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## RESOLUTION OF THE SECTION ON PREVENTIVE MEDICINE, AMERICAN MEDICAL ASSOCIATION.

Health administrators the country over have often complained of the failure of a certain proportion of the physicians practicing in their community to make prompt reports of cases of communicable diseases as required by law. Yet it is well recognized that nothing is more important in order that the health authorities may take proper steps adequately to safeguard the health of the rest of the community.

The American Medical Association has repeatedly placed itself on record as binding its members to support public health work, and it is gratifying to learn that at the recent meeting of this association at Atlantic City the following resolution was adopted by the Section on Preventive Medicine and Public Health:

*Resolved*, That the Section on Preventive Medicine and Public Health of the American Medical Association recommend to the House of Delegates that it ask the constituent associations to consider the advisability of such amendments to their by-laws and to those of this association as will eliminate from membership any physician who willfully fails or refuses to comply with local or State laws for the prevention of disease, including especially the provisions in such laws requiring the reporting of cases of communicable disease.

The enforcement of such an amendment to the by-laws as here proposed would be of incalculable value to the public health movement. It would make it possible to bring delinquent physicians before a court consisting entirely of their peers. This would make the American Medical Association insist that membership in the association depend on the faithful performance of the physician's duties not only to his patients, but to the public at large.

The association is to be congratulated on thus squarely accepting the responsibilities placed upon its members. Such cooperation is indeed appreciated by health administrators everywhere.

## OBSERVATIONS ON THE BACTERIOLOGY OF INFLUENZA.<sup>1</sup>

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These observations were made upon (A) patients affected in an epidemic in the Student Army Training Corps of the University of Chicago, (B) civilian influenza patients in various hospitals in the

<sup>1</sup> The author wishes to acknowledge his indebtedness to Dr. J. F. Norton and Miss Elizabeth Arents for assistance in this work.

vicinity of the University of Chicago, (C) patients, mainly university students, who developed influenza in December, 1918–February, 1919, after the main Chicago epidemic had subsided, and (D) cases of tonsillitis, “colds,” and other respiratory tract affections occurring during and subsequent to the epidemic. An attempt was made in Groups A, C, and D to study a few cases in great detail, making frequent and very thorough bacteriological examinations. In one case of influenza-pneumonia, for example, observations extended over a period of 36 days until convalescence was complete and the patient was discharged, and included sets of plate cultures on 25 different days.

One object especially in view was the determination of the relative frequency and abundance of the Pfeiffer bacillus in the upper respiratory tract of persons suffering from influenza and from common, nonspecific respiratory tract infections. Another was a series of similar observations upon the diplo-streptococcus described by Mathers.<sup>1</sup> Variations in the nose and throat flora throughout the illness of one and the same individual were also particularly noted.

*Methods.*—In the majority of cases swabs were made from the nose, tonsils, and nasopharynx; the nasopharynx swabs were obtained by the Mathers bent-wire method as used in meningococcus-carrier work.<sup>2</sup> Nasal swabs usually failed to give results materially different from the others and in the later cases were omitted.

As soon as made, the swab was smeared on freshly poured warm-blood agar plates, which were kept warm en route to the incubator. The meat infusion agar was prepared with 2 per cent peptone and made neutral to phenolphthalein; it has proved well adapted to the growth of pure cultures of the Pfeiffer bacillus. Human blood and sheep blood (5 per cent) were chiefly used; no material difference was noted. From the smear, radiating streaks were made with a platinum loop<sup>2</sup> and crossed after burning off the needle. Well-separated colonies are usually obtained in this way. It has been found advantageous to have plates poured on the day they are used, or at most not more than 24 hours before use. Special care was taken to keep the air of the incubator moist. If the surface of the plate is dry when inoculated, or if the air of the incubator is not sufficiently moist, growth of the Pfeiffer bacillus may be unfavorably affected. The plates were examined after 24 hours and again after 48 hours; a hand lens was always used. In the present series particular attention was paid to the occurrence of the Pfeiffer bacillus and the green-producing streptococcus isolated by Mathers.<sup>1</sup> Other bacteria, when present in noteworthy numbers, were also isolated and examined. As a rule, several colonies from each plate were circled and fished with a platinum loop to a fresh plate; if this second plate was a pure culture, appropriate

<sup>1</sup> Jour. Amer. Med. Assoc., 1918, 71, p. 1733.

<sup>2</sup> “Standard Technique of Meningococcus Carrier Detection,” published by the Medical Departments of the Army and Navy and the United States Public Health Service.

diagnostic tests were made. Heated blood-agar plates on which the Pfeiffer bacillus grows with special luxuriance were used in many cases, together with the standard blood-agar plates, but their use has not been essential for the isolation of the Pfeiffer bacillus which has grown freely upon the plain blood-agar medium which we used.

The well-known favoring influence of hemolytic colonies upon the growth of the Pfeiffer bacillus has been often observed; it has also been noted that the colonies of certain nonhemolytic bacteria have a similar stimulating effect which is quite as marked. In cases in which the growth of the Pfeiffer bacillus on the first plates was scanty after 24 hours, we sometimes obtained much larger colonies by streaking the plates with one of the growth-favoring organisms and incubating for 24 hours longer. Occasionally the original plate was too crowded for proper examination, and in such cases a second plate was made from it before fishing. Two points have seemed of special importance in the successful isolation of the Pfeiffer bacillus, particularly when this organism is present in small numbers: First, the incubation of the plates for two or three days; second, the use of the hand lens.

Sputum was examined when it was possible to obtain it. Direct stains were made and also smears on blood-agar plates in the usual way. When, as is often the case in uncomplicated influenza, sputum in washable quantity was unobtainable, we had the patient cough directly upon a blood-agar plate. Little flakes of mucus were sometimes discharged, and after 18-24 hours the growth surrounding these mucous droplets was transferred with a loop to a fresh plate. In this way the Pfeiffer bacillus has been isolated several times when the other sources of examination failed to yield it.

*Blood cultures.*—Blood drawn from the elbow vein (about 10 cc in each case) was added to warm broth (200 to 500 cc) and incubated for about a week. The observations comprised 11 cases of uncomplicated influenza and 8 of influenza-pneumonia. In the plain influenza cases blood was drawn on the first day in 2 cases, on the second day in 5, and in 1 case each on the third, fourth, fifth, and seventh days. In the pneumonia following influenza the blood cultures were made, respectively, on the fourth (2), fifth (1), sixth (1), seventh (2), eighth (1), and twelfth (1) days. All were sterile.

*The Pfeiffer bacillus.*—The small, translucent colonies on blood agar can often be identified with a high degree of certainty with the hand lens, particularly if they are numerous, in which case the heaping-up around large colonies of staphylococci and other bacteria is highly characteristic. For definite identification it has been our practice to transfer single, isolated colonies to a fresh plate; if typical growth was obtained, failure to grow on plain agar together with characteristic morphology and gram-stain reaction were regarded as sufficient identification marks. A strong, luxuriant growth can be

obtained on agar prepared with heated blood, but except for obtaining large quantities of material for inoculation experiments this medium presents no noteworthy advantages over the ordinary clear medium. It is not particularly well adapted for isolation.

It is of interest that a medium made without meat infusion, meat extract, or peptone—simple agar dissolved in physiological salt solution—to which 5 per cent of blood is added in the usual way—yields a scanty, but undoubted growth of the Pfeiffer bacillus.

For preserving cultures it is safest to make daily transfers, though if the air of the incubator is kept moist the Pfeiffer bacillus can retain its vitality for a considerable period in the incubator. We have frequently obtained growth from tube cultures that had been in the incubator for from two to three weeks. The heated blood medium is better than the ordinary blood medium for maintaining vitality.

*The Mathers coccus.*—This organism was isolated by the late Capt. Mathers during the influenza epidemic in September, 1918, at Camp Meade. A culture kindly furnished me by Miss Tunnickliff possessed the characters described in her paper.<sup>1</sup> It resembles the ordinary mouth streptococcus in some of its characters, but the colonies on blood agar are much like those of the pneumococcus, although, as a rule, larger, moister, and more confluent. It is gram-positive, usually with pointed ends and in pairs. It is not soluble in bile, and most strains ferment neither inulin nor mannite. Morphologically and in colony growth it is closer to the pneumococcus than to the streptococcus, but the fermentation characters are those of the ordinary mouth streptococci.

A coccus with these characters was found in a large percentage of the cases examined, not infrequently in practically pure culture, especially in cultures from nasopharyngeal swabs. One hundred and eight strains obtained at different times from 44 different cases were subjected to careful examination. All were gram-positive, had the morphology described above, and gave a heavy, moist, green, confluent growth on blood agar. Table I shows their close relationship to strains of *Streptococcus buccalis* (Blake's classification) isolated in this same series of cases, although in morphology and in appearance of the growth on blood agar the difference is sharp.

TABLE I.

Number of strains.	Bile solubility.		Fermentation.						Remarks.
			Lactose.		Inulin.		Mannite.		
	+	—	+	—	+	—	+	—	
108	.....	108	105	3	4	104	5	103	Mathers coccus. <i>Streptococcus buccalis</i> . <i>Pneumococcus</i> IV.
85	.....	64	84	1	2	62	1	63	
27	27	.....	27	.....	22	5	22	5	

<sup>1</sup> Jour. Amer. Med. Assoc., 1918, 71, p. 1733.

Attempts to differentiate the Mathers coccus and *Streptococcus buccalis* by testing their fermentation powers on a larger number of carbohydrates have given negative results. A comparison of 10 strains of each gave results as follows: Positive—lactose, saccharose, maltose (1 strain of *S. buccalis*, negative), galactose (1 *S. buccalis*, negative; same strain negative in maltose), mannose (2 *S. buccalis*, negative); negative—inulin, mannite, arabinose, raffinose, sorbite, and dulcete. Type pneumococci (I, II, and III) gave similar results with these carbohydrates, except that inulin and mannite were fermented by all.

The methods of observation of the cases studied are illustrated in Table II.

TABLE II.

## CASE 21 (Influenza-pneumonia).

Day of disease.	Temperature.	Leucocyte count.	Pfeiffer bacillus.	Mathers coccus.	Other bacteria.	Remarks.
Second.....	103	7,300	—	+	Pneumococcus IV, M. catarrhalis.	M. catarrhalis more abundant than any other on these dates.
Third.....	102	5,500	—	+	M. catarrhalis.....	
Fourth.....	103	5,000	—	—	do.....	
Fifth.....	103	3,700	—	—	Many diphtheroids.....	
Seventh.....	104.2	4,600	—	—	Many staphylococci.....	
Eighth.....	104	4,200	—	—	Many diphtheroids and streptococci.	Almost pure culture of staphylococci in nasopharynx. This is rather unusual.
Ninth.....	103.2	6,200	—	—	Many staphylococci.....	
Fifteenth.....	100.4	9,900	+	—	S. buccalis (Pfeiffer bacillus very abundant).	
Eighteenth.....	99.4	14,400	+	+	Some diphtheroids.....	
Twenty-first.....	98.4	14,200	+	+	S. buccalis.....	
Twenty-sixth.....	98	12,900	+	—	do.....	
Thirty-seventh.....	98	7,800	—	—	Streptococcus buccalis; M. catarrhalis.	

## CASE 24 (Uncomplicated influenza).

First.....	102	.....	—	—	Staphylococci.....	
Second.....	102	6,000	—	—	Diphtheroids.....	
Third.....	100.6	5,400	—	—	Diphtheroids; M. catarrhalis.	
Fifth.....	99	.....	+	—	M. catarrhalis.....	
Sixth.....	99	8,000	+	—	B. mucosus capsulatus..	
Eighth. Discharged.						

## CASE 66 (Uncomplicated Influenza).

First.....	103	4,900	—	+	A few S. buccalis.....	Almost pure culture Mathers coccus. Mathers coccus not nearly so abundant as on preceding days. Few if any bacteria besides Pfeiffer bacillus and Mathers coccus. Mathers coccus abundant.
Second.....	100	.....	—	+	do.....	
Third.....	100	.....	—	+	Staphylococci.....	
Fifth.....	97.6	.....	+	+	Many staphylococci.....	
Seventh.....	97	7,400	+	+	.....	
Ninth.....	97	7,300	+	+	.....	
Fourteenth. Discharged.						

! Twenty-fourth.

\* Sixth.

In all, 47 cases of influenza were studied in this way. The distribution of the Pfeiffer bacillus and the Mathers coccus was as follows:

TABLE III.

Group.	Number of cases examined.	Number in which Pfeiffer bacillus was found.	Number in which Mathers coccus was found.
A1. Uncomplicated influenza, October.....	11	8	4
A2. Influenza-pneumonia, October..... (Groups A1 and A2 in same epidemic.)	8	3	8
B. Hospital influenza and influenza-pneumonia.....	17	11	8
C. Uncomplicated influenza, December-February.....	11	8	11
Total.....	47	30	31

Arrangement in such a numerical table has its limitations and does not give a complete picture of the findings, since most of the cases in Groups A1, A2, and C were examined many times, while nearly all of those in Group B were examined only once. Groups A1 and A2 are fairly comparable with one another in respect to the number of observations in each case, and so far as the examination of this limited number of cases from one localized epidemic is concerned, there is no doubt that Pfeiffer bacilli occurred more frequently and more abundantly in the uncomplicated influenza cases than in those in which pneumonia developed.

Comparison of the tabular record for Groups A1 and C, on the other hand, might be misleading, since the Pfeiffer bacillus was present in much larger numbers in the December-February cases (Group C) than in the October cases (Group A1). Whereas in the earlier cases Pfeiffer bacillus colonies were relatively infrequent compared with the numbers of other bacteria, in the later cases there were many plates in which the Pfeiffer bacillus and the Mathers coccus were practically the only organisms present. Considering the number of colonies of Pfeiffer bacillus on each plate and the proportion of daily observations that were positive, the actual abundance of this organism in the upper respiratory tract was far greater in the later cases than in the cases observed during the height of the epidemic in Chicago. The contrast between the cases in Group B and those in Groups A1 and A2 (Table III) was even more pronounced. Although the total of examinations in the hospital cases was much smaller, the Pfeiffer bacillus was present in a relatively high proportion of the plates examined and usually in great numbers. The significance of relative abundance as disclosed by plate culture is somewhat problematical and the bearing of such facts upon the rôle of the Pfeiffer bacillus must be regarded for the present as quite uncertain.

In 18 cases in which the Pfeiffer bacillus was found, examinations made on the first to the third day of the disease showed this organism present in 8, the Mathers coccus in 11 cases; in 7 cases neither of these

organisms was found on the first three days of the disease. In 6 of the 10 cases in which the Pfeiffer bacillus was not found on the first three days, it was found later (see, e. g., Table II, cases 24 and 66). The Mathers coccus, when present at all, was always found on the early days of the attack.

*Other bacteria.*—The usual bacteria of the upper respiratory tract were found in most of the cases, although in greatly varying numbers, both in different individuals and in the same individuals on different days. The men in the Section B epidemic group (Table I, Groups A1 and A2) harbored a far greater variety of bacteria than patients from other sources. The close contact of these men with one another during their preliminary illness and in the emergency hospital evidently favored a generous transfer of bacteria from throat to throat. The result was that at the time of our examination the variety of bacteria that had found a congenial soil was very large. Diphtheroids were especially numerous and were found abundant in all the earlier cases. *M. catarrhalis* was also very commonly present, often in great numbers. (See Table II, case 21.) *S. buccalis* occurred in varying numbers, but was rarely very abundant. In many of the Section B cases in October a large gram-negative diplococcus was present which formed very delicate, translucent colonies and died out readily even when transferred frequently on blood-agar. It grew in the first generation very scantily on plain agar and since it did not ferment dextrose it is perhaps to be regarded as belonging to the *M. catarrhalis* group, although under the conditions of our work it proved a much less vigorous organism than *M. catarrhalis* or than the Pfeiffer bacillus.

Pneumococci were found in 10 cases, but several strains were irregular in respect to inulin and mannite fermentations. All but one (IIa) fell in Group IV on application of the agglutination test.

The Friedländer bacillus was found in 4 cases, in one of these in large numbers.

Hemolytic streptococci were found in 7 cases, all but one of these in the later stages of the epidemic; in 5 cases they were numerous. In one patient no hemolytic streptococci were observed during the primary attack (3 sets of examinations). Twelve days after recovery and discharge, the patient was readmitted with a temperature of 104° and subjective symptoms described as being very similar to those of the original attack; hemolytic streptococci were present in practically pure culture in the throat and nasopharynx. This second attack or relapse was of short duration and the patient was discharged five days later. Bacteriologically, it appeared like a new infection with an organism not originally present. The leucocyte count on the fourth day of the second attack was 14,500. A second case of the same nature was found later.

*Bacteriology of colds, etc., during the epidemic.*—Twenty-eight cases of tonsillitis, sore throat, and common cold among university students were examined—about half of these (13) while the influenza epidemic was at its height in October–November, 1918, the others in January–March, 1919, after the influenza cases had practically disappeared from the neighborhood. The organisms most commonly found on blood-agar plates were as follows:

Total cases examined.....	28
Mathers coccus.....	15
Hemolytic streptococci.....	12
Pneumococcus IV.....	7
Pfeiffer bacillus.....	4

The Friedländer bacillus was found once in abundance and *M. catarrhalis* was found several times, though not in large numbers.

Observations on these cases were made in precisely the same manner as that of the observations upon the influenza cases. Typical records in Table IV may be compared with the influenza records in Table II.

TABLE IV.

CASE 100 (Common cold).

Day of disease.	Temperature.	Leucocyte count.	Pfeiffer bacillus.	Mathers coccus.	Other bacteria.	Remarks.
Second.....	104	8,900	—	—	<i>M. catarrhalis</i> .....	
Sixth.....	101.6	8,100	—	—	Hemolytic streptococci ..	
Seventh.....	102	7,800	+	—	<i>S. buccalis</i> .....	

CASE 101 (Severe cold, sore throat).

Third.....	102	10,500	—	—	<i>M. catarrhalis</i> .....	
Fifth.....	100	8,100	+	+		
Sixth.....	99	7,900	+	+	Pneumococcus IV.....	
Seventh.....		6,000	—	+		
Eighth.....		5,400	—	+	<i>S. buccalis</i> .....	
Thirteenth.....	100	10,200	—	—	do.....	
Fourteenth.....	99	7,600	—	+	do.....	

CASE 103.

First.....	98	12,900	—	+	Pneumococcus IV, <i>S. buccalis</i> .	
Second.....	98		—	+	Pneumococcus IV, <i>S. buccalis</i> , <i>M. catarrhalis</i> .	
Fourth.....	98	10,300	—	+	do.....	
Fifth.....	98	7,800	—	+	<i>S. buccalis</i> , <i>M. catarrhalis</i> .	
Seventh.....	98	6,600	—	+	Pneumococcus IV, <i>S. buccalis</i> , <i>M. catarrhalis</i> .	

CASE 111<sup>1</sup> (Tonsillitis).

Second.....	102	9,700	—	+	Hemolytic Streptococci.	(Almost pure culture hemolytic streptococci; very few other colonies.)
Fourth.....		13,400	—	+	<i>S. buccalis</i> .....	

<sup>1</sup> Case 111 was one of 4 cases of tonsillitis developing at the same time, and all with a history of exposure at a party 18–24 hours before attack. All 4 cases showed leucocytosis during the first 4 days of the attack, the maximum ranging from 13,400 in one case to 20,800 in another. Three of the cases showed a relative increase of the neutrophils (82 to 86 per cent). The bacteriological picture as shown in throat and nasopharynx swabs was remarkably similar. Hemolytic streptococci were very abundant on all plates and were by far the predominating organisms. In one case pneumococcus IV was present in small numbers in one examination, but in the other only a few colonies of the Mathers streptococcus and of *S. buccalis* were found in addition to the hemolytic streptococci. Between the first and second examinations two throat treatments with methylene blue were given, but the character of the flora of nasopharynx and throat was not appreciably altered by this procedure.



The clinical picture of these common endemic respiratory tract infections was distinctly different from that of epidemic influenza, although many of the symptoms were similar and the attack, at first, was frequently regarded by the patients and others as influenza. Headache, dizziness, and pain in the joints and limbs were common accompaniments of these cases, and in some instances the onset was sudden. On the other hand, sore throat was much more frequent and pronounced than in the cases of epidemic influenza, and patches were often observed on the mucous membrane. In the majority of cases the temperature did not run above 102°, and the fever was not prolonged beyond 24–48 hours. The leucocyte count was high in nearly all these cases. Thirty-nine leucocyte counts made in 20 cases, usually on the two days of the height of the attack, gave an average of 11,500. The range was as follows:

Above 10,000.....	22
7,000–10,000.....	11
Below 7,000.....	6

In only one case was the leucocyte count similar to that observed in the majority of cases of true influenza. In this case (107) the leucocytes were: Third day, 6,700; fourth, 4,500; fifth, 5,200; seventh, 5,100. The symptoms were not unambiguous: Headache, pain in back, no sore throat, no cough, no nosebleed. The temperature was not high (second day, 101.8) and quickly subsided (third day, 98.6) and none of the symptoms was severe. The predominating organism on the third, fourth, and fifth days was the Mathers coccus, although some pneumococci Type IV were found on the fourth and fifth days. On the seventh day many Friedländer bacilli were found. This case may have been one of light influenza, but there were no other cases in the neighborhood or among the associates of (107) at this time (Feb. 2–8, 1919).

In comparing the October–November cases of cold with those in January–March the most conspicuous difference was the much larger number of cases with hemolytic streptococci and with pneumococci (Type IV) in the latter group.

TABLE V.—*Bacteria in cases of cold, etc.*

	Number of cases.	Hemolytic Streptococci.	Pneumococcus IV.	Mathers coccus.	Pfeiffer bacillus.
Height of influenza epidemic, Oct.–Nov., 1918.....	13	2	1	4	1
After subsidence of influenza epidemic, Jan.–Mar., 1919	15	10	6	11	3

The richer flora in the second group of cases may be connected with the greater severity of these cases, and this in turn may be dependent upon the season of year. At all events, the relatively mild cases

of common respiratory tract infection that were examined during the height of the influenza epidemic did not harbor the Pfeiffer bacillus in nearly as high proportion as did the influenza cases examined at the same time; neither did they, except in a few cases, harbor in abundance hemolytic streptococci, pneumococci, or the Mathers coccus. In several cases the only organism growing in any considerable numbers on blood agar plates was the common mouth streptococcus (*S. buccalis*).

