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PAST INCIDENCE OF CERTAIN COMMUNICABLE DISEASES COMMON AMONG CHILDREN.[1]

OCCURRENCE OF MEASLES, WHOOPING COUGH, MUMPS, CHICKEN POX, SCARLET FEVER, AND DIPHTHERIA AMONG SCHOOL CHILDREN IN VARIOUS LOCALITIES IN THE UNITED STATES.

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In spite of the fact that a large percentage of the population have the common children's diseases before they are 15 years of age, very few data are available to show the actual incidence of these diseases, particularly the percentage of the population who have them at one time or another and the percentage who have these diseases when at a certain age. In the course of certain studies in child hygiene made by the United States Public Health Service during the period 1916–1919, information was secured from individual school children as to whether they had at any time during their lives had an attack of measles, whooping cough, mumps, chicken pox, scarlet fever, or diphtheria. In the case of the younger children this information was verified by asking older brothers and sisters wherever they were found attending the same school.

From the data collected in this way certain facts can be shown: (1) The actual and relative prevalence of these diseases; that is, how large a percentage of the population suffer attacks and which disease has attacked the largest percentage of the children by the time they have reached adult life; (2) the age incidence; that is, what percentage of children of given ages suffer attacks of these diseases; (3) the sex incidence; that is, what percentage of boys and what percentage of girls have had these diseases and which sex shows the larger percentage who have had them; and (4) race incidence; that is, have negro children had these diseases more or less than white children?

The 31,353 children whose records form the main part of this study were all native-born white children who were attending school. In New Castle County, Del., and Nassau County, N. Y., a considerable number of children were found who were born in a foreign country or who were of foreign or mixed parentage. The records of these foreign children have been tabulated separately and are compared with the native white from the same localities. Also a considerable number of negro children were included in the study, but they have been tabulated separately and compared with the native white children from the same localities. Table 1 shows the distribution of the children included in this study by place of residence.

[1] From Field Investigations in Child Hygiene, United States Public Health Service, in cooperation with the Statistical Office, United States Public Health Service.

TABLE 1.—*Distribution of children observed for past incidence of communicable diseases according to the locality of residence.*

Locality.	Both sexes.	Boys.	Girls.
31,353 native white children 5–19 years of age.			
All localities	31,353	15,518	15,835
Frederick County, Md	3,569	1,802	1,767
Petersburg, Va	1,720	852	868
Hampton, Va	1,214	557	657
Charlotte, N. C	4,155	1,973	2,182
Spartanburg, S. C	2,393	1,197	1,196
Greenville, S. C	730	369	361
Louisville, Ky	2,832	1,437	1,395
Anniston, Ala	467	253	214
Hattiesburg, Miss	654	330	324
Little Rock, Ark	367	183	184
Fort Worth, Tex	5,072	2,495	2,577
Waco, Tex	3,763	1,844	1,919
Leavenworth, Kans	1,739	868	871
Delaware and New York State	2,678	1,358	1,320
2,292 children of foreign-born or mixed parentage 6–16 years of age.			
Delaware and New York State	2,292	1,194	1,098
2,777 colored children 6–16 years of age.			
All localities	2,777	1,201	1,576
Charlotte, N. C	1,100	461	639
Greenville, S. C	714	278	436
Waco, Tex	963	462	501

AGE INCIDENCE.

Table 2 shows for each disease the percentage of children each year of age who have at some time in their lives had an attack of that disease.

TABLE 2.—*Age incidence of certain communicable diseases common among children.*

Percentage of children at each age who had already had an attack of the specified disease—31,353 native white children 5 to 19 years of age in 14 localities in the United States. [1]

Age nearest birthday.	Measles.	Whooping cough.	Mumps.	Chickenpox.	Scarlet fever.	Diphtheria.	Number of children.
Actual percentage of children at each age who had had an attack of the specified disease at some time in their lives.							
5	67.1	48.6	20.5	22.4	5.2	3.3	210
6	67.4	56.8	23.7	33.2	5.9	4.4	1,191
7	75.7	60.8	27.3	38.8	6.5	5.6	2,863
8	79.9	66.7	33.7	42.5	7.8	5.8	3,701
9	83.4	69.7	36.5	44.9	8.4	7.0	4,089
10	84.4	69.4	41.8	47.7	9.5	7.1	4,173
11	86.7	74.2	46.1	49.6	12.1	8.5	3,825
12	86.5	75.0	48.8	49.8	10.5	8.1	3,683
13	88.6	77.4	52.8	49.2	11.1	7.1	3,089
14	89.0	76.7	57.4	50.4	11.8	7.6	2,177
15	86.6	76.4	61.6	48.3	10.6	10.8	1,212
16	90.9	79.2	60.6	54.5	11.9	10.3	624
17	79.2	73.5	61.8	60.3	12.9	12.6	317
18	90.1	78.8	64.9	57.0	7.3	12.6	151
19	89.6	72.9	64.6	58.3	8.3	6.3	48

[1] See Table 1 (section on native white children) for the localities included.

TABLE 2.—*Age incidence of certain communicable diseases common among children*—Continued.

Age nearest birthday.	Measles.	Whooping cough	Mumps.	Chickenpox.	Scarlet fever.	Diphtheria.	Number of children.
Smoothed percentage of children at each age who had had an attack of the specified disease at some time in their lives.							
5	65.0	48.5	19.7	22.4	5.1	3.5	
6	69.5	56.2	23.3	33.2	5.9	4.4	
7	75.6	61.7	27.6	38.8	6.8	5.3	
8	79.8	63.0	32.1	42.6	7.8	6.1	
9	83.0	69.2	36.6	45.6	8.9	6.8	
10	85.2	71.8	41.0	47.8	10.0	7.4	
11	86.7	73.9	45.2	49.3	10.8	7.9	
12	87.6	75.5	49.2	50.1	11.2	8.2	
13	88.2	76.6	53.0	50.6	11.4	8.4	
14	88.6	77.3	56.6	51.0	11.5	8.6	
15	88.8	77.6	59.5	51.3	11.6	8.7	
16	89.0	77.8	61.3	51.6	11.7	8.8	
17	89.1	77.9	62.7	51.9	11.8	8.9	
18	89.2	78.0	63.8	52.2	11.9	9.0	
19	89.3	78.1	64.7	52.5	12.0	9.1	
Approximate percentage of children who had an attack of the specified disease when at a certain age.							
5 to 6	4.5	7.7	3.6	10.8	0.8	0.9	
6 to 7	6.1	5.5	4.3	5.6	.9	.9	
7 to 8	4.2	4.3	4.5	3.8	1.0	.8	
8 to 9	3.2	3.2	4.5	3.0	1.1	.7	
9 to 10	2.2	2.6	4.4	2.2	1.1	.6	
10 to 11	1.5	2.1	4.2	1.5	.8	.5	
11 to 12	.9	1.6	4.0	.8	.4	.3	
12 to 13	.6	1.1	3.8	.5	.2	.2	
13 to 14	.4	.7	3.6	.4	.1	.2	
14 to 15	.2	.3	2.9	.3	.1	.1	
15 to 16	.2	.2	1.8	.3	.1	.1	
16 to 17	.1	.1	1.4	.3	.1	.1	
17 to 18	.1	.1	1.1	.3	.1	.1	
18 to 19	.1	.1	.9	.3	.1	.1	

The percentages in the upper section of Table 2 show considerable chance variation, especially in the age groups above 14 years, where the number of children rapidly declines. However, it is clear that the age curves for the different diseases are of very different types.

In order to give a more accurate idea of the incidence of these diseases, the crude data were smoothed by means of a three-period moving average, with some further adjustments made on the following assumptions:

First, in interpreting the data in this way one gets a curve similar to the curve which would be obtained by observing a single group of children from the time they were 5 until they were 19 years of age and recording for the survivors at the end of each year under observation the percentage who had had the disease in question at some time in the past. In such a case it is obvious that the percentage of children of a given age who had had the disease at some time in their past lives could never be less than the percentage of children one year younger who had had the disease. Therefore, in smoothing the percentages shown in the top section of Table 2 and in Figure 1, it was assumed that the curves would never come down.

In the second place, it can not be assumed that the curves have entirely ceased to rise by the nineteenth year of age, for a few adults suffer attacks of these children's diseases.

In adjusting the moving averages, both these facts were taken into account.

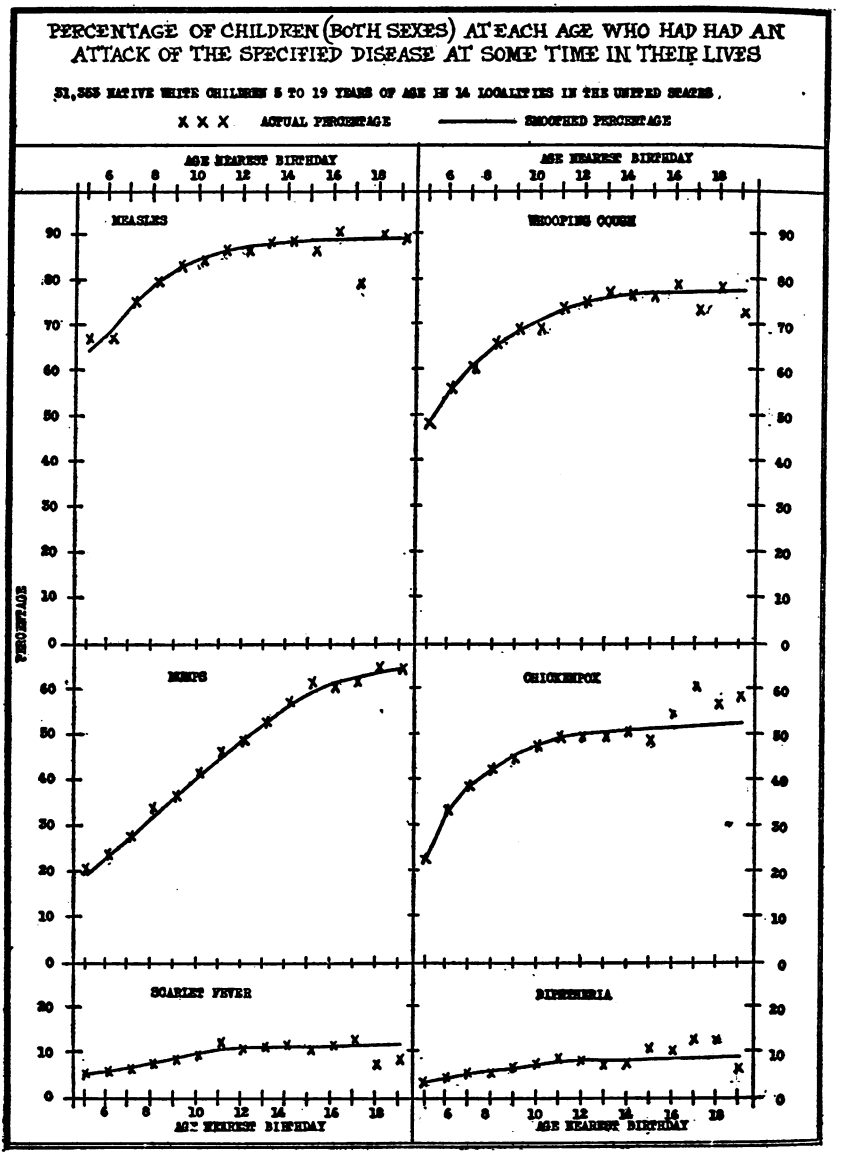

FIG. 1.

Figure 1 shows for both sexes combined the actual and the smoothed percentage at each age who had at some time in their lives had an attack of each specified disease. Attention might be called to the differences between the curves for the several diseases. Measles,

whooping cough, and chicken pox rise rather rapidly during the early school ages, but after the thirteenth or fourteenth year of age the curves rise very little and therefore indicate that most of the suscept-

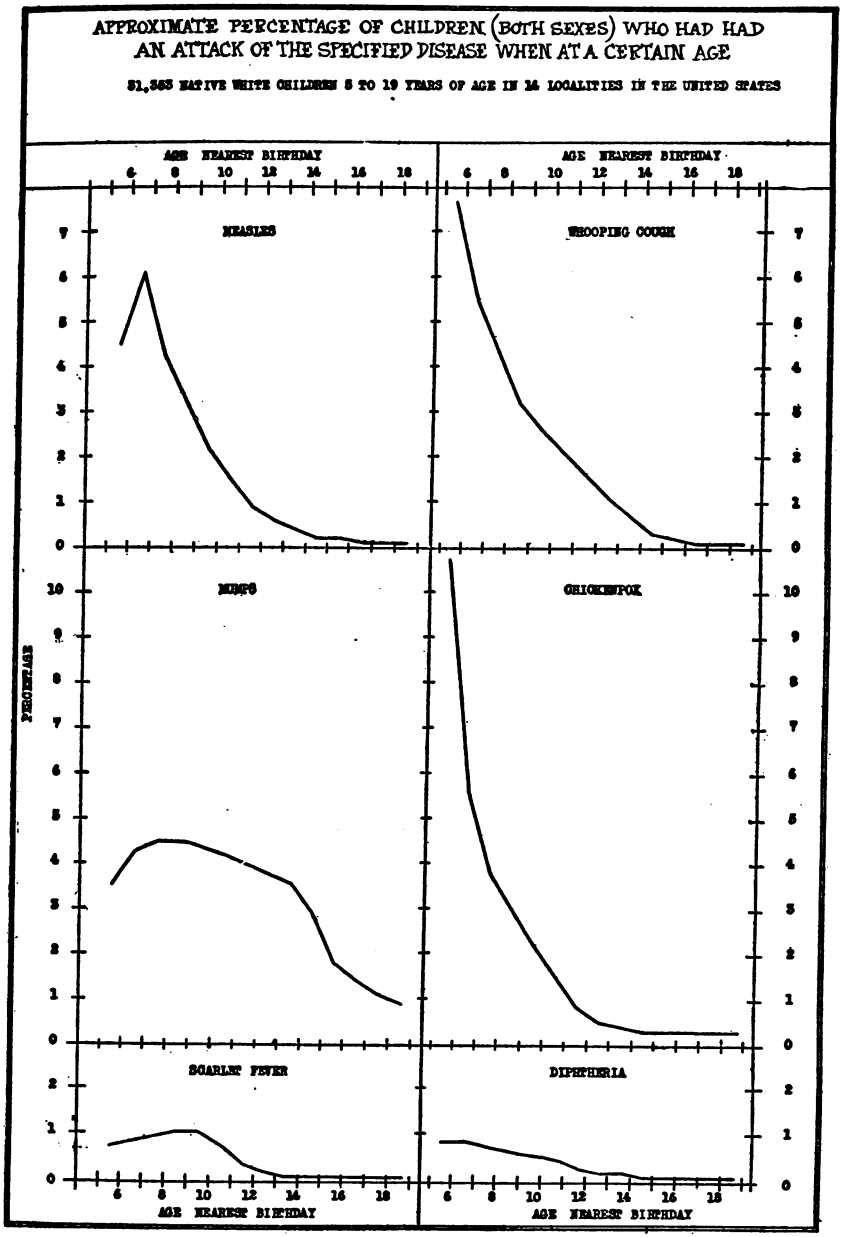

FIG. 2.

ible children have had these diseases by the time they reach the age of 13 or 14 years. The same may be said of scarlet fever and perhaps also of diphtheria, except that the percentages are much smaller and

the rise therefore appears to be less marked when the rates are plotted, as in Figure 1, on coordinate paper. Mumps, however, shows quite a different tendency. The plotted percentages form nearly a straight line up to 14 or 15 years of age and there is little indication of the curve ceasing to rise within the ages observed in this study.

In order the better to study the age incidence of these diseases, the percentage of children of a given age who had had an attack of a disease was subtracted from the percentage of children one year older who had had an attack of the same disease. The resulting number gives an approximation of the percentage of children of a given age who would be expected to have the disease before they reach the next year of age. Since the actual percentages have considerable chance variation in them, the smoothed figures were used. Figure 2 shows the results.

It should be borne in mind in considering these percentages that they are based on observations, made in different years, of a large number of children in widely separated localities. They therefore represent averages and, because of the epidemic character of these diseases, the rates for a particular locality in a given year might be much lower or much higher than those shown here.

In the case of whooping cough and chicken pox the annual incidence rapidly declines as age increases above 5 to 6 years. Diphtheria shows somewhat the same tendency. Measles seems to show the greatest incidence at 6 to 7 years of age. Scarlet fever indicates a possible increase up to about 8 to 10 years of age, followed by a decline. Mumps rises until about 7 to 9 years of age and then declines somewhat more gradually than the other diseases. Even at 15 to 16 years there is still considerable morbidity from mumps, the rate being nearly half of what it is at the maximum (7 to 9 years), whereas the rate for measles, whooping cough, and chicken pox has declined by the twelfth to the fourteenth year of age to a point not greater than one-tenth of the rate at the maximum (5 to 6 years).

In Figure 3 the curves showing the percentage of children who have suffered attacks of the specified diseases at some time in their lives are plotted on one sheet to facilitate comparison of the different diseases. It appears that by the time adult life is reached, a greater percentage of people have had measles than any other of these diseases. About 89 per cent of the children had had the measles by the time they were 19 years of age. Whooping cough comes next with 78 per cent. At the 12th year of age, practically 50 per cent of the children had had mumps and 50 per cent had had chicken pox. But the curve for mumps rises after the 12th year much more rapidly than the curve for chicken pox, and by the 19th year of age 65 per cent of the children had had mumps and 52 per cent had had chicken pox. About 12 per cent of the children had had scarlet

fever, and 9 per cent had had diphtheria by the time they were 19 years of age. It must be remembered, however, that these are percentages of the surviving children and, in the case of the more serious diseases with a high case fatality, the percentages may be considerably less than they would be if the fatal cases were included.

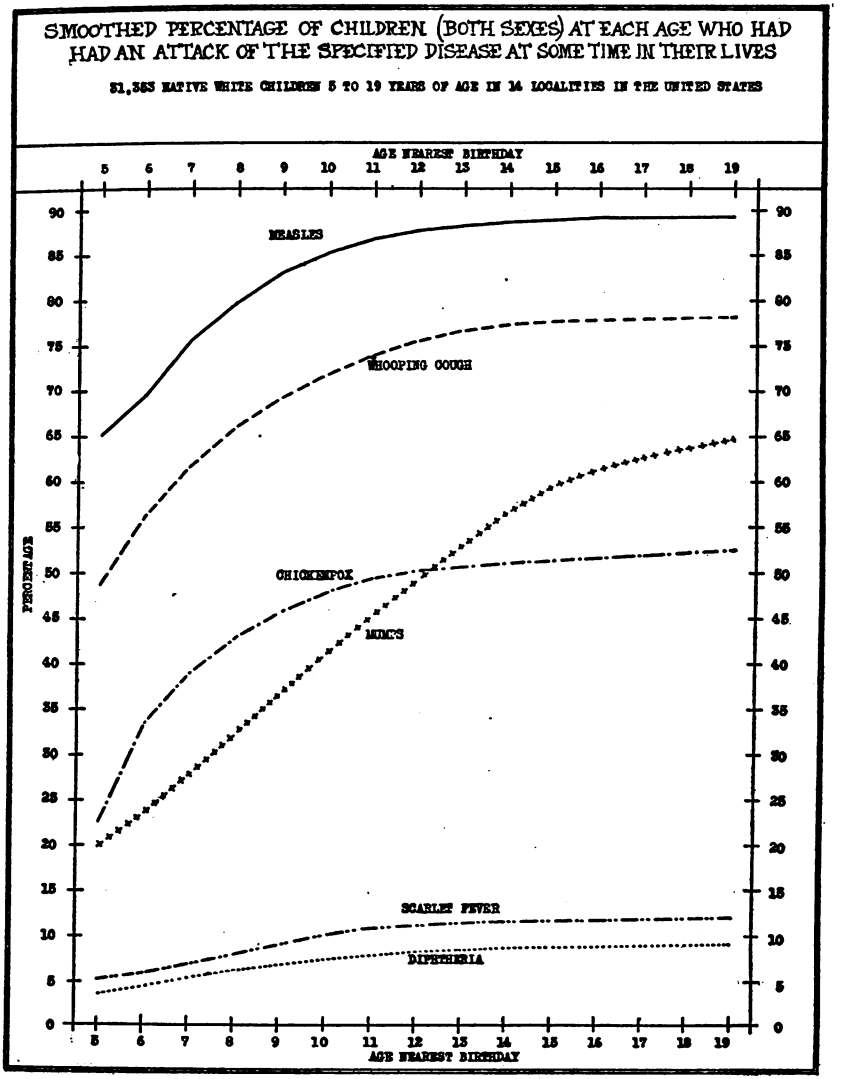

FIG. 3.

SEX INCIDENCE.

