springfield	60,840	15	5		2		5		6	2
Steubenville	28,508	3								
Toledo	243,109	53	10		2		7			5
Youngstown	132,358	15			16		2		2	1
Zanesville	29,569	9								
Oklahoma:										
Oklahoma City	91,258	12	1	1	2		2		1	1

[1] Pulmonary tuberculosis only.

CITY REPORTS FOR WEEK ENDED JUNE 18, 1921—Continued.

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

City.	Population January 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oregon:										
Portland	258,288	50	14	.....	17	.....	1	.....	11	1
Pennsylvania:										
Philadelphia	1,823,158	469	91	8	34	1	119	5	88	40
Rhode Island:										
Cranston	29,407	6	.....	.....	3	.....	1	.....	1	.....
East Providence (town)	21,793	.....	1	.....	4	.....	3	.....	.....	.....
Newport	30,255	4	1	.....	.....	.....	6	.....	.....	1
Providence	237,595	62	3	.....	11	.....	5	1	.....	5
South Carolina:										
Charleston	67,957	33	.....	.....	.....	.....	.....	.....	2	2
Columbia	37,524	.....	.....	.....	9	.....	.....	.....	3	.....
Spartanburg	22,638	7	1	.....	11	.....	.....	.....	.....	.....
Tennessee:										
Chattanooga	57,895	.....	.....	.....	1	.....	.....	.....	.....	.....
Knoxville	77,818	.....	.....	.....	2	.....	.....	.....	3	3
Nashville	118,342	34	1	.....	10	.....	3	.....	3	.....
Texas:										
Austin	34,876	7	4	.....	.....	.....	1	.....	.....	1
Beaumont	40,422	12	.....	1	1	.....	.....	.....	.....	1
Corpus Christi	10,522	3	.....	.....	.....	.....	.....	.....	1	.....
Dallas	158,976	42	1	.....	21	.....	1	.....	6	1
El Paso	77,543	52	.....	.....	2	.....	2	.....	.....	14
Galveston	44,255	9	.....	.....	.....	.....	.....	.....	.....	.....
Waco	38,500	11	.....	.....	.....	.....	.....	.....	.....	2
Utah:										
Salt Lake City	118,110	27	5	.....	2	.....	2	.....	1	1
Vermont:										
Barre	10,008	.....	.....	.....	3	.....	2	.....	.....	.....
Burlington	22,779	3	.....	.....	1	.....	1	.....	.....	.....
Rutland	14,954	6	1	.....	.....	.....	.....	.....	.....	.....
Virginia:										
Alexandria	18,060	1	.....	.....	.....	.....	.....	.....	1	.....
Danville	21,539	7	.....	.....	1	.....	.....	.....	.....	.....
Lynchburg	29,956	6	2	.....	47	.....	.....	.....	2	.....
Norfolk	115,777	.....	.....	.....	4	.....	2	.....	6	.....
Petersburg	31,002	7	.....	.....	8	.....	1	.....	2	1
Portsmouth	54,387	10	1	.....	.....	.....	.....	.....	.....	.....
Richmond	171,667	62	6	.....	27	.....	1	.....	7	8
Roanoke	50,842	19	.....	.....	9	.....	.....	.....	.....	1
Washington:										
Everett	27,644	.....	1	.....	9	.....	.....	.....	.....	.....
Seattle	315,652	.....	6	.....	5	.....	3	.....	.....	.....
Spokane	104,437	.....	2	.....	7	.....	3	.....	.....	.....
Tacoma	96,965	.....	2	.....	4	.....	.....	.....	.....	.....
Vancouver	12,637	.....	.....	.....	2	.....	.....	.....	.....	.....
Walla Walla	15,503	.....	.....	.....	.....	.....	1	.....	.....	.....
Yakima	18,539	.....	.....	.....	3	.....	.....	.....	.....	.....
West Virginia:										
Charleston	39,608	22	.....	.....	.....	.....	.....	.....	.....	.....
Fairmont	17,851	1	.....	.....	.....	.....	.....	.....	.....	.....
Huntington	50,177	21	.....	.....	2	1	1	.....	.....	5
Martinsburg	12,515	.....	3	.....	1	.....	.....	.....	.....	.....
Moundsville	10,669	2	.....	.....	.....	.....	.....	.....	.....	.....
Parkersburg	20,050	3	.....	.....	.....	.....	.....	.....	.....	.....
Wheeling	54,322	10	4	.....	1	.....	2	.....	.....	1
Wisconsin:										
Appleton	19,561	.....	1	.....	.....	.....	1	.....	.....	.....
Ashland	11,234	.....	.....	.....	.....	.....	1	.....	.....	.....
Beloit	21,284	4	1	.....	.....	.....	.....	.....	.....	1
Fond du Lac	23,427	.....	1	.....	.....	.....	.....	.....	.....	.....
Green Bay	31,017	5	4	.....	4	.....	.....	.....	.....	.....
Janesville	18,293	2	1	.....	2	.....	.....	.....	.....	.....
Kenosha	40,472	4	.....	.....	2	.....	.....	.....	.....	1
Madison	38,378	11	.....	.....	2	.....	.....	.....	.....	.....
Marinette	13,610	.....	.....	.....	1	.....	.....	.....	.....	.....
Milwaukee	457,147	.....	23	.....	14	.....	6	.....	14	.....
Oshkosh	33,162	8	2	.....	.....	.....	1	.....	.....	1
Racine	58,593	7	.....	.....	2	.....	9	1	.....	.....
Sheboygan	30,955	.....	1	.....	.....	.....	.....	.....	.....	.....
Superior	39,624	6	.....	.....	.....	.....	3	.....	1	.....