The association of large numbers of hemolytic streptococci (var. Beta) with cases of tonsillitis, and generally with cases of severe throat inflammation, was markedly evident in this series. This corresponds with the relative scarcity of this organism in the cases of true influenza, in which as a rule sore throat was not observed.

*Leucocyte counts.*—In the course of these observations leucocyte counts were made, as a rule, on the same days when throat swabs were taken. The average counts in simple influenza showed a leucopenia, as recorded in Table VI. The term "simple influenza" is here used to designate those cases not showing signs of clinical pneumonia. The patients usually regained a normal condition by the end of the first week, although with the ordinary aftermath of weakness.

TABLE VI.—*Leucocyte counts—simple influenza.*

Days of disease.	Cases.	Total leucocytes.	Polymorphonuclears.	Lymphocytes.	Large mononuclears and transitionals.
			Per cent.	Per cent.	Per cent.
Second and third.....	13	6,100	63	28	9
Fourth and Fifth.....	9	4,900	62	33	5
Sixth and seventh.....	6	6,100	59	32	9
Eighth to twelfth.....	10	7,500	66	25	9
Twelfth to thirtieth (after full recovery and discharge).....	8	9,100	60	34	6

Eosinophiles were generally absent during the attack.

Individual cases sometimes showed considerable deviation from the average. In one case the lowest count (4,300) was not reached until the eighth day of the disease. Several cases without any apparent complication gave leucocyte counts of over 10,000 for a week or more after seemingly complete recovery. In general, the counts ran rather high for some time after the patient was able to return to his ordinary vocation.

Similar observations on the influenza cases in which clinical pneumonia developed showed a drop in the number of leucocytes similar to that recorded above, but after a longer or shorter interval this was followed in each of the cases here observed by a moderate leucocytosis (14,000–15,000) which, however, in one case (cf. 21, Table II) did not

appear until about the fifteenth day. The differential ratio was not appreciably altered in these cases. Quite different is the normal leucocyte count in ordinary colds, tonsillar inflammations, etc.

TABLE VII.—*Leucocyte counts—colds, etc.*

Days of disease.	Cases.	Total leucocytes.	Polymorphonuclears.	Lymphocytes.	Large mononuclears and transitionals.
			<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
First, second, and third.....	22	12,600	73	22	5
Fourth and fifth.....	8	11,600	74	20	6
Sixth and seventh.....	7	8,800	69	25	6
Eighth to fourteenth.....	3	7,200	68	25	7

Comparison with Table VI brings out very plainly the average differences in total leucocyte counts. Whether the slight divergences in the differential count that appear in these figures have significance will need a larger number of observations to determine. As already stated, several cases have been observed in the course of this study which, clinically, seemed more like colds than like true influenza, but which had a low leucocyte count throughout. In the absence of any definite diagnostic criterion the relationship of these infections to true influenza must remain uncertain.

#### Summary.

The bacteriological picture in influenza is not a uniform one so far as nose and throat flora are concerned. The ordinary methods of cultivation with blood agar plates show marked differences in individual cases. Groups of individuals who have been in more or less intimate contact with one another may harbor very similar assemblages of microorganisms, but differ from other groups examined at the same time. The variations in respiratory tract flora reported by many observers during the progress of an influenza epidemic are doubtless, in part, group differences.

Daily examinations of a number of selected typical cases, mild and severe, have shown no one organism constantly demonstrable in large numbers by the methods employed. The two organisms most commonly and abundantly present in this series were the Pfeiffer bacillus and the diplococcus or streptococcus found by Mathers at Camp Meade.<sup>1</sup>

The Pfeiffer bacillus was found in 64 per cent of the influenza cases examined between October, 1918, and February, 1919. It was present in much larger numbers in the throats of the patients examined toward the end of the outbreak. Several cases did not come under observation until clinical pneumonia had developed and in these cases the Pfeiffer bacillus was not found as frequently as in the

<sup>1</sup> This is apparently very similar to, if not identical with, the organism described by Zingher, Jour. Amer. Med. Assoc., 1919, 72, p. 1920.

"uncomplicated" cases. Other cases for various reasons could be examined only once or twice, and the findings are not strictly comparable with those in which daily examinations were carried out. The percentage of positive findings would probably have increased if all patients had been subjected to examination throughout the course of the attack. The relative abundance of the Pfeiffer bacillus varied greatly. In some cases it was the predominant organism; in others only a few colonies could be found, no more than in normal throats. It did not often happen in this series that hemolytic streptococci (var. Beta) and the Pfeiffer bacillus were both present in large numbers. On the other hand the Pfeiffer bacillus and the Mathers coccus often had the field almost to themselves. In a few cases the Pfeiffer bacillus was present in such overwhelming numbers in cultures from nose, nasopharynx, and throat, that participation in a pathologic process was strongly suggested. These cases, however, did not differ clinically in any appreciable way from other cases in which the Pfeiffer bacillus was found scantily.

The Mathers coccus was found about as frequently and abundantly as the Pfeiffer bacillus, although its occurrence was quite independent of that of the latter. Its association with the pneumonia cases seemed to be closer than that of the Pfeiffer bacillus, but it was also found in all the later cases of simple influenza. Variations in the abundance of this organism were quite as marked as were those of the Pfeiffer bacillus and no relation could be demonstrated between these findings and the characters of the cases. Practically pure cultures of the Mathers coccus were obtained from the nasopharynx of some patients.

Comparison of the true influenza cases with colds and tonsillar infections showed that the general leucopenia of the influenza cases could be contrasted with the general leucocytosis of the others. Blood counts made during the first four or five days of the attack practically invariably showed at some time a leucopenia in the influenza cases and a leucocytosis in the others. The chief differences in the bacterial findings were the relative infrequency of the Pfeiffer bacillus in the colds, etc. (14 per cent), and the relatively high proportion of hemolytic streptococci (var. Beta). The Mathers coccus was present in about the same proportion of cases as in influenza.

The pneumococcus was found in about 20 per cent of the influenza cases (10:47) and in a slightly larger proportion in the cases of rhinitis and tonsillitis (7:28). No special search was made for these organisms, and it is probable that positive findings would have been increased somewhat if mouse inoculation could have been made whenever throat swabs were taken. Washed sputum, when procurable, was inoculated into mice, but the pneumococcus was not invariably isolated. In two cases as much as 2 cubic centimeters of

washed sputum from influenza patients, injected intraperitoneally, did not lead to the death of the mouse. The pneumococci isolated from both influenza and rhinitis cases were all Type IV, except one strain (IIa).

*M. catarrhalis*, the Friedländer bacillus, and an unidentified gram-negative diplococcus were found at times in large numbers in the throat, nose, and nasopharynx of influenza cases. Staphylococci were also sometimes present in great abundance.

Two observations on suspected cases of "recurrence," or "second attack," have shown the presence in the throat of organisms (hemolytic streptococci) not found during the original attack. Both recurrences presented some of the clinical symptoms of influenza, but had a moderate leucocytosis. A third case of suspected "recurrence" likewise showed hemolytic streptococci in the throat and slight leucocytosis, but this patient had not been under our observation during the primary attack. It seems probable that an alleged "second attack" of influenza, occurring within a few weeks of the original attack, is, at least in some cases, a new infection with another organism.

The observations carried out by the aerobic blood agar plate method and recorded in this paper have not shown the predominance or constant presence of any one organism in the upper respiratory tract of influenza patients. The Pfeiffer bacillus, however, has been more conspicuous than any other organism, particularly in comparison with its relative infrequency in cases of rhinitis and tonsillitis examined during the same epidemic period.

### POPULAR LEAFLETS ON BABY HYGIENE.

In a recent number of the Public Health Reports attention was called to the importance of health activities during the neonatal period. It is well known that the hot weather regularly brings with it an increase in mortality in this important age period. In an effort to assist State and local health officers in the educational work required to combat excessive infant mortality the Public Health Service has prepared a number of bulletins intended for popular instruction. These are available in quantity for free distribution by health officers. Requests, stating the quantity desired, should be addressed to the Surgeon General, United States Public Health Service, Washington, D. C.

Fly poster—How the fly spreads disease.

The Care of the Baby. Supplement No. 10 to Public Health Reports.

The Summer Care of Infants. Supplement No. 16 to Public Health Reports.

The Transmission of Disease by Flies. Supplement No. 29 to Public Health Reports.

Safe Milk. Supplement No. 31 to Public Health Reports.

Safe Milk for the Small Town. Reprint No. 497 from Public Health Reports.

The Homemade Milk Refrigerator. Public Health Bulletin No. 102.

## BIRTH STATISTICS AND INFANT MORTALITY.

### PRELIMINARY REPORT OF THE BUREAU OF THE CENSUS FOR 1917.

In the birth-registration area of the United States 1,353,792 infants were born alive in 1917, representing a birth rate of 24.6 per 1,000 of population. The total number of deaths in the same area was 776,222, or 14.1 per 1,000. The births exceeded the deaths by 74.4 per cent. For every State in the registration area, for practically all the cities, and for nearly all the counties, the births exceeded the deaths, in most cases by considerable proportions. The mortality rate for infants under 1 year of age averaged 93.8 per 1,000 living births.

The birth-registration area, established in 1915, has grown rapidly. It comprised, in 1917, the six New England States, Indiana, Kansas, Kentucky, Maryland, Michigan, Minnesota, New York, North Carolina, Ohio, Pennsylvania, Utah, Virginia, Washington, Wisconsin, and the District of Columbia, and had an estimated population of 55,000,000, or about 53 per cent of the estimated total population of the United States in that year.

#### Comparison with 1916.

The birth rate for the entire birth-registration area fell below that for 1916 by two-tenths of 1 per 1,000 population; but the death rate was less by six-tenths of 1 per 1,000 than in 1916. Thus, the excess of the birth rate over the death rate for 1917, which amounted to 10.5 per 1,000, was somewhat greater than the corresponding excess for 1916, 10.1 per 1,000, although it fell slightly below that for 1915, 10.9 per 1,000. If the birth and death rates prevailing in any one of these three years were to remain unchanged, and if no migration were to take place to or from the area to which they relate, the population of the area would increase at the rate of slightly more than 1 per cent per annum, or a little more than 10 per cent in a decade. This would be about half the rate—21 per cent—by which the entire population of the United States increased between 1900 and 1910.

#### White and colored.

Of the total number of births reported, 1,280,288, or 24.5 per 1,000, were of white infants, and 73,504, or 25.8 per 1,000, were of colored infants. The death rates for the two elements of the population were 13.7 and 22.5 per 1,000, respectively.

#### Infant mortality.

The infant mortality rate—that is, the number of deaths of infants under 1 year of age per 1,000 born alive—throughout the birth-registration area as a whole was 93.8 in 1917, as against 101 in 1916 and 100 in 1915. This is equivalent to saying that in 1915 and 1916 of every 10 infants born alive 1 died before reaching the age of 1 year,

whereas in 1917 the corresponding ratio was a trifle more than 1 in 11. Among the 20 States these rates ranged from 67.4 for Minnesota to 119.9 for Maryland; and for the white population separately the lowest and the highest rates were, respectively, 66.3 for Washington and 109.5 for New Hampshire.

The infant mortality rates vary greatly for the two sexes and for the various nationalities. The rate for male infants in 1917, 103.7 per 1,000 living births, was nearly 25 per cent greater than that for female infants, which was only 83.3. When the comparison is made on the basis of race or nationality of mother a minimum of 66.2 per 1,000 births is shown for infants with mothers born in Denmark, Norway, and Sweden, and a maximum of 172.6 for infants with mothers born in Poland, while for Negro children the rate was 148.6.

#### Plural births.

The reports from the registration area show the birth of 14,394 pairs of twins and 155 sets of triplets in 1917—in all, 29,253 infants, or a little more than 2 per cent of the total number born.

#### Number of children per family.

The reports for 1,241,722 of the births occurring in 1917 contained information as to number of child in order of birth. Of these reports, 339,042 were for the first child born to the mother, 264,044 for the second child, 191,528 for the third, 134,331 for the fourth, and 95,931 for the fifth. In the remaining 216,846 cases, or 17.5 per cent of the entire number for which information upon this point was obtained, the total number of children borne by the mother was 6 or more; in 37,914 cases it was 10 or more; in 1,600 cases, 15 or more; in 56 cases, 20 or more; and in 1 case, that of a colored woman, the birth of a twenty-fifth child was reported.

The total number of children borne by the mothers who gave birth to these 1,241,722 infants in 1917, in whose cases data were available as to previous births, was 4,093,908. The reports for 1,194,621 of the births occurring in 1917 contained information as to the entire number of children borne by the mothers and still living, and gave a total of 3,443,466, or an average of very nearly 3 living children in each family in which a birth took place in 1917.

#### States and cities.

The following table shows, for the birth-registration area, by States and by cities having more than 100,000 population in 1910, the number of births in 1917, the percentage of excess of births over deaths, and the infant mortality rate. The figures for the white and colored elements of the population are shown separately for those areas in which colored persons constituted more than one-tenth of the total population.

*Births, excess of births over deaths, and infant mortality, 1917.*

Area.	Number of births.	Excess of births over deaths.	Deaths of infants under 1 year of age per 1,000 live births.
		<i>Per cent.</i>	
Registration area, total.....	1,353,792	74.4	93.8
White.....	1,280,288	79.8	90.5
Colored.....	73,504	14.9	150.7
<i>Registration States.</i>			
Connecticut.....	37,481	80.0	93.8
Indiana.....	63,144	58.9	85.8
Kansas.....	38,601	87.0	77.5
Kentucky.....	61,698	88.5	87.1
Maine.....	16,651	42.7	93.3
Maryland.....	33,963	44.9	119.9
White.....	27,519	60.1	100.9
Colored.....	6,444	3.1	201.0
Massachusetts.....	95,673	68.8	97.9
Michigan.....	89,159	89.2	88.3
Minnesota.....	54,795	129.1	67.4
New Hampshire.....	9,569	28.3	109.6
New York.....	246,019	59.8	91.4
North Carolina.....	76,290	124.6	99.6
White.....	52,850	158.2	84.8
Colored.....	23,440	73.6	133.1
Ohio.....	120,949	57.2	92.1
Pennsylvania.....	222,505	73.6	111.0
Rhode Island.....	15,286	60.7	107.5
Utah.....	13,630	195.3	69.4
Vermont.....	7,553	38.1	85.0
Virginia.....	60,753	92.7	97.8
White.....	41,924	132.7	80.4
Colored.....	18,829	39.4	136.5
Washington.....	23,464	93.3	69.3
Wisconsin.....	59,124	103.0	77.8
<i>Registration cities having more than 100,000 inhabitants in 1910.</i>			
Connecticut:			
Bridgeport.....	5,109	125.1	87.1
New Haven.....	5,161	98.3	83.7
District of Columbia:			
Washington.....	7,485	13.3	97.4
White.....	5,250	31.7	70.9
Colored.....	2,235	14.7	159.7
Indiana:			
Indianapolis.....	5,955	20.0	95.2
Kentucky:			
Louisville.....	4,112	4.9	96.5
White.....	3,593	25.9	83.6
Colored.....	519	54.3	165.7
Maryland:			
Baltimore.....	15,040	32.5	118.4
White.....	12,645	51.2	103.4
Colored.....	2,395	20.0	197.1
Massachusetts:			
Boston.....	19,877	56.5	99.1
Cambridge.....	2,763	72.1	74.6
Fall River.....	3,807	79.9	158.9
Lowell.....	3,239	69.5	140.2
Worcester.....	5,280	89.3	94.9
Michigan:			
Detroit.....	26,298	124.1	103.2
Grand Rapids.....	3,051	75.5	82.6
Minnesota:			
Minneapolis.....	8,675	96.6	71.5
St. Paul.....	5,151	89.1	73.6
New York:			
Albany.....	2,259	10.8	108.9
Buffalo.....	13,487	76.3	104.0
New York.....	141,234	79.9	89.0
Rochester.....	6,938	69.9	84.2
Syracuse.....	4,199	73.1	102.4
Ohio:			
Cincinnati.....	7,817	14.5	88.0
Cleveland.....	20,274	87.2	108.9
Columbus.....	4,398	30.0	87.8
Dayton.....	3,311	61.1	96.0
Toledo.....	5,684	59.4	95.4

¹ Percentage by which births fell below deaths.



*Births, excess of births over deaths, and infant mortality, 1917—Continued.*

Area.	Number of births.	Excess of births over deaths.	Deaths of infants under 1 year of age per 1,000 live births.
Pennsylvania:		<i>Per cent.</i>	
Philadelphia.....	42,788	44.3	108.4
Pittsburgh.....	16,543	55.4	119.9
Scranton.....	3,298	46.8	147.7
Rhode Island:			
Providence.....	6,395	60.0	101.6
Virginia:			
Richmond.....	3,790	29.3	136.1
White.....	2,500	59.6	93.6
Colored.....	1,290	<sup>1</sup> —5.6	218.6
Washington:			
Seattle.....	4,876	92.7	60.5
Spokane.....	2,104	81.1	62.3
Wisconsin:			
Milwaukee.....	11,289	106.7	99.7

<sup>1</sup> Percentage by which births fell below deaths.**SALE OF INFECTED MEAT CAUSING TRICHINOSIS.****PENNSYLVANIA COURT HOLDS THAT DEALER IS NOT LIABLE WHERE NEGLIGENCE IS NOT SHOWN.**

That a dealer is not liable for selling meat infected with trichinæ, and which caused illness, when there was no negligence in such sale, is the decision in a Pennsylvania case.<sup>1</sup>

In an action to recover damages for illness resulting from eating pork infected with trichinæ, the defendant offered evidence showing that "parasites, known as trichinæ, are invisible to the naked eye and can be discovered only by microscopic inspection; that such inspection is untrustworthy and does not in all cases give assurance that the particular meat inspected and approved is free from parasites; that no system of inspection is known to science by which the presence of trichinæ can be detected with certainty in all cases; and that the only sure method of eliminating the danger is to thoroughly cook the meat at a temperature of at least 140°, whereby the harmful parasites are destroyed and the meat rendered wholesome and fit for food." Defendant also showed that "for the reasons above stated, the United States Government concluded an attempt to inspect all pork for trichinæ would result in more danger to the public than no inspection, for the reason [that] knowledge on the part of the public that an inspection had been made would lead to a false sense of security and induce consumers to omit taking proper precautions to avoid danger by thoroughly cooking."

It was shown, too, that other packing establishments made no inspection for trichinæ.

The court held that there had been no negligence on the part of the dealer.

<sup>1</sup> Tavani v. Swift & Co., 105 Atl., 55.

## SALE OF CONDENSED MILK.

### UNITED STATES SUPREME COURT DECISION UNDER OHIO LAW.

An Ohio statute prohibited the sale of condensed milk unless made from pure unskimmed milk. The United States Supreme Court has decided <sup>1</sup> that this law prohibits the sale of an article consisting of condensed skimmed milk and a vegetable fat, although not sold as condensed milk.

### DEATHS DURING WEEK ENDED JUNE 14, 1919, IN CITIES.

The table following shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined in certain large cities of the United States during the week ended June 14, 1919.

The data are taken from the "Weekly Health Index," June 17, 1919, issued by the Bureau of the Census, Department of Commerce.

*Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended June 14, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.*

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years. <sup>2</sup>	Influenza and pneu- monia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	37	17.1	C. 19.9	.....	.....
Atlanta, Ga.	201,732	63	16.3	C. 14.2	.....	.....
Baltimore, Md.	669,981	165	12.8	A. 16.1	.....	.....
Birmingham, Ala.	197,670	49	12.9	A. 18.0	.....	.....
Boston, Mass.	785,245	169	11.2	A. 15.1	6	0.4
Buffalo, N. Y.	473,229	120	13.2	C. 13.6	.....	.....
Cambridge, Mass.	111,432	24	11.2	A. 12.4	.....	.....
Chicago, Ill.	2,596,681	622	12.5	A. 13.0	50	1.0
Cincinnati, Ohio.	418,022	109	13.6	C. 15.3	.....	.....
Cleveland, Ohio.	810,306	140	9.0	C. 9.6	13	.8
Columbus, Ohio.	225,296	56	13.0	C. 13.2	2	.5
Dayton, Ohio.	130,655	18	7.2	C. 8.4	0	.....
Denver, Colo.	.....	60	.....	.....	.....	.....
Fall River, Mass.	128,392	28	11.4	C. 10.2	.....	.....
Grand Rapids, Mich.	135,450	24	9.2	C. 11.9	.....	.....
Indianapolis, Ind.	290,389	74	13.3	C. 12.4	.....	.....
Kansas City, Mo.	313,785	92	15.3	C. 16.0	7	1.2
Los Angeles, Calif.	568,495	99	9.1	A. 12.9	6	.6
Louisville, Ky.	242,707	55	11.8	C. 12.7	3	.6
Lowell, Mass.	109,081	18	8.6	A. 14.6	.....	.....
Memphis, Tenn.	154,759	66	22.2	C. 19.2	1	.3
Milwaukee, Wis.	453,481	91	10.5	A. 11.2	5	.6
Minneapolis, Minn.	383,442	71	9.7	C. 12.2	.....	.....
Nashville, Tenn.	119,215	44	19.2	C. 22.7	.....	.....
Newark, N. J.	428,684	62	7.5	C. 11.9	.....	.....
New Haven, Conn.	151,865	39	13.1	C. 15.2	.....	.....
New Orleans, La.	382,273	130	17.7	A. 19.6	.....	.....
New York, N. Y.	5,215,879	1,131	11.3	C. 11.6	.....	.....
Oakland, Calif.	214,206	39	9.5	A. 11.1	.....	.....
Philadelphia, Pa.	1,761,371	409	12.1	A. 14.3	.....	.....

<sup>1</sup> Hebe Co. et al. v. Shaw, Secretary of Agriculture of Ohio, et al., 39 Sup. Ct., 125.

<sup>2</sup> "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.

<sup>3</sup> Population estimated as of July 1, 1919.

<sup>4</sup> Rate is based on statistics of 1915, 1916, and 1917.

*Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended June 14, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined—Continued.*

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.	Influenza and pneu- monia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Pittsburgh, Pa.....	593,303	160	14.1	C. 11.8	22	1.9
Portland, Oreg.....	53	53	7.7	C. 9.5	5	1.0
Providence, R. I.....	263,613	39	14.6	C. 19.5	1	.3
Richmond, Va.....	160,719	45	10.4	C. 10.8	1	.2
Rochester, N. Y.....	264,856	53	12.4	C. 11.4	.....	.....
St. Louis, Mo.....	779,951	186	11.7	C. 8.5	.....	.....
St. Paul, Minn.....	257,699	58	16.3	C. 14.7	17	1.9
San Francisco, Calif.....	478,530	150	.....	.....	6	.....
Seattle, Wash.....	62	62	11.3	C. 12.0	1	.3
Spokane, Wash.....	22	22	9.5	A. 13.6	.....	.....
Syracuse, N. Y.....	161,404	35	11.2	A. 13.9	9	1.2
Toledo, Ohio.....	262,234	48	13.8	C. 13.5	.....	.....
Washington, D. C.....	401,681	86	.....	.....	.....	.....
Worcester, Mass.....	173,650	46	.....	.....	.....	.....

*Summary of information received by telegraph from industrial insurance companies for week ended June 14, 1919.*

Policies in force.....	39,337,515
Number of deaths.....	7,991
Number of deaths per 1,000 policies in force, annual rate.....	10.6

# 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.

### EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED JUNE 21.

#### CAMP DIX ZONE, N. J.

No cases of communicable diseases reported.

#### FAYETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
Gonorrhea.....	6
Syphilis.....	3
Typhoid fever.....	1
Vincent's angina.....	1

#### GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

##### Chancroid:

Alabama.....	1
Muscookee County.....	1

##### Chicken pox:

Columbus.....	1
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##### Gonorrhea:

Columbus.....	6
Muscookee County.....	5
Bibb City.....	1

##### Influenza:

Columbus.....	1
---------------	---

##### Malaria:

Columbus.....	2
Muscookee County.....	2
Girard.....	1

##### Measles:

Columbus.....	1
Muscookee County.....	1
Bibb City.....	1

##### Pellagra:

Muscookee County.....	1
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##### Pneumonia:

Muscookee County.....	1
Phoenix City.....	1

##### Smallpox:

Columbus.....	1
---------------	---

##### Syphilis:

Columbus.....	11
Camp Benning.....	1
Girard.....	1

##### Typhoid fever:

Columbus.....	1
---------------	---

##### Whooping cough:

Muscookee County.....	2
-----------------------	---

#### CAMP GORDON ZONE, GA.

Atlanta:	
Chancroid.....	2
Chicken pox.....	1
Gonorrhea.....	9
Measles.....	6

#### CAMP GORDON ZONE, GA.—continued.

##### Atlanta—Continued.

	Cases.
Scarlet fever.....	1
Smallpox.....	9
Tuberculosis.....	4
Typhoid fever.....	1
Whooping cough.....	2

#### GULFPORT HEALTH DISTRICT, MISS.

##### Chancroid:

Pascagoula.....	1
-----------------	---

##### Dysentery:

De Lisle.....	1
Lyman.....	1

##### Gonorrhea:

Gulfport.....	2
Long Beach.....	1
Moss Point.....	1
Pascagoula.....	2

##### Hookworm:

Gulfport.....	2
Long Beach.....	1

##### Malaria:

Biloxi.....	1
Escatawpa.....	4
Fernwood.....	1
Gulfport.....	14
Helena.....	1
Kiln.....	3
Krcole.....	1
Lyman.....	2
Mississippi City.....	2
Moss Point.....	3
Nugent.....	1
Ocean Springs.....	1
Pascagoula.....	1

##### Measles:

Moss Point.....	1
Pascagoula.....	5

##### Mumps:

Ansley.....	1
Biloxi.....	4
Gulfport.....	3
Kiln.....	1
Moss Point.....	1

##### Pellagra:

Gulfport.....	1
Lyman.....	1

##### Pneumonia:

Biloxi.....	1
-------------	---

## GULFPORT HEALTH DISTRICT, MISS.—contd.

Scarlet fever:	Cases.
Kiln.....	2
Tuberculosis:	
Biloxi.....	1
Long Beach.....	1
Typhoid fever:	
Kiln.....	1
Whooping cough:	
De Lisle.....	1
Gulfport.....	2
Hovey.....	1
Ocean Springs.....	5

## CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox.....	8
Smallpox.....	1
Tuberculosis.....	2
Typhoid fever.....	1
Whooping cough.....	6
Government clinic:	
Gonorrhea.....	13
Syphilis.....	8

## CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea.....	3
Gonorrheal ophthalmia.....	1
Tuberculosis.....	2
Typhoid fever.....	3

## CAMP MERRITT ZONE, N. J.

Englewood:	
Chicken pox.....	1
Diphtheria.....	1

## PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea.....	4
Pellagra.....	1
Syphilis.....	2
Tuberculosis.....	1
Typhoid fever.....	3

## CAMP POLK ZONE, N. C.

Chancroid:	
Durham.....	1
Chicken pox:	
Raleigh.....	1
Gonorrhea:	
Durham.....	2
Raleigh.....	2
Poliomyelitis:	
Raleigh.....	1
Smallpox:	
Wake Forest Township.....	3
Syphilis:	
Durham.....	1
Tuberculosis:	
Raleigh.....	1
Typhoid fever:	
Durham.....	1
White Oak Township.....	1
Whooping cough:	
Durham.....	10

## PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	Cases.
Portsmouth.....	2
Norfolk.....	1
Diphtheria:	
Portsmouth.....	2
Gonorrhea:	
Norfolk County.....	1
Measles:	
Portsmouth.....	1
Norfolk.....	1
Scarlet fever:	
Norfolk.....	2
Portsmouth.....	1
Smallpox:	
Norfolk County.....	1
Norfolk.....	2
Portsmouth.....	1
Tuberculosis:	
Norfolk County.....	1
Portsmouth.....	1
Typhoid fever:	
Norfolk County.....	2
Portsmouth.....	3

## CAMP SHERMAN ZONE, OHIO.

Government clinic:	
Gonorrhea.....	1
Syphilis.....	1
Scioto Township:	
Scarlet fever.....	1

## SOUTHER FIELD ZONE, GA.

Chicken pox.....	1
Malaria (outside controlled area).....	6
Tuberculosis, pulmonary.....	1

## CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chicken pox.....	1
Diphtheria.....	2
Gonorrhea.....	12
Influenza.....	1
Malaria.....	2
Measles.....	1
Tuberculosis.....	3

## CAMP UPTON ZONE, N. Y.

Brook Haven:	
Measles.....	1
Pneumonia.....	2
Riverhead:	
German measles.....	1

## WILMINGTON SANITARY DISTRICT, N. C.

Castle-Hayne:	
Typhoid fever.....	1
Wilmington:	
Diphtheria.....	1
Gonorrhea.....	7
Malaria.....	2
Measles.....	1
Mumps.....	1
Pellagra.....	1
Scarlet fever.....	1
Syphilis.....	3
Tuberculosis.....	4
Typhoid fever.....	1
Whooping cough.....	2

**DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.**

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended June 13, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes).....	645.20	488.63
All troops in United States.....	1,284.52	806.39
American Expeditionary Forces.....	310.45	322.66
Annual admission rate per 1,000 (disease only).....	555.36	416.00
All troops in United States.....	1,091.26	673.81
American Expeditionary Forces.....	274.76	281.33
Noneffective per 1,000 on day of report.....	31.09	23.10
All troops in United States <sup>1</sup> .....	52.53	46.55
American Expeditionary Forces.....	19.86	22.41
Annual death rate per 1,000 (all causes).....	7.69	7.59
All troops in United States <sup>1</sup> .....	11.80	9.53
American Expeditionary Forces.....	5.54	6.58
Annual death rate per 1,000 (disease only).....	5.23	4.83
All troops in United States <sup>1</sup> .....	9.86	8.05
American Expeditionary Forces.....	2.81	3.15

<sup>1</sup> Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

*Cases of special diseases reported during the week ended June 13, 1919.*

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
				Total.	New infections.						
Benning.....				7	6					515.17	19.81
Bowie.....			1	8	2					407.94	33.21
Bragg.....										79.14	10.65
Custer.....	1			6	5		1			662.86	48.96
Devens.....				12		2			1	395.69	38.89
Dix.....	5			40						659.80	62.99
Dodge.....				11	2		2	1		337.11	94.54
Funston.....				13			1			1,119.44	59.25
Gordon.....				25		1				832.10	35.45
Grant.....	1			36	1					921.50	65.51
Humphreys.....				1						387.23	27.65
Jackson.....				34						1,513.80	98.28
Kearny.....				2			1			796.93	178.60
Henry Knox.....	1			2						114.44	4.73
Lee.....			1	23	8					371.14	15.81
Lewis.....				8	3					1,179.95	137.72
Meade.....	1			12	7					1,167.65	177.96
Pike.....	1		1	13	2		2			1,132.07	135.26
Shelby.....	1		2	6						597.47	54.48
Sherman.....				21						656.61	95.05
Taylor.....				1						513.01	94.58
Travis.....				5						902.53	83.22
Upton.....	2			20	2					1,134.36	82.43
Holabird.....				2	1					808.73	6.70
Northeastern Department.....	1			7	3	5	1			1,095.32	29.98
Eastern Department.....				9	4					515.98	17.98
Southeastern Department.....			1	8	1					648.52	25.51
Central Department.....	1			5						608.53	24.05
Southern Department.....		1	2	37	5	20				999.51	74.64
Western Department.....				21	13					560.11	11.81
Aviation camps.....				11			1			762.71	42.90
Port of embarkation:											
Hoboken.....	7			22		3	5	1	1	3,129.38	85.75
Newport News.....	17			71	10	64				3,260.74	70.51

*Cases of special diseases reported during the week ended June 13, 1919—Continued.*

Camp.	Pneu- mo- nia.	Dys- en- tery.	Ma- laria.	Venereal diseases.		Influ- enza.	Meas- les.	Men- ingi- tis.	Scar- let fever.	Annual ad- mission rate per 1,000 (disease only).	Nonef- fective per 1,000 on day of report.
				Total.	New infect- ions.						
Fort Monroe.....				3						542.76	20.53
Alcatraz disciplinary bar- racks.....										771.51	17.80
Leavenworth disciplinary barracks.....										707.83	43.16
Columbus Barracks.....				3	1					736.28	30.03
Jefferson Barracks.....				2	2				1	4,635.95	15.30
Fort Logan.....				8	8	1				1,259.14	45.91
Fort McDowell.....				8						1,259.51	38.06
Fort Sill.....				7	1					390.87	21.29
Fort Slocum.....				1	1					920.35	29.27
Fort Thomas.....				3	1					840.79	41.04
West Point.....				2						450.59	12.93
Arsenals.....				5						604.65	31.67
Miscellaneous small sta- tions.....				8	4					541.04	25.63
Total.....	39	1	8	547	98	96	14	2	3	1,091.26	52.53

*Number of deaths at large camps in United States, week ended June 13, 1919.*

Camp.	Strength.	Deaths.		Camp.	Strength.	Deaths.	
		All causes.	Disease only.			All causes.	Disease only.
Benning.....	1,615	0		Sherman.....	8,553	1	1
Bowie.....	3,824	0		Taylor.....	6,994	0	
Bragg.....	657	0		Travis.....	2,247	0	
Custer.....	2,981	0		Upton.....	10,364	0	
Devens.....	13,016	4	0	Northeastern Depart- ment.....	2,801	0	
Dix.....	17,891	0		Eastern Department.....	11,295	0	
Dodge.....	5,553	3	3	Southeastern Depart- ment.....	3,528	1	1
Funston.....	4,320	0		Central Department.....	3,076	0	
Gordon.....	4,062	0		Southern Department.....	29,035	4	1
Grant.....	8,013	1	1	Western Department.....	8,634	1	1
Humphreys.....	1,880	0		Aviation camps.....	14,597	0	
Jackson.....	4,019	0		Port of embarkation:			
Kearny.....	1,566	1	0	Hoboken.....	35,468	16	16
Henry Knox.....	9,087	1	1	Newport News.....	26,569	0	
Lee.....	9,107	1	1	All others.....	79,464	41	38
Lewis.....	3,173	1	1	Total.....	347,977	79	66
Meade.....	7,927	3	1				
Pike.....	3,445	0					
Holabird.....	515	0					
Shelby.....	2,698	0					

*Annual admission rate per 1,000 for certain diseases.*

Disease.	Troops in United States.		American Expedi- tionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia.....	5.82	10.20	4.52	3.50
Dysentery.....	.14	.00	.15	.28
Malaria.....	1.19	.80	.39	.77
Venereal.....	81.75	69.18	57.48	57.30
Paratyphoid.....	.00	.00	.07	.00
Typhoid.....	.59	.00	.00	.28
Measles.....	2.09	.67	1.56	1.19
Meningitis.....	.29	.26	.54	.84
Scarlet fever.....	.44	1.61	.39	.35
Influenza.....	14.34	16.11		

## CURRENT STATE SUMMARIES.

## Telegraphic Reports for Week Ended June 21, 1919.

**Alabama.**—State totals: Typhoid fever 9, malaria 21, smallpox 11, measles 8, scarlet fever 5, diphtheria 2, pulmonary tuberculosis 24, infantile paralysis 5, chicken pox 8, venereal diseases 77.

**Arkansas.**—Malaria 119, tuberculosis 32, pellagra 22, chicken pox 17, whooping cough 11, dysentery 15 cases and 4 deaths, typhoid fever 6, influenza 4, smallpox 3, scarlet fever 2, trachoma 1.

**California.**—Smallpox: Cases reported 27, of which in Fresno County 6, Stockton 7, San Francisco 8, San Jose 4, Eureka 1, Oakland 1. Typhoid fever: Cases reported 15, scattered over the State. Epidemic cerebrospinal meningitis: Anaheim 1, Sacramento 1. Influenza, cases reported 37.

**Connecticut.**—State totals: Poliomyelitis, New Milford 1.

**Delaware.**—Diphtheria: Smyrna 1, Wilmington 2. Measles: Wilmington 1. Scabies: Middletown 1. Tuberculosis: Dover 1, Wilmington 3. Chancroid: Dover 1, Wilmington 3. Gonorrhea: Dover 1, Millsboro 2, Selbyville 1, Wilmington 13. Syphilis: Milford 1, Wilmington 1.

**Florida.**—State totals: Typhoid fever 19, malaria 16, smallpox 1, scarlet fever 4, diphtheria 2, dysentery 7.

**Georgia.**—State totals: Hookworm 1, cerebrospinal meningitis 1, chicken pox 6, diphtheria 4, dysentery (amebic) 2, dysentery (bacterial) 27, gonorrhea 38, malaria 34, measles 16, mumps 21, pneumonia (acute lobar) 8, scarlet fever 6, septic sore throat 3, smallpox 26, syphilis 16, tuberculosis (pulmonary) 17, typhoid fever 40, whooping cough 17.

**Illinois.**—Diphtheria: Cases reported 96, of which in Chicago 65, Galesburg 3, East Moline 3. Scarlet fever: Cases reported 49, of which in Chicago 40. Smallpox: Cases reported 86, of which in Sullivan 15, Peoria 12, Sawyerville 6, Witt 5, Indian Creek Township (White County) 5, White Hall 4, Galesburg 4, Rockford 4, Granite City 3. Poliomyelitis, 2 cases reported from Chicago. Lethargic encephalitis, 1 case reported from Jersey Township (Jersey County). Gonorrhea 113, syphilis 42.

**Indiana.**—Reports follow by counties: Scarlet fever: Elkhart and St. Joseph. Diphtheria: Johnson 3, Hendricks 1, White 1, Grant 1, Kosciusko 1, and Montgomery 1. Syphilis 33, gonorrhea 53, chancroid 1.

**Iowa.**—Chancroid: Council Bluffs 1. Chicken pox: Davenport 7. Diphtheria: Barnes City 1, Brooklyn 1, Cedar Rapids 1, Council Bluffs 1, Davenport 4, Des Moines 2, Dubuque 1, Ireton 2, Mason City 1. Gonorrhea: Boone 4, Brooklyn 1, Cedar Rapids 1, Charter Oak 1, Clear Lake 1, Council Bluffs 8, Davenport 8, Decorah 1, Dubuque 3, Fayette 1, Greene 2, Guthrie Center 1, Iowa City 1, Lytton



1, Manchester 1, Mason City 1, Muscatine 1, Nichols 1, Norway 1, Sac City 2, Shenandoah 1, Webster City 1. Measles: Council Bluffs 4. Scarlet fever: Bellevue 1, Cedar Rapids 1, Des Moines 1. Smallpox: Boone 11, Cedar Rapids 6, Cedar Falls 1, Davenport 7, Des Moines 4, Hazleton 1, Oskaloosa 3, Portsmouth 1, Searsboro 1. Syphilis: Brooklyn 2, Buffalo 1, Cedar Rapids 1, Council Bluffs 7, Davenport 5, Decorah 1, Dubuque 1. Whooping cough: Council Bluffs 1. In rural districts of the following counties: Diphtheria: Benton 1, Buena Vista 1, Keokuk 2. Scarlet fever: Crawford 1, Franklin 1, Lee 1, Webster 1, Winnebago 1, Winneshiek 1. Smallpox: Marshall 1, Potawatamie 3.

*Kansas.*—St. Francis reports 1 case meningitis. State totals: Smallpox 97, diphtheria 15, scarlet fever 42, influenza 18.

*Louisiana.*—Poliomyelitis 1, encephalitis 1, typhoid fever 69 (41 delayed reports), smallpox 5, pellagra 11, leprosy 1, gonorrhea 133, syphilis 75, chancroid 14.

*Maine.*—Chancroid: Rumford 1. Chicken pox: Portland 2. Diphtheria: Bristol 2, Fairfield 1, Van Buren 1, Winslow 1, Bucksport 1. Gonorrhea, 34. Measles: Portland 1. Scarlet fever: Rockland 2, Forest City 2, Winslow 3, Portland 8. Smallpox: Van Buren 3, Columbia Falls 2, Topsham 1. Syphilis: 25. Tuberculosis: 12. Typhoid fever: Belfast 2, Portland 1, Van Buren 1, Fairfield 1, Augusta 1. Whooping cough: Freeport 4.

*Massachusetts.*—Unusual prevalence of whooping cough, Salisbury reporting 29 cases and Pittsfield 26 cases.

*Minnesota.*—Smallpox (new foci): Becker County (Detroit Township) 1, Kanabec County (Kanabec Township) 11, Ramsey County (New Canada Township) 8. Syphilis 56, gonorrhea 67, chancroid 4.

*New Jersey.*—Cases reported: Influenza 4, pneumonia 41. Smallpox reported from Willingboro Township (Burlington County) and Camden city (Camden County). No unusual prevalence of other diseases reported.

*New York.*—State reports exclusive of New York City: Typhoid fever 29, measles 310, scarlet fever 72, whooping cough 59, diphtheria 185, smallpox 5, of which in Oswego town 2, Oneonta 1, Spencer 2; cerebrospinal meningitis 4, of which in Frankfort 1, Glen Cove 1, Roseton 1, Bedford 1; poliomyelitis, 1 case in Auburn; pneumonia 33. Voluntary reports: Syphilis 177, gonorrhea 29.

*North Carolina.*—State totals: Whooping cough 155, measles 104, diphtheria 16, scarlet fever 4, septic sore throat 2, smallpox 31, chicken pox 20, infantile paralysis 1, typhoid fever 105, epidemic meningitis 1, lobar pneumonia 3, cholera infantum 23, bacillary dysentery 8, paratyphoid fever 1, gonorrhea 118, syphilis 60, gonorrhea and syphilis 4, chancroid 3, syphilis and chancroid 2, gonorrhea and chancroid 2, balanitis 1.

*Ohio*.—Scarlet fever, additional cases: Cincinnati 21, Lima 42; new cases, Columbus 23. Smallpox, additional cases: Youngstown 17, Hamilton 8, Avon 7, Yellow Springs 14; new cases, Girard (Trumbull County) 8, Toronto (Jefferson County) 4. Diphtheria: Columbus 10 cases; additional cases from Cincinnati, 12.

*Oregon*.—Influenza: Portland reports 1 case and Hood River 4 cases.

*Vermont*.—No unusual prevalence or outbreak.

*Virginia*.—Smallpox: Norfolk 3, Rockbridge 1. Cerebrospinal meningitis: Norfolk 1.

*Washington*.—Unusual prevalence of contagious diseases reported. Smallpox: Seattle 16, Yakima 12. Scarlet fever: Seattle 14, Spokane 18, Othello 3.

*West Virginia*.—Diphtheria: Charleston 2, Elkins 1, Montgomery 1, New Martinsville 1. Measles: Beckley 2, Charleston 3, Charlestown 1, Fairmont 8, Keyser 1, Martinsburg 1, Morgantown 1, Sutton 1, Weston 7, Wheeling 1. Scarlet fever: Bluefield 2, Charleston 2, Fairmont 4, Martinsburg 4, Parkersburg 2, Wellsburg 1. Smallpox: Beckley 1, Bluefield 2, Charleston 1, Clarksburg 1, Grafton 1, Wellsburg 3, Weston 10, Williamson 1. Typhoid fever: Charleston 1, Fairmont 1, Hinton 1, Morgantown 2, Wellsburg 1, Weston 1, Wheeling 1.