In an article by E. C. Henderson [1] on contagious diseases among children in London, Canada, attention was called to the fact that the

[1] A census of contagious diseases of 8,786 children. By E. C Henderson. Am. Jour. of Pub. Health, vol. 6, No. 9, pp. 971-981, Sept., 1916.

incidence of certain diseases is greater among girls than boys. Table 3 and Figure 4 show the percentage of boys and the percentage of girls of each year of age included in the present study who have had

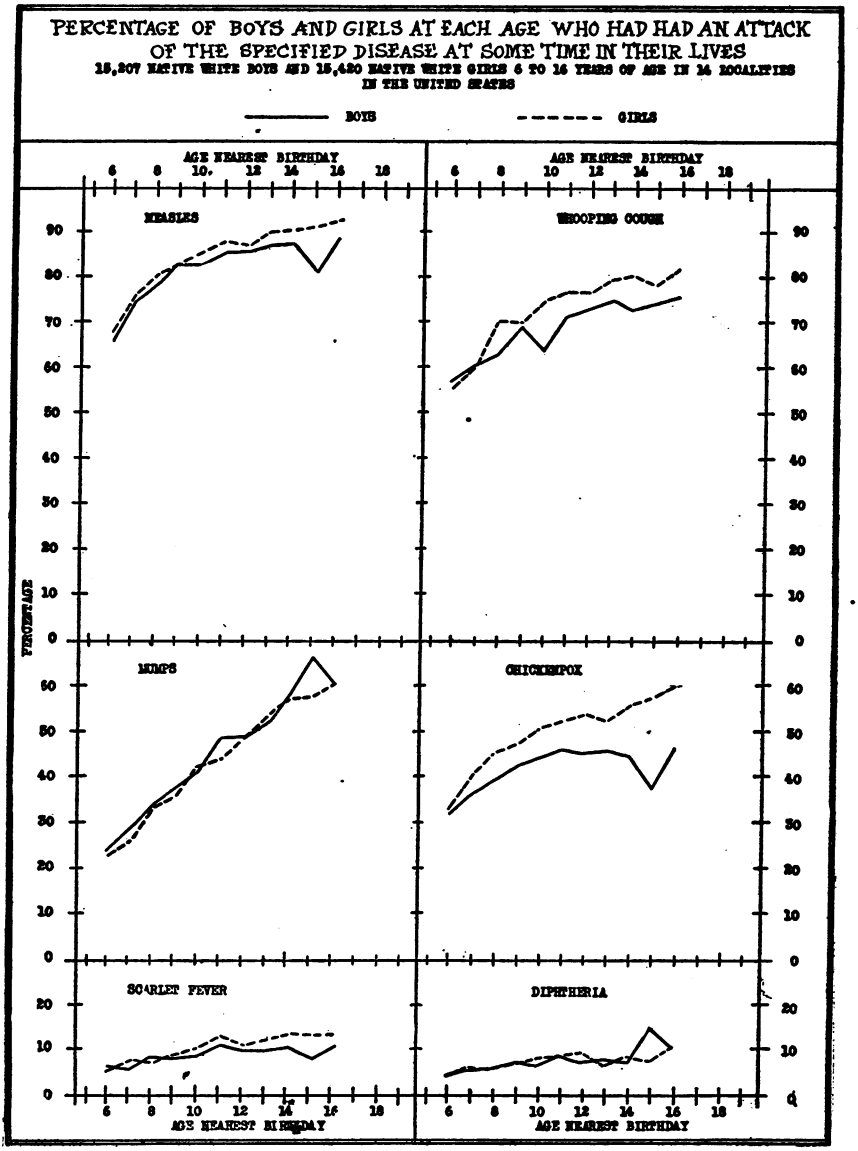

FIG. 4.

the specified diseases. In the case of measles, whooping cough, chicken pox, and scarlet fever the curves for the girls are rather consistently higher than those for the boys. In the case of mumps and diphtheria, no consistent difference appears between the sexes.

Frederick S. Crum in an article on measles [1] shows average annual case rates of measles reported in Aberdeen, Scotland, 1883–1902 by sex and single years of age. Although the differences are not large, the rates in practically all age groups are higher for females than for males. Henderson [2] also found more morbidity from measles among girls than boys.

TABLE 3.—*Sex and age incidence of certain communicable diseases common among children.*

Percentage of girls and of boys at each age who had already had an attack of the specified disease—15,207 native white boys and 15,420 native white girls 6 to 16 years of age in 14 localities in the United States.[1]

Age nearest birthday.	Measles.		Whooping cough.		Mumps.		Chicken pox.		Scarlet fever.		Diphtheria.		Number of children.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
6	66.3	68.5	55.9	57.6	24.2	23.2	32.5	33.9	6.3	5.5	4.3	4.5	587	604
7	75.0	76.3	61.0	60.6	28.5	26.1	36.7	40.8	5.6	7.4	5.2	6.0	1,409	1,454
8	79.1	80.7	63.1	70.3	33.9	33.6	39.7	45.2	8.5	7.1	5.8	5.8	1,837	1,864
9	83.5	83.3	69.2	70.1	37.2	35.8	42.6	47.3	8.0	8.8	7.2	6.8	2,065	2,024
10	83.2	85.8	64.1	75.0	41.2	42.5	44.5	51.0	8.7	10.3	6.4	7.9	2,121	2,052
11	85.6	87.9	71.6	76.9	48.3	44.0	46.5	52.7	11.1	13.1	8.3	8.7	1,907	1,918
12	85.6	87.3	73.3	76.7	48.9	48.8	45.6	53.9	9.8	11.2	7.0	9.1	1,831	1,852
13	87.2	90.0	75.0	79.7	51.8	53.7	46.1	52.3	9.6	12.6	7.8	6.4	1,522	1,567
14	87.6	90.4	73.1	80.1	57.4	57.3	45.1	55.6	10.2	13.3	7.1	8.0	1,080	1,097
15	81.5	91.3	74.4	78.3	66.2	57.5	38.1	57.5	8.0	13.1	14.7	7.2	577	635
16	88.9	92.4	75.6	81.9	60.9	60.3	47.2	60.1	10.0	13.3	10.3	10.2	271	353

[1] See Table 1 (section on native white children) for the localities included.

It can not be assumed that the morbidity and the mortality will run parallel, but this might generally be expected. In the registration states in 1920 the death rates from whooping cough and from scarlet fever were slightly higher among females than among males, in agreement with the morbidity figures. But for measles the death rate was slightly lower among females, whereas the morbidity seemed higher in the group under study in this article. In the case of diphtheria, the morbidity showed no consistent difference between the sexes, but the mortality was slightly higher among the females.[2] No data are available on mortality from mumps or chicken pox in the United States.

INCIDENCE AMONG NATIVE AND FOREIGN CHILDREN.

In two of the localities considered in this study there was a considerable number of children who were foreign born or of foreign parentage. Table 4 and Figure 5 compare the past incidence of the diseases among the children of native parentage with those of foreign or mixed parentage. In the case of measles, whooping cough, mumps, and chicken pox the curves for the native children are consistently

[1] A statistical study of measles. By Frederick S. Crum. Am. Jour. of Pub. Health, Vol. 4 No. 4, pp. 289-309, April, 1914.

[2] For the mortality from these diseases see pages 39-63, "Mortality Rates (United States) 1910 1920," Department of Commerce, Bureau of the Census, Washington ,Government Printing Office, 1923.

above those for the foreign children, but in the case of scarlet fever and diphtheria no consistent difference appears. The data at hand were not extensive enough to justify an analysis of the foreign group

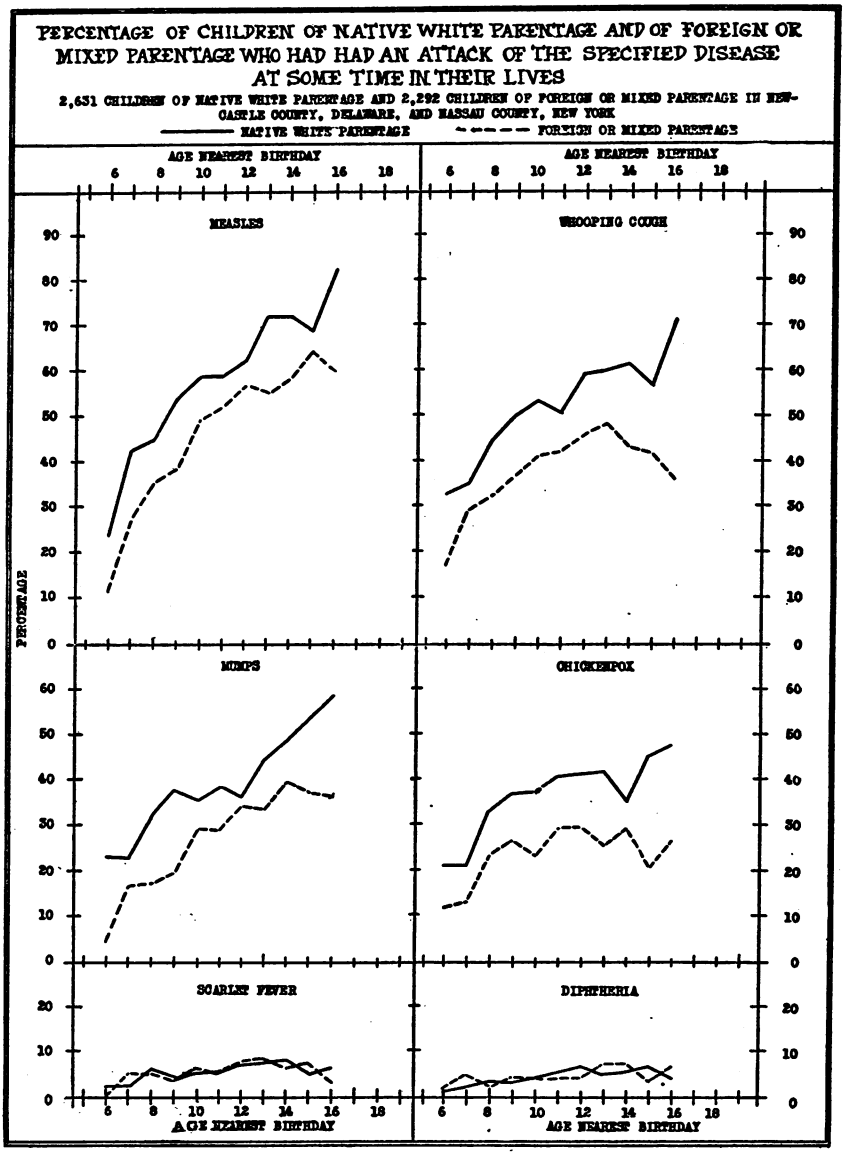

FIG. 5.

by specific races. Such an analysis would seem essential before any definite conclusions could be reached as to the relative incidence of these diseases in the two groups.

TABLE 4.—*Incidence by age and parentage of certain communicable diseases common among children.*

Percentage of children of native white parentage and of foreign-born or mixed parentage at each age who had already had an attack of the specified disease—children 6–16 years of age in New Castle County, Delaware, and Nassau County, New York.

Age nearest birthday.	Measles.		Whooping cough.		Mumps.		Chicken-pox.		Scarlet fever.		Diphtheria.		Number of children.	
	Native white parentage.	Foreign or mixed parentage.	Native white parentage.	Foreign or mixed parentage.	Native white parentage.	Foreign or mixed parentage.	Native white parentage.	Foreign or mixed parentage.	Native white parentage.	Foreign or mixed parentage.	Native white parentage.	Foreign or mixed parentage.	Native white parentage.	Foreign or mixed parentage.
6	24.4	11.8	33.3	17.8	23.1	4.7	21.8	12.4	2.6	.6	1.3	2.4	78	169
7	42.5	27.7	35.5	29.6	22.9	16.9	21.5	13.1	2.8	5.6	2.3	5.2	214	213
8	45.1	35.6	45.1	32.7	32.1	17.3	33.2	23.6	6.5	5.3	3.6	2.8	277	284
9	54.5	38.2	50.4	37.1	38.0	19.6	37.2	26.9	5.0	4.0	3.6	4.7	363	275
10	59.1	49.5	53.9	41.6	35.7	29.7	37.5	23.6	5.5	6.5	4.3	4.4	347	293
11	59.1	52.4	51.2	42.8	38.9	29.0	40.9	29.7	5.6	5.6	5.6	4.5	303	269
12	62.5	57.0	59.8	46.2	36.3	34.3	41.7	29.9	7.2	8.0	6.9	4.4	333	251
13	72.3	55.6	60.7	48.9	44.9	33.3	41.9	25.8	7.9	8.9	5.3	7.6	303	225
14	72.3	58.6	61.9	43.6	48.9	39.8	35.5	29.3	8.2	6.6	5.6	7.7	231	181
15	69.1	64.7	57.3	42.2	53.7	37.3	46.3	20.6	5.1	7.8	6.6	3.9	136	102
16	82.6	60.0	71.7	36.7	58.7	36.7	47.8	26.7	6.5	3.3	4.3	6.7	46	30

INCIDENCE AMONG WHITE AND COLORED CHILDREN.

Data regarding incidence among white and colored children were collected from a considerable number of negro children in various localities, but in only three places was the number of negro children large enough to afford a comparison with the white children. Table 5 and Figure 6 make a comparison of the rates among white with those among negro children in Charlotte, N. C., Greenville, S. C., and Waco, Tex. In the case of chicken pox, scarlet fever, and diphtheria the curves for the negro children are considerably below those for the white children and the differences are consistent in the different age groups. The measles curve for the colored is below that for the white in most of the age groups. In the case of whooping cough there seems to be no consistent difference. The incidence of mumps is possibly greater among negro than among white children.

TABLE 5.—*Incidence by color and age of certain communicable diseases common among children.*

Percentage of native white and of colored children at each age who had already had an attack of the specified disease—8,477 white children and 2,777 colored children 6–16 years of age in Charlotte, N. C., Greenville, S. C., and Waco, Tex.

Age nearest birthday.	Measles.		Whooping cough.		Mumps.		Chicken pox.		Scarlet fever.		Diphtheria.		Number of children.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
6	66.3	81.0	58.4	66.9	18.8	47.9	33.1	24.0	7.9	4.1	7.0	.8	356	121
7	78.0	78.4	65.2	68.5	25.2	34.4	38.1	21.6	5.5	2.3	6.9	1.0	860	305
8	86.4	81.0	71.4	74.0	31.9	38.4	45.5	28.3	8.9	2.9	5.8	1.0	999	315
9	90.4	84.7	74.1	78.4	31.6	51.0	47.2	24.1	9.4	4.1	6.9	2.2	1,086	365
10	89.8	81.2	76.0	74.8	41.6	46.8	51.1	25.8	10.8	6.2	8.6	3.1	1,119	325
11	92.7	85.8	79.4	78.9	47.8	51.2	55.4	30.4	12.6	5.3	9.1	4.6	1,010	303
12	92.3	88.0	81.1	79.6	52.5	55.3	53.8	34.2	13.2	7.0	7.4	3.2	986	284
13	94.6	86.8	84.0	79.4	53.4	56.4	55.9	35.4	12.2	5.1	7.7	2.3	869	257
14	95.8	84.9	81.8	76.9	61.4	62.7	53.5	32.5	15.6	4.7	8.7	4.2	621	212
15	86.9	88.0	81.7	74.3	69.4	55.1	40.4	31.7	20.5	3.0	20.8	3.6	366	167
16	93.7	84.6	82.0	70.7	61.0	55.3	60.0	35.0	24.4	10.6	11.7	6.5	205	123

Crum shows for white and for colored children the average annual case rates for measles reported in Washington, D. C., 1908–1912 in the age groups under 1 year, 1–4, 5–9, 10–19, and 20 years and over. In every age group the case rate is higher for the white children.[1]

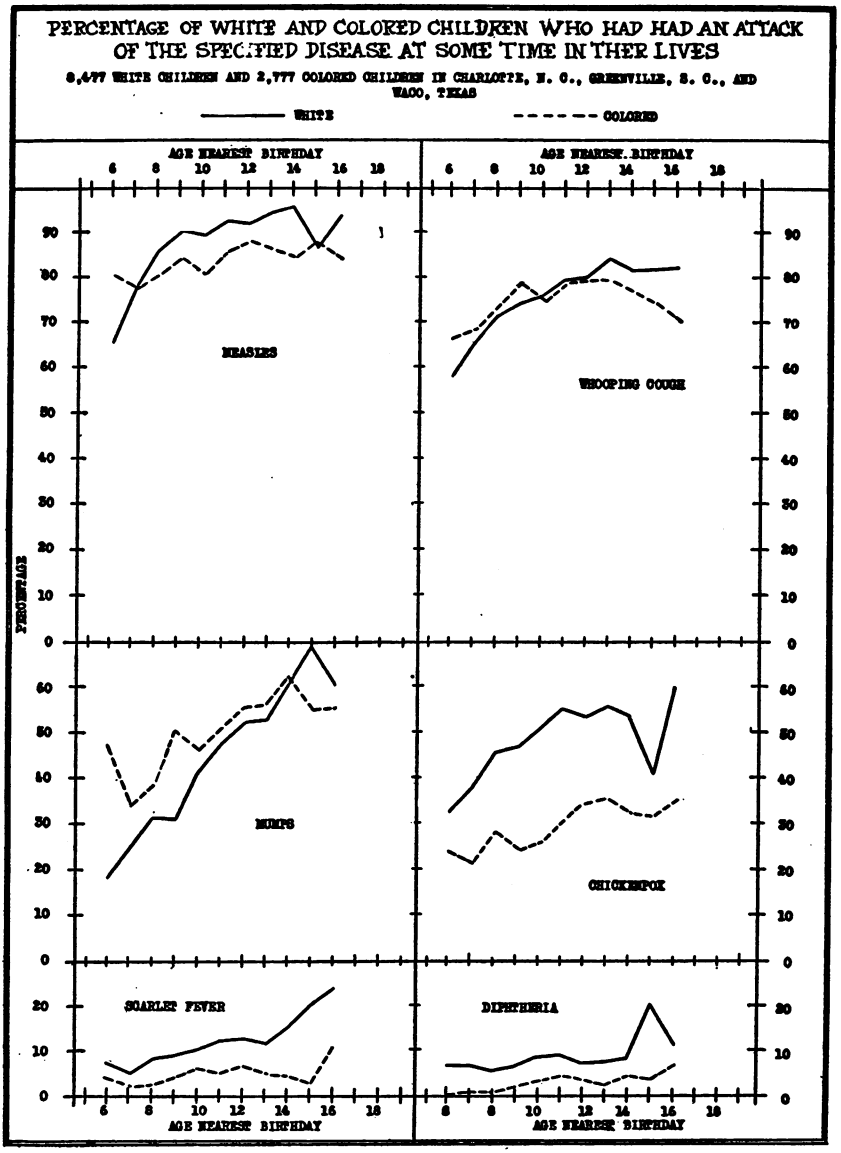

FIG. 6.

Crum, in another study shows for the same age groups the case rate for diphtheria reported in Washington, D. C., 1908–1915, for white and colored children. The rates among the white children are generally higher than those among the colored children.[2]

[1] Loc. cit.

[2] A statistical study of diphtheria by Frederick S. Crum. Am. Jour. of Pub. Health, Vol. 7, No. 5, pp. 445-477, May, 1917.

As to death rates, in the registration States of 1920 the mortality from scarlet fever and from diphtheria was very much higher among white than among colored children.[1] In regard to diphtheria, data for Washington, D. C., 1908–1915, given by Crum show the same thing, the death-rates being somewhat higher in most of the age groups among the white children than among the negroes.[1] The mortality from measles in the registration area of the United States in 1920 was greater among white children. The mortality from whooping cough was higher among the negroes, but the morbidity in this study did not seem to differ consistently for the two races.[1]

VARIATION IN DIFFERENT LOCALITIES.

Table 6 shows the data by locality for the six places having considerable numbers of children included in the study. The percentage of children of a given age who had had a specified disease varies widely in the different localities.

