## PUBLIC HEALTH REPORTS

# REPORT OF AN EPIDEMIC OF GLANDULAR FEVER (INFECTIOUS MONONUCLEOSIS) 

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On July 27, 1926, Dr. C. T. Smith, of Rocky Mount, N. C., reported the occurrence of about 30 cases of a disease characterized by high continuous fever, enlargement of the spleen and lymph glands, and a macular rash appearing over the chest, abdomen, and extremities about the third or fourth day of fever. Widal tests were invariably negative and the condition did not respond to quinine administration.

The writer arrived in Rocky Mount, a city of about 16,000 population, on July 28, 1926, and was able to see many of these cases, the majority of which, however, were then in the convalescent stage. The outbreak had begun, as far as could be ascertained, about the first week in July, the largest number of cases occurring from July 10 to 20 . It is probable that sporadic cases had occurred before. One physician reported that his 11-year old daughter had a similar infection with enlarged lymph glands a year previously.

## SYMPTOMATOLOGY

The typical cases were characterized by a few days of general malaise, followed by one or more chills and fever, a general aching all over the body especially severe in the eye muscles and occipital region. Nausea and vomiting and a slight sore throat occurred in about half the cases seen. The fever was usually high at first and gradually tapered off to normal, with an average duration of 7 to 10 days. In one typical case (No. 8) the temperature on the 29th day was $101^{\circ} \mathrm{F}$. in the afternoon. Enlarged tender lymph glands developed in 14 of the 26 cases tabulated below. In some instances the enlarged glands did not develop or were not recognized until late in the illness. Suppuration of the glands did not occur. An unusual feature of the condition was the appearance of a faint but definite rosecolored macular rash over the chest, abdomen, and flexor surfaces of the arms in 13 of the 26 cases. In one case (No. 21) the rash was definitely maculo-papular and covered the entire body except the face. This case did not show enlarged glands and the patient's blood on the 15 th day after onset did not agglutinate $B$. tularense or $B$. proteus $\mathrm{X}_{19}$. As a rule, convalescence was prolonged, the patients remaining weak for days. There were no fatalities.
Table 1

| Case | Age | Sex | Occupation | Date of onset | Severe headache | Sore throat | $\begin{gathered} \text { Nausea } \\ \text { or } \\ \text { vomit- } \\ \text { ing } \end{gathered}$ | Severe muscular pains | Rash | Enlarged and tender glands | Enlarged spleen | Widal test | White blood count | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 46 | M | Tinner.-.-.-....-. | July 15 | + | + | 0 | 0 | + | Posterior cervical epitrochlear. | + | - | 6, 200 | Blood culture negative. Guinea pigs injected 14th day of fever wero negative. |
| 2 | 12 | F | Schoolgirl | July 8 | $+$ | 0 | $t$ | $+$ | - |  | $+$ | - | 0 |  |
| 8 | 58 | $\underset{\text { F }}{\text { F }}$ | Housewife.........- | --do-...- | $\pm$ | 0 | $\pm$ | $\pm$ | $+0$ |  | $\pm$ | - | 0 |  |
| 4 | 14 33 | $\stackrel{\mathrm{F}}{\mathrm{M}}$ | Schoolgirl .......- | July 15 | + | + | $\pm$ | $\pm$ | + | Posterior cervical...... | $\pm$ | - | 0 0 0 |  |
| 6 | 30 | M | Battery worker.- | July 21 | $+$ | - | $+$ | - | $+$ |  | $\pm$ | - | 0 |  |
| 8 | 3 | M | Baby -.........--- | July 15 | $\pm$ | $+$ | - | $+$ | $\pm$ |  |  | = | 7,000 |  |
| 8 | 32 | M | Furniture dealer- | July 7 | + | $+$ | - | + | - | Posterior cervical; posterior auricular. | + | - | 7,000 | 46.8\% small lymphocytes. |
| 9 | 12 | F | Schoolgirl | July 13 | + | - | + | $\bar{\square}$ | $+$ |  | $+$ | 0 | 0 | Case 7 miles north of city. |
| 10 | 13 | M | Schoolboy--.....- | July 15 | $\pm$ | $\pm$ | - | $\pm$ | $\pm$ |  | $+_{0}$ | - 0 | 0 | Case 2 miles north of city. |
| 12 | 38 45 | M | Policeman_-.....- | July 13 | $\pm$ | $\pm$ | + | - | + | Posterior cervical----- | $+$ | - | 0 |  |
| 13 | 15 | M | Schoolboy-...-.-.-- | July 10 | - | $+$ | - | + | $+$ | Posterior auricular.-.-- | $+$ | 0 | 0 |  |
| 14 | 33 | M | Foreman car shop. | July 12 | $+$ | $\pm$ | $\bar{\square}$ | + | $+$ | --.-.do | $+$ | 0 | 0 |  |
| 15 | 21 | F | House girl....-...- | July 22 | - | - | $+$ | - | - |  | $\pm$ | 0 | 0 |  |
| 16 | 17 | F | Schoolgirl.......-- | July 15 | - | - | + | + | - | Posterior cervical; suboccipital. | - | - | 0 |  |
| 17 18 | 19 31 | $\stackrel{\mathrm{M}}{\mathrm{F}}$ | Schoolboy........- | July 10 | $\pm$ | + | $\pm$ | $\pm$ | - | Posterior cervical.-..- | - | - 0 |  | 84.6\% small lymphocytes. |
| 18 | 31 28 | $\underset{\mathrm{M}}{\mathbf{M}}$ | Cashier -.......... | July 12 | $\pm$ | $\pm$ | $\pm$ | $\pm$ | - | --.-.do-...--.-.-.-.---- | - | -0 | 0 | uinea pigs injected with blood on |
| 20 | 34 | M |  | June 29 | + | $+$ | - | + | - |  | - |  | 0 | 3d day of fever were negative. |
|  |  |  | neer. |  |  | + |  | + |  |  |  |  |  |  |
| 21 | 21 | M | Pipe fitter-......- | July 20 | $+$ | $\pm$ | - | $\pm$ | $\pm$ |  | = | = | 0 | Rash maculo-papular in character. |
| 22 | 19 | M | Schoolboy-........ | July 11 | $\pm$ | - | - | $\pm$ | - | Posterior auricular_- | - | - | 0 |  |
| 23 | 33 | M | Car repairman... | July 18 | $+$ | - | - | + | + | Posterior cervicu; posterior auricular. |  |  | 0 |  |
| 24 25 | 30 | M | Policeman-.-.-.- | July 15 | $\pm$ |  |  |  |  |  |  |  |  |  |
| 25 26 | 43 49 | $\underset{\mathrm{F}}{\mathrm{M}}$ | Jeweler-........-- | July 12 | $\pm$ | $\pm$ | $\pm$ | $\pm$ | + | Posterior auricular.... Posterior cervical | - | $-0$ | 6,400 | 70\% small lymphocytes. |