### CEREBROSPINAL MENINGITIS.

#### State Reports for April and May, 1919.

Place.	New cases reported.	Place.	New cases reported.
Connecticut (May):		New York (April):	
Fairfield County—		Albany County—	
Norwalk.....	2	Albany.....	1
Hartford County—		Chemung County—	
Hartford.....	1	Elmira.....	1
New Haven County—		Erie County—	
New Haven.....	6	Buffalo.....	1
Waterbury.....	1	Lackawanna.....	3
Total.....	10	Herkimer County—	
		Newport.....	1
Illinois (May):		Nassau County—	
Cook County—		Hempstead (town).....	1
Chicago.....	17	Hempstead.....	2
Kane County—		Orange County—	
Batavia.....	1	Newburgh.....	2
Total.....	18	Suffolk County—	
		Islip (town).....	1
Louisiana (May):		Westchester County—	
Madison Parish.....	1	Dobbs Ferry.....	1
Orleans Parish.....	1	Tarrytown.....	1
Vermillion Parish.....	1	North Tarrytown.....	2
Total.....	3	New York City.....	43
		Total.....	60
New Jersey (May):		New York (May):	
Cumberland County.....	1	Chautauqua County—	
Essex County.....	8	Jamestown.....	1
Mercer County.....	1	Erie County—	
Middlesex County.....	2	Buffalo.....	1
Passaic County.....	2	Lackawanna.....	1
Somerset County.....	1	Oneida County—	
Union County.....	1	Utica.....	2
Total.....	16	Orange County—	
		Middletown.....	1
		Rensselaer County—	
		Troy.....	1

**CEREBROSPINAL MENINGITIS—Continued.****State Reports for April and May, 1919—Continued.**

Place.	New cases reported.	Place.	New cases reported.
New York (May)—Continued.		Wisconsin (May):	
Westchester County—		Adams County.....	2
White Plains.....	1	Columbia County.....	1
New York City.....	48	Milwaukee County.....	8
Total.....	56	Shawano County.....	1
West Virginia (May):		Walworth County.....	1
Preston County.....	1	Total.....	13

**City Reports for Week Ended June 7, 1919.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	2	1	Kansas City, Mo.....	1	.....
Boston, Mass.....	1	2	Leominster, Mass.....	1	1
Bridgeport, Conn.....	.....	1	Lincoln, Nebr.....	.....	1
Chicago, Ill.....	3	.....	Malden, Mass.....	1	1
Cleveland, Ohio.....	1	.....	Milwaukee, Wis.....	1	1
Columbus, Ga.....	1	.....	Newark, N. J.....	2	1
Detroit, Mich.....	3	1	Newport News, Va.....	1	.....
Elgin, Ill.....	2	1	New York, N. Y.....	7	4
Fond du Lac, Wis.....	1	.....	Philadelphia, Pa.....	1	.....
Fort Worth, Tex.....	1	.....	St. Louis, Mo.....	1	.....
Fresno, Calif.....	.....	1	Salem, Mass.....	.....	1
Greenville, S. C.....	1	.....	Waco, Tex.....	.....	1
Haverhill, Mass.....	.....	1	Waltham, Mass.....	.....	1
Ironwood, Mich.....	1	.....	Wilkes-Barre, Pa.....	1	.....
Kansas City, Kans.....	1	.....	Yonkers, N. Y.....	1	.....

**CHANCROID.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

Cases.	Cases.
Gas and Flame school zone, Ga. and Ala..... 2	Gulfport health district, Miss..... 1
Camp Gordon zone, Ga..... 2	Camp Polk zone, N. C..... 1

**DIPHTHERIA.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

Cases.	Cases.
Camp Merritt zone, N. J..... 1	Camp Travis zone, Tex..... 2
Portsmouth and Norfolk County health district, Va..... 2	Wilmington sanitary district, N. C..... 1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1452.

**GONORRHEA.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

Cases.	Cases.
Fayetteville sanitary district, N. C..... 6	Camp Polk zone, N. C..... 4
Gas and Flame school zone, Ga. and Ala..... 12	Portsmouth and Norfolk County health district, Va..... 1
Camp Gordon zone, Ga..... 9	Camp Sherman zone, Ohio..... 1
Gulfport health district, Miss..... 6	Camp Travis zone, Tex..... 12
Camp Jackson zone, S. C..... 13	Wilmington sanitary district, N. C..... 7
Camp Lee zone, Va..... 3	
Pieric Acid plant zone, Ga..... 4	

## INFLUENZA.

## Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala.....	1	Camp Travis zone, Tex.....	1

## LEPROSY.

## San Francisco, Calif., Week Ended June 7, 1919.

During the week ended June 7, 1919, one death from leprosy was reported in San Francisco, Calif.

## LETHARGIC ENCEPHALITIS.

## State Reports for May, 1919.

Place.	New cases reported.	Place.	New cases reported.
<b>Illinois:</b>		<b>Illinois—Continued.</b>	
Cook County—		Sangamon County—	
Chicago.....	1	Springfield.....	1
Du Page.....	1	Wayne County—	
Bloomington.....	1	Fairfield.....	1
Fayette County—		Total.....	8
Ramsey.....	1		
Johnson County—		Louisiana.....	1
Tunnel Hill township.....	1		
Mason County—		Rhode Island.....	1
Bath township.....	1		
Ogle County—			
Oregon.....	1		

## MALARIA.

## Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala.....	5	Camp Travis zone, Tex.....	2
Gulfport health district, Miss.....	35	Wilmington sanitary district, N. C.....	2

## State Reports for May, 1919.

Place.	New cases reported.	Place.	New cases reported.
<b>Florida:</b>		<b>Louisiana—Continued.</b>	
Alachua County.....	1	Calcasieu Parish.....	3
Bay County.....	1	Concordia Parish.....	1
Columbia County.....	1	DeSoto Parish.....	6
Duval County.....	1	Grant Parish.....	3
Jacksonville.....	4	Iberville Parish.....	2
Escambia County.....	1	Jefferson Parish.....	1
Franklin County.....	2	Lafayette Parish.....	2
Gadsden County.....	1	Morehouse Parish.....	3
Hillsboro County.....	1	Orleans Parish.....	1
Tampa.....	2	Pointe Coupee Parish.....	1
Holmes County.....	3	St. Charles Parish.....	4
Levy County.....	5	St. James Parish.....	1
Marion County.....	9	St. John Parish.....	1
Sumter County.....	1	St. Martin Parish.....	2
Suwannee County.....	1	St. Tammany Parish.....	19
Taylor County.....	2	Tangipahoa Parish.....	3
Volusia County.....	2	Vermillion Parish.....	4
Total.....	38	Washington Parish.....	1
		Total.....	76
<b>Illinois:</b>		<b>New Jersey:</b>	
Perry County—		Bergen County.....	1
Duquoin.....	2	Essex County.....	2
		Mercer County.....	2
<b>Louisiana:</b>		Passaic County.....	4
Acadia Parish.....	8	Somerset County.....	3
Allen Parish.....	2	Total.....	12
Ascension Parish.....	1		
Assumption Parish.....	5		
Bienville Parish.....	2		

## MALARIA—Continued.

## City Reports for Week Ended June 7, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	5	.....	Newark, N. J.....	1	.....
Dedham, Mass.....	1	.....	Richmond, Va.....	3	.....
Detroit, Mich.....	.....	1	San Antonio, Tex.....	2	1
Houston, Tex.....	1	1	Savannah, Ga.....	3	1
Little Rock, Ark.....	3	.....	Tuscaloosa, Ala.....	1	.....
Long Beach, Calif.....	1	.....	Wilmington, N. C.....	.....	2
Long Branch, N. J.....	1	.....	Winston-Salem, N. C.....	1	.....

## MEASLES.

## Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala.....	3	Camp Travis zone, Tex.....	1
Camp Gordon zone, Ga.....	6	Camp Upton zone, N. Y.....	1
Gulfpport health district, Miss.....	6	Wilmington sanitary district, N. C.....	1
Portsmouth and Norfolk County health district, Va.....	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1452.

## PELLAGRA.

## Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala.....	1	Pieric Acid plant zone, Ga.....	1
Gulfpport health district, Miss.....	2	Wilmington sanitary district, N. C.....	1

## State Reports for May, 1919.

Place.	New cases reported.	Place.	New cases reported.
Florida:		Louisiana—Continued.	
Escambia County.....	1	Morehouse Parish.....	2
Franklin County.....	2	Natchitoches Parish.....	2
Gadsden County.....	2	Richland Parish.....	1
Manatee County.....	4	St. John the Baptist Parish.....	1
Putnam County.....	1	Total.....	11
Seminole County.....	1		
Walton County.....	3	Rhode Island:	
Total.....	14	Pawtucket.....	1
Louisiana:		West Virginia:	
Bienville Parish.....	1	Lewis County.....	2
Caddo Parish.....	1	Mingo County.....	1
Claiborne Parish.....	1	Total.....	3
De Soto Parish.....	1		
La Salle Parish.....	1		

## City Reports for Week Ended June 7, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.....	.....	4	Fort Worth, Tex.....	1	1
Birmingham, Ala.....	.....	2	Little Rock, Ark.....	1	.....
Charleston, S. C.....	.....	2	Pasadena, Calif.....	1	.....
Charlotte, N. C.....	.....	2	Portsmouth, Va.....	.....	1
Colorado Springs, Colo.....	1	.....	Richmond, Va.....	1	.....
Danvers, Mass.....	1	.....	Riverside, Calif.....	1	.....

## PNEUMONIA.

## Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala.....	2	Camp Upton zone, N. Y.....	2
Gulfport health district, Miss.....	1		

## City Reports for Week Ended June 7, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio.....	3	.....	.....	.....	Lynn, Mass.....	2	1	.....	.....
Anniston, Ala.....	2	.....	.....	.....	Manchester, N. H.....	1	1	.....	.....
Appleton, Wis.....	.....	.....	1	1	Morgantown, W. Va.....	1	.....	.....	.....
Atlanta, Ga.....	1	5	.....	.....	Mount Vernon, N. Y.....	4	1	.....	.....
Baltimore, Md.....	9	6	.....	.....	Natick, Mass.....	1	.....	.....	.....
Bellaire, Ohio.....	1	.....	.....	.....	Newark, N. J.....	22	3	.....	.....
Belleville, N. J.....	1	.....	.....	.....	New Bedford, Mass.....	1	2	.....	.....
Benton Harbor, Mich.....	1	.....	.....	.....	Newburgh, N. Y.....	1	1	.....	.....
Bloomfield, N. J.....	.....	.....	1	.....	Newburyport, Mass.....	1	1	.....	.....
Boston, Mass.....	26	16	.....	.....	New Orleans, La.....	1	3	.....	.....
Cambridge, Mass.....	6	2	.....	.....	Newport, Ky.....	1	1	.....	.....
Camden, N. J.....	1	.....	.....	.....	Newton, Mass.....	1	.....	.....	.....
Chicago, Ill.....	.....	.....	162	49	New York, N. Y.....	.....	.....	19	122
Cleveland, Ohio.....	11	8	.....	.....	North Adams, Mass.....	2	1	.....	.....
Columbus, Ga.....	1	1	.....	.....	Northampton, Mass.....	2	.....	.....	.....
Corpus Christi, Tex.....	1	.....	.....	.....	Philadelphia, Pa.....	28	29	.....	.....
Dayton, Ohio.....	3	3	.....	.....	Pittsfield, Mass.....	1	1	.....	.....
Detroit, Mich.....	4	10	7	14	Pontiac, Mich.....	1	.....	.....	.....
Duluth, Minn.....	2	.....	.....	.....	Rochester, N. Y.....	2	1	.....	.....
Easthampton, Mass.....	.....	.....	1	.....	Rome, N. Y.....	2	.....	.....	.....
Elmira, N. Y.....	1	.....	.....	.....	San Antonio, Tex.....	2	2	.....	.....
Fall River, Mass.....	3	1	.....	.....	Sandusky, Ohio.....	.....	.....	1	.....
Fitchburg, Mass.....	1	1	.....	.....	San Francisco, Calif.....	12	5	.....	.....
Hackensack, N. J.....	.....	.....	1	.....	Santa Barbara, Calif.....	1	.....	.....	.....
Hoquiam, Wash.....	1	.....	.....	.....	Saugus, Mass.....	.....	.....	1	1
Jamestown, N. Y.....	.....	.....	5	.....	Sault Ste. Marie, Mich.....	1	.....	.....	.....
Janesville, Wis.....	1	1	.....	.....	Schenectady, N. Y.....	1	.....	.....	.....
Kansas City, Kans.....	1	.....	.....	.....	Somerville, Mass.....	3	1	.....	.....
Kansas City, Mo.....	.....	.....	2	5	Springfield, Mass.....	1	1	.....	.....
Lackawanna, N. Y.....	2	.....	.....	.....	Trenton, N. J.....	1	.....	.....	.....
Little Rock, Ark.....	1	1	.....	.....	Waco, Tex.....	.....	.....	1	.....
Los Angeles, Calif.....	3	2	3	3	Winston-Salem, N. C.....	2	1	.....	.....
Louisville, Ky.....	1	6	.....	.....	Worcester, Mass.....	1	3	.....	.....
Lowell, Mass.....	3	.....	.....	.....					

## POLIOMYELITIS (INFANTILE PARALYSIS).

## State Reports for April and May, 1919.

Place.	New cases reported.	Place.	New cases reported.
Florida (May):		New Jersey (May):	
Pensacola.....	1	Bergen County.....	1
Illinois (May):		Hudson County.....	2
Cook County—		Morris County.....	1
Chicago.....	12	Total.....	4
Chicago Heights.....	1		
Total.....	13	New York (April):	
Louisiana (May):		Broome County—	
Richland Parish.....	1	Union (town).....	1
St. Landry Parish.....	1	Dutchess County—	
Total.....	2	Poughkeepsie (town).....	1
Michigan (May):		Herkimer County—	
Berrien County—		Herkimer.....	1
Sodus Township.....	1	Westchester County—	
Three Oaks Township.....	1	North Tarrytown.....	1
Total.....	2	New York City.....	2
		Total.....	6

**POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.****State Reports for April and May, 1919—Continued.**

Place.	New cases reported.	Place.	New cases reported.
<b>New York (May):</b>		<b>West Virginia (May):</b>	
Dutchess County—		Logan County.....	2
Poughkeepsie.....	1	Wood County.....	3
Orange County—		Wyoming County.....	4
Middletown.....	1	Total.....	9
Schenectady County—			
Princtown (town).....	1	<b>Wisconsin (May):</b>	
Suffolk County—		Kenosha County.....	1
Brookhaven (town).....	1	Milwaukee County.....	1
New York City.....	3	Total.....	2
Total.....	7		
<b>Rhode Island (May):</b>			
East Providence.....	1		

**City Reports for Week Ended June 7, 1919.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Bluefield, W. Va.....	1	.....	New Orleans, La.....	1	.....
Chicago, Ill.....	.....	1	Washington, Pa.....	1	.....

**RABIES IN ANIMALS.****La Crosse, Wis., Lawrence, Kans., Rochester, N. Y.**

During the week ended June 7, 1919, cases of rabies in animals were reported as follows: La Crosse, Wis., 1; Lawrence, Kans., 2; Rochester, N. Y., 1.

**SCARLET FEVER.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

	Cases.		Cases.
Camp Gordon zone, Ga.....	1	Camp Sherman zone, Ohio.....	1
Gulfport health district, Miss.....	2	Wilmington sanitary district, N. C.....	1
Portsmouth and Norfolk County health district, Va.....	3		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1452.

**SMALLPOX.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala.....	1	Camp Polk zone, N. C.....	3
Camp Gordon zone, Ga.....	9	Portsmouth and Norfolk County health district, Va.....	4
Camp Jackson zone, S. C.....	1		

## SMALLPOX—Continued.

## State Reports for April and May, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
<b>Florida (May):</b>						
Duval County.....	2				2	
Jacksonville.....	2					2
Escambia County.....	1				1	
Hillsboro County.....	1				1	
Tampa.....	1					1
Marion County.....	3			1	2	
<b>Total.....</b>	<b>10</b>			<b>1</b>	<b>6</b>	<b>3</b>
<b>Michigan (May):</b>						
Isabella County—						
Broomfield Township.....	4			1	2	1
Coe Township.....	9				9	
Deerfield Township.....	6				6	
Nottawa Township.....	2				2	
Rolland Township.....	8				8	
Sherman Township.....	2				2	
Vernon Township.....	1				1	
Jackson County—						
Jackson.....	4				3	1
Kalamazoo County—						
Kalamazoo Township.....	8		4		4	
Kalamazoo.....	11				11	
Richland Township.....	3				3	
Kent County—						
Grand Rapids.....	2				2	
Wyoming Township.....	6				6	
Keweenaw County—						
Allonez Township.....	50		1	14	35	
Lapeer County—						
Elba Township.....	1				1	
Lenawee County—						
Fairfield Township.....	3			1	2	
Palmyra Township.....	2				2	
Tocumseh Township.....	1				1	
Marquette County—						
Marquette.....	2				2	
Midland County—						
Lee Township.....	1				1	
Monroe County—						
Monroe.....	2				2	
Muskegon County—						
Muskegon Heights.....	2				1	1
Oakland County—						
Pontiac.....	3				3	
Ottawa County—						
Georgetown Township.....	4		3		1	
Van Buren County—						
Covert Township.....	1			1		
Saginaw County—						
Saginaw.....	1			1		
Tittabawassee Township.....	1				1	
Allegan County—						
Plainwell.....	3			1	2	
Antrim County—						
Mancelona.....	1				1	
Barry County—						
Assyria Township.....	2				2	
Barry Township.....	1				1	
Calhoun County—						
Battle Creek.....	15			2	13	
Clare County—						
Garfield Township.....	1				1	
Summerfield Township.....	1				1	
Clinton County—						
Bath Township.....	8			1	7	
Dewitt Township.....	4			2	2	
Eaton County—						
Benton Township.....	2				2	
Delta Township.....	4			1	3	
Grand Ledge.....	5				5	
Pottersville.....	4			1	3	
Windsor Township.....	1					1



## SMALLPOX—Continued.

## State Reports for April and May, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan (May)—Continued.						
Genesee County—						
Flint.....	4				4	
Gogebic County—						
Bessemer Township.....	3				2	1
Gratiot County—						
Alma.....	8				8	
Ithaca.....	6				6	
Houghton County—						
Adams Township.....	6				6	
Houghton.....	3					3
Portage Township.....	1				1	
South Range.....	16		6	1	9	
Ingham County—						
Delhi Township.....	1				1	
Lansing.....	60		1		58	1
Meridian Township.....	4				4	
Stockbridge.....	1			1		
Williamston Township.....	1				1	
Shiawassee County—						
Byron.....	1				1	
Lansburg.....	6		1		5	
New Haven Township.....	1				1	
Perry.....	1				1	
Woodhull Township.....	1				1	
St. Clair County—						
Mussey Township.....	1		1			
Washtenaw County—						
Ann Arbor.....	2				2	
Wayne County—						
Detroit.....	19		1		15	3
Highland Park.....	1		1			
Total.....	339		19	28	280	12
New Jersey (May): -						
Atlantic County.....	1				1	
Burlington County.....	17			3	14	
Camden County.....	3				3	
Cape May County.....	6			1	5	
Essex County.....	1				1	
Total.....	28			4	24	
New York (April):						
Delaware County—						
Franklin (town).....	1				1	
Erie County—						
Buffalo.....	3				1	3
Amherst (town).....	1				1	
North Collins (town).....	12			1	11	
Monroe County—						
Rochester.....	1				1	
Otsego County—						
Schenevus.....	1				1	
New York City.....	8					8
Total.....	27			1	15	11
New York (May):						
Chemung County—						
Elmira Heights.....	1				1	
Erie County—						
North Collins (town).....	11			1	9	1
North Collins.....	3			1	2	
Niagara County—						
Niagara Falls.....	1				1	
Orange County—						
Blooming Grove (town).....	1				1	

## SMALLPOX—Continued.

## State Reports for April and May, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
New York (May)—Continued.						
Otsego County—						
Oneonta.....	1	.....	1			
Maryland.....	5	.....			5	
Schenevus.....	2	.....			2	
Rockland County—						
Orangetown (town).....	1	.....		1		
Tioga County—						
Spencer (town).....	1	.....			1	
New York City.....	1	.....				1
Total.....	28	.....	1	3	22	2
Wisconsin (May):						
Adams County.....	1	.....			1	
Ashland County.....	1	.....				1
Barron County.....	16	.....	6	5	4	1
Brown County.....	4	.....		4		
Chippewa County.....	14	.....	1		9	4
Clark County.....	10	.....	2	2	6	
Columbia County.....	2	.....			1	1
Dane County.....	6	.....	4		2	
Douglas County.....	14	.....	6	4	4	
Eau Claire County.....	4	.....				4
Fond du Lac County.....	6	.....				6
Grant County.....	2	.....	2			
Green County.....	4	.....			4	
Green Lake County.....	8	.....	2	3	3	
Jefferson County.....	2	.....				2
Kenosha County.....	2	.....				2
La Crosse County.....	2	.....			2	
Manitowoc County.....	6	.....			6	
Marquette County.....	11	.....		2	9	
Milwaukee County.....	58	.....			3	55
Monroe County.....	1	.....	1			
Outagamie County.....	4	.....	1			3
Portage County.....	5	.....			3	2
Price County.....	3	.....			2	1
Racine County.....	33	.....	33			
Rock County.....	2	.....			2	
Taylor County.....	14	.....				14
Waukesha County.....	1	.....			1	
Waupaca County.....	9	.....			9	
Winnebago County.....	62	.....	13	15	10	24
Wood County.....	4	.....			4	
Total.....	311	.....	71	35	85	120

## State Reports for May, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Illinois:			Illinois—Continued.		
Adams County—			Cook County—		
Lima Township.....	1	.....	Chicago.....	10	.....
Alexander County—			Chicago Heights.....	2	.....
Tamms.....	4	.....	Dupage County—		
Bond County—			York Township.....	3	.....
Burgess Township.....	1	.....	Fayette County—		
Cass County—			Avena Township.....	6	.....
Beardstown.....	1	.....	Hurricane Township.....	2	.....
Champaign County—			Fulton County—		
Champaign.....	5	.....	Canton.....	1	.....
Ogden Township.....	1	.....	Canton Township.....	4	.....
Sadams Township.....	1	.....	Greene County—		
Urbana.....	1	.....	Walkerville Township.....	6	.....
Urbana Township.....	2	.....	Hamilton County—		
Christian County—			McLeansboro.....	21	.....
Stonington.....	1	.....			