TABLE 6.—*Percentage of children at each age who had already had an attack of the specified disease—Native white children 6–15 years of age in 6 localities in the United States.*

Age nearest birthday.	Frederick County, Md.	Spartanburg, S. C.	Charlotte, N. C.	Louisville, Ky.	Fort Worth, Tex.	Waco, Tex.
Measles.						
6	43.9	72.9	58.3	69.3	90.1	84.2
7	51.3	85.2	72.5	70.4	89.7	84.8
8	55.2	84.6	82.4	71.8	90.6	91.0
9	65.9	86.3	88.6	76.5	92.9	92.4
10	65.2	91.2	87.7	79.6	92.7	92.4
11	73.6	89.1	91.1	83.8	93.0	94.8
12	77.2	90.0	90.4	82.6	91.0	93.2
13	74.4	95.9	94.4	88.0	93.7	95.9
14	83.8	94.4	96.0	87.4	91.6	95.7
15	85.7	93.9	83.6	86.8	95.2	90.3
Whooping cough.						
6	68.2	49.6	50.7	39.8	46.7	75.0
7	67.0	64.8	63.4	47.7	61.4	69.3
8	65.5	64.7	71.0	58.2	67.0	72.9
9	67.4	72.7	73.2	59.4	73.4	74.7
10	51.7	76.5	75.7	67.9	69.8	76.7
11	74.0	79.1	79.5	72.6	72.1	78.2
12	71.4	82.3	80.1	72.7	71.4	81.5
13	72.7	85.6	86.6	75.3	73.4	83.3
14	71.9	83.2	82.6	74.9	77.2	82.7
15	77.5	78.8	85.0	72.9	76.9	77.1
Mumps.						
6	13.6	17.8	22.3	19.3	33.6	5.3
7	12.5	20.8	31.9	20.0	36.0	18.8
8	19.6	27.4	39.4	26.3	42.5	25.4
9	28.9	34.2	40.1	29.5	43.7	24.5
10	33.3	38.4	49.6	37.7	49.8	34.9
11	42.0	40.3	57.5	43.4	48.9	38.0
12	40.4	45.0	64.1	47.7	50.8	43.3
13	48.3	56.8	63.8	47.3	55.6	44.2
14	55.1	59.4	69.6	52.4	60.0	54.0
15	61.5	57.6	83.6	50.4	61.5	47.2

[1] Mortality rates, 1910–1920. Department of Commerce, Bureau of the Census.

TABLE 6.—*Percentage of children at each age who had already had an attack of the specified disease—Native white children 6–15 years of age in 6 localities in the United States*—Continued.

Age nearest birthday.	Frederick County, Md.	Spartanburg, S. C.	Charlotte, N. C.	Louisville, Ky.	Fort Worth, Tex.	Waco, Tex.
Chicken pox.						
6	38.6	22.5	37.4	28.4	34.2	17.1
7	38.0	41.1	48.9	30.4	41.0	25.2
8	39.7	36.3	57.4	33.2	44.4	34.8
9	44.8	40.1	60.3	34.6	45.8	36.4
10	47.0	38.4	63.6	46.2	46.9	40.0
11	47.6	41.1	64.5	41.9	47.6	47.2
12	47.0	41.9	64.9	49.3	49.3	45.7
13	49.1	42.3	67.6	44.2	46.3	48.1
14	52.8	48.3	65.2	57.6	45.6	43.7
15	57.7	53.0	44.0	55.0	49.0	36.1
Scarlet fever.						
6	10.6	5.4	10.4	1.1	4.6	3.9
7	5.7	5.9	9.2	3.1	8.7	9.1
8	9.2	7.9	10.8	4.1	10.3	7.5
9	6.5	9.9	12.7	5.4	12.0	6.6
10	5.6	8.8	13.6	8.0	11.3	10.2
11	10.2	10.1	16.1	9.7	15.3	15.3
12	7.3	10.4	12.4	9.6	16.4	9.5
13	7.0	8.6	12.6	15.4	11.0	13.1
14	7.6	12.6	11.6	12.1	15.2	14.0
15	5.5	10.6	13.0	17.8	11.5	11.8
Diphtheria.						
6	0.8	1.6	6.6	2.3	3.9	5.3
7	2.5	5.5	7.4	3.5	7.1	6.6
8	4.1	5.8	6.8	4.4	7.7	4.3
9	4.2	7.1	6.4	5.7	8.2	7.2
10	4.1	7.2	8.6	3.7	9.8	9.3
11	5.0	4.3	8.2	6.8	11.7	9.0
12	4.8	4.6	8.8	9.9	10.4	5.8
13	4.7	3.2	5.4	7.9	9.8	9.0
14	6.3	7.0	6.2	9.5	5.6	10.3
15	4.4	3.0	31.4	7.8	11.5	6.9
Number of children.						
6	132	129	211	88	152	76
7	279	236	448	200	505	361
8	368	292	472	316	702	469
9	402	322	481	387	794	514
10	466	307	536	377	785	450
11	462	258	473	339	685	458
12	413	260	396	333	598	497
13	344	222	373	292	410	412
14	303	143	276	231	250	300
15	182	66	207	129	104	144

SUMMARY.

In the course of certain studies in child hygiene, information was obtained from approximately 35,000 school children from 5 to 19 years of age as to whether they had ever had measles, whooping cough, mumps, chicken pox, scarlet fever, or diphtheria. The children were classified according to age, sex, color, and nativity or nativity of the parents.

The curves of the percentage of children who had had an attack of these diseases at some time in their lives rises fairly rapidly as age increases until about the thirteenth or fourteenth year, after which time the rise is very slow, except in the case of mumps, which continues to rise considerably through the nineteenth year. The slackening in the rate of increase presumably means that the susceptible material is largely used up.

When the annual incidence was considered it was found that for the ages studied the maximum incidence of measles was at 6 to 7 years; whooping cough, 5 to 6 years; mumps, 7 to 9 years; chicken pox, 5 to 6 years; scarlet fever, 8 to 10 years; and diphtheria, 5 to 7 years. As age increases, within the limits of those included in this study, the annual incidence rapidly declines.

By the time the adult ages were reached, about 89 per cent of the children had had measles, about 78 per cent had had whooping cough, 65 per cent mumps, 52 per cent chicken pox, 12 per cent scarlet fever, and 9 per cent diphtheria.

Measles, whooping cough, chicken pox, and scarlet fever seem to have been more prevalent among girls than among boys. The rates for mumps and diphtheria are about the same for the two sexes.

Measles, whooping cough, mumps, and chicken pox seem to have been more prevalent among the native white than among the foreign children. The rates for scarlet fever and diphtheria seem to be about the same for the two groups.

Measles, chicken pox, scarlet fever, and diphtheria seem to have been more prevalent among the white than among the colored. The rates for mumps were possibly higher among the colored. Whooping cough seemed to be about the same in both groups.

A NOTE ON THE PREVENTION OF LEAD POISONING IN CERTAIN RUBBER-WORKING INDUSTRIES.

By LEONARD GREENBURG, Associate Sanitary Engineer, Office of Industrial Hygiene and Sanitation, United States Public Health Service.

One of the methods recommended for preventing industrial poisonings in certain industries is the use of water or some other suitable liquid which, when mixed with the toxic substance, prevents its dissemination in the atmosphere in the form of dust. In this manner the hazard due to inhalation and ingestion of the substance may be materially reduced.

At the present time many rubber-working industries utilize compounds of lead for the purpose of accelerating the vulcanization process. Certain of these industries also make use of substances of the nature of oils or petrolatum, known as "softeners," for the purpose of giving the final product a desired texture. The lead hazard in such a rubber-working plant has recently been brought to

the attention of the Public Health Service. In this particular case, lead dust was disseminated in the atmosphere of the workroom at many points, practically every time the "batch" was handled by the workers prior to its final milling. As a solution of the lead-poisoning hazard at this plant, it was recommended that the litharge and petrolatum be prepared at a point removed from all other workers, and that this salve, composed of the proper proportions of litharge and petrolatum (8 : 1), then be brought into the compounding room and the requisite amount weighed out and added to each "batch." By this simple procedure the toxic dust was eliminated from all points in the workroom but one, and there it was in contact with only one worker.

It is understood that some plants can not make use of such a method as the above; but this procedure may be of value to others in mitigating the lead-poisoning hazard.

IODINE DEFICIENCY AND THE PREVALENCE OF SIMPLE GOITER IN MICHIGAN.

An interesting preliminary report on investigations made by the Michigan State Department of Health regarding iodine deficiency in the water and the prevalence of simple goiter in various sections of Michigan has recently been published by Dr. R. M. Olin, State health commissioner.[1] The report presents a résumé of the important data brought out in the different field surveys regarding the prevalence of simple goiter and the iodine content of the water in the sections surveyed.

GOITER PREVALENCE AND IODINE CONTENT OF WATER.

Doctor Olin states that although the unusual prevalence of goiter in Michigan had been a matter of common knowledge for years, it had occasioned little concern either to the public or the medical profession until 1918, when the selective draft brought out the fact that northern Michigan and Wisconsin had a real public health problem in this disease. In the fall of 1919 the first step was taken to secure accurate data and the traveling representatives of the Michigan Department of Health were instructed to collect all possible information relative to the prevalence of goiter in various sections of the State. This personnel included the traveling tuberculosis clinic, medical inspectors, public health nurses, and laboratory field workers.

In March, 1919, Dr. Simon Levin called attention to the prevalence of goiter in the drafted men, and in 1921 he published a paper showing that of 1,783 persons in Lake Linden, Mich., 1,146 (64.4 per cent)

[1] Jour. A. M. A., Apr. 26, 1924, pp. 1328–1332.

had thyroid enlargement. In January, 1922, representatives of th State department of health made a survey of Iron Mountain, Mich. which showed that 54 per cent of the persons examined had percep tible thyroid enlargements. In the same year Doctor Marine wa called from New York to deliver an address before the annual confer ence of State health officers, in order that information might be hac as to the methods of procedure followed by Doctors Marine anc Kimball in Ohio.

Shortly afterwards, Doctor Slemons, health officer of Granc Rapids, made a survey of that city. The results of the two surveys in northern Michigan, one by Levin and one by the State departmen of health, when compared with the data obtained in the Granc Rapids survey, showed a great difference in the percentage of persons affected. Consequently, Doctor Olin, in conference with the advisory council of health, decided to make some careful surveys of representa- tive sections of the State with regard to the prevalence of goiter and the iodine content of the water. Fifty samples of water, of 1 gallons each, were collected from localities representing the whole State. Four counties were then chosen as those showing the greatest differences in the iodine content of the water. Six samples of water from each county were collected and analyzed, and a goiter survey was made in each county. These counties were Houghton, in the northwestern part of the Upper Peninsula; Wexford, in the north- western part of the Lower Peninsula, and inland from the lakes; Macomb, about midway of the southern half of the Lower Peninsula on the extreme east side and partially bordered by the waters of Lake St. Clair; and Midland County, in the east central part of the Lower Peninsula. A report on the geological formation of these sections will be made in the future by officers of the Michigan State Geological Survey, who state that there are some fundamental geological considerations involved in the variation of the iodine content of the waters of these areas.

The following table presents the findings with regard both to the prevalence of goiter and the iodine content of water:

County.	Average iodine content of water (parts per billion).	Per cent found with goiter.	Total number exam- ined.	Boys.		Girls.	
				Number exam- ined.	Per cent found with goiter.	Number exam- ined.	Per cent found with goiter.
Macomb	8.7	26.0	10,258	5,152	20.1	5,106	32.0
Midland	7.3	32.7	3,645	1,834	24.4	1,811	41.1
Wexford	.5	55.6	3,984	1,963	47.6	2,021	63.4
Houghton	.0	64.4	13,725	6,860	41.9	6,865	70.5
Total		47.2	31,612	15,809	40.5	15,803	46.2

Localities separated by only a few miles varied greatly in the percentage of thyroid enlargements found. In Macomb County, Mount Clemens had 26 per cent thyroid enlargement, whereas Romeo, 12 miles distant, had 75 per cent. Mount Clemens has an iodine content in the city water of approximately 25 parts per billion, whereas the Romeo water was found not to contain a trace of iodine in 50 liters. In the rural portions of Wexford County the incidence of goiter was about 10 per cent higher than that found in the city of Cadillac, which is the only city in the county. Attention is called to the fact that the iodine available in the food supply as well as that in the water must be considered. The analyses of the samples of water taken from various parts of the State indicate that an increase in goiter incidence will be shown in going from south to north—a minimum incidence in the south to a maximum in certain areas in the northern Peninsula.

INCIDENCE OF GOITER AT CERTAIN AGES.

The following table presents the data by age of patient:

Goiter incidence by ages.

Ages of patients with goiter.	Total, four counties.		Macomb County.		Midland County.		Wexford County.		Houghton County.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
5	244	200	29	28	12	13	36	28	167	131
6	380	421	62	68	23	46	50	52	245	255
7	490	542	84	104	42	55	67	69	297	314
8	543	612	94	123	43	58	78	87	328	344
9	640	699	109	116	52	75	85	112	394	396
10	706	817	132	168	65	83	97	111	412	455
11	700	812	132	159	44	61	104	120	420	472
12	669	891	101	177	48	73	101	129	419	512
13	645	892	105	184	35	72	113	130	392	506
14	562	850	87	161	43	67	76	36	356	486
15	406	740	53	183	28	52	58	115	267	390
16	208	456	26	78	5	31	37	81	140	266
17	118	326	15	57	2	31	23	60	78	178
18	45	175	3	19	3	19	7	30	32	107
Over 18	15	50	0	4	0	5	2	22	13	23
Not given	34	26	6	9	2	3	0	0	26	14

Goiter incidence in these groups of population was uniformly higher among girls than among boys, but not as much higher as was found in the surveys at Grand Rapids, Mich., Akron, Ohio, and other localities, the proportion being approximately four girls to three boys.

The greatest number of cases among boys was found at age 10, whereas the greatest number among girls was found at age 12.[1] Doctor Olin observes that this suggests that congenital cases run approximately even as regards the sexes up to age 10, and that the rate decreases in boys after this age, whereas the girls show an apparent increase during adolescence up to age 13.

[1] Percentages rather than absolute numbers should be the basis for determining the ages of greatest incidence, but the number examined at each age is not given —Ed.

GOITER INCIDENCE AND SCHOOL STANDING.

In regard to school standing it was found that there was definitely a greater percentage below school grade among pupils affected with enlarged thyroid than among nongoitrous pupils. The following table shows the percentage of nongoitrous and goitrous boys and girls found below school grade:

County.	Percentage below school grade—			
	Boys.		Girls.	
	Non-goitrous.	Goitrous.	Non-goitrous.	Goitrous.
Macomb	23.0	29.0	19.0	25.0
Midland	32.6	38.5	18.1	28.2
Wexford	23.9	29.9	11.4	21.2
Houghton	24.7	25.9	12.5	16.3

Doctor Olin concludes: "Although there is a great deal of work to be done before the final report can be made on the prevalence of simple goiter in Michigan, we believe that the four years' study that has led up to this preliminary report has given us sufficient data so that a method of prevention can be recommended that will be fundamentally adapted to remedying the iodine deficiency for the whole population of the State."

The methods of prevention discussed are the administration of sodium iodide in chocolate tablets once a week for 40 weeks to all children in the schools, iodizing the drinking water, and the use of iodized salt.

The advantage of supplying the iodine deficiency through a universal household necessity, Doctor Olin observes, would eliminate practically all administrative detail and would solve the problem for both urban and rural districts.

OUTBREAK OF PARATYPHOID FEVER TRACED TO CERTIFIED DAIRY.

An outbreak of gastroenteritis occurring among the children of New Rochelle, N. Y., and vicinity during March, April, and May has recently been reported by district State health officers to have been an epidemic of paratyphoid fever, transmitted through the milk from a certified dairy. The following statements regarding the outbreak are taken from the Health News Service, issued by the New York State Department of Health:

"The report is based upon the investigation of 50 cases, the onsets of which were from March 5 to May 7. These cases occurred in

New Rochelle and in neighboring municipalities. Each of the 50 patients was said to have used certified milk produced at and sold by a single dairy. Water as a causative factor was eliminated, because the primary districts represented were served by a number of different water supplies.

"The youngest patient was 3 months old. Forty-nine of the fifty patients studied were under 6 years of age. The remaining patient, 40 years of age, had a gastric ulcer and was on a special diet which included this certified milk.

"When the investigation was begun, only one patient was still in the acute stage. At the State laboratory, *Bacillus paratyphosus B* was found in the stool from this case. Subsequently another case was found, in the stools of which the same organism was discovered. Examination of the stools of the workers at the dairy was made by a local laboratory, and in one instance *Bacillus paratyphosus B* was isolated. Later this finding was confirmed at the State laboratory. One of the active cases was the baby in this carrier's family.

"One of the interesting features of the investigation was the early discovery, in one of the cows, of an acute mastitis from which *Streptococcus hemolyticus* was isolated, and the conclusion might readily have been drawn that this was the cause of the epidemic. The subsequent findings emphasize the necessity for thorough and complete information before arriving at definite conclusions regarding the source of any epidemic."

CURRENT WORLD PREVALENCE OF DISEASE.

REVIEW OF THE MONTHLY EPIDEMIOLOGICAL REPORT FOR MAY, 1924, ISSUED BY THE HEALTH SECTION OF THE LEAGUE OF NATIONS.

By EDGAR SYDENSTRICKER, Statistician, United States Public Health Service.

The following review is based on current information published in the May number of the Monthly Epidemiological Report of the health section, Lague of Nations' Secretariat at Geneva, Switzerland. This report contains weekly or monthly statistics of cases (and deaths when available) for 13 principal diseases [1] in 71 countries and colonies so far as these diseases are notifiable, and of mortality from all causes and from certain important causes for a selected list of large cities of the world.

Aside from the extraordinary malaria situation in Russia, Albania, and other southeastern European countries, upon which information had been given in previous issues of the Monthly Report, probably the outstanding feature of the May number is the statistics on the wave of influenza prevalence which appeared in certain countries in the spring of this year. The Report states that "the influenza

[1] Plague, cholera, yellow fever, typhus fever, relapsing fever, smallpox, cerebrospinal meningitis, poliomyelitis, lethargic enciphalitis, influenza, scarlet fever, diphtheria, and enteric fever.

epidemic has practically come to an end in Europe and no severe outbreak has been reported so far from America or any other part of the world." It is interesting to note, as the Report points out, that the epidemic occurred some weeks later in central Europe than in England and was much milder. For example, during the five weeks of maximum prevalence, 941 deaths were registered as directly due to influenza in the 46 large German cities as against 3,301 deaths in the large English towns having only a slightly larger population. A characteristic of the epidemic wave of this year, upon which the Report comments, was its very irregular progress, the maximum for the different cities occurring at different times within a period of three or four months with no well defined geographical movement. The accompanying table has been compiled from the statistics in the Report and shows the mortality rate for influenza alone in the cities specified.

Mortality (rate per 100,000) from influenza in certain large cities, October, 1923–March and April, 1924.[1]

City or cities.	Month, or 4 weeks period ended—							
	1923			1924				1923 [2]
	Nov. 3.	Dec. 1.	Dec. 29.	Jan. 26.	Feb. 23.	Mar. 22.	Apr. 19.	
46 German cities	0.5	0.7	-------	1.5	1.9	4.2	-------	2.8
Berlin	.7	.9	1.4	2.0	2.3	7.3	-------	2.7
Breslaw	.7	1.8	2.0	3.6	3.0	4.3	-------	5.0
Cologne	.6	.7	1.1	.9	2.9	5.8	-------	2.0
Dresden	.2	.2	1.5	2.0	1.5	4.1	-------	3.4
Hamburg	.5	.7	1.0	.8	2.3	1.9	-------	1.4
Munich	.1	.4	.9	1.8	1.6	2.3	-------	4.8
Belfast	2.1	.9	1.4	4.0	13.3	7.7	2.6	5.6
Glasgow	.4	.5	1.0	.9	3.8	16.5	7.7	.4
London	.6	1.0	2.1	3.9	13.3	9.4	3.7	3.4
Madrid [3]	1.3	1.6	3.2	6.1	4.9	1.2	-------	4.7
Milan [3]	-------	-------	.4	1.7	1.6	-------	-------	2.0
Paris [3]	.03	.2	1.7	5.8	1.8	.7	.3	.3
Stockholm	-------	.2	.2	.5	11.1	3.8	1.2	-------
26 Swiss cities	.3	.5	.9	1.5	10.5	12.5	3.9	1.5
Rio de Janeiro	4.1	3.2	4.0	3.9	3.7	6.5	-------	12.9
97 United States cities	-------	-------	-------	.9	1.3	1.4	1.3	-------

[1] Computed from data published in the Monthly Epidemiological Report, health section, League of Nations' Secretariat, May 24, 1924 (R. E. 66, pp. 451–455), except for United States cities, which were compiled from the current Public Health Reports.
[2] For the period corresponding to the latest available in 1924.
[3] Monthly, but adjusted to a 28-day period.

In Denmark there were nearly 25,000 cases of influenza in March as against about 10,000 in February; in Sweden about 2,300 in March as against 2,440 in February. The very marked epidemic in Switzerland is stated to have definitely ended, only 75 cases having been reported during the last week of April as against a weekly maximum of 5,563 at the end of February. In Spain 1,635 deaths were registered as due to influenza in February as against 853 in the same month of 1923.

The high incidence, relatively, of lethargic encephalitis in certain parts of Great Britain, as well as an increased incidence of this disease in several other countries, naturally revives the question of its relation to influenza. The Report states that "the prevalence of encephalitis lethargica has not coincided with that of influenza, as was the case in the Swiss epidemic of 1920, and no cases of the former disease have occurred in several cities seriously affected by influenza." The possible relation of the two diseases is of such great interest that a special tabulation was prepared of the deaths from influenza and of the morbidity incidence of lethargic encephalitis in certain cities where a noticeable incidence of both diseases occurred. It is reproduced in slightly different form below.