Table 2.-Agglutination test

| Case | Day of disease on which blood was taken | Agglutination for B. tularense | Agglutination for B. proteus $X^{10}$ | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 14 |  |  | Case No. 1 in Table 1. |
| 2 | 29 |  |  | Case No. 8 in Table 1. |
| 3 | 3 |  |  | Case No. 19 in Table 1. |
| 4 | 15 |  |  | Case No. 21 in Table 1. |
| 5 | 26 |  |  | Case No. 25 in Table 1. |
| 7 | 11 |  |  |  |
| 8 | 24 |  |  | Cases not included in Table 1. |
| 9 | 15 |  |  |  |

Table 3.-Differential blood count, in percentages, of eight cases

| Polymorphonuclear neutrophiles | 49.1 | 13.2 | 20.0 | 17.5 | 40.1 | 31.3 | 50.7 | 43.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Large lymphocytes. | 3.2 | 2.1 | 7.3 | 5.1 | 9.1 | 4.2 | 3.3 | 4.4 |
| Small lymphocytes. | 46.8 | 84.6 | 70.8 | 76. 2 | 47.1 | 61.4 | 43.8 | 62. 2 |
| Large mononuclears | 0 | 0 | 2.2 | 1.4 | 3.8 | 4.1 | 2.2 | 0 |
| Transitionals..-.-... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polymorphonuclear eosinophiles | 1.3 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polymorphonuclear basophiles.. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## AGE AND SEX DISTRIBUTION

Although the cases tabulated in Table 1 show a preponderance of males ( 18 males; 8 females), the sexes were about equally represented in the total number of cases recorded. In the cases shown in Table 1 age distribution varied from 3 years to 58 years. Thirty-two cases not tabulated, however, were all in young adults from 15 to 28 years of age.

## ANIMAL INOCULATION

Guinea pigs were injected with citrated blood from cases No. 1 and No. 19 (Table 1) taken on the fourteenth and third day of fever, respectively. These animals showed no elevation of temperature and remained normal for 18 days.

## EPIDEMIOLOGICAL DATA

Since the etiology and mode of spread of this condition were unknown, an investigation was made along the following lines:

City water supply.-An inspection of the city filtration plant showed that the daily consumption at this time of year is about $2,000,000$ gallons. This amount does not tax the capacity of the plant. The water taken from the Tar River is first treated with 500 pounds of alum and 25 pounds of soda per day and permitted to settle in a baffled reservoir of 250,000 gallons capacity. It is then passed through six rapid sand pressure filters. These filters are washed every twelve hours by reverse flow. The clear water is then treated with $31 / 2$ pounds of chlorine gas (Wallace and Tiernan apparatus) per million gallons. A bacteriological count is made
daily at the city health department. The records show that the water rarely has had a total count in excess of 100 organisms per c. c. and that $B$. coli has been invariably absent in 10 c. c. amounts for the preceding two or three months. Under such conditions the water supply could not reasonably be held responsible for the epidemic.

In addition, two of the cases seen occurred at homes out of the city, each having its own source of water. Other cases were also reported from adjacent country.

Milk supply.-Among 30 typical cases, 12 stated they drank no milk, 7 had milk from their own or neighbor's cows, 5 obtained milk from C's dairy, 3 from the L. R. dairy, 2 from G's dairy, and 1 from M. B. dairy. It is therefore safe to conclude that no one source of milk could have been responsible for the outbreak. There was no indication that other dairy products such as cheese, butter, or buttermilk were involved.

Ice cream.-Practically all the ice cream sold to the public in Rocky Mount is furnished by one company. The ice-cream mixture for the local plant of that company is prepared at Wilson, N. C. The Wilson plant was inspected on August 7. The ice-cream mixture is pasteurized by means of steam coils at a temperature of $160^{\circ} \mathrm{F}$. This temperature is held for 30 minutes, after which it is quickly cooled to about $35^{\circ} \mathrm{F}$. It is then shipped by motor truck to Rocky Mount in milk cans which have been sterilized by a steam jet. It is then immediately frozen. Ice cream from the Wilson plant is also sold in localities where no cases have been reported. Several of the patients, upon being questioned, claimed never to have eaten ice cream.

Insects as possible vectors.-Because of the evidence of enlarged post cervical, post auricular, and suboccipital lymph glands, head lice were looked for especially. None were found.

A careful survey about homes as well as in the business district revealed no larvae of Aëdes aegypti, although ideal breeding places for such mosquitoes were numerous. A few culicene mosquitoes were found.

Contagion.-The cases reported by the physicians were scattered and no definite relationship or contact appeared to exist between them. However, a house-to-house survey in a selected area of the residential section and another in the business district uncovered a number of cases that suggested a spread of the condition from one person to another. A history was also obtained of many mild and abortive attacks which would far exceed the actual number of cases seen and reported. In one family of four, the three children came down within a week, the mother escaping. The oldest boy, aged 20, who worked in a confectionery store, was taken first. In the same store, employ-
ing 8 people, 4 boys and 2 girls, ranging in age from 16 to 20 , were stricken within two days. The two older employees escaped. In four of these cases enlarged glands in the post cervical and suboccipital regions were still palpable and visible after the patients had returned to work.

In another firm of eight employees, four, all under 24 years, were taken sick from July 10 to 20. Another developed tender glands in the neck but did not feel ill enough to stop work.

In still other firms a history of two or more cases were obtained. Other firms employing from 5 to 20 workers remained free of the infection. There were many reports of indefinite illness with fever and headache or slight sore throat for one or two days among those associated with cases. Such cases as these, it is believed, were responsible for the rapid spread of the disease and for those cases where direct contact was obscure.

The residential area surveyed contained 31 homes and a total of 173 people. Four cases from this area had already been reported by physicians. The survey revealed a total of 15 cases, or an attack rate of 8.6 per cent.

In the business district, among 23 firms visited, having a total personnel of 272 , there were 33 cases (attack rate of 12.1 per cent).

Sixteen of these patients, all of which were seen shortly after recovery, either had enlarged palpable cervical glands at the time or distinctly recalled their presence during the illness. Others had intense soreness in the neck, especially on movement, but did not remember any definite enlargement of the glands.

In 11 firms, with a total of 56 employees, no case histories were elicited. The 12 firms in which cases occurred are enumerated below, showing the relationship between the number of employees and the number of cases:

| Nature of firm | Number of employees | Number of cases | Nature of firm | Number of employees | Number of cases |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Laundry | 40 | 1 | Dry goods | 8 | 5 |
| Jewelry store | 5 | 3 | Do... | 6 | 2 |
| Department store. | 25 | 2 | Furniturc store | 9 | 2 |
| Do...........- | 6 | 1 | Do.......-- | 3 | 1 |
| Do. | 24 | 3 | Confectionery store | 8 | 6 |
| Do. | 20 | 4 | Dry cleaning.-.-.-- | 15 | 3 |

## DISCUSSION

The possibility that the epidemic was one of dengue fever was considered. But the absence of the intermediate host, the protracted fever in many cases, and the slow convalescence seems to prectade a diagnosis of this malady.