## SMALLPOX—Continued.

## State Reports for May, 1919—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Illinois—Continued.			Illinois—Continued.		
Henry County—			Stephenson County—		
Kewanee.....	1	.....	Freeport.....	1	.....
Kane County—			Rock City.....	1	.....
Aurora.....	11	.....	Tazewell County—		
Dundee Township.....	2	.....	East Pecora.....	5	.....
Elgin.....	1	.....	Groveland Township.....	3	.....
Hampshire.....	1	.....	Pekin.....	35	.....
Knox County—			Union County—		
East Galesburg.....	1	.....	Cobden.....	6	.....
Galesburg.....	32	.....	Cobden Precinct.....	3	.....
Rio Township.....	10	.....	Vermilion County—		
La Salle County—			Cattlin Township.....	2	.....
Cedar Point.....	15	.....	Danville Township.....	3	.....
Mendota.....	3	.....	Fairmount.....	11	.....
Lee County—			Vance Township.....	1	.....
Amboy.....	3	.....	Warren County—		
Amboy Township.....	3	.....	Monmouth.....	1	.....
Dixon.....	1	.....	Washington County—		
Sublette Township.....	4	.....	Du Bois Township.....	4	.....
Livingston County—			White County—		
Fairbury.....	2	.....	Indian Creek Town-		
Logan County—			ship.....	1	.....
Elkhart Township.....	1	.....	Maunie.....	22	.....
Macon County—			Norris City.....	22	.....
Decatur.....	2	.....	Whiteside County—		
Macoupin County—			Erie.....	3	.....
Sawyer ville.....	28	.....	Sterling.....	3	.....
Madison County—			Will County—		
East Alton.....	12	.....	Joliet.....	4	.....
Granite City.....	15	.....	Joliet Township.....	1	.....
Marion County—			Williamson County—		
Odin.....	1	.....	Johnston City.....	1	.....
Salem.....	1	.....	Winnabago County—		
Mason County—			Rockport.....	4	.....
Havana.....	3	.....	Woodford County—		
Mason City.....	1	.....	El Paso.....	1	.....
McHenry County—			Total.....	554	.....
Woodstock.....	2	.....			
McLean County—			Louisiana:		
Bloomington.....	9	.....	Acadia Parish.....	4	.....
Menard County—			Allen Parish.....	17	.....
Athens.....	2	.....	Assension Parish.....	1	.....
Mercer County—			Assumption Parish.....	4	.....
Aledo.....	7	.....	Avozelles Parish.....	1	.....
Greene Township.....	1	.....	Beauregard Parish.....	2	.....
Preemption Township.....	4	.....	Bienville Parish.....	3	.....
Seaton.....	4	.....	Bossier Parish.....	1	.....
Morgan County—			Caddo Parish.....	14	.....
Jacksonville.....	3	.....	Calcasieu Parish.....	10	.....
Meredosia.....	1	.....	East Baton Rouge Parish.....	14	.....
Ogle County—			Evangeline Parish.....	5	.....
Lynnville Township.....	4	.....	Iberia Parish.....	1	.....
Rochelle.....	1	.....	Iberville Parish.....	2	.....
Peoria County—			Jackson Parish.....	1	.....
Averyville.....	2	.....	Jefferson Parish.....	1	.....
Hollis Township.....	1	.....	Jefferson Davis Parish.....	2	.....
Kingston Mines.....	1	.....	Lafayette Parish.....	20	.....
Peoria.....	42	.....	Orleans Parish.....	6	.....
Pulaski County—			Rapides Parish.....	3	.....
Allin Precinct.....	17	.....	Richland Parish.....	3	.....
Randolph County—			St. Martin Parish.....	9	.....
Percy.....	1	.....	St. Mary Parish.....	1	.....
Richland County—			Tangipahoa Parish.....	4	.....
Decker Township.....	8	.....	Vermilion Parish.....	4	.....
Noble Township.....	1	.....	Winn Parish.....	2	.....
Rock Island County—			Total.....	131	.....
Coal Valley.....	1	.....			
East Moline.....	1	.....	Rhode Island:		
Rock Island.....	71	.....	Providence.....	1	.....
Rural Township.....	1	.....			
Sangamon County—			West Virginia:		
Auburn Township.....	1	.....	Barbour County.....	1	.....
Springfield.....	1	.....	Boone County.....	1	.....
St. Clair County—					
Belleville.....	1	.....			
Lebanon.....	1	.....			

## SMALLPOX—Continued.

## State Reports for May, 1919—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
West Virginia—Continued.			West Virginia—Continued.		
Brooke County.....	5	.....	Ohio County.....	3	.....
Fayette County.....	33	.....	Preston County.....	33	.....
Greenbrier County.....	3	.....	Raleigh County.....	5	.....
Harrison County.....	6	.....	Roane County.....	11	.....
Kanawha County.....	7	.....	Summers County.....	3	.....
Lewis County.....	5	.....	Taylor County.....	1	.....
Logan County.....	14	.....	Upshur County.....	16	.....
McDowell County.....	24	.....	Wayne County.....	4	.....
Marion County.....	2	.....	Wood County.....	5	.....
Mercer County.....	79	.....	Wyoming County.....	1	.....
Mineral County.....	20	.....			
Mingo County.....	28	.....	Total.....	327	.....
Monongalia County.....	8	.....			
Monroe County.....	9	.....			

## City Reports for Week Ended June 7, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, Wash.....	1	.....	Los Angeles, Calif.....	2	.....
Ablene, Tex.....	2	.....	Louisville, Ky.....	1	.....
Akron, Ohio.....	1	.....	Madison, Wis.....	1	.....
Alliance, Ohio.....	6	.....	Marinette, Wis.....	6	.....
Atlanta, Ga.....	17	.....	Marshalltown, Iowa.....	3	.....
Austin, Tex.....	1	.....	Milwaukee, Wis.....	25	.....
Battle Creek, Mich.....	1	.....	Minneapolis, Minn.....	52	.....
Birmingham, Ala.....	5	.....	Moline, Ill.....	3	.....
Bluefield, W. Va.....	4	.....	Morgantown, W. Va.....	3	.....
Boise, Idaho.....	1	.....	Muskogee, Okla.....	1	.....
Boston, Mass.....	1	.....	Newport News, Va.....	6	.....
Boulder, Colo.....	4	.....	New Orleans, La.....	4	.....
Butte, Mont.....	1	.....	Norfolk, Va.....	4	.....
Cedar Rapids, Iowa.....	13	.....	Norwood, Ohio.....	1	.....
Chanute, Kans.....	6	.....	Oakland, Calif.....	2	.....
Charlotte, N. C.....	1	.....	Oklahoma City, Okla.....	16	.....
Cheyenne, Wyo.....	3	.....	Omaha, Nebr.....	24	.....
Chicago, Ill.....	2	.....	Parsons, Kans.....	3	.....
Cincinnati, Ohio.....	6	.....	Pekin, Ill.....	11	.....
Cleveland, Ohio.....	11	.....	Peoria, Ill.....	1	.....
Colorado Springs, Colo.....	4	.....	Pocatello, Idaho.....	1	.....
Columbia, S. C.....	4	.....	Pontiac, Mich.....	3	.....
Columbus, Ga.....	3	.....	Portland, Oreg.....	47	.....
Connellsville, Pa.....	1	.....	Portsmouth, Ohio.....	2	.....
Council Bluffs, Iowa.....	1	.....	Racine, Wis.....	15	.....
Dallas, Tex.....	10	.....	Roanoke, Va.....	9	.....
Danville, Ill.....	1	.....	Rockford, Ill.....	10	.....
Davenport, Iowa.....	15	.....	Rock Island, Ill.....	12	.....
Denver, Colo.....	7	.....	St. Joseph, Mo.....	23	.....
Detroit, Mich.....	10	.....	St. Louis, Mo.....	1	.....
Duluth, Minn.....	6	.....	St. Paul, Minn.....	11	.....
Durham, N. C.....	1	.....	Salem, Oreg.....	1	.....
Everett, Wash.....	8	.....	Salt Lake City, Utah.....	8	1
Farrell, Pa.....	1	.....	San Diego, Calif.....	1	.....
Fond du Lac, Wis.....	2	.....	San Francisco, Calif.....	2	.....
Fort Wayne, Ind.....	3	.....	San Jose, Calif.....	30	.....
Fort Worth, Tex.....	5	.....	Seattle, Wash.....	12	.....
Framingham, Mass.....	1	.....	Sioux City, Iowa.....	3	.....
Galesburg, Ill.....	3	.....	South Bend, Ind.....	1	.....
Grand Rapids, Mich.....	1	.....	Spartanburg, S. C.....	1	.....
Great Falls, Mont.....	5	.....	Spokane, Wash.....	1	.....
Hogquiam, Wash.....	3	.....	Springfield, Ohio.....	1	.....
Houston, Tex.....	1	.....	Stillwater, Minn.....	2	.....
Hutchinson, Kans.....	1	.....	Superior, Wis.....	4	.....
Indianapolis, Ind.....	4	.....	Tacoma, Wash.....	4	.....
Kalamazoo, Mich.....	1	.....	Tiffin, Ohio.....	1	.....
Kansas City, Kans.....	2	.....	Topeka, Kans.....	2	.....
Kansas City, Mo.....	4	.....	Tulsa, Okla.....	2	.....
Knoxville, Tenn.....	1	.....	Utica, N. Y.....	1	.....
Kokomo, Ind.....	2	.....	Walla Walla, Wash.....	1	.....
Lafayette, Ind.....	4	.....	Washington, D. C.....	5	.....
Lexington, Ky.....	1	.....	Wichita, Kans.....	9	.....
Lincoln, Nebr.....	12	.....	Winston-Salem, N. C.....	5	.....
Little Rock, Ark.....	2	.....	Yakima, Wash.....	7	.....
Logansport, Ind.....	11	.....	Youngstown, Ohio.....	19	.....
Long Beach, Calif.....	3	.....			

**SYPHILIS.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

	Cases.		Cases.
Fayetteville sanitary district, N. C.....	3	Camp Polk zone, N. C.....	1
Gas and Flame school zone, Ga. and Ala.....	13	Camp Sherman zone, Ohio.....	1
Camp Jackson zone, S. C.....	8	Wilmington sanitary district, N. C.....	3
Picric Acid plant zone, Ga.....	2		

**TETANUS.****City Reports for Week Ended June 7, 1919.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....		1	Dedham, Mass.....	1	
Baton Rouge, La.....	1		Detroit, Mich.....		1
Brunswick, Ga.....	1		Savannah, Ga.....		1
Chicago, Ill.....	2	2			

**TUBERCULOSIS.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

	Cases.		Cases.
Camp Gordon zone, Ga.....	4	Portsmouth and Norfolk County health dis-	
Gulfport health district, Miss.....	2	trict, Va.....	2
Camp Jackson zone, S. C.....	2	Souther Field zone, Ga.....	1
Camp Lee zone, Va.....	2	Camp Travis zone, Tex.....	3
Picric Acid plant zone, Ga.....	1	Wilmington sanitary district, N. C.....	4
Camp Polk zone, N. C.....	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1452.

**TYPHOID FEVER.****Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.**

	Cases.		Cases.
Fayetteville sanitary district, N. C.....	1	Picric Acid plant zone, Ga.....	3
Gas and Flame school zone, Ga. and Ala.....	1	Camp Polk zone, N. C.....	2
Camp Gordon zone, Ga.....	1	Portsmouth and Norfolk County health dis-	
Gulfport health district, Miss.....	1	trict, Va.....	5
Camp Jackson zone, S. C.....	1	Wilmington sanitary district, N. C.....	2
Camp Lee zone, Va.....	3		

**State Reports for April and May, 1919.**

Place.	New cases reported.	Place.	New cases reported.
Connecticut (May):		Connecticut (May)—Continued.	
Fairfield County—		New London County—	
Bridgeport.....	1	New London.....	2
Danbury.....	2	Waterford.....	1
Norwalk.....	3		1
Shelton.....	3	Total.....	29
Hartford County—			
Manchester.....	1	Florida (May):	
Litchfield County—		Alachua County.....	1
Barkhamsted.....	1	Bradford County.....	1
Morris.....	1	Citrus County.....	1
Middlesex County—		Duval County—	
Saybrook.....	1	Jacksonville.....	8
New Haven County—		Escambia County.....	3
Meriden.....	1	Pensacola.....	1
New Haven.....	9	Gadsden County.....	3
Orange.....	9	Hillsborough County.....	1
Waterbury.....	2	Tampa.....	4

## TYPHOID FEVER—Continued.

## State Reports for April and May, 1919—Continued.

Place.	New cases reported.	Place.	New cases reported.
<b>Florida (May)—Continued.</b>		<b>Michigan (May)—Continued.</b>	
Lafayette County.....	1	Berrien County—	
Madison County.....	1	Eau Claire.....	1
Monroe County—		Clinton County—	
Key West.....	5	Dewitt Township.....	2
Orange County.....	2	Victor Township.....	1
Palm Beach County.....	1	Genesee County—	
Pinellas County.....	1	Flint.....	3
Putnam County.....	3	Grand Traverse County—	
St. John County.....	2	Traverse City.....	1
Sumter County.....	1	Ingham County—	
Taylor County.....	1	Ingham Township.....	1
Volusia County.....	8	Lansing.....	4
Total.....	49	Williamston Township.....	1
<b>Illinois (May):</b>		Ionia County—	
Coles County—		Ronald Township.....	1
Mattoon.....	4	Isabella County—	
Cook County—		Nottawa Township.....	1
Chicago.....	13	Kalamazoo County—	
Lake County—		Kalamazoo.....	1
Lake Forest.....	1	Kent County—	
Marion County—		Spencer Township.....	1
Alma.....	1	Wyoming Township.....	1
Odin.....	1	Muskegon County—	
Morgan County—		Muskegon Heights.....	1
Jacksonville.....	2	Oakland County—	
Randolph County—		Troy Township.....	1
Baldwin.....	1	Ottawa County—	
Rock Island County—		Holland.....	1
Rock Island.....	1	Saginaw County—	
Schuylar County—		Saginaw.....	2
Camden.....	2	Washtenaw County—	
Camden Township.....	2	Ann Arbor.....	1
Stephenson County—		Total.....	27
Freeport.....	1	<b>New Jersey (May):</b>	
Vermilion County—		Atlantic County.....	4
Danville Township.....	1	Bergen County.....	1
Will County—		Burlington County.....	3
New Lenox Township.....	1	Cumberland County.....	1
Williamson County—		Essex County.....	7
Johnston City.....	1	Gloucester County.....	2
Total.....	32	Hudson County.....	1
<b>Louisiana (May):</b>		Hunterdon County.....	1
Allen Parish.....	3	Mercer County.....	2
Ascension Parish.....	1	Monmouth County.....	4
Assumption Parish.....	1	Salem County.....	1
Beauregard Parish.....	3	Union County.....	3
Bienville Parish.....	1	Total.....	30
Caddo Parish.....	2	<b>New York (April):</b>	
Calcasieu Parish.....	2	Albany County—	
Catahoula Parish.....	2	Albany.....	4
East Baton Rouge Parish.....	9	Alleghany County—	
East Feliciana Parish.....	1	Hume (village).....	1
Franklin Parish.....	1	Wellsville (town).....	2
Iberia Parish.....	1	Broome County—	
Iberville Parish.....	2	Maine (town).....	1
Lafayette Parish.....	1	Cattaraugus County—	
Lafourche Parish.....	1	Olean.....	1
Lincoln Parish.....	2	Ischua (town).....	1
Livingston Parish.....	1	Chautauqua County—	
Madison Parish.....	1	Ellington (town).....	1
Orleans Parish.....	12	Chemung County—	
Pointe Coupee Parish.....	2	Southport (town).....	1
St. James Parish.....	1	Columbia County—	
St. John Parish.....	2	Greenport (town).....	1
St. Landry Parish.....	1	Cortland County—	
St. Martin Parish.....	9	Taylor (town).....	1
St. Mary Parish.....	3	Dutchess County—	
Tangipahoa Parish.....	1	Fishkill (town).....	1
Vermilion Parish.....	8	Erie County—	
Washington Parish.....	1	Buffalo.....	3
Winn Parish.....	1	Essex County—	
Total.....	76	Keene (town).....	1
<b>Michigan (May):</b>		Franklin County—	
Barry County—		Burke (town).....	1
Nashville.....	1	Saranac Lake (village).....	1
Bay County—		Malone (town).....	1
Bay City.....	1	Greene County—	
		Durham (town).....	1

## TYPHOID FEVER—Continued.

## State Reports for April and May, 1919—Continued.

Place.	New cases reported.	Place.	New cases reported.
New York (April)—Continued.		New York (May)—Continued.	
Herkimer County—		Niagara County—	
Herkimer (town).....	1	Lockport.....	1
Jefferson County—		Oneida County—	
Watertown.....	1	Rome.....	1
Adams (town).....	1	Ontario County—	
Wilna (town).....	1	Geneva.....	1
Madison County—		Orange County—	
Eaton (town).....	1	Newburgh.....	1
Monroe County—		Oswego County—	
Rochester.....	2	Oswego.....	6
Montgomery County—		Putnam County—	
Amsterdam (town).....	1	Brewster.....	1
Oneida County—		Rensselaer County—	
Utica.....	1	Troy.....	2
Orange County—		Brunswick (town).....	1
Newburgh.....	1	St. Lawrence County—	
Oswego County—		Canton (town).....	1
Oswego.....	1	Massena.....	1
Hastings (town).....	2	Saratoga County—	
Central Square.....	1	Mechanicville.....	1
Richland (town).....	2	South Glens Falls.....	1
Rensselaer County—		Schenectady County—	
Troy.....	1	Rotterdam (town).....	1
Brunswick (town).....	1	Schoharie County—	
Rockland County—		Cobleskill.....	1
Clarkstown (town).....	1	Steuben County—	
Saratoga County—		Corning.....	1
Mechanicville.....	1	Suffolk County—	
Schoharie County—		Babylon.....	1
Cobleskill (town).....	1	Brookhaven (town).....	1
Schoharie (town).....	1	Central Islip State Hospital.....	1
Steuben County—		Sullivan County—	
Corning (town).....	1	Rockland (town).....	1
Suffolk County—		Tompkins County—	
Brookhaven (town).....	1	Ithaca.....	1
Islip (town).....	2	Westchester County—	
Wayne County—		Mamaroneck.....	1
Sodus (town).....	1	Wyoming County—	
Westchester County—		Arcade (town).....	1
White Plains.....	1	New York City.....	32
Yonkers.....	2		
Bronxville.....	1	Total.....	99
New York City.....	28		
Total.....	82	Rhode Island (May):	
New York (May):		Providence.....	1
Albany County—		West Warwick (town).....	1
Albany.....	2	Total.....	2
Alleghany County—		West Virginia (May):	
Andover.....	2	Barbour County.....	1
Wellsville.....	1	Berkeley County.....	1
Broome County—		Brooke County.....	1
Johnson City.....	1	Calhoun County.....	1
Cattaraugus County—		Clay County.....	1
Franklinville.....	3	Doddridge County.....	10
Chenango County—		Hampshire County.....	2
Oxford.....	1	Harrison County.....	2
Clinton County—		Jackson County.....	1
Plattsburg.....	1	Kanawha County.....	3
Clinton (town).....	1	Marion County.....	3
Dutchess County—		Morgan County.....	1
Fishkill (town).....	1	Ohio County.....	3
Hudson River State Hospital.....	1	Preston County.....	1
Erle County—		Putnam County.....	3
Buffalo.....	7	Upshur County.....	2
Lackawanna.....	3	Webster County.....	1
Tonawanda.....	1	Total.....	37
Springville.....	1		
Buffalo State Hospital.....	2	Wisconsin (May):	
Genesee County—		Green Lake County.....	1
Batavia.....	1	Kenosha County.....	1
Greene County—		Lafayette County.....	2
Catskill.....	2	Marathon County.....	1
Jefferson County—		Milwaukee County.....	1
Wilna (town).....	4	Winnebago County.....	6
Livingston County—			
Springwater (town).....	3	Total.....	12
Nassau County—			
Hempstead (town).....	1		

## TYPHOID FEVER—Continued.

## City Reports for Week Ended June 7, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	.....	Los Angeles, Calif.....	4	.....
Ann Arbor, Mich.....	1	.....	Louisville, Ky.....	1	.....
Atlanta, Ga.....	4	.....	Macon, Ga.....	.....	1
Atlantic City, N. J.....	1	.....	Malden, Mass.....	1	.....
Baltimore, Md.....	1	2	Minneapolis, Minn.....	1	.....
Birmingham, Ala.....	2	.....	Nashville, Tenn.....	1	.....
Boise, Idaho.....	1	.....	New Orleans, La.....	5	1
Buffalo, N. Y.....	1	.....	Newport News, Va.....	1	.....
Butler, Pa.....	1	.....	New York, N. Y.....	9	1
Charleston, S. C.....	1	.....	Norristown, Pa.....	1	.....
Charlotte, N. C.....	.....	1	Pekin, Ill.....	1	.....
Chester, Pa.....	2	.....	Philadelphia, Pa.....	.....	2
Chicago, Ill.....	3	1	Pittsburgh, Pa.....	2	.....
Chillicothe, Ohio.....	1	.....	Pittsfield, Mass.....	1	.....
Cincinnati, Ohio.....	1	.....	Port Chester, N. Y.....	1	.....
Cleveland, Ohio.....	1	.....	Portland, Me.....	1	.....
Coffeyville, Kans.....	1	.....	Portland, Oreg.....	1	.....
Columbia, S. C.....	2	.....	Pottstown, Pa.....	1	.....
Columbus, Ga.....	1	.....	Pueblo, Colo.....	1	.....
Covington, Ky.....	2	.....	Reading, Pa.....	1	.....
Dallas, Tex.....	2	.....	Reno, Nev.....	6	.....
Dedham, Mass.....	1	.....	Richmond, Va.....	1	.....
Detroit, Mich.....	7	4	Roanoke, Va.....	1	.....
Durham, N. C.....	2	.....	Sacramento, Calif.....	.....	1
Elmira, N. Y.....	1	.....	Salt Lake City, Utah.....	1	.....
Everett, Wash.....	1	.....	Sanford, Me.....	.....	1
Fairmont, W. Va.....	3	.....	San Francisco, Calif.....	1	1
Fall River, Mass.....	1	.....	Saratoga Springs, N. Y.....	1	.....
Fort Worth, Tex.....	1	1	Saugus, Mass.....	1	.....
Framingham, Mass.....	1	.....	Savannah, Ga.....	1	.....
Great Falls, Mont.....	1	.....	Spartanburg, S. C.....	1	.....
Hartford, Conn.....	1	.....	Spokane, Wash.....	1	.....
Highland Park, Mich.....	1	.....	Steelton, Pa.....	1	.....
Houston, Tex.....	1	.....	Toledo, Ohio.....	1	.....
Ironton, Ohio.....	1	.....	Trenton, N. J.....	1	.....
Kansas City, Kans.....	1	.....	Troy, N. Y.....	1	.....
Kansas City, Mo.....	1	3	Tulsa, Okla.....	2	.....
Kenosha, Wis.....	2	.....	Tuscaloosa, Ala.....	1	.....
Kokomo, Ind.....	2	.....	Waco, Tex.....	1	1
Lancaster, Pa.....	1	.....	Wheeling, W. Va.....	1	.....
Lawrence, Mass.....	2	.....	Wilmington, Del.....	1	1
Lima, Ohio.....	1	.....	Wilmington, N. C.....	4	.....
Logansport, Ind.....	.....	1	Winston-Salem, N. C.....	4	.....