Influenza mortality and encephalitis morbidity in 6 English cities, January 27–May 3, 1924.[1]

City and disease.	1924: Week ended—													
	February.				March.					April.				May.
	2	9	16	23	1	8	15	22	29	5	12	19	26	3
London:														
Encephalitis lethargica	2	4	0	2	3	1	4	10	20	17	23	33	31	50
Influenza	122	154	178	148	139	115	89	83	49	45	28	45	21	27
Bristol:														
Encephalitis lethargica	0	0	0	1	0	1	1	2	1	4	8	13	8	12
Influenza	11	19	27	25	14	20	13	13	13	5	4	3	3	3
Birmingham:														
Encephalitis lethargica	1	3	0	0	2	2	3	12	6	20	27	29	17	20
Influenza	6	6	12	23	25	41	38	36	32	30	21	8	6	5
Liverpool:														
Encephalitis lethargica	2	2	0	0	2	0	0	4	15	4	4	3	4	6
Influenza	4	8	13	15	21	17	16	8	14	3	5	7	6	1
Manchester:														
Encephalitis lethargica	1	9	13	16	22	29	23	18	15	13	10	5	5	4
Influenza	4	5	3	4	13	22	22	21	44	21	29	19	16	12
Sheffield:														
Encephalitis lethargica	0	0	0	0	0	0	4	9	14	19	37	41	26	23
Influenza	3	4	5	3	6	7	9	13	14	15	10	12	13	13

[1] Compiled from Monthly Epidemiological Report, health section, League of Nations' Secretariat, May, 1924 (R. E. 66, p. 426) The data in this table are for cases of encephalitis lethargica and for deaths from influenza.

A considerable outbreak of cerebrospinal meningitis occurred in northern Nigera, where 282 cases and 192 deaths were reported in February as against 124 cases and 64 deaths in January. Only a few cases were reported in Uganda, where serious epidemics had occurred in 1922 and 1923. It is pointed out that epidemics of this disease have become frequent in the northern tropical prairie belt of Africa during recent years. In the other parts of the world, however, cerebrospinal meningitis is stated to be less prevalent so far in 1924 than in 1923.

So far as the plague situation is concerned, the two most interesting developments are those in India and in the Union of South Africa. The reports from India up to March 15 indicate that while the total incidence has not varied much from the previous year, the geographical distribution of the disease is markedly different. Nearly

one-half of the cases are reported from the Punjab, which was not severely affected in 1923, while the United Provinces and Bihar and Orissa are not as severely affected as in the previous year. Assam is free from plague, as usual, and Bengal is practically free from the disease. The outbreak in Madras appears to be coming to an end. In the Union of South Africa there was a considerable extension of the plague-infected area toward the end of March. Cases were observed in several new districts. Ninety-five new cases were reported from March 2 to 29, the total number of cases from December 16 to March 29, being 222, of which 131 proved fatal. The fatality rate has been 39 per cent for whites and 62 per cent for negroes. Unofficial reports from Russia indicate certain prevalence of plague about the middle of April in the republic of Kharezma (Khiva) and in the Amu-Daria district, Province of Turkestan.[1]

No unusual developments in the prevalence of cholera have been reported, practically all the cases being in British and French India.

As regards typhus and relapsing fever, it is stated that typhus is less prevalent everywhere than during the previous winter and spring. Cases of relapsing fever are rarely mentioned in the reports.

After commenting upon the relatively high prevalence of smallpox in certain sections of the United States, the report mentions the definite decline of smallpox incidence in Hongkong, where a severe epidemic has been in progress since November, 1923. In the fortnight of March 2–15, 27 cases and 23 deaths were reported, as compared with 50 cases and 52 deaths in the previous fortnight, and 88 cases and 84 deaths in the period February 3–16. An increase in the prevalence of smallpox in Japan began in December, 1923, and had continued up until February 20, 1924, the date of the latest report. In England and Wales considerable prevalence of smallpox is still reported, as well as in Switzerland. The type in both countries is said to be very mild.

No unusual developments in the prevalence of scarlet fever and diphtheria have appeared, according to the reports. Scarlet fever has apparently declined in most of the countries of Eastern and Southeastern Europe, where the disease has been much more frequent than diphtheria. In Western and Central Europe there has been a very slight decline.

The widespread epidemic of measles, on the other hand, apparently reached its maximum in March and April. In 105 large English towns the disease caused 724 deaths during the five weeks ending April 26. In Italy there were over 9,000 cases of measles during the four weeks ending April 6, as against 6,355 during the previous four weeks, with indications that the epidemic was increasing. An increased incidence of the disease is reported also from the Balkan countries and in Turkey, particularly the city of Angora.

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[1] See page 1596.—Ed.

The current statistics of notifiable diseases in Japan are included for the first time in the Monthly Epidemiological Report, delay being due to the fact that the Japanese epidemiological service was somewhat disorganized and many records were destroyed by the earthquake. The reports are furnished for 10-day intervals. In this connection it may be of interest to note the comment on the registration of vital statistics and notification of infectious diseases in Japan made by Dr. F. Norman White, chief epidemic commissioner of the League of Nations, in his report, which has just been issued, on epidemic conditions in the Far East. Doctor White says: "It is doubtful whether there is any country in which the registration of births and deaths is carried out with greater accuracy than it is in Japan. In towns and villages alike, all houses are subjected to frequent and regular visits by police officials, who keep a careful record, not only of the number and age of all inmates of each house, but also of such matters as vaccination, school attendance, occupation, and the like. In this way it would be almost impossible for either a birth or death to go unrecorded. The registration of births and deaths is, of course, compulsory. Similarly, the occurrence of cases of infectious disease is little likely to escape observation. Here it may be remarked that the number of qualified medical practitioners in Japan is very large, equivalent to one practitioner for every 1,250 of the population of the country. Though the distribution of these medical practitioners is, of course, by no means uniform, there are few, if any, parts of the country in which sufficient skilled medical attendance is not available." [1]

The statistics published in the Monthly Epidemiological Report are summarized by months for the period September, 1923–February, 1924, in the following table:

Incidence of certain infectious diseases in Japan, September 1, 1923–February 20, 1924.[a] *(For Japan, exclusive of territories; population in 1921—56,926,500.)*

Disease.	1923				1924	
	September.	October.	November.	December.	January.	Feb. 1-20
Cholera	0	0	4	0	0	0
Diphtheria	547	959	1,272	1,623	1,304	921
Paratyphoid fever	721	894	531	348	217	122
Typhoid fever	6,945	8,410	6,736	5,685	3,693	2,437
Cerebrospinal meningitis	88	79	27	22	32	27
Scarlet fever	54	85	149	190	132	102
Typhus fever	0	0	0	0	0	0
Smallpox	2	36	37	206	463	343

[a] Compiled from Monthly Epidemiological Report, health section, League of Nations' secretariat, May, 1924 (R. E. 66, p. 445).

[1] The prevalence of epidemic disease and port health organization and procedure in the Far East. Report presented to the health committee of the League of Nations, Geneva, 1923, page 92.

A note on the epidemic situation in Poland from the epidemiological correspondent in Warsaw states that "during the first twelve weeks of the year Poland has experienced no widespread epidemic and the general health conditions are satisfactory as compared with the years following the war." Some increase is evidenced in the incidence of smallpox over the preceding year, the cases being confined chiefly to southwest Poland. The incidence of typhus fever has shown a slight increase during 1924, the greatest prevalence being in the eastern zones. It is of more than passing interest to note that the outbreaks in 1924 are of endemic origin; since the repatriation movement has practically ceased, the large quarantine stations at Bialystok and Dorohusk having been closed. Cases of relapsing fever are rare, and five of the provinces are practically free. The prevalence of enteric fevers, including typhoid and paratyphoid, continues to decline. It is stated that the decrease in the incidence may be attributed to the vaccination campaign which was carried out late in 1923. Some increase is indicated in the prevalence of scarlet fever in Poland.

The infant mortality in certain large cities of the world is being published currently in the Monthly Epidemiological Report. In view of the interest which is attached to the infant mortality rate in certain European countries, the following table has been compiled from the statistics published in the report:

Infant mortality rates in certain large cities of Europe, December 30, 1923—April 19, 1924.[1]

City or cities.	1924: Four weeks period ended—				Four weeks ended Apr. 21, 1923.
	Jan. 26.	Feb. 23.	Mar. 22.	Apr. 19.	
105 English cities	86	115	118	103	**78**
London	81	114	95	78	**60**
Glasgow	148	184	204	128	**91**
Belfast	160	170	121	125	**152**
Dublin	131	152	127	102	**117**
Stockholm	55	48	30	56	**61**
46 German cities	108	115	122	120	**132**
Berlin	111	115	128	111	**138**
Hamburg	89	100	87	169	**115**
Cologne	123	100	100	113	**140**
Dresden	94	107	111	96	**116**
Munich	138	119	175	151	**167**
26 Swiss cities	47	48	76	67	**54**
Lille	91	121	97	94	**128**
Paris	93	98	128	115	**76**
New York	73	72	87	85	**77**

[1] Compiled from Monthly Epidemiological Report, health section, League of Nations' Secretariat, May, 1924 (R. E. 66, p. 450).

Mortality rates are published for between 250 and 300 large cities of the world in weekly form for the latest week available and for the previous six months, as well as for the corresponding week of the previous year. Similar statistics for a list of smaller cities are published for the principal infectious diseases.

DEATHS DURING WEEK ENDED JUNE 14, 1924.

Summary of information received by telegraph from industrial insurance companies for week ended June 14, 1924, and corresponding week of 1923. (From the Weekly Health Index, June 17, 1924, issued by the Bureau of the Census, Department of Commerce.)

	Week ended June 14, 1924.	Corresponding week, 1923.
Policies in force	56, 324, 470	52, 450, 675
Number of death claims	10, 877	10, 439
Death claims per 1,000 policies in force, annual rate	10. 1	10. 4

Deaths from all causes in certain large cities of the United States during the week ended June 14, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, June 17, 1924, issued by the Bureau of the Census, Department of Commerce.)

City.	Week ended June 14, 1924.		Annual death rate per 1,000, corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended June 14, 1924.[2]
	Total deaths.	Death rate.[1]		Week ended June 14, 1924.	Corresponding week, 1923.	
Total (65 cities)	6,187	11.9	[3] 11.2	755	[3] 710	
Akron	35			2	3	21
Albany [4]	52	22.9	9.8	6	2	132
Atlanta	72	16.5	19.2	6	14	
Baltimore [4]	165	11.0	13.0	19	27	55
Birmingham	63	16.4	18.1	12	7	
Boston	209	14.0	12.7	28	27	78
Bridgeport	25			3	2	47
Buffalo	126	12.0	11.1	20	24	85
Cambridge	40	18.6	13.6	5	5	87
Camden	31	12.8	8.8	7	1	111
Chicago [4]	645	11.4	10.5	70	69	65
Cincinnati	119	15.2	14.8	14	15	88
Cleveland	177	10.1	8.7	28	21	73
Columbus	59	11.5	11.4	10	5	95
Dallas	53	14.7	11.2	12	10	
Dayton	25	7.7	10.7	3	5	50
Denver	73			5	8	
Des Moines	26	9.3	12.2	1	2	
Detroit	278			40	43	74
Duluth	19	9.1	8.3	4	0	86
Erie	29			4	2	82
Fall River [4]	33	14.2	12.9	10	9	141
Flint	20			3	6	52
Fort Worth	22	7.7	11.2	2	8	
Grand Rapids	31	10.9	9.6	4	3	62
Houston	36			1	4	
Indianapolis	89	13.2	12.9	9	13	68
Jacksonville, Fla.	22	11.2	18.8	1	3	
Jersey City	58	9.7	11.3	10	11	72
Kansas City, Kans.	36	15.9	10.8	6	2	120
Kansas City, Mo.	88	12.8	12.0	6	9	
Los Angeles	211			28	25	87
Louisville	54	10.9	12.7	6	9	58
Lowell	39	17.6	15.0	5	2	89
Lynn	18	9.1	12.7	3	0	76
Memphis	54	16.3	11.7	10	5	
Milwaukee	83	8.8	11.2	12	13	55
Minneapolis	94	11.7	8.7	8	6	43
Nashville [4]	39	16.5	12.3	4	7	
New Bedford	23	9.0	10.4	5	3	78
New Haven	37	11.0	8.7	4	5	52
New Orleans	176	22.4	16.2	26	16	

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1923. Cities left blank are not in the registration area for births.
[3] Data for 63 cities.
[4] Deaths for week ended Friday, June 13, 1924.

Deaths from all causes in certain large cities of the United States during the week ended June 14, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923—Continued.

City.	Week ended June 14, 1924.		Annual death rate per 1,000, corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended June 14, 1924.
	Total deaths.	Death rate.		Week ended June 14, 1924.	Corresponding week, 1923.	
New York	1,241	10.8	10.3	142	138	57
Bronx Borough	159	9.5	7.8	10	4	35
Brooklyn Borough	375	8.9	9.5	44	48	47
Manhattan Borough	573	13.2	12.4	71	76	69
Queens Borough	90	8.5	7.2	12	5	66
Richmond Borough	44	17.6	15.5	5	5	91
Newark, N. J	87	10.2	9.9	12	17	56
Norfolk	35	11.1	9.8	9	7	164
Oakland	37	7.8	9.6	5	4	63
Oklahoma City	21	10.5		1		
Omaha	66	16.5	8.2	8	0	86
Paterson	21	7.8	12.7	2	4	33
Philadelphia	428	11.4	11.7	50	37	64
Pittsburgh	152	12.7	13.4	16	27	54
Portland, Oreg	49	9.2	10.7	2	5	21
Providence	60	12.8	13.6	11	5	90
Richmond	65	18.4	17.6	9	13	106
Rochester	68	10.9		7		55
St. Louis	208	13.3	11.0	13	12	
St. Paul	60	12.8	10.6	1	5	9
Salt Lake City [1]	35	14.2	14.5	3	6	50
San Antonio	61	16.6	11.3	15	9	
San Francisco	142	13.5	10.8	8	6	48
Schenectady	14	7.3	9.0	2	0	57
Seattle	63			7	3	68
Somerville	16	8.3	9.0	1	0	27
Spokane	18			0	1	0
Springfield, Mass	36	12.6	13.0	4	3	68
Syracuse	42	11.6	11.6	6	5	74
Tacoma	24	12.1	11.8	2	1	46
Toledo	69	13.0	10.6	10	13	95
Trenton	37	14.9	13.5	6	6	98
Utica	24	11.9	8.6	8	2	173
Washington, D. C	110	11.8	10.1	8	11	46
Waterbury	19			3	5	67
Wilmington, Del	22	9.6	10.2	1	2	22
Worcester	34	9.1	9.0	7	5	84
Yonkers	16	7.6	7.3	4	5	87
Youngstown	30	10.1	12.8	6	4	87

[1] Deaths for week ended Friday, June 13, 1924.

PREVALENCE OF DISEASE.

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

UNITED STATES.

CURRENT WEEKLY STATE REPORTS.

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

Reports for Week Ended June 21, 1924.

ALABAMA.	Cases.
Chicken pox	39
Diphtheria	7
Dysentery	116
Influenza	12
Malaria	107
Measles	128
Mumps	64
Ophthalmia neonatorum	1
Paratyphoid fever	7
Pellagra	18
Pneumonia	27
Scarlet fever	8
Smallpox	115
Tuberculosis	35
Typhoid fever	32
Whooping cough	48

ARIZONA.	
Chicken pox	1
Diphtheria	4
Dysentery	1
Measles	15
Mumps	2
Scarlet fever	3
Smallpox	2
Typhoid fever	3

ARKANSAS.	
Chicken pox	13
Diphtheria	1
Influenza	7
Malaria	85
Measles	51
Mumps	26
Pellagra	11
Scarlet fever	3
Smallpox	2
Trachoma	4
Tuberculosis	7
Typhoid fever	5
Whooping cough	25

CALIFORNIA.	Cases.
Cerebrospinal meningitis—San Francisco	1
Diphtheria	239
Influenza	6
Leprosy—Los Angeles	1
Lethargic encephalitis:	
Merced County	1
San Francisco	1
Measles	343
Scarlet fever	117
Smallpox:	
Long Beach	9
Los Angeles	41
Los Angeles County	26
San Diego	11
Scattering	33
Typhoid fever	27

COLORADO.	
(Exclusive of Denver.)	
Chicken pox	9
Diphtheria	10
Measles	62
Mumps	11
Pellagra	1
Pneumonia	2
Scarlet fever	7
Smallpox	2
Tuberculosis	33
Typhoid fever	1
Whooping cough	2

CONNECTICUT.	
Cerebrospinal meningitis	1
Chicken pox	44
Diphtheria	24
German measles	6
Influenza	2
Lethargic encephalitis	1
Measles	110
Mumps	45

Paratyphoid fever	1
Pneumonia (lobar)	15
Poliomyelitis	1
Scarlet fever	73
Smallpox	9
Trinchinosis	1
Tuberculosis (all forms)	42
Typhoid fever	6
Whooping cough	13

DELAWARE.

Chicken pox	5
Diphtheria	3
Malaria	2
Measles	17
Mumps	5
Poliomyelitis	1
Scarlet fever	9
Tuberculosis	3
Typhoid fever	1
Whooping cough	1

FLORIDA.

Cerebrospinal meningitis	1
Diphtheria	9
Influenza	14
Lethargic encephalitis	1
Malaria	23
Pneumonia	114
Scarlet fever	7
Typhoid fever	27

GEORGIA.

Chicken pox	19
Dysentery (bacillary)	10
Hookworm disease	10
Influenza	1
Malaria	26
Measles	4
Mumps	2
Paratyphoid fever	4
Pneumonia	2
Scarlet fever	1
Smallpox	5
Tuberculosis (pulmonary)	6
Typhoid fever	6
Whooping cough	10

ILLINOIS.

Cerebrospinal meningitis—Logan County	1
Diphtheria:	
Cook County	57
Scattering	26
Influenza	2
Lethargic encephalitis—Chicago	1
Measles	607
Pneumonia	172
Scarlet fever:	
Cook County	146
Scattering	58
Smallpox:	
Lake County	12
Madison County	12
Scattering	35
Tuberculosis	223
Typhoid fever	21
Whooping cough	133
Chicken pox	54
Diphtheria	26
Influenza	1
Measles	124
Pneumonia	3
Scarlet fever	33
Smallpox	65
Tuberculosis	20
Typhoid fever	12
Whooping cough	31

IOWA.

Diphtheria	7
Scarlet fever	13
Smallpox	23

KANSAS.

Cerebrospinal meningitis	3
Chicken pox	52
Diphtheria	21
German measles	3
Influenza	8
Lethargic encephalitis	2
Measles	173
Mumps	118
Pneumonia	57
Scarlet fever	26
Smallpox	38
Tuberculosis	44
Typhoid fever	5
Whooping cough	65

LOUISIANA.

Anthrax	3
Diphtheria	16
Dysentery	2
Hookworm disease	6
Influenza	4
Leprosy	2
Malaria	30
Measles	4
Pneumonia	17
Scarlet fever	3
Smallpox	6
Tuberculosis	29
Typhoid fever	18

MAINE.

Chicken pox	39
Diphtheria	9
Influenza	3
Measles	95
Mumps	57
Pneumonia	6
Scarlet fever	29
Tuberculosis	18
Typhoid fever	5
Whooping cough	11

MARYLAND.[1]

Cerebrospinal meningitis	2
Chicken pox	60
Diphtheria	29
Dysentery	1
German measles	10
Malaria	3
Measles	114
Mumps	25

MARYLAND—continued.	Cases.
Ophthalmia neonatorum	1
Pneumonia (all forms)	37
Scarlet fever	56
Septic sore throat	2
Smallpox	3
Tuberculosis	57
Typhoid fever	10
Vincent's angina	1
Whooping cough	58

MASSACHUSETTS.

Cerebrospinal meningitis	4
Chicken pox	108
Conjunctivitis (suppurative)	25
Diphtheria	142
German measles	48
Influenza	1
Lethargic encephalitis	3
Malaria	1
Measles	559
Mumps	158
Ophthalmia neonatorum	29
Pneumonia (lobar)	67
Poliomyelitis	2
Scarlet fever	176
Tuberculosis (all forms)	371
Typhoid fever	14
Whooping cough	37

MICHIGAN.

Diphtheria	68
Measles	509
Pneumonia	58
Scarlet fever	192
Smallpox	132
Tuberculosis	277
Typhoid fever	10
Whooping cough	88

MINNESOTA.

Chicken pox	87
Diphtheria	39
Measles	62
Pneumonia	3
Scarlet fever	122
Smallpox	30
Tuberculosis	131
Typhoid fever	2
Whooping cough	14

MISSISSIPPI.