The rash at first suggested Brill's disease, but the enlarged glands, the history of so many mild and abortive cases, the nagtive animal inoculation, the negative agglutination of $B$. proteus $\mathbf{X}_{19}$ in nine cases, and the blood picture seemed to rule it out completely.

Tularaemia was likewise discarded on agglutination tests and in the absence of suppurative glands.

The epidemiology, symptomatology, and laboratory finding fit in best with glandular fever, first described by Pfeiffer ${ }^{1}$ as "Drusenfeber," and by Sprunt and Evans ${ }^{2}$ as "Infectious mononucleosis." The frequent occurrence of a rash was the most unusual feature in our cases; and Longcope ${ }^{3}$ reported ten cases, two of which had a macular rash over the chest and abdomen resembling rose spots. Tidy and Diniels ${ }^{4}$ state definitely that eruptions did not occur in their cases. These authors also called attention to the persistence of enlarged palpable glands in the neck several weeks after convalescence as observed in some of our cases.

Other outbreaks of glandular fever have been reported from New York, New Jersey, and Wisconsin, ${ }^{5}$ and it is believed the condition has a wider distribution than is commonly recognized.

# THE REPORTING OF NOTIFIABLE DISEASES IN A TYPICAL SMALL CITY ${ }^{6}$ 

Hagerstown Morbidity Studies No. II

By Edgar Sydenstrickrr, Statistician, United States Public Health Service
The completeness with which cases of diseases notifiable by law are actually reported depends upon several specific conditions and is subject to the influence of more or less intangible factors. The laws requiring notification are usually quite definite and frequently demand much more than is expected or even possible. For example, in some States the disease notification laws make it the duty, not only of physicians, but also of school-teachers, administrators of institutions, and citizens generally, to report promptly all cases of a long list of diseases. But what actually occurs in most instances has narrowed down to the notification of only a few of these diseases by physicians who are in attendance upon cases, largely because

[^0]dependable diagnoses are sought. So that the practical situation seems to resolve itself into those factors which affect the following conditions:

1. The extent to which physicians are available in a given population for attendance upon cases of notifiable diseases;
2. The extent to which the physicians in this population are called in to attend these cases; and
3. The extent to which the physicians actually report the cases they see and diagnose.

In the belief that a small contribution might be made to our knowledge of these conditions, the records obtained in a series oi morbidity observations upon a general (white) population group during 28 months in Hagerstown, Md., were analyzed from the points of view set forth above, and the results are given briefly in the tables and comments which follow.

The city of Hagerstown had, at the time when the morbidity study was made, a population of about 30,000 ( 29,878 estimated as of February 1, 1923, the mid-date of the period covered by the study). There were 45 physicians (medical graduates), of whom 37 were engaged in general practice. This gives a ratio of one physician to 666 persons, a proportion not greatly in excess of the average for cities in the United States. ${ }^{7}$ It was found that 30 of the 37 physicians in general practice were actually practicing among the families regularly observed for the incidence of illness. If all the cases of notifiable diseases estimated to have occurred in Hagers. town had been distributed among the 37 physicians engaged in general practice, the average number which each physician would have had to report upon would have been 7 or 8 new cases per month; in the season of heaviest prevalence each physician would have had possibly one new case per day. Unless it be assumed that their practice would have been materially increased along other lines, it appears safe to assume that a sufficient number of physicians were available for attendance and reporting upon the cases of notifiable diseases which occurred in the city during the period under consideration.

The record of illness was made by trained workers visiting about 1,800 families at intervals of less than two months from December 1, 1921, to April 1, 1924. ${ }^{\text {. }}$ The population thus observed constituted about one-fourth of the total population of the city, and the selection of families was so made as to include all sections and classes. Since excellent cooperation was given by the families visited, and the field assistants became well acquainted with the individuals and their

[^1]disease histories, it is believed that a fairly accurate record was obtained of the diseases with which we are particularly concerned here. ${ }^{9}$ All cases seen by physicians were referred to the physicians for review as to diagnosis.

Table 1.-Attendance of physicians upon cases of certain notifiable diseases obscrved in a general population group in Hagerstown, Md., December 1, 1921March 31, 1924

| Disease | Number of cases obser ved | Per cent attended by physician |
| :---: | :---: | :---: |
| Typhoid fever. | 19 | 100.0 |
| Meningitis. | 1 | 100.0 |
| Pneumonia (all forms) | 144 | 97.9 |
| Diphtheria | 45 | 97.8 |
| Scarlet fever. | 34 | 97.1 |
| Influenza | 261 | 91.1 |
| Measles. . | 568 | 64.1 |
| Scabies and impetigo | 49 | 61.2 |
| Whooping cough. | 374 | 48.8 |
| Chicken pox- | 232 | 45.2 |
| German measles | 18 | 38.9 |
| Mumps. | 9 | 33.3 |

The number of cases of the principal notifiable diseases which were recorded as having occurred in the population under observation for the 28 -month period, and the proportion attended by physicians ure shown in Table 1. The number of cases of certain diseases is too small to indicate the situation even in the population observed, but it is clearly evident that two general groups of communicable diseases may be distinguished from the point of view of medical attendance in a community which was fairly well supplied with physicians. In one group are scarlet fever, typhoid fever, pneumonia, diphtheria, and influenza, ${ }^{10}$ over 90 per cent of the cases of each of these diseases having had medical attendance. In the second group are measles, scabies and impetigo, whooping cough, chicken pox, and probably mumps, although in the last instance the number of cases was too small to warrant any conclusion.

In so far as this experience may be regarded as at all typical, it can be interpreted that nine-tenths or more of the cases of the more serious diseases upon which public attention has been focussed come under the observation of those upon whom the health department depends for its reports. On the other hand, it is also clearly shown

[^2]that a considerably smaller proportion of cases of such common diseases as measles, impetigo, whooping cough, and chicken pox ever come to the attention of the physicians, much less to the attention of the health department itself.
The question then naturally arises, What proportion of the cases actually seen by physicians are reported? Obviously, so many factors are involved that it is hardly fair to take a single example as typical. This particular experience is not without interest, however, because a health demonstration was in progress at the time when the observations were made. The local physicians were cooperating almost unanimously with this demonstration, considerable public interest was aroused, and the conditions favorable to complete reporting were unusually good.
We did not check each individual case recorded in the observed. population group and seen by a physician with the reports sent in to the health demonstration office, and therefore we are unable to give an exact statement of what actually transpired, but it can be approximated with a fair degree of accuracy for the more frequently occurring diseases by the following method: Assuming that the observed population group was a fair sample of the entire population of Hagerstown, the total number of cases of a given disease seen by physicians can be estimated for the entire population. This estimated total may then be compared with the number of cases actually reported to the local health officer as having occurred during the same period.