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

## State Reports for April and May, 1919.

State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
Connecticut (May).....	180	878	191
Florida (May).....	17	68	4
Illinois (May).....	668	5,204	495
Louisiana (May).....	40	52	21
Michigan (May).....	554	830	481
New Jersey (May).....	566	767	518
New York (April).....	2,082	2,057	1,233
New York (May).....	2,287	3,037	1,214
Rhode Island (May).....	53	19	56
West Virginia (May).....	51	417	275
Wisconsin (May).....	147	682	345



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

City Reports for Week Ended June 7, 1919.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Aberdeen, S. Dak.	15,926						3			
Adams, Mass.	14,406	1								
Akron, Ohio	93,604	37	4		61		6			
Alameda, Calif.	28,433	5			2					
Allentown, Pa.	65,109				75				4	
Alliance, Ohio.	19,581	3			2					1
Alton, Ill.	23,783		1		1					
Anderson, Ind.	21,250	6								1
Ann Arbor, Mich.	15,041	13	1		1		1			
Annisston, Ala.	14,326								2	
Ansonia, Conn.	16,954	2								
Appleton, Wis.	18,005	5								
Arlington, Mass.	13,073	1					1		1	
Asbury Park, N. J.	14,629	5			19					
Asheville, N. C.	25,656	9					1			5
Ashtabula, Ohio.	22,008	4	1		3					1
Atlanta, Ga.	186,144	69	2		11		4		2	5
Atlantic City, N. J.	59,515	5	1		6		1		6	
Attleboro, Mass.	19,776	2					1		1	
Auburn, N. Y.	37,823	9								
Austin, Tex.	35,612	9					2			3
Bakersfield, Calif.	17,543	10								
Baltimore, Md.	594,637	220	21	2	24		112	1	25	19
Barre, Vt.	12,401	4								
Baton Rouge, La.	17,544	4			3				2	
Battle Creek, Mich.	30,150		3		20					
Bayonne, N. J.	72,204		4		2		1		7	
Beatrice, Nebr.	10,437	3								
Beaumont, Tex.	28,851	7								
Beaver Falls, Pa.	13,749				1		1			
Bedford, Ind.	10,613						1			
Bellaire, Ohio.	14,575	6								
Bellerive, N. J.	12,797		4							
Beloit, Wis.	18,547	5	1		3		1		2	
Benton Harbor, Mich.	11,099	1			2		2			
Berkeley, Calif.	60,487	10	3	1						
Berlin, N. H.	13,892	3								
Bethlehem, Pa.	14,353		4		48					
Beverly, Mass.	22,128	8								
Biddleford, Me.	17,700	6								
Billings, Mont.	15,123	4	1		1		3			
Binghamton, N. Y.	51,864	23	1				3		1	1
Birmingham, Ala.	189,716	64			10		3	1	5	6
Boise, Idaho.	35,951	9					2			
Boston, Mass.	767,813	232	51	2	34		48		54	18
Boulder, Colo.	12,012						1			
Bradford, Pa.	22,060				1		1		2	
Bradford, Pa.	14,544				2					
Brazil, Ind.	10,472	2								1
Bridgeport, Conn.	124,724	26	3	1	2		2	1		3
Bristol, Conn.	16,318	1	1							
Brockton, Mass.	69,152	6	1				3		1	
Brookline, Mass.	33,526	11	1		2				1	
Brunswick, Ga.	10,984	2							3	
Buffalo, N. Y.	475,781	142	49	4	86		25		28	12
Burlington, Iowa.	25,144	6					2		1	1
Burlington, Vt.	21,802	10	1						1	1
Butler, Pa.	28,677	3			1					
Butte, Mont.	44,057						1		2	
Cairo, Ill.	15,995	7	2							1
Cambridge, Mass.	114,293	34	6		10				9	3
Camden, N. J.	108,117	3					3			
Canton, Ill.	13,674	4							3	
Canton, Ohio.	62,566	9			6					
Cape Girardeau, Mo.	11,146		2				1			
Carlisle, Pa.	10,795				19					
Cedar Rapids, Iowa.	38,033		1							
Centralia, Ill.	11,838	2			2		1			
Chambersburg, Pa.	12,475				1		2			
Champaign, Ill.	15,052	3								1
Chanute, Kans.	12,968	2								
Charleston, S. C.	61,041	23								3

<sup>1</sup> Population Apr. 15, 1910.

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

City Reports for Week Ended June 7, 1919—Continued.

City	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Charleston, W. Va.	31,060	2	.....	.....	2	.....	1	.....	.....	1
Charlotte, N. C.	40,759	10	.....	.....	8	.....	.....	.....	2	.....
Chelsea, Mass.	48,405	11	3	.....	.....	.....	3	.....	2	.....
Chester, Pa.	41,857	.....	1	.....	2	.....	1	.....	.....	.....
Cheyenne, Wyo.	111,320	.....	1	.....	.....	.....	.....	.....	.....	.....
Chicago, Ill.	2,547,201	668	86	5	987	11	63	1	296	9
Chicopee, Mass.	29,950	7	2	.....	.....	.....	.....	.....	2	3
Chillicothe, Ohio.	15,625	2	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Ohio.	414,248	120	8	.....	40	2	45	1	23	20
Cleveland, Ohio.	692,259	178	39	8	96	4	11	.....	40	22
Clinton, Iowa.	27,678	.....	2	.....	.....	.....	1	.....	.....	.....
Clinton, Mass.	113,075	2	.....	.....	.....	.....	1	.....	.....	.....
Coatesville, Pa.	14,998	.....	.....	.....	1	.....	.....	.....	2	.....
Coffeyville, Kans.	18,531	.....	.....	.....	1	.....	.....	.....	.....	.....
Cohoes, N. Y.	25,292	7	1	.....	.....	.....	1	.....	6	.....
Colorado Springs, Colo.	38,965	7	.....	.....	.....	.....	.....	.....	5	3
Columbus, Ga.	26,306	13	.....	.....	19	.....	1	.....	3	2
Columbus, Ohio.	220,135	63	.....	.....	16	.....	3	.....	7	6
Concord, N. H.	22,858	7	.....	.....	.....	.....	1	.....	.....	.....
Connellsville, Pa.	15,876	.....	.....	.....	.....	.....	.....	.....	2	.....
Council Bluffs, Iowa.	31,838	4	.....	.....	3	.....	.....	.....	.....	.....
Covington, Ky.	59,623	15	2	.....	1	.....	4	.....	2	2
Cranston, R. I.	26,773	8	.....	.....	.....	.....	.....	.....	1	1
Cumberland, Md.	26,686	2	1	.....	12	.....	2	.....	1	.....
Dallas, Tex.	129,788	46	2	.....	2	.....	.....	.....	5	4
Danbury, Conn.	22,931	.....	.....	.....	.....	.....	2	.....	1	.....
Danvers, Mass.	10,037	.....	1	.....	.....	.....	.....	.....	1	.....
Danville, Ill.	32,969	1	1	.....	3	.....	.....	.....	1	1
Davenport, Iowa.	49,618	.....	1	.....	.....	.....	.....	.....	.....	.....
Dayton, Ohio.	128,939	33	.....	.....	16	.....	.....	.....	3	2
Dedham, Mass.	10,618	1	.....	.....	.....	.....	.....	.....	.....	.....
Denver, Colo.	268,439	64	9	1	22	.....	6	.....	.....	15
Detroit, Mich.	619,648	197	43	2	149	.....	52	1	25	13
Dover, N. H.	13,276	5	.....	.....	.....	.....	.....	.....	.....	1
Du Bois, Pa.	14,994	.....	.....	.....	1	.....	5	.....	.....	.....
Dubuque, Iowa.	40,096	.....	2	.....	.....	.....	.....	.....	.....	2
Duluth, Minn.	97,077	12	2	.....	49	1	.....	.....	4	1
Dunmore, Pa.	21,286	.....	2	.....	.....	.....	1	.....	.....	.....
Durham, N. C.	26,160	6	.....	.....	.....	.....	.....	.....	1	.....
East Chicago, Ind.	30,286	7	.....	.....	.....	.....	.....	.....	.....	.....
East Cleveland, Ohio.	13,864	.....	.....	.....	3	.....	.....	.....	.....	.....
Easton, Pa.	30,854	.....	1	.....	2	.....	.....	.....	1	.....
East Orange, N. J.	43,761	8	2	.....	2	.....	1	.....	3	1
East Providence, R. I.	18,485	.....	.....	.....	1	.....	1	.....	.....	.....
Eau Claire, Wis.	18,887	.....	.....	.....	11	.....	2	.....	.....	.....
Elgin, Ill.	28,562	7	1	.....	7	.....	1	.....	.....	2
Elizabeth, N. J.	88,830	.....	3	1	.....	.....	6	.....	6	6
Elmira, N. Y.	38,272	12	2	.....	2	.....	.....	.....	.....	1
El Paso, Tex.	69,149	37	.....	.....	.....	.....	4	.....	.....	5
Englewood, N. J.	12,603	.....	.....	.....	2	.....	.....	.....	.....	.....
Erie, Pa.	76,592	.....	4	.....	2	.....	2	.....	10	.....
Eureka, Cal.	15,142	4	.....	.....	3	.....	.....	.....	.....	.....
Evanston, Ill.	29,304	8	1	.....	57	.....	.....	.....	.....	.....
Everett, Mass.	40,160	9	1	.....	.....	.....	6	.....	1	.....
Everett, Wash.	37,205	.....	.....	.....	.....	.....	7	.....	12	.....
Fairmont, W. Va.	16,111	.....	.....	.....	11	.....	.....	.....	.....	.....
Fall River, Mass.	129,828	31	4	.....	44	2	1	.....	14	2
Fargo, N. Dak.	17,872	3	1	.....	3	.....	2	.....	.....	.....
Farrell, Pa.	10,190	.....	.....	.....	1	.....	.....	.....	.....	.....
Findlay, Ohio.	14,858	7	.....	.....	38	1	.....	.....	.....	.....
Fitchburg, Mass.	42,419	11	.....	.....	.....	.....	.....	.....	2	1
Flint, Mich.	57,386	8	3	.....	2	.....	1	.....	.....	.....
Fond du Lac, Wis.	24,486	9	.....	.....	.....	.....	4	1	.....	.....
Fort Dodge, Iowa.	21,039	1	.....	1	.....	.....	.....	.....	.....	.....
Fort Scott, Kans.	10,564	3	.....	.....	2	.....	.....	.....	.....	.....
Fort Wayne, Ind.	78,014	22	3	.....	13	.....	.....	.....	.....	.....
Fort Worth, Tex.	108,597	18	.....	.....	.....	.....	1	.....	1	.....
Framlingham, Mass.	14,149	7	2	.....	4	.....	3	.....	3	.....
Frederick, Md.	11,225	4	.....	.....	4	.....	.....	.....	.....	.....
Freeport, Ill.	19,844	6	.....	.....	5	.....	2	.....	.....	.....
Fremont, Ohio.	11,034	1	2	.....	.....	.....	.....	.....	.....	.....
Fresno, Calif.	36,314	10	.....	.....	.....	.....	.....	.....	.....	2

\* Population Apr. 15, 1910.

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

**City Reports for Week Ended June 7, 1919—Continued.**

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Galesburg, Ill.	24,629	5			13					
Galveston, Tex.	42,650	11								2
Geneva, N. Y.	13,915	1								
Gloversville, N. Y.	22,314				29				1	
Grand Rapids, Mich.	132,861	35			24		1		2	
Great Falls, Mont.	13,948	3			2		9		1	
Greely, Colo.	11,942	6								
Green Bay, Wis.	30,017	9								
Greenfield, Mass.	12,251	4	1		1					
Greensboro, N. C.	20,171	7								2
Greensburg, Pa.	15,881		1		3		1			
Greenville, S. C.	18,574	2							1	
Greenwich, Conn.	19,594									1
Hackensack, N. J.	17,412	5					1		1	
Hancock, Mich.	12,578	1								
Harrisburg, Pa.	73,276		1		185		15			
Harrison, N. J.	17,345		2		2		1		1	
Hartford, Conn.	112,881	33	5		2		1		4	2
Haverhill, Mass.	49,180	25		1						4
Hazleton, Pa.	28,981				8					
Hibbing, Minn.	17,550		1		1		3			
Highland Park, Mich.	33,859	4	4		7		4			
Hoboken, N. J.	78,324	4	4	2			2		5	3
Houston, Tex.	116,878	39							8	3
Hudson, N. Y.	12,898	3								
Hutchinson, Kans.	21,461		1						1	
Independence, Mo.	11,964	6							2	
Indianapolis, Ind.	283,622		3		52		11		4	7
Iowa City, Iowa.	11,626						1			
Ironton, Ohio.	14,079	5								1
Ironwood, Mich.	15,095	1		1			1			
Ithaca, N. Y.	16,017	7			1		6		2	
Jamestown, N. Y.	37,431	7	2							
Janesville, Wis.	14,411	3								
Jersey City, N. J.	312,557		27		19		7		18	
Johnstown, N. Y.	10,678	4								
Johnstown, Pa.	70,473		3		12					
Joplin, Mo.	33,400	5							3	
Kalamazoo, Mich.	50,408	19	1		56		2		4	5
Kankakee, Ill.	14,270	8	1							
Kansas City, Kans.	102,096		1		15		1		3	
Kansas City, Mo.	305,816	74	9		8		3			8
Kearny, N. J.	24,325	3			9		1		2	
Kenosha, Wis.	32,833	7	5	1	26		7		2	
Knoxville, Tenn.	59,112		1				2			
Kokomo, Ind.	21,929	6	1				3			
Lackawanna, N. Y.	16,219	5			3					
La Crosse, Wis.	31,835	13	2						1	2
La Fayette, Ind.	21,481	9	1		2					
Lakewood, Ohio.	23,813	6			1		1		1	1
Lancaster, Ohio.	16,086	7			2					
Lancaster, Pa.	51,437		1		3		1		1	
Lawrence, Kans.	13,477	1	1							
Lawrence, Mass.	102,923	29	3	1			4		1	5
Lebanon, Pa.	20,947				8		2		2	
Leominster, Mass.	21,365	4			15					
Lexington, Ky.	41,997	20			12	1				2
Lima, Ohio.	37,145	1	1		46		12		1	1
Lincoln, Nebr.	46,957	12			1		4			
Little Rock, Ark.	58,716	9					1		1	1
Lockport, N. Y.	20,028	4			22		3		2	
Logansport, Ind.	21,338	6			1		3			
Long Beach, Calif.	29,163						1			
Long Branch, N. J.	15,733	4					1			
Lorain, Ohio.	38,266	8								1
Los Angeles, Calif.	535,485	140	6	1	6		9		33	24
Louisville, Ky.	240,808	70	4	2	5		16		6	9
Lowell, Mass.	114,366	35			6		1		10	5
Ludington, Mich.	10,566	6			1					1
Lynn, Mass.	104,534	24	3		31	1	5		5	1
McKeesport, Pa.	48,299				8		1		3	
Macon, Ga.	46,099	20			1					

<sup>1</sup> Population Apr. 15, 1910.

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

City Reports for Week Ended June 7, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Madison, Wis.	31,315	8	1		17		2			2
Malden, Mass.	52,243	18			2		2		3	3
Manchester, N. H.	79,607	21	2		1				5	1
Manitowoc, Wis.	13,931	4			12		1		1	1
Yankton, Minn.	10,365	1	1		1					
Marinette, Wis.	14,610	3					2		1	
Marion, Ind.	19,923	4	1		1		1			
Marion, Ohio.	24,129	3	1		1					
Marlboro, Mass.	15,285	3			1				2	
Marquette, Mich.	12,555	2			5					
Marshalltown, Iowa	14,519		1				1			
Martinsburg, W. Va.	12,964				1		1			
Mason City, Iowa	14,938	2								
Medford, Mass.	26,681	9					3		4	1
Melrose, Mass.	17,724	9	1				2			
Memphis, Tenn.	151,877	56	7		26		9		18	10
Methuen, Mass.	14,320	5							1	
Middletown, N. Y.	15,890						1		1	
Middletown, Ohio	16,334	3								1
Millford, Mass.	14,280	1								
Millwaukee, Wis.	445,008	94	6	1	6		15		16	7
Minneapolis, Minn.	373,448	70	18	2	85		21	1	23	9
Missoula, Mont.	19,075	6					2		23	1
Moline, Ill.	27,976		2	1						1
Monessen, Pa.	23,070		2		2		3			
Montclair, N. J.	27,087				1				3	
Montgomery, Ala.	44,039	23			1					
Morgantown, W. Va.	14,444	4								
Morristown, N. J.	13,410	5								
Mount Carmel, Pa.	20,709		2		7				1	
Mount Vernon, N. Y.	37,991	5	3		1					1
Nanticoke, Pa.	23,811				3					
Nashua, N. H.	27,541	4								
Nashville, Tenn.	118,136	38	1		6	1	3		3	2
Natick, Mass.	10,140	6								
Newark, N. J.	418,789	85	38	1	14		14		45	13
New Bedford, Mass.	121,622	32	4		12		3		14	5
New Britain, Conn.	55,385	13	1		1		1			1
New Brunswick, N. J.	25,855		3		1				2	
Newburgh, N. Y.	29,893	5	1						3	1
Newburyport, Mass.	15,291	5	1							
New Castle, Pa.	41,915						5			
New Haven, Conn.	152,275	47	7	1	12				4	2
New London, Conn.	21,199	7	2		3		1		1	
New Orleans, La.	377,010	129	7				4		24	16
Newport, Ky.	32,133	6	1						1	1
Newport News, Va.	22,622	9			1				1	1
Newport, R. I.	30,585	6					3			
Newton, Mass.	44,345	7	1		1				2	
New York, N. Y.	5,737,492	1,304	317	24	217	9	85	4	320	144
Niagara Falls, N. Y.	38,466	15	3		1		1		2	1
Norfolk, Va.	91,148		1		7		1			
Norristown, Pa.	31,969				24		5		1	
North Adams, Mass.	12,019	11								3
Northampton, Mass.	20,006	6	2						1	
North Tonawanda, N. Y.	14,050	6			2	1			5	1
Norwich, Conn.	21,923	1					1			1
Norwood, Ohio.	23,269	3			10		1			1
Oakland, Calif.	206,405	49	8				5		6	3
Oak Park, Ill.	27,816	6	1		57		1			
Ogdensburg, N. Y.	16,845	4								
Oil City, Pa.	20,162		1		45				4	
Oklahoma City, Okla.	97,588	10	2							2
Olean, N. Y.	16,927	10								
Omaha, Nebr.	177,777	32	1		17		8			1
Orange, Conn.	14,393	12			1		2			
Ossining, N. Y.	14,064	6	1		9					
Parkersburg, W. Va.	21,059	3			1		3			
Parsons, Kans.	15,952								1	
Pasadena, Calif.	49,620	16							1	3
Pascale, N. J.	74,478	7	1		1		2			1
Paterson, N. J.	140,512		4				2			

<sup>1</sup> Population Apr. 15, 1910.

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

**City Reports for Week Ended June 7, 1919—Continued.**

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Peekskill, N. Y.	19,034	5								
Peoria, Ill.	72,184	14	2		2		4		2	1
Perth Amboy, N. J.	42,646	10	1				2		7	1
Philadelphia, Pa.	1,735,514	502	70	11	133	1	59	3	86	67
Phillipsburg, N. J.	15,879	1								
Phoenixville, Pa.	11,871	1			1					
Pine Bluff, Ark.	17,777						2			
Piqua, Ohio.	14,275	2	1						1	
Pittsburgh, Pa.	586,196		17		68		17		28	
Pittsfield, Mass.	39,678	11	1							1
Plainfield, N. J.	24,330	5							2	2
Plattsburg, N. Y.	13,111	2	1							
Plymouth, Mass.	14,001	3								1
Plymouth, Pa.	19,439				1					
Pocatello, Idaho.	12,806						1			
Pomona, Calif.	13,624	3								
Pontiac, Mich.	18,006		6	1	8					
Port Chester, N. Y.	16,727	3					1			1
Portland, Me.	64,720	16					7			3
Portland, Oreg.	308,399		3		2		25		5	5
Portsmouth, Ohio.	29,356		2							
Portsmouth, Va.	40,683	27	2		2				1	1
Pottstown, Pa.	16,987		3		5					
Poughkeepsie, N. Y.	30,786	18	3				2		4	2
Providence, R. I.	259,895	63	9	1	3	1	5			15
Pueblo, Colo.	56,064						4			
Quincy, Ill.	36,832	8					1		1	
Quincy, Mass.	39,022	13	6		2		2		1	2
Racine, Wis.	47,465	9			1				3	
Rahway, N. J.	10,361	1							2	
Raleigh, N. C.	20,274	9			1		1			
Reading, Pa.	111,607		2		3		1			
Redlands, Calif.	14,573	1					1		1	
Reno, Nev.	15,514	2			1					
Richmond, Va.	158,702	43			23		3		3	6
Riverside, Calif.	20,496	7								
Roanoke, Va.	46,282	14	1		36					
Rochester, N. Y.	264,714	85	9		7		9		14	5
Rockford, Ill.	56,739	19	1		7		4			1
Rock Island, Ill.	29,452	6			3					
Rocky Mount, N. C.	12,673	4	1							
Rome, N. Y.	24,259	1			17				1	
Rutland, Vt.	15,038	4							1	1
Sacramento, Calif.	68,984	26					6		4	4
Saint Cloud, Minn.	12,013				1					
St. Joseph, Mo.	86,498	16	2						1	1
St. Louis, Mo.	768,630	191	67	4	145	3	15		45	20
St. Paul, Minn.	252,465	45	30		96	1	6	1	17	7
Salem, Nass.	49,346	11	2	1			5		1	2
Salem, Oreg.	21,274	2					2			
Salt Lake City, Utah.	121,623	28	1		1		4			2
San Angelo, Tex.	10,321	1								1
San Antonio, Tex.	128,215	10							9	7
San Bernardino, Calif.	17,616	10								5
San Diego, Calif.	56,412	23	1		1		7			1
Sandusky, Ohio.	20,226	6	1						1	
Sanford, Me.	11,217	7								1
San Francisco, Calif.	471,023	117	20	3	3		2		20	10
San Jose, Calif.	39,810						3		1	1
Santa Barbara, Calif.	15,360	3	1							
Saratoga Springs, N. Y.	13,839	5			1					
Saugus, Mass.	10,210	3	1		7		2			
Sault Ste. Marie, Mich.	14,130	3		1						1
Savannah, Ga.	69,250	26	1						2	2
Schenectady, N. Y.	103,774	16			1	1	3		6	4
Scranton, Pa.	149,541		4				5			
Seattle, Wash.	366,445		6				16		19	
Shamokin, Pa.	21,274		7		15					
Sharon, Pa.	19,156				1		1			
Somerville, Mass.	88,618	25	5		3		1		6	4

<sup>1</sup> Population Apr. 15, 1910.