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "Oreland"—At Genoa, Italy.

The steamship *Oreland* from La Plata, Argentina, arrived at Genoa, Italy, June 12, 1921, with a history of two fatal cases of plague occurring on board during the voyage. The cases occurred among the crew of the vessel. The *Oreland* left La Plata May 13, 1921, with a cargo of wheat for Genoa, via St. Vincent, Cape Verde Islands.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	June 11-20, 1921.		Remaining under treatment June 20, 1921.	Disease.	June 11-20, 1921.		Remaining under treatment June 20, 1921.
	New cases.	Deaths.			New cases.	Deaths.	
Chicken pox	4	.....	5	Measles	6	.....	3
Diphtheria	1	.....	1	Scarlet fever	2	.....	2
Leprosy	.....	.....	11	Smallpox	4	1	5
Malaria	23	1	[1] 25	Typhoid fever	9	1	[2] 27

[1] From the interior, 15.

[2] From the interior, 16.

Disembarkation of Emigrants Arriving Under Contract.

By order of the Cuban quarantine service, dated June 21, 1921, disembarkation of emigrants arriving under contract may be made only at the ports of Habana and Santiago and, in case of there being no quarantinable disease on board, at the ports of Antilla and Cienfuegos, Cuba.

Quarantine Against Honduras Removed.[1]

Under date of June 3, 1921, quarantine on account of yellow fever was removed at ports in Cuba against arrivals from Honduras.

JAMAICA.

Infectious Disease (Alastrim or Kaffir Pox).

During the two weeks ended June 11, 1921, 224 new cases of alastrim or Kaffir pox were reported in the Island of Jamaica.

[1] Public Health Reports, Mar. 18, 1921, p. 732.

MEXICO.

Plague—Tampico.[1]

During the 10-day period ended June 20, 1921, 26 cases of plague were reported at Tampico, Mexico, the last cases being reported June 18, 1921. The total number of cases reported at Tampico from January 1 to June 18, 1921, was 145.

Yellow Fever—Vera Cruz.

According to information dated June 27, 1921, 7 cases of yellow fever had occurred in Vera Cruz, Mexico, during the preceding 15 days, 5 cases being officially reported on June 27.

PERU.

Plague—March-April, 1921.

During the month of March, 1921, 76 cases of plague with 44 deaths were reported in Peru. The cases and deaths were distributed in the maritime departments of the country as follows: *Arequipa*, 2 cases occurring at Mollendo; *Callao*, 7 cases with 1 death at Callao; *Lambayeque*, 2 cases with 1 death at Chiclayo; *Libertad*, 12 cases with 7 deaths in 5 localities; *Lima*, 32 cases with 16 deaths, of which 20 cases with 13 deaths occurred in Lima city and 7 cases with 2 deaths in the Lima district; *Piura*, 21 cases with 19 deaths occurring at Payta, Piura, and Sullana.

During the month of April, 1921, 43 cases of plague with 20 deaths were reported in the maritime departments of Peru as follows: *Ancachs*, 4 cases with 1 death at Huarmey; *Arequipa*, 3 cases with 3 deaths at Mollendo; *Callao*, 8 cases at Callao; *Lambayeque*, 1 case with 1 death at Chiclayo; *Libertad*, 16 cases with 5 deaths occurring in 5 localities; *Lima*, 6 cases with 3 deaths, including 3 cases with 2 deaths at Lima city; *Piura*, 7 deaths occurring at Payta, Sullana, and Talara.

Yellow Fever—March-April, 1921.

During the month of March, 1921, 66 cases of yellow fever with 25 deaths were reported in the Department of Lambayeque. The cases were distributed in 8 localities.

During the month of April, 1921, 106 cases of yellow fever with 32 deaths were reported from 13 localities.

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[1] Reports of the occurrence of plague in Tampico published in the Public Health Reports for June 10, 1921, p. 1354, and June 24, p 1481, recorded as of 10-day periods ended June 6 and 17, respectively, were for 10-day periods ended May 31 and June 10, respectively.