Table 2.-Exient to which certain notifiable diseases seen by physicians were reported by them to the local health officer in Hagerstown, Md., December 1, 1921March 31, 1924

| Diseases | Number of cases estimated from study of sample popu lation as scen by physicians in entire city ${ }^{2}$ | Number of cases reported to local health officer ${ }^{1}$ | Per cent of cases seen by physicians that were reported |
| :---: | :---: | :---: | :---: |
| Pneumonia (all forms) | 595 | 339 | 57.0 |
| Diphtheria. | 186 | 165 | 88.7 |
| Scarlet fever | 139 | 142 | 102.0 |
| Influenza | 996 | 863 | 86.6 |
| Measles.. | 1,557 | 627 | 40.3 |
| Scabies and impetigo | 127 | 1 | 0.8 |
| Whooping cough | 751 439 | 229 | 30.5 34.4 |
| Chickea pox. |  |  |  |

${ }_{1}$ As furnished by the burcau of communicable diseases, Maryland State department of health.
${ }^{2}$ The number of cases represented in the first figure column of Table 1 has been multiplied by the ratio of the number of persons observed to the total population to obtain these estimates.

The results of this comparison as given in Table 2 are doubtless about what those who are familiar with the situation of disease reporting would expect. Measles, whooping cough, and chicken pox are very incompletely reported. Scabies and impetigo are an
illustration of diseases notifiable under laws which little or no attempt is made to enforce. In fact, practically all of the cases of scabies and impetigo were first seen by teachers among school children and the children were sent home with the recommendation that a physician be consulted. The total number of cases actually recorded in the families under observation undoubtedly is a minimal statement; a considerable number of cases of children with "sores" were also reported by family informants. On the other hand, the response of physicians to the demand for reports of scarlet fever and diphtheria (and typhoid and smallpox may be safely included) is evidence of their desire, as well as the general desire, for the administration of control measures. The relatively high proportion of influenza cases (as well as of pneumonia) which were reported may be regarded as a reflection of the general interest in this disease which manifested itself in epidemic form in Hagerstown in the late winter and early spring of 1923.

Table 3.-A comparison of the incidence rates for certain notifiable diseases in Hagerstown, Md., based on morbidity surveys with those based on reports by physicians to the local health department, December 1, 1921-March 31, 1924

| Disease | Annual rate per 1,000 |  |
| :---: | :---: | :---: |
|  |  | Based on reports of physicians to the local health department |
| Typhoid fever.-.... | 1.15 | 0.96 |
| Meningitis---1-...- | . 06 | . 03 |
| Pneumonia (all forms) | 8. 72 2. 72 | 4.86 2.37 |
| Scarlet fever.. | 2.06 | 2.04 |
| Influenza.. | 15.80 | 12.38 |
| Measles. | 34. 39 | 8.99 |
| Scabies and impetigo | 2. 97 | . ${ }^{01}$ |
| Whooping cough ....- | 22.64 | 3. 28 |
| Chicken pox-..... | 14.05 | 2.17 .06 |
| German measles...- | 1.09 .54 | $\mathbf{6}$ .34 |

We may now summarize this item of experience in the reporting of notifiable diseases from the point of view of the value of a rate of incidence based upon cases as reported. A comparison is given in Table 3 of the rate of incidence computed upon cases recorded in a continuous canvass of a considerable population with a rate based upon cases reported by physicians. There is a great variation in the diseases. For scarlet fever, typhoid fever, diphtheria, and influenza, the rate based on reported cases approximates the actual rate fairly well, and this undoubtedly would have been true of other serious but relatively rare diseases. But the rates based on the reports for the
other more common notifiable diseases do not begin to approximate the actual rates for these diseases, in spite of the existence of conditions favorable to cooperation between the practicing physicians and the local health demonstration and of the probability that the "actual rate" is a minimal statement of the incidence of the diseases in question.

## SUMMARY

In the course of a 28 -month study of illnesses in a general population group in Hagerstown, Md., data were collected relating to medical attendance. These records were considered from the points of view that led to the following conclusions:

1. The number of physicians engaged in general practice was sufficient to provide for medical attendance upon all cases of notifiables diseases in this community.
2. Physicians were actually called in to attend 90 per cent or more of the cases of the more serious notifiable diseases which were observed including typhoid fever, the pneumonias, diphtheria, scarlet fever, and epidemic influenza, but less than 65 per cent of cases of measles, scabies and impetigo, whooping cough, and chicken pox were attended by physicians.
3. Of cases seen by physicians, apparently 85 per cent or more of the cases of diphtheria, scarlet fever, and influenza were reported; about 60 per cent of the pneumonias and 30 to 40 per cent of measles, whooping cough, and chicken pox. Practically no scabies nor impetigo was reported. Conditions were unusually favorable for complete reporting.
4. Incidence rates based on the physicians' reports approximated fairly well the rates based on regularly repeated house-to-house inquiries for scarlet fever, typhoid fever, diphtheria, epidemic influenza, and probably other serious but rarer diseases. The incidence rates based on physicians' reports for the other more common notifiable diseases, however, fell far short of their incidence as actually observed.

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## CURRENT WORLD PREVALENCE OF DISEASE

## REVIEW OF THE MONTHLY EPIDEMIOLOGICAL REPORT ISSUED AUGUST 15, 1926, BY THE HEALTH SECTION OF THE LEAGUE OF NATIONS' SECRETARIAT ${ }^{1}$

Cholera diminished rapidly during July in all the principal ports of the Far East except in Shanghai, where a sudden outbreak began the middle of the month and 314 cases were reported in the one week, July 25-31, according to information contained in the August Epidemiological Report published at Geneva by the health section of the League of Nations' secretariat. The weekly cases (or deaths) reported at the various ports are given in Table 1.

Table 1.-Cholera prevalence reported in the principal ports of the Far East from June 26 to July 31, 1926

| City | Week ended- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 28 | July 3 | July 10 | July 17 | July 24 | July 31 |
| Bombay (deaths) | 0 | 0 | 0 | 0 | 1 | 1 |
| Calcutta (deaths) | 41 | 45 | 0 | 0 | 0 | 0 |
| Negapatam (deaths) | 23 | 7 | 3 | 2 | 1 | 0 |
| Vizagapatam (deaths). | 0 | 0 | 0 | 0 | 1 | 0 |
| Rangoon (deaths) | 12 | 6 | 11 | 7 | 1 | 1 |
| Singapore (cases).- | 0 | 0 | 1 | 0 | 0 | 0 |
| Bangkok (cases) -- | 56 | 36 | 18 | 20 | 10 | 5 |
| Saigon and Cholon (cases) | 5 | 32 | 8 | 3 | 0 | 0 |
| Haiphong (cases) | 42 | 17 | 19 | 3 | 0 | 0 |
| Shanghai (cases)... | 0 | 0 | 0 | 37 | 29 | 314 |

The outbreak of cholera in Kwang-Chow-Wan in June, with 70 cases between June 11 and 30, seems not to have spread, as no cases were reported in the first 20 days of July. In French Indo-China a slight decline is noted in July, when 1,528 cases of cholera were reported in the first 20 days as compared with 1,786 cases in the preceding 20 days.