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

**City Reports for Week Ended June 7, 1919—Continued.**

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
South Bend, Ind.	70,967	13	.....	1	2	.....	.....	.....	.....	.....
Southbridge, Mass.	14,465	3	.....	.....	.....	.....	.....	.....	.....	.....
Spartanburg, S. C.	21,985	3	1	.....	.....	.....	.....	3	.....	.....
Spokane, Wash.	157,656	.....	1	.....	5	.....	11	.....	.....	.....
Springfield, Ill.	62,623	9	1	.....	.....	.....	3	.....	.....	.....
Springfield, Mass.	108,668	31	.....	1	1	.....	1	.....	1	1
Springfield, Mo.	41,169	5	.....	.....	.....	.....	.....	.....	.....	.....
Springfield, Ohio.	52,296	20	.....	.....	5	.....	.....	4	.....	1
Steelton, Pa.	15,759	.....	.....	.....	4	.....	.....	.....	.....	.....
Steubenville, Ohio.	23,259	4	.....	.....	.....	.....	.....	4	.....	.....
Stockton, Calif.	33,209	6	.....	.....	.....	.....	.....	.....	.....	1
Sunbury, Pa.	16,661	.....	.....	.....	1	.....	.....	.....	.....	.....
Superior, Wis.	47,167	4	1	.....	.....	.....	.....	.....	.....	.....
Syracuse, N. Y.	158,559	38	3	.....	1	.....	15	.....	5	1
Tacoma, Wash.	117,446	.....	2	.....	7	.....	5	.....	.....	.....
Taunton, Mass.	36,610	7	1	.....	3	1	.....	.....	2	.....
Terre Haute, Ind.	67,361	15	1	.....	2	.....	1	.....	1	.....
Tiffin, Ohio.	12,962	8	.....	.....	.....	.....	.....	1	.....	1
Toledo, Ohio.	202,010	62	2	.....	168	.....	6	.....	14	7
Topeka, Kans.	49,538	7	1	.....	.....	.....	1	.....	.....	.....
Trenton, N. J.	113,974	41	1	.....	85	.....	1	.....	4	2
Troy, N. Y.	78,094	28	2	.....	.....	.....	.....	.....	3	3
Tulsa, Okla.	32,507	.....	1	.....	.....	.....	.....	1	.....	.....
Tuscaloosa, Ala.	10,824	1	1	.....	.....	.....	.....	2	.....	.....
Utica, N. Y.	89,272	18	5	.....	1	.....	3	.....	6	3
Vallejo, Calif.	13,803	2	.....	.....	.....	.....	.....	.....	.....	.....
Virginia, Minn.	15,954	.....	1	.....	.....	.....	.....	.....	.....	.....
Waco, Tex.	34,015	9	.....	.....	.....	.....	1	.....	.....	.....
Wakefield, Mass.	12,947	2	.....	.....	.....	.....	.....	.....	.....	.....
Walla Walla, Wash.	26,667	.....	.....	.....	.....	.....	.....	.....	1	.....
Waltham, Mass.	31,011	9	1	.....	.....	.....	.....	.....	1	.....
Warren, Pa.	15,683	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington, D. C.	369,282	.....	32	3	8	.....	18	.....	26	8
Washington, Pa.	22,076	.....	4	.....	.....	.....	.....	.....	.....	.....
Waterbury, Conn.	89,201	1	6	1	16	.....	6	.....	3	.....
Watertown, Mass.	15,188	.....	.....	.....	2	.....	.....	.....	1	.....
Watertown, N. Y.	30,404	.....	1	.....	1	.....	.....	.....	.....	.....
Wausau, Wis.	19,666	4	.....	.....	.....	.....	1	.....	.....	1
Webster, Mass.	13,484	4	.....	.....	1	.....	.....	.....	.....	.....
West Chester, Pa.	13,403	.....	1	.....	8	.....	3	.....	.....	.....
Westfield, Mass.	18,769	2	2	.....	.....	.....	.....	.....	1	.....
West Hoboken, N. J.	44,386	9	1	.....	1	.....	1	.....	1	.....
West New York, N. J.	19,613	4	1	.....	.....	.....	.....	.....	.....	1
West Orange, N. J.	13,964	2	3	.....	.....	.....	.....	.....	.....	.....
Wheeling, W. Va.	43,657	15	2	.....	3	.....	2	.....	1	1
Wichita, Kans.	73,597	24	1	.....	1	.....	.....	.....	2	.....
Wilkes-Barre, Pa.	78,334	.....	1	.....	18	.....	3	.....	.....	.....
Wilkinsburg, Pa.	23,899	.....	1	.....	1	.....	.....	.....	2	.....
Williamsport, Pa.	34,123	.....	3	.....	16	.....	2	.....	.....	.....
Wilmington, Del.	95,369	22	4	.....	2	.....	2	.....	1	1
Wilmington, N. C.	30,400	11	.....	.....	.....	.....	.....	.....	.....	1
Winchester, Mass.	10,812	3	.....	.....	.....	.....	.....	.....	1	1
Winston-Salem, N. C.	33,136	21	2	.....	14	.....	.....	4	.....	3
Winthrop, Mass.	13,105	.....	.....	.....	.....	.....	3	.....	.....	.....
Woburn, Mass.	16,076	4	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.	166,106	44	6	.....	26	3	6	.....	5	6
Yakima, Wash.	22,058	.....	.....	.....	.....	.....	3	.....	.....	.....
Yonkers, N. Y.	103,066	26	1	.....	6	.....	3	.....	.....	2
York, Pa.	52,770	.....	2	.....	2	.....	3	.....	1	.....
Youngstown, Ohio.	112,282	34	2	.....	59	1	3	.....	1	2
Zanesville, Ohio.	31,320	6	.....	.....	.....	.....	.....	.....	1	1

## FOREIGN.

### CHINA.

#### Plague—Hongkong.

During the week ended June 14, 1919, 43 cases of plague with 38 fatalities were notified at Hongkong.

### CUBA.

#### Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	May 1-10, 1919.		Remaining under treatment May 10, 1919.
	New cases.	Deaths.	
Broncho-pneumonia.....	1	.....	1
Diphtheria.....	2	.....	3
Leprosy.....	.....	.....	17
Malaria.....	20	.....	27
Paratyphoid fever.....	1	.....	4
Scarlet fever.....	2	.....	2
Typhoid fever.....	19	.....	66

<sup>1</sup> From the interior, 24.

<sup>2</sup> From the interior, 29.

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

### Reports Received During Week Ended June 27, 1919.<sup>1</sup>

#### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	Mar. 24-Apr. 26....	48	29	
Calcutta.....	Apr. 27-May 3.....	.....	165	
Rangoon.....	Apr. 20-26.....	6	4	

#### PLAGUE.

China:				
Hongkong.....	June 8-14.....	43	38	
India:				
Bombay.....	Mar. 21-Apr. 26....	298	243	Apr. 19-26, 1919: Cases, 5,919; deaths, 4,671.
Calcutta.....	Apr. 27-May 3.....	.....	25	
Rangoon.....	Apr. 20-26.....	36	35	

<sup>1</sup> 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, 1919—Continued.****SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Rio de Janeiro.....	Apr. 20-May 3.....	10	13	
Canada:				
Nova Scotia—				
Halifax.....	June 1-7.....	24		Present in 12 localities and in un-
Sydney.....	May 25-June 7.....	5		
Ontario—				
Hamilton.....	June 8-14.....	1		
Quebec—				
Quebec.....	June 1-7.....	4		
Ceylon:				
Colombo.....	Apr. 20-May 3.....	7		
China:				
Chungking.....	Apr. 20-May 3.....			Present.
Nanking.....	May 4-17.....			
France:				
Paris.....	May 4-17.....	3		
Great Britain:				
Cardiff.....	May 11-31.....	5		
India:				
Bombay.....	Mar. 24-Apr. 26.....	401	235	
Calcutta.....	Apr. 27-May 3.....		98	
Rangoon.....	Apr. 20-26.....	40	28	
Italy:				
Milazzo.....	May 19-25.....	6		Province of Messina.
Naples.....	May 19-25.....	34	30	
Palermo.....	May 9-15.....	10		
Manchuria:				
Dairen.....	May 6-12.....	2	1	
Mexico:				
Guaymas.....				Present in April and May, 1919
Newfoundland:				
St. Johns.....	May 31-June 13.....	20		Outports, 18 cases.
Portugal:				
Oporto.....	May 11-24.....	28	23	
Spain:				
Barcelona.....	Apr. 24-May 14.....		7	
Madrid.....	Apr. 1-30.....		4	
Valencia.....	Apr. 27-May 10.....	119	9	

**TYPHUS FEVER.**

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Tsingtao.....	May 5-11.....	1		
Great Britain:				
Glasgow.....	May 11-24.....	5	2	
Japan:				
Nagasaki.....	May 12-18.....	1		
Portugal:				
Oporto.....	May 11-24.....	145		

**Reports Received from Dec. 28, 1918, to June 27, 1919.****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Nov. 17-30.....	4	5	
China:				
Swatow.....	June 3.....			Present.
Germany:				
Berlin.....	To Oct. 5.....	17	11	
Bremen.....	Oct. 13-19.....	1		On a barge.
Marienwerder.....				1 case in October, 1918, on a barge in canal.



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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.	
<b>India:</b>					
Bombay.....	Aug. 18-Dec. 28...	1,354	1,031	Reports for weeks ended Nov. 23, 1918, and Mar. 29, 1919, missing.	
Do.....	Dec. 29-Apr. 26.....	9,739	8,539		
Calcutta.....	Sept. 20-Dec. 21.....		241		
Do.....	Dec. 29-May 3.....		2,377		
Karachi.....	Jan. 26-Mar. 22.....	3	3	Oct. 27-Nov. 2, 1918: Cases, 9; deaths, 4.	
Madras.....	Oct. 5-Dec. 28.....	264	164		
Do.....	Jan. 5-Apr. 19.....	430	300		
Rangoon.....	Oct. 5-Dec. 21.....	35	35		
Do.....	Dec. 29-Apr. 26.....	71	58	July 1-Oct. 31, 1918: Cases, 753; deaths, 472.	
Indo-China.....					
Anam.....	July 1-Aug. 31.....	37	30		
Cambodia.....	July 1-Oct. 31.....	324	171		
Cochin China.....	do.....	436	337	City and district.	
Saigon.....	Oct. 7-Dec. 22.....	75	45		
Do.....	Dec. 3-Apr. 20.....	573	358		
Kwang-Chow-Wan.....	July 1-31.....	50	34		
Tonkin.....	July 1-Oct. 31.....	6			
<b>Java:</b>					
East Java.....				Oct. 7-Dec. 31, 1918: Cases, 381; deaths, 323. Jan. 1-Apr. 1, 1919: Cases, 1,171; deaths, 907.	
Surabaya district.....	Oct. 7-Dec. 31.....	655	423		
Do.....	Jan. 1-Apr. 1.....	565	394		
Mid-Java.....					
Samarang.....	Sept. 26-Oct. 16.....	120	111	Sept. 25-Dec. 18, 1918: Cases, 3,282; deaths, 2,014. Jan. 24-Mar. 27, 1919: Cases, 3,375; deaths, 2,534.	
West Java.....				Oct. 3-Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918-Apr. 17, 1919: Cases, 24; deaths, 11.	
Batavia.....	Oct. 3-Dec. 11.....	291	148		
Do.....	Dec. 27-Apr. 17.....	16	4		
Cheribon.....	Jan. 3-Mar. 3.....	3			
<b>Mesopotamia:</b>					
Bagdad.....	Oct. 11-18.....	8			
<b>Philippine Islands:</b>					
Manila.....	Sept. 22-Dec. 28.....	209	135	Nov. 2-Dec. 28, 1918: Cases, 1,908; deaths, 1,515. Dec. 29, 1918-May 3, 1919: Cases, 1,537; deaths, 1,077.	
Do.....	Dec. 29-May 3.....	53	24		
<b>Provinces:</b>					
Albay.....	Dec. 15-21.....	1	1		
Ambos Camarines.....	Feb. 15-21.....	10	2		
Bataan.....	Nov. 17-Dec. 28.....	38	32		
Do.....	Jan. 5-11.....	2	2		
Batangas.....	Nov. 2-Dec. 28.....	258	230		
Do.....	Dec. 29-May 3.....	103	77		
Bohol.....	Nov. 2-Dec. 28.....	29	24		
Do.....	Dec. 29-Apr. 12.....	108	71		
Bulacan.....	Oct. 12-Dec. 28.....	51	8		
Do.....	Dec. 29-Feb. 21.....	42	26		
Capiz.....	Dec. 22-28.....	7	5		
Do.....	Jan. 5-25.....	28	14		
Cavite.....	Oct. 27-Dec. 21.....	207	115		
Do.....	Dec. 29-Apr. 19.....	18	17		
Cebu.....	Nov. 10-Dec. 21.....	50	27		
Do.....	Jan. 12-Apr. 19.....	20	15		
Iloos Sur.....	Dec. 8-28.....	17	8		
Do.....	Dec. 29-Feb. 15.....	56	38		
Iloilo.....	Oct. 27-Dec. 21.....	112	78		
Do.....	Jan. 5-Apr. 12.....	173	109		
Laguna.....	Oct. 27-Dec. 28.....	18	11		
Do.....	Dec. 29-May 3.....	255	191		
Lanao.....	Jan. 5-11.....	8	4		
Mindoro.....	Nov. 21-30.....	7	14		
Misamis.....	Oct. 27-Dec. 28.....	81	53		
Do.....	Jan. 5-Mar. 29.....	154	88		
Nueva Ecija.....	Jan. 12-25.....	9	6		
Occidental Negros.....	Feb. 2-Mar. 22.....	10	7		
Oriental Negros.....	Nov. 2-Dec. 7.....	32	18		
Do.....	Jan. 5-Feb. 15.....	35	22		
Pampanga.....	Nov. 24-Dec. 14.....	4	4		
Do.....	Jan. 5-May 3.....	186	137		
Pangasinan.....	Nov. 2-Dec. 28.....	930	652		
Do.....	Dec. 29-Apr. 19.....	170	131		
Rizal.....	Oct. 27-Nov. 2.....	3	1		
Do.....	Nov. 24-30.....	16	5		
Samar.....	Dec. 15-21.....	8	1		
Sorsogon.....	Nov. 17-23.....	8	4		
Do.....	Jan. 19-Feb. 8.....	44	26		
Tayabas.....	Nov. 3-Dec. 28.....	60	40		
Do.....	Dec. 29-Feb. 15.....	69	62		

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

Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.

## CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued.				
Provinces—Continued.				
Union.....	Nov. 2-Dec. 28....	18	14	
Zamboanga.....	Dec. 8-28.....	27	19	
Do.....	Jan. 5-Feb. 8.....	25	21	
Poland:				
Pionsk district.....	Oct. 2-Nov. 27....	5	1	
Warsaw.....	Sept. 29-Oct. 26...	5	1	
Russia:				
Petrograd.....	To July 16.....	3,388	1,054	
Do.....	July 17-Sept. 11...	3,479	1,455	In civil and military hospitals. In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
Siam:				
Bangkok.....	Mar. 23-Apr. 5....	6	2	
Ukraine:				
Ekaterinavsk.....	Sept. 1-20.....	7	6	
Odesa.....	do.....	25	6	Sept. 1-20, 1918: 11 cases on s. s. Heima.

## PLAGUE.

Brasil:				
Porto Alegre.....				Present in April, 1919.
Ceylon:				
Colombo.....	Oct. 27-Nov. 2....	1	1	
Do.....	Jan. 4-Apr. 5....	5	4	
China:				
Amoy.....	Nov. 24-Dec. 8....			Do.
Chungking.....	Dec. 1-7.....			Do.
Hing-Ning district.....	Mar. 15.....			Do.
Hongkong.....	Oct. 1-Dec. 28....	4	4	
Do.....	Jan. 1-May 3....	21	7	May 4-17, 1919: Deaths, 65. May 18-31, 1919: Cases, 71. June 1-6, 1919: Cases, 41; deaths, 37. June 8-14, 1919: Cases, 43; deaths, 33.
Ecuador:				
Duran.....	Feb. 16-Mar. 16....	2	1	
Guayaquil.....	July 1-Dec. 31....	20	7	
Do.....	Jan. 1-Apr. 30....	55	17	
Taura.....	Dec. 16-31.....	1	1	
Egypt:				
Cities—				Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1-May 1, 1919: Cases, 202; deaths, 144.
Alexandria.....	Mar. 23.....	1	1	
Suez.....	Jan. 31-Apr. 29....	73	44	
Provinces—				
Assiout.....	Feb. 24-Apr. 17....	22	13	16 septicemic.
Beni-Souef.....	Apr. 22.....	1	1	
Fayoum.....	Apr. 26.....	13	3	
Girgeh.....	Feb. 22-Mar. 22....	10	5	2 pneumonic.
Mineh.....	Feb. 21-Apr. 22....	3	3	1 pneumonic.
India:				Sept. 23-Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918-Mar. 1, 1919: Cases, 25,506; deaths, 19,401. Mar. 9-15, 1919: Cases, 13,981; deaths, 5,402. Mar. 30-Apr. 12, 1919: Cases, 6,854; deaths, 5,550. Apr. 19-26, 1919: Cases, 5,919; deaths, 4,671.
Bombay.....	Aug. 18-Dec. 28....	41	29	
Do.....	Jan. 12-Apr. 26....	366	295	
Calcutta.....	Dec. 22-28.....		1	
Do.....	Jan. 12-May 3....		193	
Karachi.....	Oct. 19-Dec. 28....	17	17	
Do.....	Dec. 29-May 7....	73	60	
Madras.....	Dec. 8-28.....	26	17	
Do.....	Dec. 29-Apr. 5....	206	117	
Madras Presidency.....	Oct. 13-Dec. 28....	1,152	774	
Do.....	Dec. 29-Apr. 19....	2,583	1,743	
Rangoon.....	Oct. 5-Dec. 21....	84	81	
Do.....	Dec. 29-May 19....	424	407	
Indo-China.....				July 1-Oct. 21, 1918: Cases, 161; deaths, 145.
Anam.....	July 1-Oct. 31....	42	36	
Cambodia.....	do.....	72	72	
Cochin-China.....	do.....	65	35	
Saigon district.....				
Cholon.....	Apr. 7-20.....	1	1	
Saigon.....	Oct. 7-Nov. 24....	5	1	
Do.....	Apr. 7-20.....	1	1	
Kwang-Chow-Wan.....	July 1-31.....	1	1	Jan. 13-Apr. 20, 1919: Cases, 39; deaths, 26.

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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Java:</b>				
East Java				
Surabaya (district).....	Oct. 7-Dec. 31.....	92	92	Oct. 7-Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1-Apr. 1, 1919: Cases, 238; deaths, 238.
Do.....	Jan. 1-Apr. 1.....	59	59	
Mid-Java				
Samarang.....	Sept. 25-Oct. 16.....	6	6	
Do.....	Mar. 21-27.....	7	7	Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14. Jan. 30-May 14, 1919: Cases, 220; deaths, 220.
<b>Mesopotamia:</b>				
Bagdad.....	Nov. 16-29.....	5	2	
Do.....	Feb. 22-May 18.....	222	133	
<b>Siam:</b>				
Bangkok.....	Sept. 21-Oct. 12.....	6	5	
Do.....	Jan. 19-Feb. 22.....	7	6	
<b>Venezuela:</b>				
Caracas.....	Dec. 30.....	1		
<b>On vessel:</b>				
S. S. Japan.....	Jan. 14.....	1	1	At Suez quarantine station from Bombay.
S. S. Sparta.....	May 21.....	1	1	At Liverpool, England, from Bombay.