POLAND.

Smallpox—Typhus Fever—March-April, 1921.

During the period from March 1 to April 30, 1921, 1,117 cases of smallpox with 142 deaths, and 11,489 cases of typhus fever with 1,131 deaths were reported in Poland. The occurrence was distributed in 11 districts. In the city of Warsaw 90 cases of smallpox with 13 deaths, and 223 cases of typhus fever with 29 deaths were reported.

PORTO RICO.

Examination of Rats.

During the week ended June 11, 1921, 3,199 rats were examined in Porto Rico for plague infection. Of these, 929 rats were taken in San Juan and vicinity. No plague infection was found.

Plague.

During the week ended June 11, 1921, two fatal cases of human plague were reported in Porto Rico, one case occurring at Caguas and one at Manati, making a total of 24 cases reported from the beginning of the outbreak.

UNION OF SOUTH AFRICA.

Typhus Fever—Outbreak, Vicinity of Cape Town.

During the week ended May 19, 1921, 10 cases of typhus fever with three deaths were reported in the vicinity of Cape Town, Union of South Africa. The outbreak occurred in a cantonment of natives and was attributed to overcrowding.

VIRGIN ISLANDS.

Contagious Diseases—May, 1921.

The occurrence of contagious diseases in the Virgin Islands during the month of May, 1921, has been reported as follows:

Disease.	Cases.	Remarks.
In St. Thomas and St. John:		
Chancroid	3	2 imported.
Gonorrhea	8	4 imported.
Malaria	1	1 imported.
Mumps	26	
In St. Croix:		
Chancroid	2	
Filariasis	4	Bancrofti.
Gonorrhea	5	
Measles	2	
Mumps	2	
Syphilis	2	
Trachoma	3	

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

Reports Received During Week Ended July 8, 1921.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Mar. 6–12, 1921: Deaths, 1,902.
Bombay	May 1–7	1	1	
Calcutta	May 8–14	75	68	
Madras	May 15–21	1		
Rangoon	Apr. 24–May 7	11	9	

PLAGUE.

Ceylon:				
Colombo	May 8–14	1	1	
China:				
Manchuria—				
Harbin	May 3–16	40		
Egypt				Jan. 1–May 26, 1921: Cases, 132; deaths, 64.
Cities—				
Alexandria	May 21–27	1	1	
Suez	May 20–25	2	2	
Provinces—				
Assiout	May 24–25	7	5	
India				May 1–7, 1921: Cases, 494; deaths, 387.
Bombay	May 1–7	73	54	
Calcutta	May 8–21	7	7	
Karachi	do	8	7	
Rangoon	Apr. 24–May 7	22	23	
Mexico:				
Tampico	June 11–20	26		Last case, June 18, 1921. Total from Jan. 1 to June 18, 1921: Cases, 145.
Peru				Mar. 1–31, 1921: Cases, 76; deaths, 44. Apr. 1–30, 1921: Cases, 43; deaths, 20.
Department—				
Arequipa	Mar. 1–31	2		At Mollendo.
Callao	do	7	1	At Cal'ao.
Lambayeque	do	2	1	At Chiclayo.
Libertad	do	12	7	In 5 localities.
Lima	do	32	16	At Lima city, 20 cases, 13 deaths.
Piura	do	21	19	At Payta, Piura, and Sullana.
Ancachs	Apr. 1–30	4	1	At Huarmey.
Arequipa	do	3	3	At Mollendo.
Callao	do	8		At Callao.
Lambayeque	do	1	1	At Chiclayo.
Libertad	do	16	5	In 5 localities.
Lima	do	6	3	In Lima city, 3 cases, 2 deaths.
Piura	do	5	7	At Payta, Sullana, and Talara.
On vessel:				
S. S. Oreland				At Genoa, Italy, June 12, 1921, from La Plata, Argentina. Two fatal cases plague in crew en route.

SMALLPOX.

Asia Minor:				
Smyrna	May 22–28	1		On the s. s. Nicholas.
Australia:				
Melbourne	Apr. 9–23	4	1	Mild epidemic.
Bolivia:				
La Paz	Apr. 1–30	5	4	
Brazil:				
Rio de Janeiro	May 8–14	1	1	
Bulgaria:				
Sofia	May 15–31	6		
Canada:				
Alberta—				
Calgary	May 26–June 18	3		
British Columbia—				
Vancouver	May 28–June 11	5		
Manitoba—				
Winnipeg	May 28–June 18		5	

[1] From medical officers of the Public Health Service, American consuls, and other sources. For reports received from Jan. 1 to July 1, 1921, see Public Health Reports for July 1, 1921. The tables of epidemic diseases are terminated semiannually and new tables begun.