Plague.-The prevalence of plague in Africa in the first half of 1926 is shown in Table 2.

Table 2.-Plague cases reported in Africa during 1926

| Month | Kenya | Nigeria | Senegal | Tunisia | Madagascar | Union of South Africa | 4-week periods ended- | Uganda ${ }^{\text {a }}$ | Egypt ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January...- | 49 | 24 | 0 | 0 | 334 | 0 | Jan. 30-- | 93 | 0 |
| February. | 97 | 25 | 0 | 0 | 277 | 1 | Feb. 27-- | 52 | 1 |
| March. | 81 | 56 | 3 | 0 | 186 | 26 | Mar. 27. | 26 | 7 |
| April. | 37 | 34 | 12 | 0 | 101 | 10 | Apr. $24-$ | 78 | 10 |
| May | 40 |  | 129 | 70 | 25 | 13 | May 22 - | 213 | 25 |
| June | 79 |  |  | 104 | 66 |  | June 19.- | ${ }^{6} 237$ | 37 |
| July.-- |  |  |  | 22 |  |  |  |  |  |

[^3]In Egypt 104 plague cases were reported from January 1 to July 22, 1926, as compared with 84 cases reported in the corresponding period of 1925, indicating, however, a very favorable plague situation. During the three weeks from July 2 to 22,12 cases and 6 deaths were reported, with one case at Alexandria and the others in inland Provinces.

In the Dutch East Indies the plague deaths slightly decreased at the end of May and 167 deaths were reported in the three weeks ended June 5, as compared with 218 in the preceding three weeks.

The plague outbreak at Baghdad continued to decline during June, and 15 cases were reported in the town in the two weeks ended July 3 , as against 31 in the preceding two weeks.

In French Indo-China there were 9 cases of plague between July 1 and 20, of which 4 were at Saigon, 2 in Chaudoc (Cochin-China), 1 in Pnom-Penh, and 2 in Kandal (Cambodia). The plague incidence during the first five months of 1926 was less than in 1925, but in June and July it exceeded that in the corresponding period of 1925.

Plague cases reported in Indo-China, January-July, 1925 and 1926

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1925 |  |  |  |  |  |  |  |
| 1920 |  |  |  |  |  |  |  |

${ }^{1}$ For 20 days only.
At Kwang-Chow-Wan, 19 cases of plague were notified in the 10 -day period June 21-30, and 18 during the preceding 10 days.

Reports from South American countries showed 34 cases of plague with 6 deaths during June in Peru, 2 cases at Guayaquil, Ecuador, in June, and 1 death at Sao Paulo, Brazil, in the week April 19-25.

Yellow fever.-The following cases of yellow fever are reported: Gold Coast, 3 cases and 1 death during April and 3 cases and 2 deaths during May; Bahia, Brazil, 2 cases and 2 deaths from May 2 to 15.

Typhus.-Among the European countries from which typhus is still reported, European Russia, Poland, Latvia, the Kingdom of the Serbs, Croats, and Slovenes, and Greece showed a considerably lower prevalence for the first six months of 1926 than for the preceding six-month period. On the other hand, the prevalence during this period was higher in Czechoslovakia, Lithuania, Rumania, and Bulgaria. In Italy, where only one case had been reported during the period 1922-1925, 31 cases occurred in the first half of 1926 in Naples.

The incidence of typhus in African countries during the first half of 1926 is compared with 1925 in Table 3. The incidence was lower
in 1926 in Algeria, Egypt, and Basutoland, about the same in Tunisia and the Union of South Africa, and somewhat higher in 1926 in Morocco.

Table 3.-Cases of typhus notified in various African countries, 1925 and 1926

| Month | Algeria |  | Morocco |  | Tunisia |  | South Africa |  | 4-week period | Basutoland |  | Egypt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1925 | 1926 | 1925 | 1926 | 1925 | 1926 | 1925 | 1926 |  | 1925 | 1926 | 1925 | 1928 |
| January. | 21 | 19 | 72 | 39 | 6 | 6 | 96 | 94 |  | 1 | 11 | 31 | 35 |
| February | 32 | 44 | 176 | 73 | 4 | 81 | 75 | 69 |  | 9 | 0 | 79 | 134 |
| March. | 42 | 26 | 26 | 140 | 44 | 93 | 41 | 37 | III | 9 | 0 | 178 | 99 |
| April.. | 105 | 36 | 25 | 159 | 50 | 51 | 49 | 87 |  | 3 | 2 | 148 | 192 |
| May | 97 | 55 | 59 | 115 | 139 | 43 | 92 | 70 |  | 3 | 0 | 292 | 171 |
| June... | 114 | 33 | 59 | 12 | 89 | 22 | 66 |  | VI | 2 |  | 254 |  |

Smallpox.-"The usual seasonal lull in smallpox incidence is apparent in the reports from nearly all countries," states the Report. "In northern England, however, while the incidence has decreased as compared to the earlier weeks of the present year, the number of cases reported during June and the early part of July represents an increase over the number of cases notified in corresponding periods of the last two years.
"The unusual prevalence in Japan, noted in previous reports of this year, shows signs of diminution. In India, the first half of the year has been marked by an incidence and morta'ity from smallpox greater than in recent years; Orissa, Bengal, and the central Provinces suffered most, the situation being re!atively favorable in other districts."

Dysentery and enteric fever.-The reports available in the August Epidemiological Report, which refer to the month of June or the first half of July for the most part, did not to date indicate much seasona! rise in the incidence of either dysentery or enteric fever. On the whole, the incidence of these two diseases during the first six months of the present year compared very favorably with the preceding year.

Some increase in dysentery was noted in the reports for Germany, Greece, Japan, Korea, and Palestine.

Malaria.-There were 349,126 cases of malaria reported in European Russia, exclusive of the Ukraine, in the first quarter of 1926 as compared with 412,275 cases in the first quarter of 1925 . A lower prevalence was reported in all the different geographical regions, except the Central Black Earth and the Middle and Lower Volga Regions, where the numbers of cases during the first quarter were slightly higher than in 1925. In the Ukraine, 41,770 cases were reported in the first quarter of 1926, less than half the reported incidence in the corresponding period of 1925.

Acute poliomyelitis.-The latest reports, relating to the last week of June and the first two weeks of July, show a slightly increased number of cases of acute poliomyelitis in England, Norway, Sweden, Germany, Italy, and the United States, thus indicating the approaching summer increase of this disease.

Cerebrospinal meningitis.-As to epidèmic cerebrospinal meningitis, a slight decline is to be noted in the last reports from Sweden, England and Wales, Holland, Austria, and Italy, while a comparatively higher ncidence has been reported from Czechoslovakia, Germany, and Poland.