Cerebrospinal meningitis	1
Diphtheria	6
Scarlet fever	6
Smallpox	18
Typhoid fever	22

MISSOURI.

(Exclusive of Cape Girardeau.)

Chicken pox	40
Diphtheria	44
Measles	90
Mumps	70
Pneumonia	11
Rabies	1
Scarlet fever	87
Septic sore throat	1

MISSOURI—continued.	Cases.
Smallpox	5
Trachoma	19
Tuberculosis	50
Typhoid fever	7
Whooping cough	46

MONTANA.

Diphtheria	19
Rocky Mountain spotted fever:	
Billings R. F. D	1
Ekalaka R. F. D	1
Fromberg R. F. D	1
Westmore	2
Scarlet fever	5
Smallpox	25
Typhoid fever	1

NEBRASKA.

Cerebrospinal meningitis	1
Chicken pox	13
Diphtheria	5
Lethargic encephalitis	1
Measles	10
Mumps	6
Scarlet fever	6
Smallpox	8
Tetanus	1
Whooping cough	6

NEW JERSEY.

Cerebrospinal meningitis	3
Chicken pox	160
Diphtheria	89
Influenza	6
Malaria	5
Measles	361
Pneumonia	85
Scarlet fever	132
Smallpox	18
Trachoma	2
Typhoid fever	13
Whooping cough	165

NEW MEXICO.

Chicken pox	1
Diphtheria	2
Measles	19
Mumps	2
Pellagra	1
Pneumonia	2
Scarlet fever	3
Tuberculosis	5
Typhoid fever	3

NEW YORK.

(Exclusive of New York City.)

Cerebrospinal meningitis	6
Diphtheria	89
Influenza	11
Lethargic encephalitis	3
Measles	888
Pneumonia	157
Poliomyelitis	5
Scarlet fever	243
Smallpox	18
Typhoid fever	14
Whooping cough	268

NORTH CAROLINA.

	Cases.
Cerebrospinal meningitis	2
Chicken pox	56
Diphtheria	12
German measles	2
Measles	219
Scarlet fever	23
Septic sore throat	3
Smallpox	89
Typhoid fever	20
Whooping cough	321

OREGON.

Chicken pox	12
Diphtheria	12
Measles	19
Mumps	1
Pneumonia	[1] 4
Scarlet fever:	
Portland	11
Scattering	17
Smallpox	8
Tuberculosis	7
Typhoid fever	2

SOUTH DAKOTA.

Chicken pox	1
Diphtheria	6
Measles	30
Mumps	1
Scarlet fever	5
Whooping cough	1

TEXAS.

Chicken pox	78
Diphtheria	9
Dysentery	8
Influenza	3
Leprosy	3
Measles	37
Mumps	18
Pellagra	3
Pneumonia	4
Scarlet fever	14
Smallpox	29
Trachoma	2
Tuberculosis	46
Typhoid fever	8
Whooping cough	26

VERMONT.

Chicken pox	18
Measles	106
Mumps	2
Pneumonia	1

[1] Deaths.

VERMONT—continued.

	Cases.
Scarlet fever	10
Whooping cough	13

VIRGINIA.

Smallpox—Northampton County	1

WASHINGTON.

Chicken pox	42
Diphtheria	23
Measles	24
Mumps	13
Pneumonia	1
Scarlet fever	26
Smallpox	24
Tuberculosis	87
Typhoid fever	8
Whooping cough	7

WEST VIRGINIA.

Diphtheria	5
Scarlet fever	20
Typhoid fever	7

WISCONSIN.

Milwaukee:	
Chicken pox	102
Diphtheria	9
Measles	27
Pneumonia	2
Scarlet fever	18
Tuberculosis	17
Whooping cough	8
Scattering:	
Cerebrospinal meningitis	1
Chicken pox	170
Diphtheria	64
German measles	38
Influenza	8
Lethargic encephalitis	1
Measles	270
Pneumonia	5
Scarlet fever	92
Smallpox	30
Tuberculosis	35
Typhoid fever	2
Whooping cough	93

WYOMING.

Chicken pox	7
Measles	9
Mumps	1
Pneumonia	1
Scarlet fever	6
Whooping cough	1

Report for Week Ended June 14, 1924.

DISTRICT OF COLUMBIA.

	Cases.
Chicken pox	20
Diphtheria	4
Measles	17
Scarlet fever	30
Smallpox	1
Tuberculosis	26
Whooping cough	5

SUMMARY OF MONTHLY REPORTS FROM STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
April, 1924.										
Ohio	8	431	44	0	3,415	0	2	1,329	661	66
May, 1924.										
Delaware	4	----	5	13	42	----	----	----	----	3
Idaho	----	10	----	----	----	----	----	9	----	6
Louisiana	1	63	50	116	493	55	2	38	56	69
Maryland	4	114	86	6	1,118	1	4	384	17	32
Michigan	----	467	10	1	2,487	----	0	1,128	770	53
Missouri	2	267	15	0	1,242	0	0	543	88	21
New Jersey	16	331	28	7	2,813	----	6	600	2	22
New Mexico	2	28	4	1	593	0	0	41	6	11
New York	15	1,542	137	5	12,688	----	8	2,346	33	219
North Dakota	----	13	----	----	134	----	----	126	90	41
Pennsylvania	4	915	----	----	----	----	5	1,491	----	112
Rhode Island	----	41	----	----	39	----	1	269	----	3
South Carolina	----	140	1	1	83	----	----	4	67	30
West Virginia	1	57	41	----	508	----	----	137	47	51

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES.

Diphtheria.—For the week ended June 7, 1924, 35 States reported 1,557 cases of diphtheria. For the week ended June 9, 1923, the same States reported 1,300 cases. Ninety-nine cities situated in all parts of the country and having an aggregate population of about 28,400,000, reported 914 cases of diphtheria for the week ended June 7, 1924. Last year for the corresponding week they reported 788 cases. The estimated expectancy for these cities was 909 cases. The estimated expectancy was based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty States reported 9,222 cases of measles for the week this year and 20,724 cases for the week last year. Ninety-nine cities reported 3,223 cases of measles for the week this year and 6,977 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-five States—this year, 2,750 cases; last year, 2,423 cases. Ninety-nine cities—this year 1,237 cases; last year, 1,107 cases; estimated expectancy, 708 cases.

Smallpox.—Thirty-five States reported 1,292 cases of smallpox for the week ended June 7, 1924. For the corresponding week of last year they reported 474 cases of this disease. Ninety-nine cities reported smallpox for the week as follows: 1924, 467 cases; 1923, 91 cases; estimated expectancy, 172 cases.

The reports for both States and cities indicate an increase in the number of cases of smallpox over the preceding week of 1924.

Thirteen deaths from this disease were registered in the cities during the week.

Typhoid fever.—Two hundred and ninety-seven cases of typhoid fever were reported for the week ended June 7, 1924, by 34 States. For the corresponding week of last year the number was 310 cases. Ninety-nine cities reported 91 cases for the week this year and 80 cases for the week last year. The estimated expectancy was 95 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 99 cities as follows: 1924, 599 deaths; 1923, 587 deaths.

City reports for week ended June 7, 1924.

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years. If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city.	Chicken pox, cases reported.	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy	Cases reported.
NEW ENGLAND.										
Maine:										
Lewiston	0	0	1	0	0	19	0	1	5	0
Portland	4	2	4	0	0	4	41	0	1	0
New Hampshire:										
Concord	0	0	0	0	0	4	0	0	1	0
Vermont:										
Barre	0	0	0	0	0	0	0	0	0	2
Burlington	4	1	2	0	0	3	0	1	0	0
Massachusetts:										
Boston	30	50	52	3	0	165	12	15	35	86
Fall River	1	4	3	0	0	7	1	4	2	1
Springfield	5	2	4	0	1	13	6	1	3	11
Worcester	----	4	6	0	0	18	----	2	5	9
Rhode Island:										
Pawtucket	0	1	3	0	0	1	0	0	1	4
Providence	0	9	5	0	0	3	0	8	7	29
Connecticut:										
Bridgeport	5	5	8	0	0	1	5	3	4	15
Hartford	6	5	4	0	0	22	25	1	2	16
New Haven	4	3	1	0	0	9	18	3	2	8
MIDDLE ATLANTIC.										
New York:										
Buffalo	0	13	6	0	0	20	0	9	18	11
New York	214	291	271	12	3	998	221	168	138	227
Rochester	5	8	1	0	0	43	23	7	8	7
Syracuse	13	6	5	0	0	39	11	7	7	17
New Jersey:										
Camden	----	3	2	0	0	1	----	7	2	0
Newark	25	15	7	3	0	165	69	8	14	20
Trenton	2	4	5	0	0	14	0	1	2	2

City reports for week ended June 7, 1924—Continued.

Division, State, and city	Chicken pox, cases reported.	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
MIDDLE ATLANTIC—continued.										
Pennsylvania:										
Philadelphia	----	57	70	2	2	168	----	43	55	80
Pittsburgh	56	19	12	0	0	28	106	26	16	31
Reading	5	2	8	0	0	7	46	0	1	6
Scranton	3	3	1	0	0	4	2	4	2	1
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati	5	10	8	0	0	39	12	9	8	7
Cleveland	75	20	8	1	0	147	170	15	20	8
Columbus	6	2	4	0	0	3	2	3	3	19
Toledo	35	5	9	----	1	103	0	3	12	23
Indiana:										
Fort Wayne	----	4	1	0	0	0	----	1	1	1
Indianapolis	----	6	4	0	0	54	----	5	12	1
South Bend	6	1	2	0	0	4	0	2	1	8
Terre Haute	9	1	0	0	0	2	0	1	1	0
Illinois:										
Chicago	89	109	57	3	2	304	135	37	73	105
Cicero	0	2	0	0	0	3	11	0	0	0
Springfield	----	1	4	0	0	2	----	0	1	0
Michigan:										
Detroit	128	57	35	1	1	154	86	34	51	60
Flint	----	3	----	----	----	----	----	----	3	----
Grand Rapids	17	2	2	0	0	4	24	0	7	7
Wisconsin:										
Madison	3	0	2	0	0	0	3	0	1	2
Milwaukee	131	11	14	0	0	26	35	7	22	14
Racine	11	0	5	0	0	0	0	0	3	2
Superior	0	0	2	0	0	0	0	3	1	7
WEST NORTH CENTRAL.										
Minnesota:										
Duluth	11	1	0	0	0	13	1	3	2	18
Minneapolis	79	12	16	0	0	21	3	4	20	35
St. Paul	----	12	17	0	0	6	----	3	14	30
Iowa:										
Sioux City	0	1	0	0	----	0	0	----	2	0
Waterloo	5	0	0	0	----	0	13	----	4	3
Missouri:										
Kansas City	6	6	4	1	2	9	11	5	6	6
St. Joseph	3	1	0	0	0	0	2	1	1	0
St. Louis	36	36	36	0	0	65	45	----	18	80
North Dakota:										
Fargo	----	1	----	----	----	----	----	----	1	----
Grand Forks	0	0	0	0	0	2	0	0	1	0
South Dakota:										
Aberdeen	----	----	0	0	----	13	----	----	----	2
Sioux Falls	1	0	0	0	0	1	0	2	1	1
Nebraska:										
Lincoln	----	1	2	0	0	1	----	4	1	1
Omaha	9	3	1	0	0	7	0	3	7	4
Kansas:										
Topeka	8	1	0	0	0	3	0	1	1	4
Wichita	1	1	2	0	0	3	4	0	2	1
SOUTH ATLANTIC.										
Delaware:										
Wilmington	1	1	2	0	0	0	2	0	4	5
Maryland:										
Baltimore	59	14	21	6	0	159	24	24	17	35
Cumberland	----	0	0	0	0	0	----	0	1	2
Frederick	0	0	0	0	0	0	0	0	0	11
District of Columbia:										
Washington	0	8	7	2	2	22	----	5	10	23

City reports for week ended June 7, 1924—Continued.

Division, State, and city	Chicken pox, cases reported.	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
SOUTH ATLANTIC—continued.										
Virginia:										
Lynchburg	1	0	0	0	0	0	7	0	0	0
Norfolk	1	0	0	0	0	4	2	0	1	0
Richmond	6	1	1	0	0	75	1	4	1	1
Roanoke	2	1	1	0	1	7	4	3	0	2
West Virginia:										
Charleston	1	0	0	0	0	26	1	2	0	0
Huntington	1	0	0	0	0	0	0	2	1	0
Wheeling	5	1	1	0	0	10	0	2	1	9
North Carolina:										
Raleigh	22	0	0	0	0	5	0	1	1	0
Wilmington	1	0	0	0	0	5	3	1	0	0
Winston-Salem	7	0	1	0	0	2	4	4	1	18
South Carolina:										
Charleston	0	0	0	0	0	0	1	2	0	2
Columbia	6	0	1	0	0	0	14	2	1	0
Greenville	0	0	0	0	0	0	0	2	0	0
Georgia:										
Atlanta	0	1	6	1	0	0	1	10	4	12
Brunswick	0	0	0	0	0	0	1	0	0	0
Savannah	3	0	0	0	0	2	0	4	0	0
Florida:										
St. Petersburg	----	----	----	----	----	----	----	----	----	----
Tampa	0	1	0	0	0	0	0	0	0	0
EAST SOUTH CENTRAL.										
Kentucky:										
Covington	0	1	0	0	0	3	0	3	1	0
Lexington	2	0	0	0	0	5	0	0	0	0
Louisville	3	3	2	0	1	6	6	1	1	5
Tennessee:										
Memphis	1	2	3	0	1	6	1	8	3	4
Nashville	1	0	0	0	0	3	0	1	2	2
Alabama:										
Birmingham	----	1	1	1	0	10	----	5	1	0
Mobile	0	0	2	0	0	8	0	0	0	0
Montgomery	0	0	0	0	0	0	0	0	1	0
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith	3	1	0	0	----	1	2	----	1	0
Little Rock	3	0	0	0	0	4	0	1	1	2
Louisiana:										
New Orleans	0	5	10	2	1	6	0	2	1	0
Shreveport	0	----	0	0	0	0	0	1	----	0
Oklahoma:										
Oklahoma	0	1	0	0	0	0	0	2	1	0
Tulsa	1	0	0	0	----	4	0	----	0	1
Texas:										
Dallas	12	2	2	0	0	7	4	0	1	5
Galveston	0	1	0	0	0	0	0	1	0	0
Houston	----	0	4	0	0	0	----	1	1	2
San Antonio	1	1	2	----	1	1	1	12	0	2
MOUNTAIN.										
Montana:										
Billings	8	1	0	0	0	2	0	1	1	0
Great Falls	1	1	7	0	0	0	0	0	1	0
Helena	0	----	0	0	0	0	0	2	----	0
Missoula	6	0	0	0	0	0	0	1	1	0
Idaho:										
Boise	1	0	0	0	0	1	0	0	1	0
Colorado:										
Denver	24	8	21	0	0	36	8	9	7	13
Pueblo	1	1	6	0	0	2	2	0	1	3
New Mexico:										
Albuquerque	0	2	1	0	0	0	1	2	0	0
Utah:										
Salt Lake City	24	2	3	0	0	9	10	1	2	1
Nevada:										
Reno	0	0	0	0	0	0	0	0	0	0

City reports for week ended June 7, 1924—Continued.

Division, State, and city	Chicken pox, cases reported.	Diphtheria. Cases, estimated expectancy.	Diphtheria. Cases reported.	Influenza. Cases reported.	Influenza. Deaths reported.	Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever. Cases, estimated expectancy.	Scarlet fever. Cases reported.
PACIFIC.										
Washington:										
Seattle	36	3	5	0	-------	4	8	-------	9	8
Spokane	13	2	2	0	-------	6	0	-------	4	6
Tacoma	15	1	6	0	-------	2	8	-------	2	7
California:										
Los Angeles	58	24	57	6	1	172	8	12	10	28
Sacramento	4	2	12	0	0	18	1	2	1	1
San Francisco	32	18	30	3	2	9	17	7	12	27

Division, State, and city.	Population, July 1, 1923, estimated.	Smallpox. Cases, estimated expectancy.	Smallpox. Cases reported.	Smallpox. Deaths reported.	Tuberculosis, deaths reported.	Typhoid fever. Cases, estimated expectancy.	Typhoid fever. Cases reported.	Typhoid fever. Deaths reported.	Whooping cough cases reported.	Deaths, all causes.
NEW ENGLAND.										
Maine:										
Lewiston	33,790	0	0	0	0	1	0	0	3	12
Portland	73,129	0	0	0	2	1	0	0	7	15
New Hampshire:										
Concord	22,408	0	0	0	1	0	0	0	0	9
Vermont:										
Barre	[1] 10,008	0	0	0	1	0	0	0	0	5
Burlington	23,613	0	0	0	0	0	0	0	1	9
Massachusetts:										
Boston	770,400	0	0	0	15	1	2	0	7	203
Fall River	120,912	0	0	0	1	1	0	0	14	38
Springfield	144,227	0	0	0	1	0	0	0	3	30
Worcester	191,927	0	0	0	1	0	1	0	------	42
Rhode Island:										
Pawtucket	68,799	0	0	0	1	0	0	0	0	10
Providence	242,378	0	0	0	3	0	0	0	0	68
Connecticut:										
Bridgeport	[1] 143,555	0	0	0	2	0	0	0	0	40
Hartford	[1] 138,036	0	0	0	2	0	0	0	0	40
New Haven	172,967	0	0	0	2	1	0	0	0	27
MIDDLE ATLANTIC.										
New York:										
Buffalo	536,718	0	0	0	15	1	0	0	22	133
New York	5,927,625	0	0	0	[2] 128	12	25	0	205	1,432
Rochester	317,867	0	0	0	0	0	0	0	0	53
Syracuse	184,511	0	0	0	1	1	0	0	1	50
New Jersey:										
Camden	124,157	0	0	0	2	1	0	0	------	39
Newark	438,699	0	0	0	7	1	0	0	43	98
Trenton	127,390	0	0	0	2	1	0	0	4	31
Pennsylvania:										
Philadelphia	1,922,788	0	1	0	37	8	3	0	------	462
Pittsburgh	613,442	0	5	1	10	2	1	1	18	176
Reading	110,917	0	2	0	0	0	1	0	15	25
Scranton	140,636	0	0	0	2	0	0	0	1	------
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati	406,312	1	15	0	11	1	3	0	16	114
Cleveland	888,519	2	3	1	12	2	0	0	89	172
Columbus	261,082	1	6	0	1	0	0	0	7	60
Toledo	268,338	2	14	0	6	1	0	0	7	67
Indiana:										
Fort Wayne	93,573	3	2	0	0	0	0	0	------	18
Indianapolis	342,718	10	36	0	4	1	2	0	------	82
South Bend	76,709	0	1	0	1	0	0	0	0	16
Terre Haute	68,939	0	8	0	0	0	0	0	0	17

[1] Population Jan. 1, 1920.

[2] Pulmonary only

City reports for week ended June 7, 1924—Continued.