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

Reports Received During Week Ended July 8, 1921—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
New Brunswick—				
Westmoreland County	June 5-11	1		
Nova Scotia—				
Sydney	do	1		
Ontario—				
Hamilton	June 12-18	3		
Kingston	June 5-11	1		At two localities in vicinity, 2 cases.
London	do	1		
Montreal	June 12-18	1		
Ottawa	do	8		
Toronto	do	4		
Saskatchewan—				
Regina	June 5-11	2		
Saskatoon	June 7-13	2		
Chile:				
Antofagasta	May 16-29	91	46	
China:				
Amoy	May 8-14		1	
Canton	Apr. 1-30			Present.
Chungking	May 1-14			Present.
Foochow	May 8-14			Present.
Hankow	May 15-21	4	1	
Manchuria—				
Dairen	May 9-22	18	2	
Nanking	May 8-21			Present.
Tientsin	May 8-14	1		Mission hospital.
Tsingtau	May 9-15	1		
Colombia:				
Santa Marta	June 5-11			Present.
Cuba:				
Antilla	do	7		
Egypt:				
Cairo	Mar. 19-25	1		
Finland	May 1-15	1		
Haiti:				
Cape Haitien	May 29-June 11	142		
India:				
Bombay	May 1-7	32	20	
Calcutta	May 8-21	5	5	
Madras	do	11	4	
Rangoon	Apr. 24-May 7	10	2	
Japan:				
Kobe	May 24-30	1		
Java:				
West Java—				
Buitenzorg	Apr. 29-May 5	10	2	
Krawang	do	2		
Lebak	do	3	1	
Mexico:				
Chihuahua	May 23-29		1	
Mexico City	May 15-21	37		Including Federal municipalities.
Panama:				
Colon	May 18-24	2		
Poland				Mar. 1-Apr. 30, 1921: Cases, 1,117; deaths, 142.
Bialystok	Mar. 1-Apr. 30	3		
Cracovia	do	56	6	
Kielce	do	189	26	
Leopol	do	52	16	
Lodz	do	72	9	
Lublin	do	397	30	
Posen	do	26	2	
Silesia	do	10		In Teschen.
Stanislawow	do	30	5	
Tarnopol	do	156	21	
Warsaw	do	36	4	
Warsaw city	do	20	13	
Spain:				
Tarragona	May 9-15		1	
Valencia	May 22-28	1		
Syria:				
Aleppo	Apr. 9-16			Present.
Beirut	May 10-20	1		
Tunis:				
Tunis	May 30-June 5	1	1	

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

Reports Received During Week Ended July 8, 1921—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Oran	May 22-31	10	8	
Bolivia:				
La Paz	Apr. 1-30	32	39	
Egypt:				
Alexandria	May 21-27	1	2	
Cairo	Mar. 19-25	9	4	
Finland	May 1-15	5		
Germany				May 1-7, 1921: Cases, 3. Additional for previous week, 3 cases.
Great Britain:				
Dublin	May 29-June 4	1		
Mexico:				
Mexico City	May 15-21	15		
Poland				Mar. 1-Apr. 30, 1921: Cases, 11,483; deaths, 1,131.
District—				
Bialystok	Mar. 1-Apr. 30	853	45	
Cracovia	do	603	90	
Kielce	do	848	62	
Leopol	do	2,508	277	
Lodz	do	521	53	
Lublin	do	1,446	83	
Posen	do	77	5	
Silesia	do	26		In Teschen.
Stanislawow	do	1,55	232	
Tarnopol	do	1,855	194	
Warsaw	do	972	61	
Warsaw city	do	223	29	
Russia:				
Siberia—				
Vladivostok	do	4	1	
Turkey:				
Constantinople	May 22-28	5		
Union of South Africa:				
Cape Province—				
Cape Town	May 13-19	10	3	At native cantonment in vicinity.

YELLOW FEVER.

Mexico:				
Vera Cruz	June 13-27	7		
Peru				Mar. 1-31, 1921: Cases, 66; deaths, 25.
Departments—				Apr. 1-30, 1921: Cases, 106; deaths, 32. In 13 localities.
Lambayeque—				
Chiclayo	Mar. 1-31	20	10	
Chongollape	do	2	2	
Ferrenafe	do		1	
Lambayeque	do	15	5	
Monsefu	do	18	4	
Motupe	do	1	1	
Pomalca	do	5	1	
Villa Eten	do	5	1	
Callao—				
Callao	Apr. 1-30	1		At quarantine station. From Chiclayo.
Lambayeque—				
Chiclayo	do	23	5	
Chongollape	do	10	1	
Jayanca	do	5	2	
Lambayeque	do	5	2	
Monsefu	do	8	5	
Motupe	do	45	11	
Olmos	do	2	4	
Villa Eten	do	2		
Zana	do	1		
Libertad—				
Guadalupe	do	2		
Pueblo Nuevo	do	1	1	
Trujillo	do	1	1	Country.