Communicable diseases in China.-The Report this month gives an interesting summary of the results of the efforts of Dr. Tsefang F. Huang, Chief of the Department of Administration of the National Epidemic Prevention Bureau at Peking, to obtain information on the prevalence of certain communicable diseases in China. Doctor Huang addressed letters to the practitioners of western medicine in the 18 Provinces of China and Manchuria, and inclosed post cards to be filled out and returned monthly. A large proportion of the physicians have been cooperating since May, 1925. The following summary, taken from the Report, was based on the information obtained by Doctor Huang for the 10 months, May, 1925, to February, 1926.
It appears from these reports that plague was present (sporadic) in Manchuria during May and June, 1925, prevalent in Kwangtung Province during the same months, and endemic throughout the year in Fukien Province, the only district reporting plague in January-February, 1926. Infected rats were found throughout nearly the whole period in Fukien Province.
Cholera was notified from every reporting Province at some time during the 10 months. It appears to have been most prevalent during August, September, and October, but too much reliance must not be placed upon this impression. The Provinces of Chekiang, Hunan, and Kiangsu appeared to suffer most. During January and February, 1926, the reports indicate a decrease, sporadic cases being notified from Anhwei, Honan, Kan-suh, and Kwangtung Provinces, while the disease was said to be prevalent in Chekiang and Shensi.
Smallpox was reported from every Province during the period; it was said to be epidemic in four Provinces during January and February, 1926, and prevalent in nearly all others.

Dysentery was said to be present in all reporting Provinces, most prevalent, naturally, during the summer months. Typhus fever was reported from 14 Provinces during the first two months of 1926, and relapsing fever from 10 during the same period. Other diseases for which returns were received were epidemic meningitis, diphtheria, and typhoid fever, the latter two being prevalent almost everywhere.

## PUBLIC HEALTH ENGINEERING ABSTRACTS

Relation of Summer Rainfall to Mosquito Prevalence.-Thomas J. Headlee, New Jersey Agricultural Experiment Stations, New Brunswick, N. J., Bulletin 423, December, 1925, pp. 3-14. (Abstract by J. A. Le Prince.)

In this article the writer answers the question, In the absence of mosquitoes why do we continue to have antimosquito work?

Only by constant work can the mosquito pest be held in subjection. Basic facts in mosquito life history are given. Suitable temperature, larval food, and light to support that food, are essentials. Rainfall is a basic factor for larval development in upland, and tide a basic factor on salt marshes. Extreme acidity or alkalinity is fatal to larval development. The type of tide most likely to result in mosquito broods is one which runs just high enough to send the water creeping through the grass and filling the depressions. The grass acts as a screen and prevents fish from accompanying the creeping water into the depressions.

Flooding of stream channels in the uplands often destroys mosquito breeding, but the net result of heavy rainfall is enormous increase in water accumulations in which larvae can develop. Studies of mosquito prevalence indicate distinctly that the number of mosquitoes varies inversely as the intensiveness of antimosquito work.

Malarial Fevers in the United States Army and at Selected Sta-tions.-Maj. Albert G. Love. Military Surgeon, Vol. 58, No. 6, June, 1926, pp. 593-610; Vol. 59, No. 1, July, 1926, pp. 69-95. (Abstract by L. D. Fricks.)

This is a brief historical review of malarial fevers in the United States Army from the beginning of the nineteenth century, as compiled from the records of the Surgeon General's office and reports from Army surgeons at different stations. All of these reports indicate a pronounced reduction in malaria in the United States Army during the period covered.

One hundred years ago malarial fevers were responsible for more than 25 per cent of all sick admissions to Army hospitals. Since the World War malaria has been responsible for only 1 per cent of admissions. In 1841, during the Seminole War, 50 per cent of admissions to post hospitals were attributed to malaria; during the Mexican War, 25 per cent; during the Civil War, 23 per cent; during the Spanish-American War, 23 per cent; and during the World War, one-half of 1 per cent.

In past years epidemic malaria was reported among soldiers stationed at Fort Wayne, Mich. (Detroit), Fort Hamilton, N. Y., and Columbus Barracks, Ohio. In recent years malaria has been controlled on all Army posts in the United States by suitable antimosquito measures.

Protection of Highway. Water Supplies.-Earle L. Waterman, Professor of Sanitary Engineering, University of Iowa, Iowa City, Iowa. American Journal of Public Health, Vol. 16, No. 3, Mạrch, 1926, pp. 250-256. (Abstract by H. B. Hommon.)

By means of a questionnaire, the status of roadside water supply work in 40 States was ascertained. In 10 States definite programs for marking safe sources of water supply along the principal highways are being carried out. Sanitary surveys and bacteriological examinations of roadside supplies are made in five States, but no signs are posted. In three States water supplies of tourist camps are supervised by State health departments, and preliminary investigations are under way in two States. Twenty States reported that no special attempt had been made to supervise roadside water supplies. Many State health departments favor the general plan of supervising roadside water supplies without the use of signs, while others favor posting only the unsafe sources of supply.

Discussion by W. H. Dittoe, formerly State sanitary engineer, Ohio State Department of Health: The Ohio State Department of Health started a systematic survey of water supplies available to the motoring public in February, 1924. Between that date and October, 1925, 1,850 miles of highways were covered and approximately 1,450 water supplies examined. Of the total only 105 were given the "Seal of safety," and of this number, 102 were drilled wells, 2 were springs, and 1 was a dug well. A large percentage of the 1,300 sources which were unsatisfactory could be made approved sources with improvement made in their protection.

Rural Water Supplies may Appear Deceptively Pure.-Jack J. Hinman, jr., Associate Professor of Sanitation, University of Iowa, Iowa City, Iowa. The Nation's Health, Vol. 8, No. 7, July 15, 1926, pp. 465-467. (Abstract by Paul S. Fox.)

Rural water supplies may be divided into two classes: The supply for domestic use; and the supply for farm animals, irrigation, and other uses. Domestic water is usually obtained from wells and springs or cisterns. Water for animals is commonly obtained from streams or ponds. It would be much better if farm animals were supplied with a good ground water, since surface water may be polluted to such extent as actually to endanger the health of the animals.

Analyses of water from private sources 1915-1924, inclusive, were as follows:

| Source | Per cent satisfactory |
| :---: | :---: |
| Shallow wells.. | 18. 14 |
| Deep wells. | 68.19 |
| Springs.-- | 29.09 |

The article contains the usual advice in regard to the protection of wells, springs, and cisterns, with a number of illustrations.

Sterilization of Water by Liquid Chlorine.-J. M. Mathew. The Commonwealth Engineer (Australia), Vol. 13, No. 1, August 1, 1925, pp. 30-33. (Abstract by Sol Pincus.)

An account and description of equipment is given of what appears to be the first use of liquid chlorine for the treatment of a public water supply in Australia. The purposes and methods of chlorination are reviewed and reference to its widespread use in water purification in the United States and Canada is made.