Division, State, and city.	Population, July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
EAST NORTH CENTRAL—contd.										
Illinois:										
Chicago	2,886,121	2	4	0	45	3	5	0	61	608
Cicero	55,968	0	0	0	0	0	0	0	1	3
Springfield	61,833	1	0	0	1	0	0	0	----	15
Michigan:										
Detroit	995,668	10	77	10	23	4	1	0	24	249
Flint	117,968	0	----	----	----	1	----	----	----	----
Grand Rapids	145,947	0	4	0	2	1	0	0	8	34
Wisconsin:										
Madison	42,519	1	0	0	0	0	0	0	11	7
Milwaukee	484,595	5	2	0	8	1	0	0	35	110
Racine	64,393	0	2	0	0	0	0	0	0	12
Superior	[1] 39,671	2	8	0	0	0	0	0	2	8
WEST NORTH CENTRAL.										
Minnesota:										
Duluth	106,289	3	3	1	0	0	3	0	1	25
Minneapolis	409,125	25	7	0	4	1	0	1	2	102
St. Paul	241,891	5	19	0	2	0	0	0	----	49
Iowa:										
Sioux City	79,662	2	0	----	----	0	0	----	0	----
Waterloo	39,667	0	0	----	----	0	0	----	3	----
Missouri:										
Kansas City	351,819	5	0	0	8	1	1	0	12	79
St. Joseph	78,232	9	0	0	1	1	0	0	0	27
St. Louis	803,853	5	2	0	9	2	3	0	38	214
North Dakota:										
Fargo	24,841	0	----	----	----	0	----	----	----	----
Grand Forks	14,547	0	0	0	0	0	0	0	0	----
South Dakota:										
Aberdeen	15,829	----	0	----	----	----	----	----	----	----
Sioux Falls	29,206	0	0	0	0	0	0	0	0	5
Nebraska:										
Lincoln	58,761	2	0	0	1	1	0	0	----	21
Omaha	204,382	9	2	0	6	0	0	0	0	41
Kansas:										
Topeka	52,555	2	0	0	0	0	1	1	3	6
Wichita	79,261	6	7	0	0	0	0	0	0	23
SOUTH ATLANTIC.										
Delaware:										
Wilmington	117,728	0	0	0	0	1	1	0	2	23
Maryland:										
Baltimore	773,580	0	2	0	20	4	0	0	18	203
Cumberland	32,361	0	0	0	0	1	0	0	----	11
Frederick	11,301	0	0	0	0	0	0	0	0	2
District of Columbia:										
Washington	[1] 437,571	1	3	0	4	2	0	0	3	89
Virginia:										
Lynchburg	30,277	0	0	0	0	0	0	0	1	9
Norfolk	159,089	0	0	0	0	1	0	0	0	----
Richmond	181,044	0	0	0	2	1	0	0	7	62
Roanoke	55,502	2	0	0	1	0	0	0	4	21
West Virginia:										
Charleston	45,597	0	0	0	2	1	0	0	1	18
Huntington	57,918	0	0	0	4	0	0	0	0	19
Wheeling	[1] 56,208	0	0	0	3	1	1	0	0	24
North Carolina:										
Raleigh	29,171	1	4	0	2	0	0	0	1	8
Wilmington	35,719	0	0	0	0	1	0	0	----	6
Winston-Salem	56,230	1	0	0	2	1	0	0	5	25
South Carolina:										
Charleston	71,245	0	0	0	2	1	0	0	1	20
Columbia	39,688	0	1	0	0	1	8	1	1	21
Greenville	25,789	0	0	0	2	1	1	0	1	16
Georgia:										
Atlanta	222,963	6	28	0	6	1	0	0	2	63
Brunswick	15,937	0	1	0	0	1	0	0	0	3
Savannah	89,448	0	0	0	3	3	0	0	0	38
Florida:										
St. Petersburg	24,403	----	----	----	----	----	----	----	----	----
Tampa	56,050	0	0	0	2	1	1	1	0	15

[1] Population Jan. 1, 1920.

City reports for week ended June 7, 1924—Continued.

Division, State, and city.	Population, July 1, 1923, estimated.	Smallpox.			Tuberculosis deaths reported.	Typhoid fever.			Whooping cough cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
EAST SOUTH CENTRAL.										
Kentucky:										
Covington	57,877	0	0	0	1	0	0	0	0	21
Lexington	43,673	0	0	0	1	0	0	0	0	14
Louisville	257,671	1	1	0	7	2	4	1	1	73
Tennessee:										
Memphis	170,067	1	1	0	5	0	2	2	0	56
Nashville	121,128	1	6	0	2	3	0	0	1	39
Alabama:										
Birmingham	195,901	2	89	0	6	3	0	1	----	48
Mobile	63,858	1	1	0	0	1	0	1	0	26
Montgomery	45,383	0	9	0	1	0	1	0	0	8
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith	30,635	0	0	----	----	0	0	----	1	----
Little Rock	70,916	1	0	0	5	0	4	1	0	----
Louisiana:										
New Orleans	404,575	5	0	0	14	4	4	2	0	122
Shreveport	54,590	----	0	0	0	----	0	1	0	20
Oklahoma:										
Oklahoma	101,150	4	1	0	1	0	0	0	1	18
Tulsa	102,018	3	5	----	----	2	0	----	0	----
Texas:										
Dallas	177,274	2	2	0	2	1	0	0	10	40
Galveston	46,877	0	0	0	0	2	0	0	0	13
Houston	154,970	1	3	0	2	1	3	0	----	50
San Antonio	184,727	0	0	0	13	1	2	1	0	74
MOUNTAIN.										
Montana:										
Billings	16,927	1	0	0	0	0	0	0	0	11
Great Falls	27,787	3	1	0	1	0	0	0	1	7
Helena	[1] 12,037	----	0	0	1	----	0	1	0	9
Missoula	[1] 12,668	1	1	0	1	0	0	0	0	9
Idaho:										
Boise	22,806	1	0	0	0	0	0	0	0	1
Colorado:										
Denver	272,031	10	0	0	14	0	0	0	28	69
Pueblo	43,519	0	0	0	1	0	0	0	0	10
New Mexico:										
Albuquerque	16,648	0	0	0	4	0	0	0	0	9
Utah:										
Salt Lake City	126,241	6	0	0	1	1	0	0	8	26
Nevada:										
Reno	12,429	0	0	0	0	0	0	0	0	2
PACIFIC.										
Washington:										
Seattle	[1] 315,685	5	1	----	----	1	2	----	3	----
Spokane	104,573	5	12	----	----	0	0	----	1	----
Tacoma	101,731	4	3	----	----	1	0	----	0	----
California:										
Los Angeles	666,853	2	80	0	26	2	4	0	4	255
Sacramento	69,950	0	0	0	1	0	2	0	0	30
San Francisco	539,038	1	1	0	13	2	0	0	2	154

[1] Population Jan. 1, 1920.

City reports for week ended June 7, 1924—Continued.

Division, State, and city.	Cerebro-spinal meningitis.		Lethargic encephalitis.		Pellagra.		Poliomyelitis (infantile paralysis).			Typhus fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases, estimated expectancy.	Cases.	Deaths.	Cases.	Deaths.
NEW ENGLAND.											
Vermont:											
Barre	0	0	0	0	0	0	0	1	1	0	0
Massachusetts:											
Boston	1	1	1	0	0	0	0	0	0	0	0
Fall River	1	1	0	0	0	0	0	1	1	0	0
Connecticut:											
Bridgeport	0	0	1	1	0	0	0	0	0	0	0
MIDDLE ATLANTIC.											
New York:											
New York	5	9	7	5	0	0	1	1	3	0	0
Rochester	0	0	1	0	0	0	0	0	0	0	0
Syracuse	0	0	0	0	0	0	0	2	0	0	0
New Jersey:											
Newark	2	0	0	0	0	0	0	0	0	0	0
EAST NORTH CENTRAL.											
Ohio:											
Toledo	0	0	0	1	0	0	0	0	0	0	0
Illinois:											
Chicago	0	0	2	0	0	0	0	0	0	0	0
WEST NORTH CENTRAL.											
Minnesota:											
Minneapolis	1	1	0	0	0	0	0	0	0	0	0
St. Paul	0	0	0	0	0	0	0	1	0	0	0
Missouri:											
St. Louis	2	1	0	0	0	0	0	0	0	0	0
SOUTH ATLANTIC.											
Maryland:											
Baltimore	1	0	0	2	0	0	1	1	0	0	0
West Virginia:											
Huntington	0	2	0	0	0	0	0	0	0	0	0
North Carolina:											
Winston-Salem	0	1	0	0	1	0	0	0	0	0	0
South Carolina:											
Charleston	0	0	0	0	0	1	0	0	0	0	0
Columbia	0	0	0	0	0	1	0	0	0	0	0
EAST SOUTH CENTRAL.											
Alabama:											
Birmingham	0	0	0	0	3	0	0	0	0	0	0
Mobile	0	0	0	0	0	1	0	0	0	0	0
WEST SOUTH CENTRAL.											
Arkansas:											
Little Rock	0	0	0	0	0	1	0	0	0	0	0
MOUNTAIN.											
Colorado:											
Denver	0	0	0	0	0	0	0	0	1	0	0
PACIFIC.											
California:											
Los Angeles	2	1	3	0	0	0	0	0	0	1	0
Sacramento	0	0	0	1	0	0	0	0	0	0	0
San Francisco	1	0	0	0	0	0	0	0	0	0	0

The following table gives a summary of the reports from 105 cities for the ten-week period ended June 7, 1924. The cities included in this table are those whose reports have been published for all ten weeks in the Public Health Reports. Eight of these cities did not report deaths. The aggregate population of the cities reporting cases was estimated at nearly 29,000,000 on July 1, 1923, which is the latest date for which estimates are available. The cities reporting deaths had more than 28,000,000 population on that date. The number of cities included in each group and the aggregate population are shown in a separate table below.

Summary of weekly reports from cities, March 30 to June 7, 1924.

DIPHTHERIA CASES.

	1924, week ended—									
	Apr. 5.	Apr. 12.	Apr. 19.	Apr. 26.	May 3.	May 10.	May 17.	May 24.	May 31.	June 7.
Total	1,039	1,006	1,009	988	910	892	930	927	869	920
New England	105	102	99	111	97	83	78	94	85	90
Middle Atlantic	383	384	374	400	344	395	357	340	371	387
East North Central	219	210	211	156	173	157	168	175	[1] 130	[2] 151
West North Central	74	60	60	71	68	64	110	106	80	[3] 76
South Atlantic	61	52	52	50	38	31	42	32	[4] 33	[4] 41
East South Central	17	8	14	13	6	8	3	8	4	8
West South Central	23	24	31	33	18	26	16	18	18	18
Mountain	30	40	52	31	35	29	18	30	14	37
Pacific	127	126	116	123	131	99	138	124	134	112

MEASLES CASES.

Total	6,070	6,237	5,147	5,203	4,730	4,422	4,019	3,716	2,943	3,237
New England	374	401	353	354	379	339	271	310	227	247
Middle Atlantic	2,394	2,647	2,347	2,184	2,310	1,889	1,868	1,571	1,231	1,483
East North Central	806	838	675	829	703	862	781	873	[1] 733	[2] 744
West North Central	569	415	359	350	257	274	197	128	124	[3] 130
South Atlantic	572	626	487	518	485	457	465	468	[4] 344	[4] 317
East South Central	126	156	159	173	98	73	56	56	47	36
West South Central	354	323	188	127	104	71	51	33	28	19
Mountain	405	241	179	193	113	97	100	79	70	50
Pacific	470	590	400	475	281	360	230	198	139	211

SCARLET FEVER CASES.

Total	1,737	1,796	1,658	1,532	1,605	1,549	1,503	1,311	1,213	1,247
New England	312	326	253	271	242	210	213	165	168	181
Middle Atlantic	517	498	474	467	473	470	452	406	380	401
East North Central	346	345	334	284	325	318	336	279	[1] 259	[2] 246
West North Central	184	230	222	195	197	219	223	182	167	[3] 182
South Atlantic	200	218	189	168	171	159	118	134	[4] 112	[4] 121
East South Central	11	18	16	12	16	19	9	9	8	11
West South Central	15	26	27	18	23	15	14	14	11	11
Mountain	16	20	19	23	27	37	25	30	17	17
Pacific	136	115	124	94	131	102	113	92	91	77

SMALLPOX CASES.

Total	544	536	467	568	543	460	529	408	331	469
New England	0	1	1	0	0	0	0	0	0	0
Middle Atlantic	1	1	0	0	0	0	5	1	1	8
East North Central	153	141	164	193	186	165	213	181	[1] 149	[2] 171
West North Central	52	61	41	62	53	33	39	26	19	[3] 40
South Atlantic	116	98	93	98	70	95	51	54	[4] 29	[4] 39
East South Central	49	45	26	55	49	20	54	33	36	107
West South Central	10	4	5	2	4	1	7	6	7	5
Mountain	8	4	10	6	5	6	6	3	7	2
Pacific	155	181	127	152	176	140	154	104	83	97

[1] Figures for Columbus, Ohio, estimated. Report not received at time of going to press.
[2] Figures for Flint, Mich., estimated.
[3] Figures for Fargo, N. Dak., estimated.
[4] Figures for St. Petersburg, Fla., estimated.

Summary of weekly reports from cities, March 30 to June 7, 1924—Continued.

TYPHOID FEVER CASES.

	1924, week ended—									
	Apr. 5.	Apr. 12.	Apr. 19.	Apr. 26.	May 3.	May 10.	May 17.	May 24.	May 31.	June 7.
Total	51	52	55	58	49	68	73	78	78	92
New England	1	4	4	7	4	9	2	6	9	3
Middle Atlantic	9	21	17	11	10	25	32	24	18	30
East North Central	7	7	7	10	11	9	12	7	[1] 6	[2] 11
West North Central	7	2	6	1	3	2	3	8	5	[3] 8
South Atlantic	9	10	4	8	11	11	8	18	[4] 13	[4] 12
East South Central	1	1	4	8	3	3	7	6	11	7
West South Central	9	2	4	6	3	3	3	5	10	13
Mountain	2	1	4	0	1	3	0	2	1	0
Pacific	6	4	5	7	3	3	6	2	5	8

INFLUENZA DEATHS.

Total	97	95	80	72	51	60	49	40	30	21
New England	6	3	3	3	2	2	1	2	1	1
Middle Atlantic	44	35	31	30	21	32	25	10	10	5
East North Central	20	25	14	12	7	10	5	11	[1] 10	[2] 3
West North Central	2	8	4	4	3	3	4	3	1	[3] 2
South Atlantic	3	7	6	10	5	7	5	6	[4] 5	[4] 3
East South Central	13	6	11	8	3	4	4	3	1	2
West South Central	6	3	4	3	4	0	3	1	1	2
Mountain	1	2	4	2	0	1	1	1	0	0
Pacific	2	6	3	0	6	1	1	3	1	3

PNEUMONIA DEATHS.

Total	1,251	1,222	1,101	959	935	782	743	644	630	591
New England	75	71	61	63	69	55	52	35	34	37
Middle Atlantic	500	494	474	430	392	332	343	285	267	276
East North Central	286	258	232	170	199	150	139	136	[1] 131	[2] 118
West North Central	71	74	64	49	53	42	41	38	40	[3] 23
South Atlantic	125	158	118	114	97	93	86	64	[4] 60	[4] 66
East South Central	61	53	57	42	44	29	22	32	40	18
West South Central	67	43	43	35	24	25	27	27	14	18
Mountain	39	32	25	26	27	24	13	11	18	14
Pacific	27	39	27	30	30	32	20	15	26	21

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923.

Group of cities.	Number of cities reporting cases.	Number of cities reporting deaths.	Aggregate population of cities reporting cases.	Aggregate population of cities reporting deaths.
Total	105	97	28,898,350	28,140,934
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	17	17	7,032,535	7,032,535
West North Central	14	11	2,515,330	2,381,454
South Atlantic	22	22	2,566,901	2,566,901
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	3	1,797,830	1,275,841

[1] Figures for Columbus, Ohio, estimated. Report not received at time of going to press.
[2] Figures for Flint, Mich., estimated.
[3] Figures for Fargo, N. Dak., estimated.
[4] Figures for St. Petersburg, Fla., estimated.

FOREIGN AND INSULAR.

CUBA.

Communicable Diseases—Habana.

Communicable diseases were notified at Habana during the period June 1–10, 1924, as follows:

Disease.	June 1–10, 1924.		Remaining under treatment June 10, 1924.
	New cases.	Deaths.	
Diphtheria	6	1	3
Leprosy			15
Malaria	8		[1] 25
Measles	4		4
Scarlet fever	1		1
Typhoid fever	4	1	[2] 28

[1] From the interior, 11.
[2] From the interior, 15.

JAVA.

Epidemic Smallpox—Pasoerean Residency.

Under date of April 9, 1924, epidemic smallpox was declared present at Kaliboto, a locality in the Pasoerean Residency, Island of Java.

MALAY STATES.

Health Conditions—Kedah.

The following information, received under date of April 24, 1924, by way of Penang, Straits Settlements, was taken from the annual report of the State of Kedah for the period August 23, 1922, to August 13, 1923:

The population of Kedah was estimated in the year 1923 at 341,596. The birth rate was given as 27.73 and the death rate as 23.41. Continued improvement in infantile mortality was noted, the rate being 161.73 per thousand births as against 165.35 in the previous year. The actual number of deaths reported was 7,834, of which 3,269 were attributed to fever, but the returns were stated not to be entirely reliable. The only accurate figures were stated to be those received from hospitals.

Hospital Care.

Eight Government hospitals were reported to be maintained, with 13,020 patients treated. The principal diseases reported were malaria, venereal diseases, ankylostomiasis, dysentery, pulmonary tuberculosis, and pneumonia. In addition to the outdoor department maintained by the hospitals there were stated to be seven Government outdoor dispensaries in the State, with 15,533 cases under treatment, of which 6,670 were Malays.

PARAGUAY.

Quarantine Station—Encarnacion.

According to information dated May 1, 1924, a quarantine station has been established at Encarnacion, Paraguay, in consequence of epidemic outbreaks in the district of Corrientes. The station is intended chiefly to protect the country from infections brought in by train passengers. The international express from Buenos Aires crosses the Parana River at Posadas and leaves for Asuncion from Encarnacion.

POLAND.

Communicable Diseases—March 2–29, 1924.

During the period March 2 to 29, 1924, communicable diseases were notified in Poland as follows:

March 2–8, 1924.

Disease.	Cases.	Deaths.	Districts showing greatest number of deaths.
Cerebrospinal meningitis	8	5	Lodz.
Diphtheria	85	14	Warsaw.
Measles	345	2	Wilno.
Scarlet fever	252	29	Tarnopol.
Smallpox	51	8	Posen.
Tuberculosis	158	271	Warsaw.
Typhoid fever	151	17	Lublin.
Typhus fever	263	23	Lwow.
Typhus fever, recurrent	18	----	
Whooping cough	60	10	Do.

March 9–15, 1924.

Cerebrospinal meningitis	8	6	Silesia.
Diphtheria	86	12	Lodz.
Measles	197	5	Lwow.
Scarlet fever	239	32	Lodz.
Smallpox	197	5	Lwow.
Typhoid fever	169	15	Lodz.
Typhus fever	333	23	Wilno.
Typhus fever, recurrent	13	----	
Whooping cough	50	1	Warsaw.

March 16–22, 1924.

Cerebrospinal meningitis	12	3	Lodz.
Diphtheria	93	14	Warsaw.
Measles	238	3	Do.
Scarlet fever	261	25	Lwow.
Smallpox	57	9	Krakow.
Typhoid fever	156	11	Lodz.
Typhus fever	454	34	Tarnopol.
Typhus fever, recurrent	8	1	Lwow.
Whooping cough	53	12	Stanislawow.

March 23–29, 1924.

Cerebrospinal meningitis	12	6	Silesia.
Diphtheria	76	14	Lwow.
Measles	149	3	Do.
Scarlet fever	235	24	Do.
Smallpox	49	5	Krakow.
Typhoid fever	155	12	Lodz.
Typhus fever	298	35	Kielce.
Typhus fever, recurrent	8	----	
Whooping cough	35	5	Warsaw.

Population, census, September 30, 1924—27,160,163.

Dysentery—Rabies.

During the same period 95 cases of dysentery with 6 deaths were reported in Poland. During the week ended March 29, 1924, 2 deaths from rabies were reported.

RUSSIA.

Plague—Southeastern Provinces.

Information dated April 23, 1924, shows the occurrence of an outbreak of plague in the Amu-Daria district, Province of Turkestan, Asiatic Russia, with about 230 reported cases. The district is bounded by a navigable river of the same name. Quarantine stations are stated to have been established along the Amu-Daria River from Kresnovodsk to Tashkent to guard against spread of infection by railways and waterways. Medical aid was dispatched to the infected region by airplane from the bacteriological institute recently established at Saratov. On May 10 plague was reported at Bokhara and Khiva. Previous reports had shown that the plague center was at Akkomysh, where, to April 17, when the medical personnel arrived, 57 cases had been notified, with five deaths. Measures were stated to be in force to prevent spread along the line of the Tashkent railway, and two expeditions were organized for the control of the main caravan routes connecting Turt-kul with the other districts of the Turkestan Republic. An additional credit of 50,000 rubles has been granted the commissariat of health with which to fight the disease.

Information dated April 25, 1924, in regard to plague conditions in southeast Russia shows that the epidemic which prevailed in that region during the winter and spring months of the current year developed 85 plague centers with extension of infection over four Provinces, viz, Astrakhan, Bukeyevsk (Bukeeve), Kalmuk, and Ural, the occurrence being mainly in small villages. The total number of reported cases was 473 with 434 deaths. The first case in the Province of Astrakhan was reported January 13, and on January 28 the epidemic was reported to have terminated. Plague was stated to be of annual occurrence in the steppes of the Kirghiz and Kalmuk Provinces, its source being the infection in the wild mice of the steppes and in the Siberian marmot. During recent years there has been noted a movement of the prevalence of the infection in a westerly direction, which represents a menace to the Volga district of Russia.

Measures to Prevent Spread.

The lack of medical stations and communication facilities, the great distances involved, and the large number of plague centers

make the fight against the disease difficult. The center of the combat in the eastern Provinces was Saratov, where a State bacteriological institute was established during the current year to study the sources of the infection and to take measures against spread. The institute was stated to be well equipped and to have organized special plague stations at Alexandrov-Gay, Astrakhan, Ganoshkin, Tsarytsin, Ural and Urda.

YUGOSLAVIA.

Communicable Diseases—Year 1923.