## **SMALLPOX.**

<b>Algeria:</b>				
Algiers.....	Oct. 1-Dec. 31.....	2	1	
Do.....	Mar. 1-31.....	1	1	
<b>Arabis:</b>				
Aden.....	Apr. 14-21.....		1	
<b>Austria:</b>				
Vienna.....	Dec. 1-Jan. 11.....	6		Dec. 1, 1918-Jan. 11, 1919: Cases, 68. Jan. 12-Mar. 15, 1919: Cases, 154.
Do.....	Feb. 9-Mar. 15.....	28		
<b>Bohemia:</b>				
Gablons.....	Feb.-Mar.....	974	19	Feb., 1919: Reported prevalent. Mar., 1919: Cases, 57.
<b>Brazil:</b>				
Bahia.....	Mar. 30-Apr. 5.....	5		
Rio de Janeiro.....	Dec. 1-28.....	46	19	Oct. 6-12, 1918: Cases, 15; deaths, 10.
Do.....	Dec. 30-May 3.....	52	32	
Sao Paulo.....	Mar. 3-Apr. 25.....		4	
<b>British East Africa:</b>				
Mombasa.....	Sept. 1-Nov. 30.....	6	1	
<b>Canada:</b>				
New Brunswick—				
Campbellton.....	Dec. 22-28.....	1		
Do.....	Jan. 5-May 10.....	4		
St. John.....	Nov. 8-14.....	3		
Do.....	Jan. 26-Feb. 22.....	6		
Nova Scotia—				
Bear River.....	Dec. 29-Jan. 4.....			Present.
Bigbee.....	Jan. 10.....			Do.
Cape Sable Island.....	May 13.....			Present on south side.
Digby.....	Jan. 4.....			Present.
Halifax.....	Dec. 7-28.....	10		
Do.....	Jan. 5-June 7.....	391		Present in 20 other localities.
Middleton.....	Dec. 29-Jan. 4.....			Present.
Sydney.....	Jan. 5-June 7.....	38		
<b>Ontario:</b>				
Hamilton.....	June 8-14.....	1		
North Bay.....	Jan. 19-25.....	1		
Ottawa.....	Jan. 12-May 31.....	14		
Toronto.....	Feb. 2-15.....	2		
Do.....	Mar. 16-22.....	1		
<b>Prince Edward Island—</b>				
Charlotte Town.....	Feb. 27-Apr. 16.....	2		
<b>Quebec:</b>				
Montreal.....	Jan. 24-Dec. 21.....	2		
Do.....	Jan. 12-May 10.....	32		
Paspébiac.....	Jan. 12-Mar. 8.....	8		
Quebec.....	Dec. 15-21.....	1		
Do.....	Dec. 29-June 7.....	35		
<b>Ceylon:</b>				
Colombo.....	Jan. 12-May 3.....	12		

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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>China:</b>				
Amoy.....	Oct. 13–Dec. 28.....			Present.
Do.....	Mar. 11–Apr. 14.....	4	3	Do.
Antung.....	Feb. 10–16.....	1		
Do.....	Feb. 24–Mar. 2.....	1		
Canton.....	Nov. 17–23.....			Do.
Do.....	Feb. 9–May 3.....			Do.
Changsha.....	Mar. 16–Apr. 12.....	5		
Chungking.....	Nov. 10–Dec. 28.....			Do.
Do.....	Jan. 5–May 3.....			Do.
Foochow.....	Nov. 24–Dec. 28.....			Do.
Do.....	Dec. 29–Apr. 5.....			Do.
Hankow.....	Apr. 13–19.....	1		
Hongkong.....	Dec. 15–21.....	1	1	
Do.....	Feb. 2–8.....	1		
Do.....	Feb. 16–May 3.....	16	5	
Nanking.....	Dec. 1–23.....			Do.
Do.....	Dec. 29–May 17.....			Do.
Shanghai.....	Jan. 20–26.....	1		
Tientsin.....	May 4–10.....	1		
Tsingtao.....	Mar. 3–9.....	2		
<b>Chosen (Korea):</b>				
Chemulpo.....	Nov. 1–Dec. 31.....	15	4	
Do.....	Jan. 1–Mar. 31.....	16	7	
Fusan.....	Feb. 1–Mar. 31.....	20	16	
Seoul.....	Feb. 1–Mar. 31.....	3	1	
<b>Colombia:</b>				
Barranquilla.....	Apr. 6–12.....		1	
<b>Denmark:</b>				
Copenhagen.....	Nov. 9–Dec. 28.....	12		
Do.....	Dec. 29–May 3.....	121		
<b>Egypt:</b>				
Alexandria.....	Dec. 17–23.....	1	1	
Do.....	Jan. 22–May 13.....	80	24	
<b>Finland:</b>				
Provinces:				Jan. 1–Apr. 15, 1919: Cases, 936.
Abo Och Björneborg.....	Jan. 1–Apr. 15.....	91		
Kuopio.....	do.....	188		
Nyland.....	do.....	25		
St. Michael.....	do.....	135		
Tavastehus.....	do.....	16		
Alesborg.....	do.....	1		
Vasa.....	do.....	16		
Viborg.....	do.....	464		
<b>France:</b>				
Bordeaux.....	Feb. 8–13.....		1	
Brest.....	Feb. 2–8.....	1		
Paris.....	Mar. 2–May 17.....	20	3	
<b>Germany:</b>				
Dresden.....	Nov. 24–Dec. 7.....	18		Nov. 24–Dec. 7, 1918: Cases, 31.
Friedland.....	do.....	1		Dec. 8, 1918–June 11, 1919:
Halle.....	do.....	4		Cases, 177. Additional cases
				reported later, 54, for week
				ended Jan. 11. Feb. 16–Mar.
				22, 1919: Cases, 230; among
				soldiers and prisoners of war,
				745 cases.
Königsberg.....	do.....	8		In persons evacuated from the
Schkeuditz.....	do.....	1		Ukraine.
Tilsit.....	do.....	1		
Torgau.....	do.....	1		
<b>Germany:</b>				
Aix-la-Chapelle (district).....	Dec. 8–Jan. 11.....	17		
Cassel.....	do.....	10		
Danzig.....	do.....	3		
Doristhal.....	do.....	8		
Dresden.....	Dec. 8–Feb. 15.....	247		District of Gumbinnen.
Halle.....	Dec. 8–Jan. 11.....	5		26 additional cases reported later
Hanover.....	do.....	7		at Dresden.
Königsberg.....	do.....	15		Among interned Russians.
Kottowitz.....	do.....	5		
Meyrode.....	do.....	6		
Riesa.....	do.....	4		District of Dresden.
<b>Great Britain:</b>				
Cardiff.....	May 11–31.....	5	1	
Liverpool.....	Jan. 26–Mar. 15.....	7		Of these, 2 from vessels.
London.....	Mar. 9–May 17.....	17	2	
Southampton.....	May 18–24.....	1		

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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki.....	Feb. 2-May 10.....		87	
India:				
Bombay.....	Aug. 18-Dec. 28.....	35	8	
Do.....	Dec. 29-Apr. 25.....	834	414	
Calcutta.....	Sept. 29-Dec. 28.....		17	Reports for weeks ended Nov. 23,
Do.....	Dec. 29-May 3.....		785	1918, and Mar. 29, 1919, missing.
Karachi.....	Sept. 29-Dec. 28.....	13	4	
Do.....	Dec. 29-May 3.....	176	86	
Madras.....	Cct. 5-Dec. 28.....	62	40	
Do.....	Dec. 29-Apr. 19.....	295	131	
Rangoon.....	Oct. 20-Dec. 21.....	32	6	
Do.....	Dec. 29-Apr. 26.....	1,190	488	
Indo-China:				July 1-Oct. 31, 1918: Cases, 620;
Anam.....	July 1-Oct. 31.....	146	67	deaths, 254.
Cambodia.....	Aug. 1-Oct. 31.....	165	74	
Cochin-China.....	July 1-Oct. 31.....	400	112	
Saigon.....	Cct. 7-Dec. 22.....	29	5	
Do.....	Dec. 29-Apr. 6.....	119	21	City and vicinity. Apr. 7-20,
Tonkin.....	July 1-Oct. 31.....	20	1	1919: District, cases, 33; city, 1.
Italy:				
Andria.....	Mar. 10-16.....	1		Province of Bari.
Barletta.....	Mar. 3-9.....	2		Do.
Castroreale.....	May 12-18.....	1	1	
Genoa.....	Jan. 9-Mar. 15.....	4	2	
Lecco (Province).....	Feb. 17-23.....	2		
Leghorn.....	Apr. 14-30.....	1		
Messina.....	Mar. 2-May 18.....	7		Cases reported in several locali-
Milazzo.....	May 12-25.....	11	1	ties in Province, Mar. 2-30.
Naples.....	Mar. 10-May 25.....	109	92	
Palermo.....	Jan. 31-May 15.....	63	2	
Turin.....	Jan. 27-Mar. 23.....	9	2	
Japan:				
Kobe.....	Oct. 26-Dec. 28.....	186	46	
Do.....	Dec. 29-May 3.....	630	220	
Nagasaki.....	Mar. 31-Apr. 6.....	3		
Nagoya.....	Mar. 2-15.....	2		
Taihoku.....	Jan. 15-Apr. 29.....	152	18	Island of Formosa.
Tokyo.....	Apr. 26.....	1		
Yokohama.....	Jan. 20-Apr. 27.....	2		
Java:				
East Java:				
Surabaya (district).....	Oct. 7-Dec. 31.....	16		Oct. 7-Dec. 31, 1918: Cases, 22;
Do.....	Jan. 1-Feb. 25.....	4	2	deaths, 1. Jan. 1-Feb. 25, 1919:
Mid-Java.....				Cases, 4; deaths, 3.
				Sept. 25-Dec. 18, 1918: Cases, 172;
				deaths, 3. Jan. 24-30, 1919:
				Case, 1.
West Java.....				Oct. 2-Dec. 11, 1918: Cases, 809;
Batavia.....	Oct. 2-Dec. 11.....	185	151	deaths, 263. Dec. 27, 1918-
Do.....	Dec. 27-Apr. 17.....	54	31	Apr. 7, 1919: Cases, 710; deaths,
				153.
				Sept. 1-Oct. 16, 1918: Cases, 44.
Lithuania.....				
Manchuria:				
Dairen.....	Jan. 15-21.....	1		
Do.....	Feb. 22-May 12.....	7	3	
Mesopotamia:				
Bagdad.....	Oct. 11-Dec. 27.....	308	97	
Do.....	Dec. 28-Feb. 9.....	8		
Mexico:				
Ciudad Juarez.....	Nov. 24-30.....	1		
Guadalajara.....	Mar. 1-31.....	1		
Do.....	Mar. 29-Apr. 30.....	1		
Guaymas.....				Present in April and May, 1919.
Mexico City.....	Sept. 22-Dec. 28.....	23		
Do.....	Dec. 29-May 3.....	28		
Vera Cruz.....	Feb. 10-Apr. 12.....	2	1	
Newfoundland:				
St. Johns.....	Dec. 6-20.....	4		Outports—Dec. 6-27, 1918: Cases,
Do.....	Jan. 24-June 13.....	71		78. Dec. 28, 1918-June 13, 1919:
				Cases, 351.
Panama:				
Colon.....	Dec. 15-21.....	1		Aug. 1-31, 1918: Cases, 133, oc-
Do.....	Dec. 29-Feb. 9.....	8		curing at Colon, Panama, and
Philippine Islands:				points in the interior. Jan.
Manila.....	Nov. 2-16.....	5	3	1-25, 1919: Cases, 28.
Do.....	Dec. 29-Apr. 19.....	43	22	Varioloid, 16.
Portugal:				
Lisbon.....	Nov. 16-Dec. 28.....	843		
Oporto.....	Mar. 9-May 24.....	176	121	

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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **SMALLPOX—Continued.**

Place.	Date..	Cases.	Deaths.	Remarks.
Portuguese East Africa:				
Lourenço Marques.....				July 1-Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok.....	Nov. 1-3.....	4		
Do.....	Jan. 17-23.....	16	1	
Do.....	Feb. 1-Mar. 15.....		1	
Spain:				
Barcelona.....	Jan. 9-Feb. 11.....		5	
Do.....	Feb. 19-May 14.....	6	9	
Bilbao.....	Jan. 1-Feb. 20.....	6		
Cadiz.....	Oct. 1-Dec. 31.....	18		
Do.....	Jan. 1-Mar. 31.....		35	
Madrid.....	Sept. 1-Oct. 31.....		153	
Do.....	Jan. 1-Apr. 30.....		85	
Seville.....	Nov. 1-Dec. 31.....		8	
Do.....	Jan. 1-Mar. 31.....		5	
Valencia.....	Nov. 10-Dec. 31.....	40	9	
Do.....	Dec. 29-Jan. 25.....	93	10	
Do.....	Feb. 16-May 10.....	635	54	
Straits Settlements:				
Penang.....	Oct. 6-12.....	1		
Singapore.....	Feb. 2-22.....	3		
Sweden:				
Stockholm.....	Feb. 2-8.....		1	
Tunis:				
Tunis.....	Apr. 26-May 8.....	5	1	
Union of South Africa:				
Cape Town.....	Aug. 1-30.....	1		
Do.....	Dec. 21-Jan. 31.....	1		
Johannesburg.....	Aug. 1-Oct. 31.....	12		Nov. 1-30: Cases, 4.
On vessels:				
S. S. Euripides.....	Mar. 21.....	1		From England via Suez and Colombo. Case removed at Fremantle, Australia, Apr. 10.
S. S. Port Sydney.....	Mar. 13.....	1	1	From Egypt to Australia via Colombo. Arrived Fremantle Mar. 31.
S. S. Ulimaroa.....	Mar. 26.....	1		From Egypt via Colombo. Case developed after arrival at Colombo. Vessel arrived at Fremantle, Australia, Apr. 8.

## **TYPHUS FEVER.**

Algeria:				
Algiers.....	Nov. 1-30.....	1		
Austria:				
Vienna.....	Dec. 1-Jan. 11.....	110		Dec. 1, 1918-Jan. 11, 1919: Cases, 125. Jan. 12-Mar. 15, 1919: Cases, 479.
Do.....	Jan. 12-Mar. 15.....	410		Occurring almost exclusively in repatriated soldiers and their contacts.
Brazil:				
Ceara.....	Sept. 14-21.....	1		
Rio de Janeiro.....	Dec. 15-22.....	2		
Do.....	Dec. 29-Feb. 22.....	29	3	
Sao Paulo.....	Jan. 13-19.....	3		
Bulgaria:				
Aeteven.....	Mar. 10.....			Present.
Rustchuk.....	do.....			Do.
China:				
Antung.....	Dec. 2-15.....	2		
Do.....	Jan. 6-Apr. 20.....	3	1	
Chosen (Korea):				
Fusan.....	Feb. 1-28.....	1	1	
Seoul.....	Jan. 1-Feb. 28.....	12	1	
Colombia:				
Barranquilla.....	Nov. 8-Dec. 28.....		3	
Do.....	Jan. 5-Mar. 8.....	2	3	
Egypt:				
Alexandria.....	Oct. 14-Dec. 31.....	85	26	Confined to one quarter of city and mostly to natives. Oct. 20-Nov. 7, 1918: Cases, 12; deaths, 1.
Do.....	Jan. 1-May 13.....	967	255	

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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Finland</b>				Jan. 1-Apr. 15, 1919: Cases, 80.
Provinces—				
Abo Och Björneborg.	Jan. 1-Apr. 15.	61		
Nyland.	do.	17		
Uleaborg.	Mar. 1-31.	1		
Viborg.	Apr. 1-15.	1		
<b>France:</b>				
Marseille.	Mar. 1-31.			Apr. 26, 1919, present in 2 civil and 2 military prisons.
<b>Germany:</b>				
Brosław.	Sept. 29-Oct. 19.	12	8	
Gumbinnen district.	Oct. 20-Nov. 7.	1		
Dresden.	do.	1		
Griefswald.	do.	1		
Godullahutte.	do.	1		
Königsberg.	Sept. 29-Oct. 19.	3	1	
Königshttte.	Oct. 20-Nov. 7.	1	1	
Magdeburg.	do.	2		
Möstaltem.	Sept. 29-Oct. 19.	7	2	District of Allenstein.
Oppeln district.	Oct. 23-Nov. 7.	5		
<b>Great Britain:</b>				
Cork.	Feb. 2-Mar. 22.	4	1	
Glasgow.	Dec. 22-23.	5		
Do.	Jan. 5-Feb. 8.	9	1	
Do.	Mar. 9-15.	1		
Liverpool.	May 11-17.	1		From vessel.
<b>Greece:</b>				
Athens.	Mar. 8.	2	2	
Saloniki.	Sept. 29-Dec. 21.		34	
Do.	Dec. 29-May 10.		117	
<b>Hungary</b>				Sept. 9-Nov. 26, 1918: Cases, 110; deaths, 8. Nov. 27, 1918-Feb. 2, 1919: Cases, 473.
Budapest.	Sept. 3-Nov. 26.	75	2	
Do.	Jan. 13-Feb. 2.	131	7	Nov. 27, 1918-Jan. 12, 1919: Cases, 159.
Debreczin.	Jan. 20-Feb. 2.	42		
Pressburg.	Sept. 29-Nov. 6.	11	1	
Szatmarneteti.	Nov. 4-26.	1		Present in county of Bihar.
Tyrnau.	do.	1		
<b>Italy:</b>				
Aquila Province.	Apr. 23-May 4.	24		One locality. Prisoners of war.
Arezzo Province.	Apr. 7-May 4.	5		At Arezzo.
Avellino Province.	Apr. 23-May 4.	1		
Bari Province.	Feb. 3-May 4.	19		
Belluno Province.	Apr. 7-13.	1		
Caltanissetta Province.	Apr. 23-May 4.	1		
Caserta Province.	do.	85		
Florence.	Apr. 7-May 4.	22		
Genoa.	Apr. 23-May 4.	6		
Leghorn.	Apr. 14-27.	9	2	
Naples.	Feb. 3-May 11.	15		
Novara Province.	Apr. 7-13.	1		
Pisa Province.	Apr. 23-May 4.	4		
Porto Maurizio Province.	do.	1		
Reggio Calabria Province.	do.	1		
Rome Province.	do.	17		
Salerno Province.	do.	5		
Taranto.	Feb. 3-Apr. 13.	4		
Udine Province.	Apr. 7-13.	13		At Cividale, 11 cases; at Udine, 2.
Venice Province.	Apr. 23-May 4.	8		
<b>Japan:</b>				
Nagasaki.	Nov. 10-Dec. 29.	13	4	
Do.	Dec. 30-May 4.	53	6	
<b>Java:</b>				
East Java.				Oct. 7-21, 1918: Cases, 5.
Surabaya.	Oct. 7-21.	4		
Mid-Java.				Sept. 25-Oct. 16, 1918: Cases, 3.
West Java.				Oct. 2-23: Cases, 31; deaths, 6.
Batavia.	Oct. 2-23.	15	4	
<b>Lithuania.</b>				Sept. 1-Oct. 26, 1918: Cases, 539; deaths, 26.
<b>Macedonia:</b>				Present.
Drama.	Mar. 17.			Do.
Epirus.	Mar. 21.			Estimated.
Kavala.	Mar. 17.	300		
<b>Mesopotamia:</b>				
Bagdad.	Oct. 5-Dec. 27.	2		
Do.	Dec. 28-Apr. 11.	15	2	

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

**Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.**

## **TYPHUS FEVER—Continued.**

Place	Date	Cases.	Deaths.	Remarks.
<b>Mexico:</b>				
Aguascalientes.....	Feb. 2-23.....		3	
Do.....	Mar. 24-Apr. 13.....		4	
Guadalajara.....	Nov. 1-Dec. 31.....	4	1	
Do.....	Jan. 1-Apr. 30.....	9	5	
Mexico City.....	Sept. 22-Dec. 28.....	434		
Do.....	Dec. 29-May 3.....	644		
<b>Netherlands:</b>				
Amsterdam.....	Dec. 8-14.....	1		
Do.....	Jan. 12-Apr. 12.....	6		
Delft.....	Feb. 23.....			Present.
Harlem.....	do.....			Do.
Leiden.....	do.....			Do.
Limburg.....	do.....	5	1	Mining district.
Naaldwijk.....	Mar. 30-Apr. 19.....	4		
Rotterdam.....	Feb. 2-Apr. 12.....	507	90	Jan. 30-Feb. 27, 1919: Cases, 462; deaths, 46.
Schiedam.....	Feb. 23.....			Present.
Wateringen.....	Mar. 30-Apr. 5.....	1		
<b>Poland:</b>				
Lodz.....	Sept. 29-Oct. 26.....	55	8	
Warsaw.....	do.....	111	13	
<b>Portugal:</b>				
Braga.....	Mar. 24.....			
Oporto.....	Mar. 8-May 10.....	889		
<b>Russia:</b>				
Archangel.....	Jan. 15-Apr. 15.....	224	63	
<b>Serbia:</b>				
Belgrade.....	Feb. 5.....	62		Among soldiers and prisoners.
<b>Siberia:</b>				
Vladivostok.....	Sept. 1-Dec. 30.....	43		
Do.....	Jan. 17-Mar. 15.....	143	15	
<b>Spain:</b>				
Huelva.....	Oct. 1-31.....		2	
Madrid.....	Dec. 1-31.....		1	
<b>Tunis:</b>				
Tunis.....	Apr. 12-May 8.....	4	2	
<b>Ukraine:</b>				
Union of South Africa:				Apr. 5, 1919: Reported to be spreading.
Port Elizabeth.....	Sept. 14-23.....			Present among natives in several interior towns.

## **YELLOW FEVER.**

<b>Brasil:</b>				
Bahia.....	Jan. 12-Mar. 1.....	5	2	
Pernambuco.....	Oct. 1-Nov. 30.....	2	1	
<b>Colombia:</b>				
Cartagena.....	Jan. 29-Feb. 4.....		4	
<b>Ecuador:</b>				
Babahoyo.....	Nov. 1-30.....	1		
Do.....	Mar. 1-15.....	1		
Catarama.....	Feb. 1-15.....	1		
Chobo.....	Jan. 1-15.....	1		
Daule.....	do.....	1	1	
Duran.....	Nov. 1-Dec. 31.....	3	2	
Do.....	Jan. 16-Mar. 15.....	5	1	
Guayaquil.....	July 1-Dec. 31.....	328	177	
Do.....	Jan. 1-Mar. 31.....	124	68	
Hacienda Vainilla.....	Feb. 10-28.....	1		
Milagro.....	Nov. 1-15.....	1		
Do.....	Feb. 1-Mar. 15.....	2	1	
Naranjal.....	Nov. 1-15.....	1	1	
Do.....	Jan. 1-15.....	1	1	
Naranjito.....	Nov. 1-15.....	1	1	
Do.....	Jan. 1-Feb. 28.....	2	2	
Payo (Hacienda).....	Nov. 1-15.....	1		
Punta de Piedra.....	Nov. 1-30.....	1		
<b>Salvador:</b>				
San Salvador.....	Jan. 9.....	1		
<b>On vessel:</b>				
S. S. Jamaica.....	Jan. 30.....	1		At quarantine station, Canal Zone, Panama.