The author describes the tests made in applying liquid chlorine through American-made control apparatus to a surface water supply which at times was somewhat turbid and contained the wash from a populated watershed. The results were in agreement with the American experience. The addition of chlorine of $0.4 \mathrm{p} . \mathrm{p} . \mathrm{m}$. under moderately favorable conditions gave a water of high degree of purity. The colorimetric test with orthotoluidine giving a residual of 0.1 to 0.2 after 10 minutes was a satisfactory guarantee. Such a dosage, except for local or seasonal modification, would have no adverse effect on the taste of the water.

## VENEREAL DISEASE MANUAL FOR SOCIAL AND CORRECTIVE AGENCIES

A new publication entitled "Venereal Disease Manual for Social and Corrective Agencies" has been recently prepared by the United States Public Health Service.

There is a definite relationship between venereal diseases and insanity, dependency, delinquency, crime, and other conditions affecting the social structure. The Public Health Service has had an increasing demand from many individuals and organizations interested in the various branches of social welfare for authentic and comprehensive information concerning the social and economic aspects of the venereal diseases. It was to meet this demand for information that the publication was prepared.

In addition to giving fundamental information on the medical aspects of the venereal diseases, their relief and prevention, the manual deals with the socio-economic relationships of these diseases and has chapters on the following subjects: The venereal diseases and the community, sex education, legal aspects of venereal disease control, sex morality and the law, juvenile delinquency, aids in conditioning behavior.

The book should be of especial value to the following groups: Court officials; social workers; police and probation officers; nurses; visiting
teachers; nurses' training schools and schools of social work; superintendents and matrons of homes for the dependent, delinquent, and defective classes.

The publication is bound in green buckram, and owing to the cost of printing and binding it will not be possible for the Public Health Service to distribute it free of charge. It may be secured, however, from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 50 cents per copy.

## DEATHS DURING WEEK ENDED SEPTEMBER 25, 1926

Summary of information received by telegraph from industrial insurance companies for week ended September 25, 1926, and corresponding week of 1925. (From the Weekly Health Index, September 29, 1926, issued by the Bureau of the Census, Department of Commerce)


Deaths from all causes in certain large cities of the United States during the week ended September 25, 1926, infant mortality, annual death rate, and comparison with corresponding week of 1925. (From the Weekly Health Index, September 29, 1926, issued by the Bureau of the Census, Department of Commerce)

| City | Week ended Sept.$25,1926$ |  | Annual death rate per 1,000 cor-responding week, 1925 | Deaths under 1 year |  | Infantmortalityrate, weekendedSept. 25,$1926^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total deaths | Death rate ${ }^{1}$ |  | Week ended Sept. 25, 1926 | Corresponding week, 1925 |  |
| Total (66 cities) | 6,299 | 11.3 | 10.8 | 840 | $\$ 36$ | ${ }^{3} 68$ |
| Akron. | 38 |  |  | 9 | 7 | 97 |
| Albany ${ }^{\text {a }}$ | 27 | 11.8 | 18.6 | 3 | 4 | 62 |
| Atlanta--- | 56 |  |  | 8 | 10 |  |
| Colored | 30 | (5) |  | 3 |  |  |
| Baltimore ${ }^{\text {a }}$ | 210 | 13.6 | 12. 1 | 31 | 40 | 95 |
| White. | 156 |  |  | 22 |  | 78 |
| Colored. | 54 | (5) |  | 9 |  | 146 |
| Birmingham | 49 | 12.1 | 13.4 | 5 | 7 | 1 |
| White- |  |  |  | 4 |  |  |
| Colored | 8 |  |  | 1 |  |  |
| Boston.--- | 238 | 15.8 | 11.4 | 45 | 27 | 126 |
| Bridgeport. | 20 |  |  | 2 | 4 | 34 |
| Buffalo--..- | 122 | 11.7 | 12.3 | 18 | 23 | 75 |
| Cambridge | 30 | 12.8 | 7.8 | 5 | 2 | 89 |
| Canton-.- | 18 | 8. 5 | $\begin{array}{r}5.9 \\ \hline 109\end{array}$ | 3 3 3 | 2 | ${ }_{50}^{66}$ |
| Chicago ${ }^{\text {- }}$ | $\begin{array}{r}31 \\ 619 \\ \hline\end{array}$ | - 12.3 | 10.9 | $\begin{array}{r}3 \\ 78 \\ \hline\end{array}$ | ${ }_{4}^{4}$ | 50 |
| Cincinnati | 120 | 15.2 | 13.8 | 20 | 20 | 125 |
| Cleveland... | 187 | 10.2 | 9.5 | 23 | 24 | 60 |

[^4]Deaths from all causes in certain large cities of the United States during the week ended September 25, 1926, infant mortality, annual death rate, and comparison with corresponding week of 1925-Continued