Communicable diseases were notified in Yugoslavia (Kingdom of the Slavs, Croats, and Slovenes), during the year 1923, as follows:

Cases and deaths, year 1923.

Disease.	Cases.	Deaths.	Remarks.
Diphtheria	1,943	302	
Measles	13,135	220	
Scarlet fever	16,051	3,677	
Smallpox	1,042	199	
Typhoid fever	3,454	507	
Typhus fever	352	49	Paratyphus fever: Cases, 216; deaths, 13.
Typhus fever, recurrent	13	----	
Whooping cough	3,886	193	

Population, 12,017,323.

Dysentery—Malaria.

During the same period 4,129 cases of dysentery with 627 deaths and 17,926 cases of malaria with 155 deaths were reported in the seven States of Yugoslavia.

During the month of January, 1924, 35 cases of dysentery with 6 deaths and 524 cases of malaria with 5 deaths were reported in Yugoslavia.

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

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended June 27, 1924.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy	May 4-10	----	1	
India:				
Madras	May 11-17	1	----	
Rangoon	May 4-10	5	1	

[1] From medical officers of the public Health Service, American consuls, and other sources.

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

Reports Received During Week Ended June 27, 1924—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	May 4–10	6	2	Three plague-infected rodents.
Chile:				
Antofagasta	May 11–17	1		
China:				
Foochow	Apr. 27–May 3			Present.
Nanking	May 4–17			Do.
India:				
Karachi	May 11–17	13	14	
Madras (presidency)	do	1	1	
Rangoon	May 4–10	13	11	
Russia:				
Turkestan—				
Amu-Daria				Outbreak reported Apr. 23, 1924, with about 230 cases.
Bokhara	May 10			Present.
Khiva	do			Do.
Syria:				
Beirut	do	3		

SMALLPOX.

British South Africa:				
Southern Rhodesia	May 1–7	2		
Canada:				
Manitoba—				
Winnipeg	June 1–7	2		
China:				
Amoy	May 4–10			Present.
Chungking	do			Widespread.
Foochow	Apr. 27–May 3			Present.
Hongkong	Apr. 20–26	10	6	
Nanking	May 4–17			Do.
Colombia:				
Barranquilla	May 18–31		1	
India:				
Karachi	May 11–17	13	5	
Madras	do	1	1	
Rangoon	May 4–10	6	3	
Japan:				
Tokyo				To Apr. 18, 1924: Cases, 199.
Java:				
East Java—				
Pasoerean Residency	Apr. 9			Epidemic at Kaliboto, a small locality.
West Java—				
Batavia	Apr. 19–25	3	2	Province.
Mexico:				
Guadalajara	June 1–7		1	
Mexico	Apr. 27–May 3	15		Including municipalities in Federal district.
San Luis Potosi	June 1–7		1	
Palestine:				
Samaria	May 20–26	1		Reported May 25.
Poland				Mar. 2–29, 1924: Cases, 354; deaths, 27.
Portugal:				
Lisbon	Apr. 28–May 24	4	2	
Oporto	May 18–24		4	
Russia:				
Moscow	Mar. 23–29	59		
Straits Settlements:				
Singapore	Apr. 27–May 3	1	1	
Switzerland:				
Berne	May 18–24	1		
Zurich	May 18–25	1		
Yugoslavia	Year 1923	1,042	199	

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

Reports Received During Week Ended June 27, 1924—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile:				
Concepcion	May 6-12		1	
Iquique	May 18-24	2		In nitrate plants.
Talcahuano	May 4-10	3		
Valparaiso	May 11-24		8	
China:				
Manchuria—				
Harbin	May 6-12	3		
Chosen (Korea):				
Chemulpo	Apr. 1-30		1	
Seoul	do	33	7	
Egypt:				
Alexandria	May 14-27	3		
Mexico:				
Mexico City	Apr. 27-May 3	16		Including municipalities in Federal district.
Torreon	May 1-31		1	
Poland				Mar. 2-29, 1924: Cases, 1,348; deaths, 115. Recurrent typhus cases, 47; deaths, 1.
Russia:				
Moscow	Mar. 23-29	16		Recurrent typhus fever, cases, 4.
Tunis:				
Tunis	May 20-26	3	1	
Yugoslavia	Year 1923	352	49	Paratyphus fever: Year 1923—cases, 216; deaths, 13. Typhus fever, recurrent; cases, 13.

Reports Received from December 29, 1923, to June 27, 1924.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy	May 4-10	1		
Hongkong	Nov. 18-24	1		
India				Oct. 14-Dec. 22, 1923: Cases, 14,117; deaths, 9,148.
Do				Dec. 30, 1923-Apr. 19, 1924: Cases, 47,278; deaths, 31,408.
Bombay	Dec. 23-29	1	1	
Do	Feb. 3-Apr. 19	19	19	
Calcutta	Nov. 11-Dec. 29	85	69	
Do	Dec. 30-May 10	968	726	
Madras	Nov. 25-Dec. 29	15	5	
Do	Dec. 30-May 17	28	13	
Rangoon	Nov. 11-Dec. 29	8	5	
Do	Feb. 24-May 10	34	25	
Indo-China:				
Saigon	Dec. 31-Apr. 26	6	5	Including 100 square kilometers of surrounding country.
Philippine Islands:				
City—				
Manila	Feb. 3-9	1	1	
Province—				
Cebu	Mar. 2-8	1	1	
Siam:				
Bangkok	Nov. 18-Dec. 8	4	2	
Do	Dec. 31-Apr. 28	16	8	
Turkey:				
Constantinople	Dec. 2-8		1	

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

PLAGUE.

Azores:				
St. Michael Island	Oct. 20-Nov. 10	9	5	At localities 3 to 9 miles from port of Ponta Delgada.
Bolivia:				
La Paz	Oct. 1-31		3	
Do	Feb. 1-Mar. 31		10	

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia	Nov. 11-Dec. 22	5	3	
Do	Dec. 30-Mar. 15	7	6	
Porto Alegre	Feb. 10-Apr. 26	6	3	Plague infected rats found at railway station.
Rio de Janeiro	Jan. 20-26	1		
British East Africa:				
Kenya—				
Kisumu	Feb. 24-Mar. 8	1	1	
Mombasa	Oct. 14-20	1	1	Infected rats, 2. Dec. 9-15, 1923: Cases, 4; deaths, 2; removed from vessel arrived Dec. 11, 1923.
Do	Dec. 30-Jan. 5	1	1	
Nairobi	Nov. 1-21	40		In rural districts, several hundred.
Tanganyika				To Nov. 24, 1923: Cases, 39, deaths, 25.
Do	Jan. 27-Feb. 9	8	5	
Uganda	Aug. 1-Oct. 31	734	719	
Entebbe	Oct 1-Dec 31	251	239	
Do	Jan. 1-31	36	35	
Canary Islands:				
Las Palmas	Oct. 15-Nov. 15	14	14	
Santa Cruz de Teneriffe	Feb. 19-May 16	7	1	Bubonic and septicemic.
San Juan de la Rambla	Dec. 11	1		Locality 52 km. from Teneriffe.
Celebes Island	Mar. 30			Epidemic.
Macassar	Feb. 20-Mar. 8	11	7	Including Menado.
Ceylon:				
Colombo	Nov. 11-Dec. 29	31	21	Plague rodents, 24.
Do	Dec. 30-May 10	112	105	Plague rodents, 47.
Chile:				
Antofagasta	Mar. 16-May 17	11	1	
China:				
Antung	Mar. 31-Apr. 6	1		
Foochow	Apr. 27-May 3			Present.
Nanking	Dec. 16-29			Do.
Do	Dec. 30-May 17			Do
Ecuador:				
Eloy Alfaro	Mar. 16-31	1	1	
Guayaquil	Nov. 16-Dec. 31	45	13	Rats taken, 53,240; found infected, 133.
Do	Jan. 1-May 15	115	35	Rats taken, 128,384; found infected, 549.
Jipijapa	Nov. 16-Dec. 15			Present.
Posorja	Apr. 1-30	6	1	
Quevedo	Jan. 1-31	3	2	
Quito	Nov. 1-30	11	1	
Santa Rosa	Feb. 16-29			Do.
Vino del Milagro	Dec 1-15	1		
Egypt				Jan. 1-Dec. 31, 1923: Cases, 1,519; deaths, 725. Jan. 1-May 1, 1924: Cases, 264; deaths, 149.
City—				
Alexandria	Year 1923	65	33	
Do	Apr. 2	1	1	
Cairo	Year 1923	2	2	
Port Said	do	51	29	
Do	Apr. 24	1		
Suez	Year 1923	46	24	
Do	Jan. 2-Apr. 28	14	7	
Province—				
Assiout	Year 1923	370	211	
Do	Apr. 1-May 1	27	19	
Beni-Souef	Year 1923	63	23	
Charkieh	Jan 31-Mar. 27	3	3	
Dakhalieh	Year 1923	2	2	
Fayoum	do	34	9	
Do	Feb. 18-May 1	48	10	
Gharbieh	Year 1923	23	9	
Do	Apr. 21	1	1	
Girgeh	Year 1923	337	193	
Do	Jan. 17-Apr. 25	14	6	
Gizeh	Year 1923	3	4	
Kalioubiah	do	76	10	
Do	Jan. 6-Mar. 27	1		
Kena	Year 1923	50	34	
Do	Apr. 9-29	41	29	
Menoufieh	Year 1923	290	98	
Do	Jan. 2-Apr. 21	94	58	
Minia	Year 1923	106	44	
Do	Feb. 5-Apr. 8	11	9	

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Kalamata	Apr. 18-24			Several deaths.
Patras	do			Do.
Hawaii (Territory of):				
Honokaa				Jan. 8-Mar. 14, 1924: Four plague-infected rodents.
Do	May 10			One plague-infected rodent.
Paauhau				Dec. 14, 1923: One plague rat. Feb. 14, 1924: One plague rat.
India				Oct. 14-Dec. 29, 1923: Cases, 34,542; deaths, 23,778.
Do				Dec. 30, 1923-Apr. 19, 1924: Cases, 144,131; deaths, 111,142. Corrected report.
Bombay	Oct. 28-Dec. 22	5	5	
Do	Dec. 30-May 3	358	285	
Calcutta	Dec. 23-29	1	1	
Do	Jan. 6-May 10	94	21	
Karachi	Nov. 11-Dec. 29	42	33	
Do	Dec. 30-May 17	135	97	
Madras Presidency	Nov. 4-Dec. 29	1,657	1,021	
Do	Jan. 27-May 17	676	435	
Rangoon	Jan. 27-Feb. 16	20	15	
Do	Dec. 30-May 10	220	202	
Indo-China:				
Saigon	Oct. 28-Dec. 8	19	6	Including 100 square kilometers of surrounding country.
Do	Jan. 27-Apr. 26	5	2	Including 100 square kilometers of surrounding country. One plague rodent.
Iraq (Mesopotamia):				
Bagdad	Nov. 11-Dec. 29	8	6	
Do	Jan. 6-Apr. 30	93	38	Corrected report. Jan.-Mar., 1924: Cases, 44. In spring months of 1923, 300 deaths reported.
Java				Oct. 1-Dec. 31, 1923: Deaths, 2,908 Jan. 1-Feb. 29: Deaths, 1,732.
East Java—				
Djokjakarta	Oct. 4-Dec. 31		146	
Do	Jan. 1-Feb. 29		92	
Kedoe	Oct. 1-Dec. 31		1,287	
Do	Jan. 1-Feb. 29		626	
Pasoeroean	Feb. 1-29		3	
Pekalongan	Oct. 1-Dec. 31		150	
Do	Jan. 1-Feb. 29		107	
Samarang	Oct. 1-Dec. 31		430	
Do	Jan. 1-Feb. 29		183	
Socrabaya	Oct. 1-Dec. 31		9	
Do	Jan. 1-Feb. 29		17	Plague rats, 5
Soerakarta	Oct. 1-Dec. 31		886	
Do	Jan. 1-Feb. 29		704	Corrected report.
Madagascar:				
Tananarive Province	Oct. 1-Dec. 31	324	272	Bubonic, pneumonic, septicemic. July 1-Dec. 31, 1923—city and Province: Cases, 429; deaths, 367. Jan. 1-Mar. 31, 1924—city and Province: Cases, 729; deaths, 667
Ambatondrazaka	Feb. 1-15	8		District. Type pneumonic.
Ambositra	Feb. 1-29	8	1	Do.
Tananarive town	Oct. 1-Dec. 31	74	74	
Do	Jan. 29-Mar. 31	43	42	
Other localities	Feb. 1-Mar. 31	415	398	
Paraguay:				
Asuncion	Dec. 18	6	4	
Peru				Nov. 1-Dec. 31, 1923: Cases, 38; deaths, 24. Jan. 1-Apr. 30, 1924: Cases, 218; deaths, 78.
Locality—				
Ayabaca	Mar. 1-31	4		
Barranco	do	1		
Cajamarca	Apr. 1-30	29	17	In districts.
Callao	Jan. 1-Apr. 30	11	7	
Cañete	Nov. 1-30	1	1	
Do	Feb. 1-Apr. 30	15	6	
Casma	Mar. 1-31	2	1	
Chancay	Dec. 1-31	2		
Chepen	Nov. 1-30	1		
Chiclayo	Nov. 1-Dec. 31	2	1	
Do	Apr. 1-30	2		
Chilca	Jan. 1-31	1		
Chincha	Apr. 1-30	3	1	

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Peru—Continued.				
Locality—Continued.				
Guadalupe	Feb. 1–Mar. 31	3	1	
Huacho	do	5	3	
Huaral	do	11	4	
Huarmey	Jan. 1–Mar. 31	22	4	
Lambayeque	Mar. 1–31	2		
Lima (city)	Nov. 1–Dec. 31	22	15	
Do	Jan. 1–Apr. 30	52	26	
Lima (country)	Nov. 1–Dec. 31	8	7	
Do	Jan. 1–Mar. 31	11	2	
Lurin	do	2		
Mollendo	Jan. 1–Apr. 30	4	2	
Moro	Mar. 1–31	7		
Pacora	Apr. 1–30	2		
Paita (city)	Jan. 1–Mar. 31	1	1	
Paita (country)	do	8	1	
Pativalca	Apr. 1–30	2		
Reque	do	4		
Salaverry	Mar. 1–31	1		
Sullana	Jan. 1–Mar. 31	2		
Trujillo	Jan. 1–Apr. 30	13	2	Country.
Portugal:				
Lisbon	Dec. 13–21	7		
Do	Dec. 31–Jan. 6		1	
Portuguese West Africa:				
Angola—				
Loanda	Oct. 1–Dec. 29	59	29	
Do	Dec. 30–Feb. 2		4	
Russia:				
Bukeeve Province				Oct. 1, 1923–Mar. 10, 1924: Cases, 339; deaths, 315; 66 plague centers. Entire southeast section: Cases, 473; deaths, 435.
Turkestan—				
Amu-Daria				Outbreak reported Apr. 23, 1924, with about 230 cases.
Bokhara	May 10			Present.
Khiva	do			Do.
Ural Provinces				Oct. 1, 1923–Feb. 4, 1924: Cases, 441; 4 plague centers.
Kalmuk district	Mar. 10	3		
Novy Kazanha	Mar. 1		4	At a locality on the coast; 16 cases, 8 deaths.
Siam:				
Bangkok	Nov. 4–Dec. 8	3	2	
Do	Jan. 13–Mar. 22	5	5	
Siberia:				
Transbaikalia—				
Chita	Jan. 27	2	2	Pneumonic. Occurring in veterinary laboratory workers.
Spain:				
Malaga	Dec. 1–31	4		
Straits Settlements:				
Penang	Jan. 27–Feb. 2	1	1	
Singapore	Nov 11–Mar. 15	4	4	
Do	Dec. 30–Apr. 12	17	13	
Syria:				
Beirut	Nov. 1–Dec. 10	3		
Do	Jan. 1–May 10	6		
Turkey:				
Constantinople	Dec. 2–22	6	3	
Union of South Africa				Dec. 16, 1923–Apr. 26, 1924: Cases, 320, deaths, 193. (White cases, 46; white deaths, 21. Native cases, 274; deaths, 172.)
Cape Province				Reported Mar 17, 1924: Cases, 11; deaths, 7.
Uitenhage district	Dec. 9–15			Plague rodent found in vicinity Haarhoff's Kraal farm.
Orange Free State				Jan. 6–Mar. 8, 1924: Cases, 132; deaths, 69.
Thaba 'Nchu				Mar. 23–29, 1924: One plague rat.
Hoopstad district	Feb. 3–9	1		
Kroonstad district	Dec. 16–27	7	3	
Do	Jan. 6–Feb. 9	43	20	
Winburg district	Feb. 3–9	1		
Wonderfontein farm	Dec. 2–8	4		Vicinity of Hoopstad. At Hoopstad, Dec. 9–15, 1923, one death of case previously reported.
Transvaal—				
Wolmaransstad district	Mar. 2–8	3	1	White, one case.

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
West Africa				Apr. 2, 1924: Reported present in one locality.
On vessels:				
———	Dec. 11	4	2	At Mombasa, British East Africa.
———	Jan. 24	2		At Varna, Bulgaria, from Syrian port.

SMALLPOX.

Algeria:				
Algiers	Nov. 1-30	1		
Do	Mar. 1-Apr. 30	2		
Arabia:				
Aden	Dec. 16-22	1		Imported.
Do	Jan. 13-May 17	9		Four imported
Belgium:				
Brussels	Jan. 13-Mar. 29	10		
Boliv'a:				
La Paz	Oct. 1-Dec. 31	45	15	
Do	Jan. 1-Apr. 30	39	25	
Brazil:				
Bahia	Jan. 6-12	2		
Pernambuco	Nov. 4-Dec. 1	15	3	
Do	Jan. 6-Feb. 23		8	
Porto Alegre	Dec. 23-29		1	
Do	Dec. 30-May 10		4	
Rio de Janeiro	Nov. 18-24	3	4	
Do	Jan. 6-May 10	7	4	
Sao Paulo	Sept. 3-9	1		
British East Africa:				
Tanganyika Territory	Sept. 30-Dec. 29	30	7	
Do	Jan. 6-12	2		
Uganda	Sept. 1-30	6	1	
Entebbe	Oct. 1-Dec. 31	5	1	
Zanzibar	Sept. 1-Oct. 31	116	18	Sept. 1-30, 1923: In areas 27 miles from town of Zanzibar. Oct. 1-31, 1923: In vicinity, 1 case, 1 death. In Mikotoni district, 30 cases, 14 deaths reported.
British South A'rica:				
Northern Rhodesia				Dec. 4-31, 1923: Cases, 40; deaths, 5.
Do	Feb. 26-Apr. 7	3		Jan. 1-31, 1924: Cases, 50; deaths, 11; reported from Balorale, Kalabo, and Mankoya districts.
Southern Rhodesia	May 1-7	2		
Canada:				
Alberta—				
Calgary	Jan. 27-May 31	51		
British Columbia—				
Vancouver	Dec. 22-29	10		
Do	Dec. 30-May 31	149		
Victoria	Feb. 10-Mar. 29	3		
Manitoba—				
Winnipeg	Nov. 25-Dec. 29	21		
Do	Dec. 30-June 7	84		
New Brunswick—				
Fredericton				Feb. 1-29, 1924: Cases, 8.
Gloucester County	Mar. 2-Apr. 5	4		
Madawaska County	Dec. 8-15	1		
Restigouche County	Apr. 20-26	1		Jan. 1-Mar. 3, 1924: Cases, 5.
Victoria County	Feb. 10-16	2		
Westmoreland County	Feb. 10-Apr. 26	5		
Ontario				Jan. 1-May 31, 1924: Cases, 429; deaths, 33.
Amherstburg	Mar. 1-31	16	8	
Chapleau	do	13	1	
Cochrane	do	15	5	
Essex Border	do	12	6	
Fort William and Port Arthur.	Dec. 16-29	3		Occurring at Fort William.
London	Feb. 3-Apr. 5	9		
North Bay	do	1		
Perth	Mar. 1-31	14		
Toronto	Jan. 17-Mar. 31	15		
Ottawa	Feb. 17-May 31	19	1	
Windsor	Feb 1-Mar. 15	52	11	

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Quebec—				
Montreal	Nov. 30–Feb. 23	7		
Saskatchewan—				
Regina	Dec. 9–15	1		
Do	Dec. 30–Feb. 23	6	1	
Saskatoon	May 18–24	1		
Ceylon:				
Colombo	Nov. 11–17	3	1	
Do	Jan. 20–May 3	7	1	
Chile:				
Antofagasta	Jan. 6–May 3	7	1	
Concepcion	Oct. 1–Dec. 31		14	
Talcahuano	Nov. 26–Dec. 2	3		Dec. 22, 1923: Five cases present.
Valparaiso	Dec. 9–15		1	
Do	Jan. 13–Mar. 10		18	
China:				
Amoy	Nov. 18–Dec. 8		11	
Do	Jan. 6–May 10		17	Including Kulangsu, 14 deaths; and in hospital, Feb. 9, 1924, more than 30 cases stated to be present.
Antung	Dec. 31–May 18	7	2	
Canton	Dec. 23–Feb. 23			Present.
Chungking	Nov. 4–Dec. 29			Present and endemic.
Do	Dec. 30–May 10			Widespread.
Foochow	Nov. 4–Dec. 15			Present.
Do	Dec. 31–May 3			Do.
Hongkong	Oct. 28–Dec. 29	769	680	
Do	Dec. 30–Apr. 26	656	656	
Manchuria—				
Dairen	Dec. 31–Jan. 20	2		
Do	Mar. 3–Apr. 20	4	1	
Harbin	Nov. 12–Dec. 22	36		
Do	Jan. 1–Mar. 17	19	5	
Nanking	Dec. 2–15			Do.
Do	Dec. 30–May 17			Do.
Shanghai	Dec. 29			Prevalent.
Do	Jan. 6–May 3	34	79	Cases, foreign; deaths, Chinese and foreign.
Tientsin	Mar. 23–May 3	6		Reported by mission and British municipality; one mission hospital.
Chosen (Korea):				
Chemulpo	Jan. 1–31	1		
Seoul	Nov. 1–30	1		
Do	Feb. 1–Apr. 30	6		
Colombia:				
Barranquilla	Apr. 6–May 31		3	
Buenaventura	Nov. 18–Dec. 15	8		
Do	Apr. 3–12	3		
Costa Rica:				
Port Limon	Feb. 18–Apr. 5	2		
Czechoslovakia				Oct. 1–Dec. 31, 1923: Cases, 1; deaths 1, occurring in Slovakia. Mar. 1–31, 1924; one case.
Dominican Republic:				
La Romana	Jan. 27–Mar. 22	14		
Ecuador:				
Esmeraldas	Nov. 16–30	4		
Guayaquil	Dec. 1–31	1		
Do	Jan. 1–May 15	3	1	
Milagro	Apr. 1–15	1		
Quito	Nov. 1–30	167	26	
Egypt:				
Alexandria	Feb. 27–May 6	5	7	
Cairo	Jan. 1–Feb. 11	3	1	
Port Said	Nov. 24–Dec. 2	1		
Do	Apr. 16–22	2		Imported.
Esthonia				Nov. 1–Dec. 31, 1923: Cases, 38, Jan. 1–Mar. 31, 1924: Cases, 16.
Finland				Apr. 1–30; 2 cases. One dead.
France:				
Cherbourg	Feb. 9–15	1		British seaman.
Gibraltar	Mar. 3–Apr. 13	2		
Great Britain				England and Wales, Dec. 30–May 24: Cases, 1,872.
Liverpool	Mar. 2–8	1		In family of seaman recently returned from Oporto, Portugal.
Sheffield	May 11–17	2		

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki	Oct. 22–Dec. 30		11	
Do	Dec. 31–Apr. 20	31	24	
Guadeloupe (West Indies)				Jan. 2–16, 1924: Present.
Abymes	Feb. 16			Present. Vicinity of Point à Pitre.
Basse Terre	Dec. 18			Present.
Do	Jan. 12–Feb. 16			Do.
Marie Galante Island	Dec. 18			Off shore. Estimated 60 cases
Do	Feb. 16			Present.
Moule	Jan. 12–Feb. 16			Do
Point à Pitre	Dec. 18			Present in vicinity.
Haiti:				
Cape Haitien	Feb. 3–Apr. 26	4		Mar. 9–15, 1924: Two cases in hospital.
Hinche	Feb. 10–16	1		Developed at Limbe, Haiti.
Port au Prince	Feb. 17–May 3	5	1	
India				Oct. 14–Dec. 29, 1923: Cases, 9,720; deaths, 2,241.
Do				Dec. 30, 1923–Apr. 19, 1924: Cases, 54,043; deaths, 11,030.
Bombay	Oct. 28–Dec. 29	55	25	
Do	Dec. 30–May 3	1,372	699	
Calcutta	Dec. 16–29	4	4	
Do	Dec. 30–May 10	33	35	
Karachi	Dec. 30–May 17	209	78	
Madras	Nov. 4–Dec. 29	23	3	
Do	Dec. 30–May 17	345	39	
Rangoon	Nov. 4–Dec. 29	12	4	
Do	Dec. 30–May 10	95	32	
Indo-China:				
City—				
Saigon	Nov. 4–Dec. 29	133	74	Including 100 square kilometers of surrounding country.
Do	Dec. 31–Apr. 26	853	480	
Iraq (Mesopotamia):				
Bagdad	Oct. 24–Dec. 29	46	28	
Do	Dec. 30–Apr. 12	45	33	
Italy:				
Treviso	Apr. 1–15	15		Estimated.
Trieste	Feb. 17–23	4		
Turin	Feb. 18–24	1		
Jamaica				Nov. 25–Dec. 29, 1923 Cases, 115.
Do				Dec. 30, 1923–May 17, 1924: Cases, 515. Reported as alastrim.
Kingston	Nov. 25–Dec. 29	3		Delayed report for Feb. 17–23, 1924, 1 case.
Do	Dec. 30–Apr. 26	17		
Japan:				
Kobe	Feb. 14–May 12	18	7	
Nagoya	Apr 6–12	3	1	
Taiwan Island	Jan. 1–Mar. 31	8		
Tokyo	Jan. 1–Apr. 12	136		To Apr. 18, 1924: Cases, 199.
Yokohama	Mar. 30–May 4	3		
Java:				
East Java—				
Patjiram	Mar. 8			Epidemic.
Pasoerean Residency	Apr. 9			Epidemic at Kalibato, a small locality.
Soerabaya	Oct. 31–Dec. 29	348	60	
Do	Dec. 30–Apr. 12	342	80	
West Java—				
Batavia	Oct. 27–Dec. 28	65	13	
Do	Dec. 29–Apr. 25	81	12	
Latvia				Province.
				Oct. 1–Dec. 31, 1923; Cases, 6: Jan. 1–Mar. 31, 1924: Cases, 11.
Lithuania				Mar. 1–31, 1924: Cases, 36; deaths, 11.
Malta	Feb. 1–29	1		
Mexico:				
Durango	Apr. 1–30		2	
Guadalajara	Jan. 27–June 7	5	11	
Manzanillo	Dec. 4–10	5	1	
Mazatlan	Mar. 31–Apr. 13		4	Apr. 21, 1924: Cases from 25–35. In city and vicinity. No mortality reported.
Mexico City	Nov. 25–Dec. 29	32		Including municipalities in Federal District.
Do	Dec. 30–May 3	198	23	Do.
Monterey				Mar. 24, 1924, 11 cases officially announced.

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico—Continued.				
Salina Cruz	Jan. 1-Apr. 30	5	4	Nine cases chicken pox present.
San Luis Potosi	Mar. 16-June 7		2	
Tampico	Jan. 21-May 31	54	6	From Irapuato, 9; La Barra, 1.
Vera Cruz	Nov. 3-Dec. 30		4	Jan. 21-Apr. 10, 1924: Cases, 36 (12 in soldiers or soldiers' families); deaths, 5.
Do	Jan. 6-Apr. 20	2	7	
Netherlands:				
Rotterdam	Jan. 20-26	3		
Palestine:				
Jaffa	Jan. 15-28	3		
Jerusalem	Feb. 18-25	1		
Samaria	May 20-26	1		Reported May 25.
Persia:				
Teheran	Sept. 24-Dec. 23		4	
Do	Dec. 22-Jan. 31		2	
Poland				Sept. 23-Dec. 31, 1923: Cases, 83; deaths, 20. Jan. 1-Mar. 29, 1924: Cases, 695; deaths, 68.
Portugal:				
Lisbon	Nov. 11-Dec. 29	19	10	Corrected report.
Do	Dec. 31-May 24	105	21	
Oporto	Nov. 25-Dec. 29	39	23	
Do	Dec. 30-May 24	111	63	
Portuguese East Africa:				
Lourenco Marques	Dec. 30-Jan. 5	2		
Portuguese West Africa:				
Angola—				
Loanda	Dec. 2-29		5	
Russia:				
Moscow	Mar. 23-29	59		
Ukraine				Aug. 1-Sept. 30, 1923: Cases, 143.
Senegal:				
Dakar	Apr. 1-30	1		
Siam:				
Bangkok	Oct. 28-Dec. 8	33	18	Nov. 25-Dec. 1, 1923; epidemic.
Do	Dec. 30-Apr. 28	15	2	Imported.
Siberia:				
Dauria Station	Oct. 21			Present. Locality on Chita Railway, Manchurian frontier.
Sierra Leone:				
Sherbro District—				
Tagbail	Nov. 1-15	3		
Spain:				
Barcelona	Nov. 15-Dec. 26		2	
Do	Jan. 3-Mar. 26		5	
Cadiz	Mar. 1-31	2		
Valencia	Nov. 25-Dec. 29	152	12	
Do	Dec. 30-May 24	453	38	
Straits Settlements:				
Penang	Mar. 16-29	2	2	
Singapore	Dec. 16-29	2	1	
Do	Dec. 30-May 3	7	1	
Switzerland:				
Basel	Jan. 27-May 17	5		Corrected.
Berne	Nov. 17-Dec. 22	15		
Do	Jan. 6-May 24	42	1	
Lucerne	Nov. 1-Dec. 31	60		
Do	Jan. 1-Apr. 30	50		
Zurich	Jan. 27-May 24	4		
Syria:				
Aleppo	Nov. 25-Dec. 1	1		In vicinity, at Djsr Choughour.
Beirut	Jan. 21-Feb. 20	2		
Damascus	Nov. 16-Dec. 15	7		
Do	Jan. 29-Apr. 28	40		
Tunis:				
Tunis	Oct. 27-Nov. 2	5	1	
Do	Jan. 8-May 19	14	7	
Turkey				Dec. 1-31, 1923: Cases, 120; deaths, 15.
Constantinople	Nov. 11-Dec. 8	3		
Do	Jan. 6-May 17	5	1	
Union of South Africa				Oct. 1-31, 1923: Colored, cases, 41; deaths, 2; white, cases, 3. Feb. 1-29, 1924: Cases, 71 (white, 6); 1 death.
Cape Province	Oct. 28-Dec. 8			Outbreaks.
Do	Jan. 20-Apr. 26			Do.

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa—Con.				
Natal	Oct. 28-Nov. 3			Outbreaks.
Do	Mar. 16-22			Do.
Orange Free State	Oct. 28-Nov. 24			Do.
Do	Jan. 20-Apr. 19			Do.
Transvaal	Nov. 18-Dec. 1			Do.
Do	Mar. 11-17			Do.
Johannesburg	Nov. 25-Dec. 15	3		
Do	Feb. 3-23	2		
Uruguay:				
Montevideo	Oct. 1-31	1		
Venezuela:				
Caracas	Jan. 22			Epidemic.
Margarita Island—				
Punta Piedra	Mar. 21	60		20 miles from mainland.
On vessels:				
Steamship Coppename	Mar. 19	1		At New Orleans from Puerto Barrios, Guatemala.
U. S. naval hospital ship Mercy	Apr. 1	1		At St. Thomas, Virgin Islands, from Culebra, P. I. Patient had been in Jamaica, West Indies, two weeks previous. Case reported as alastrim.
S. S. Nitokris	Apr. 30	1		At Guayaquil, from Valparaiso, Chile. Under treatment at lazaretto.
S. S. Torres	Jan. 14	1		At New Orleans quarantine station from Tampico, Mexico, via ports. Case in seaman signed on at Galveston, Tex., on outward voyage.
S. S. Tupper	Jan. 20-26	1		At Gonaives, Haiti.
S. S. Vasari	Dec. 31	1		At Trinidad, West Indies, from Buenos Aires, Argentina. Vessel left Buenos Aires, Dec. 15 1923, for New York, via Santos, Rio de Janeiro, Trinidad, Barbados.
Sch. Annie M. Parker	Jan. 23	3		At sea. Vessel abandoned and crew removed to vessel bound for Rotterdam. Patients removed at Liverpool Feb. 28, bound for Newfoundland.
Yugoslavia				Year, 1923; cases, 1,042; deaths, 199.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-Dec. 31	7	3	
Do	Jan. 1-Mar. 31	21	7	
Bolivia:				
La Paz	Oct. 1-Dec. 31	43	5	
Do	Jan. 1-Apr. 30	41	4	
Brazil:				
Porto Alegre	Feb. 24-Mar. 1		1	
Bulgaria:				
Sofia				Nov. 18-Dec. 15, 1923: Paratyphus fever, cases, 17. Jan. 6-Apr. 19, 1924: Paratyphus fever, cases, 11.
Canary Islands:				
Santa Cruz de Teneriffe	Jan. 14-Feb. 17		2	
Ceylon:				
Colombo	Feb. 24-Mar. 1	1	1	Case from port, 1.
Chile:				
Antofagasta	Dec. 2-8	4		
Do	Apr. 6-12	2		
Concepcion	Oct. 1-Nov. 30		4	Dec. 11-24, 1923: Deaths, 3.
Do	Jan. 8-May 12	5	14	In district, at 12 localities, 92 cases. In nitrate plants.
Iquique	Jan. 20-May 24	2	1	
Talcahuano				Dec. 5, 1923: 3 cases under treatment. Jan. 12, 1924: 1 case under treatment.
Do	Jan. 31-May 10	12	4	
Valparaiso	Nov. 25-Dec. 15		29	Dec. 24, 1923: In hospital, 34 cases.
Do	Dec. 30-May 24		52	Reports from two districts of the Province of Valparaiso.

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Antung	Nov. 12-Dec. 30	5		
Chungking	Nov. 18-24			Present.
Do	Dec. 16-29			Endemic.
Do	Dec. 30-Feb. 16			Do.
Manchuria—				
Harbin	Mar. 18-May 12	3	1	
Chosen (Korea):				
Chemulpo	Feb. 1-Apr. 30	5	4	
Seoul	Feb. 1-Apr. 30	116	14	
Czechoslovakia				Oct.-Dec., 1923: Cases, 21. Mar. 1-31, 1924: Cases, 30; deaths, 2.
Danzig-Polish frontier:				
Mühlbanz	Mar. 6			Present: Origin stated to be focus at Mallinia.
Ecuador:				
Quito	Nov. 1-30	14	1	
Egypt:				
Alexandria	Nov. 19-Dec. 23	3		
Do	Jan. 8-May 27	11		
Cairo	Sept. 10-Dec. 31	39	11	
Do	Jan. 8-Feb. 4	5	3	
Esthonia				Nov. 1-30, 1923: Paratyphus fever, cases, 8. Dec. 1-31, 1923: Typhus fever, cases, 15; paratyphus fever, cases, 4. January 1-Mar. 31, 1924: Cases, 11; paratyphus fever, cases, 21.
Finland				Dec. 1-15, 1923: Paratyphus fever, cases, 15. Feb. 15-Apr., 1924: Paratyphus fever, cases, 46.
Germany:				
Coblenz	Jan. 27-Feb. 2	1		
Greece:				
Athens	Jan. 11-Feb. 20		7	
Saloniki	Nov. 26-Dec. 30	7	3	
Hungary				July 1-Aug. 31, 1923: Cases, 24.
Budapest	Jan. 27-Apr. 19	35	13	
Java:				
East Java—				
Soerabaya	Dec. 9-29	12		
Do	Dec. 30-Jan. 5	2		
Latvia				Oct. 1-Dec. 31, 1923: Cases, 22. Paratyphus fever, 12; recurrent typhus, 3. Jan. 1-Mar. 31, 1924: Cases, 132. Paratyphus, A. 1: B. 1. Recurrent, 1 case.
Libau	Apr. 8-15	4		
Lithuania				Year, 1923: Cases, 819; deaths, 86; recurrent typhus, 13 cases. Feb. 1-Mar. 31, 1924: Cases, 269; deaths, 27.
Mexico:				
Durango	Dec. 1-31		2	
Do	Jan. 1-Feb. 29		3	
Guadalahara	Jan. 27-May 10	5	9	Feb. 1-29, 1924: Cases, 2; deaths, 1.
Mexico City	Nov. 25-Dec. 29	86		Including municipalities in Federal district.
Do	Dec. 30-May 3	110	8	
San Luis Potosi	Jan. 17-23		1	
Torreon	Feb. 1-May 31		7	District.
Netherlands:				
Amsterdam	Mar. 2-Apr. 26	4		
Norway:				
Stavanger	Dec. 25-31	1		
Palestine:				
Jaffa	Jan. 1-Apr. 15	7		
Jerusalem	Feb. 19-May 5	4		
Persia:				
Teheran	Sept. 24-Oct. 23		1	
Poland				Sept. 23-Dec. 31, 1923: Cases, 947; deaths, 92; recurrent typhus, cases, 67; deaths, 1. Jan. 1-Feb. 9, 1924: Cases, 1,232, deaths, 102. Recurrent cases, 63. Jan. 6-Mar. 8, 1924: Cases, 2,192; deaths, 182. Recurrent fever, cases, 108; deaths, 5.
Pomerellen	Jan. 8-Mar. 25	17	4	Locality on Danzig-Polish frontier.
Portugal:				
Oporto	Jan. 27-Feb. 2	2		

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

Reports Received from December 29, 1923, to June 27, 1924—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Rumania:				
Kishineff district	Nov. 1-Dec. 31	15		
Russia				Mar. 12, 1924: Reported present in various sections.
Karelian Republic	Mar. 12			Prevalent.
Moscow	Mar. 23-29	16		Recurrent typhus; cases, 4.
Novo Cherkask	Mar. 12			Prevalent.
Rostov-on-Don	do			Do.
Saratov	do			Do.
Ukraine				Aug. 1-Sept. 30, 1923: Cases, 768. Recurrent typhus; cases, 2,307.
Siberia:				
Vladivostok	Feb. 19			Present and verging on epidemic prevalence.
Spain:				
Barcelona	Nov. 29-Dec. 12		2	
Do	Jan. 3-Apr. 2		6	
Madrid	Dec. 1-31		7	
Do	Jan. 1-31		2	
Syria:				
Damascus	Jan. 27-Feb. 2	1		
Tunis:				
Tunis	Feb. 5-May 26	4	1	
Turkey				Dec. 1-31, 1923: Cases, 41; deaths, 5.
Constantinople	Nov. 11-Dec. 29	15	1	
Do	Dec 30-Apr. 5	11		
Union of South Africa				Oct. 1-31, 1923: Colored, 287 cases, 58 deaths; white, 2 cases; total, 289 cases, 58 deaths. Jan. 1-Feb. 29, 1924: Cases, 407; deaths, 75 (colored). Among white population, 7 cases. Total cases, 414; deaths, 75.
Cape Province				Oct. 1-31, 1923: Colored, cases, 245; deaths, 47.
Do				Jan. 1-Feb. 29, 1924: Cases, 168; deaths, 26. Feb. 24-Apr. 26, 1924: Outbreaks.
Natal				Oct. 1-31, 1923: Colored, cases, 4; deaths, 3.
Do				Jan. 1-Feb. 29, 1924: Cases, 90; deaths, 14. Feb. 24-Mar. 1, 1924: Outbreaks.
Durban	Nov. 24-Dec. 1	73		Cases occurring among native stevedores in the harbor area of the port and confined to one barracks.
Orange Free State				Oct. 1-31, 1923: Colored, cases, 25; deaths, 8. Feb. 24-Mar. 1, 1924: Outbreaks.
Do				Jan. 1-Feb. 29, 1924: Cases, 59; deaths, 10. Mar. 23-Apr. 5: Outbreaks.
Kroonstad District	Jan. 20-26			Outbreaks on 2 farms.
Transvaal				Oct. 1-31, 1923: Colored, cases, 13.
Do				Jan. 1-Feb. 29, 1924: Cases, 90; deaths, 26.
Johannesburg	Oct. 1-Dec. 31	3	4	
Do	Jan. 6-Mar. 29	8		
Potschefstrom District	Jan. 20-26			Outbreaks on 7 farms.
Venezuela:				
Maracaibo	Dec. 16-22		1	
Do	Feb. 17-May 3		8	
Yugoslavia	Year 1923	352	49	Paratyphus fever: Cases, 216; deaths, 13. Typhus fever, recurrent: Cases, 13.
Croatia—				
Zagreb	Dec. 2-15	3		
Do	Feb. 17-23	1		
Serbia—				
Belgrade	Nov. 25-Dec. 1	1		
On vessel:				
S. S. Malta Maru	Mar. 17	1		At Rotterdam, Netherlands, from South America.

YELLOW FEVER

Brazil:				
Pernambuco City	Nov. 16, 1923	3		
Do	May 26, 1924			Reported present.
West Africa (French Dahomey):				
Porto Novo	May 26			Present.