| City | Week ended Sept.$25,1926$ |  | Annual death rate per 1,000 cor-responding week, 1925 | Deaths under 1 year |  | Infantmortalityrate, weekendedSept. 25,1926 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total deaths | Death rate |  |  | $\begin{gathered} \text { Corre- } \\ \text { sponding } \\ \text { week, } \\ 1925 \end{gathered}$ |  |
| Columbus. | 78 | 14.3 | 12.9 | 15 | 17 | 140 |
| Dallas - | 66 | 17.2 | 10.2 | 21 | 7 |  |
| White... <br> Colored | 61 5 |  |  | 21 |  |  |
| Dayton.-.- | 38 | 11.2 | 6.9 | 8 | 5 | 132 |
| Denver- | 62 | 11.3 | 14.5 | 8 | 20 |  |
| Des Moines. | 29 | 10.4 | 9.2 | 3 | 3 | 50 |
| Detroit. | 278 | 11.2 | 8.8 | 39 | 50 | 64 |
| Duluth. | 26 | 12.0 | 9.4 | 3 | 4 | 70 |
| El Paso. | 22 | 10.5 | 14.4 | 4 | 6 |  |
| Erie | 25 |  |  | 2 | 5 | 39 |
| Fall River ${ }^{\text {4 }}$ | 27 | 10.7 | 10. 1 | 1 | 3 | 16 |
| Flint | 20 | 7.6 | 9.2 | 5 | 7 | 85 |
| Fort Worth. | 37 | 12.1 | 8.9 | 4 | 3 |  |
| White Colored | 28 9 | (5) |  | 3 1 |  |  |
| Grand Rapids. | 29 | 9.7 | 11.2 | 4 | 5 | 57 |
| Houston-..- | 53 |  |  |  | 3 |  |
| White. | 34 |  |  | 4 |  |  |
| Colored. | 19 | (5) |  | 9 |  |  |
| Indianapolis. | 90 | 12.8 | 10.8 | 5 | 8 | 38 |
| White- | 72 |  |  | 5 |  | 42 |
| Colored. | 18 |  |  | 0 |  | 0 |
| Jersey City. | 67 | 11.0 | 12.6 12.1 | 5 | 11 4 | ${ }_{97}$ |
| Kansas City, Kans White........ | 33 | 14.7 | 12.1 | 5 3 | 4 | 97 63 |
| Colored | 12 | (5) |  | 2 |  | 263 |
| Kansas City, Mo. | 84 | 11.7 | 12.1 | 15 |  |  |
| Los Angeles. | 217 |  |  | 15 | 9 | 42 |
| Louisville... | 73 | 12.2 | 15.5 | 10 | 8 | 85 |
| White. | 54 | (5) |  | 9 |  | 90 63 |
| Lowell.... | 31 |  |  | 6 | 8 | 116 |
| Lynn.-. | 19 | 9.5 | 7.6 | 2 | 1 | 53 |
| Memphis. | 58 | 17.1 | 19.4 | 9 | 5 |  |
| White. | 27 |  |  | 7 |  |  |
| Colored | 31 | ${ }^{5}$ |  | 2 |  |  |
| Milwaukee. | 89 | 9.0 | 8.3 | 10 | 15 | 47 |
| Minneapolis. | 88 | 10.6 | 9.9 | 8 | 7 | 44 |
| Nashville ${ }^{\text {4 }}$. | 39 | 14.8 | 9.6 | 3 | 2 |  |
| White. | 27 |  |  | 3 |  |  |
| Colored | 12 | ${ }^{5}$ |  | 0 |  |  |
| New Bedford. | 27 |  |  | 5 | 5 | 87 |
| New Haven... | 56 | 16.0 | 9.3 | 5 | 5 | 68 |
| New Orleans.- | 165 | 13.1 | 17.4 | 17 | 17 | -- |
| White... | 5 |  |  | 8 |  |  |
| New Yolored. | 51 1, 201 | ${ }^{(5)} 10.6$ | 10.3 | 168 | 165 | 65 |
| Bronx borough. | 1, 137 | 7.9 | 8.1 | 14 | 20 | 47 |
| Brooklyn borough. | 387 | 9.0 | 8.6 | 55 | 45 | 56 |
| Manhattan borough. | 513 | 14.3 | 13.6 | 74 | 77 | 82 |
| Queens borough...- | 128 | -8.7 | 7.3 | 12 | 19 | 55 |
| Richmond borough. | 36 | 13.1 | 18.1 | ${ }_{6}^{6}$ | 4 | 105 |
| Newark, N. J <br> Norfolk | 83 41 | 12.4 | 10.5 10.5 | 14 7 | 15 5 | 67 141 |
| White. | 18 |  |  | 2 |  | 59 |
| Colored | 23 |  |  | 5 |  | 249 |
| Oakland.- | 41 | 8.2 | 7.2 | 2 | 3 | 23 |
| Oklahoma City | 24 |  |  | 2 | 3 |  |
| Omaha...- | 36 | 8.7 | 12.6 | 3 | 9 | 32 |
| Paterson- | 26 | 9.5 | 10.3 | 6 | 1 | 101 |
| Philadelphia | 424 | 11.0 | 10.4 | 49 | 69 | 65 |
| Pittsburgh. | 161 | 13.2 | 13.2 | 20 | 40 | 66 |
| Portland, Oreg.- | 57 |  |  | 4 | 4 | 40 |
| Providence...-- | 48 | 9.1 | 9.0 | 5 | ${ }_{14}^{4}$ | 42 87 |
| Richmond White-........ | 42 | 11.6 | 12.0 | 7 3 | 14 | 87 59 |
| Colored... | 18 ; | (3) |  |  |  | 140 |

Footnotes at end of table.

Deaths from all causes in certain large cities of the United States during the week ended September 25, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1925-Continued


[^5]
# PREVALENCE OF DISEASE 

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

## UNITED STATES

## CURRENT WEEKLY STATE REPORTS

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

## Reports for Week Ended October 2, 1926

| ARIZONA | Cases | caltrornia-continued | Cases |
| :---: | :---: | :---: | :---: |
| Chicken pox. |  | Measles. | 375 |
| Diphtheria. | 1 | Mumps | 109 |
| Lethargic encephalitis. | 1 | Poliomyelitis: |  |
| Policmyelitis. | 1 | Lincoln. | 1 |
| Scarlet fever | 6 | Los Angeles. | 1 |
| Trachoma | 6 | Los Angeles County. | 2 |
| Tuberculosis. | 33 | San Diego. | 1 |
| Typhoid fever. | 9 | Scarlet fever. | 105 |
|  |  | Smallpox. | 4 |
| arkansas |  | Tuberculosis. | 140 |
| Chicken pox | 16 | Typhoid fever. | 17 |
| Diphtheria. | 7 | Whooping cough | 43 |
| Hookworm disease. | 3 |  |  |
| Influenza. | 22 | COLORADO |  |
| Malaria. | 183 | Chicken pox | 2 |
| Measles. | 5 | Diphtheria | 26 |
| Mumps. | 1 | Impetigo contagiosa. | 1 |
| Ophthalmia neonatorum | 1 | Lethargic encephalitis | 1 |
| Pellagra. | 14 | Measles. | 6 |
| Scarlet fever | 6 | Mumps. | 1 |
| Smallpox | 1 | Paratyphoid fever. | 6 |
| Tuberculosis. | 18 | Pellagra | 1 |
| Typhoid fever. | 54 | Pneumonia | 3 |
| Whooping cough. | 35 | Scarlet fever | 16 |
|  |  | Smallpox. | 2 |
| California |  | Tuberculosis. | 49 |
| Cerebrospinal meningitis: |  | Typhoid fever- | 7 |
| Alameda.-.......-. | 1 | Vincent's angina | 1 |
| San Francisco. | 1 | Whooping cough | 8 |
| San Joaquin County | 1 | connecticet |  |
| Tulare County. | 1 | Anthrax | 1 |
| Chicken pox. | 77 | Cerebrospinal meningitis | 2 |
| Diphtheria. | 97 | Chicken pox. | 10 |
| Influenza. | 19 | Diphtheria. | 14 |
| Lethargic encephalitis: |  | German measles. | 1 |
| Burbank | 1 | Influenza. | 2 |
| Los Angeles. | 1 | Measles.. | 7 |

## CONNRCTICUT-continued

| CONNECTIC |  |
| :---: | :---: |
|  | Cases |
| Mumps | 3 |
| Paratyphoid fever | 3 |
| Pneumonia (broncho) | 13 |
| Pneumonia (lobar) | 23 |
| Poliomyelitis. | - 4 |
| Scarlet fever | 30 |
| Septic sore throat | 1 |
| Tuberculosis (all forms) | 40 |
| Typhoid fever. | 3 |
| Whooping cough | 23 |

## DELAWARE

Diphtheria..................................................... 2
Influenza..................................................... 1
Malaria......................................................... 2
Pneumonia................................................. 1
Scarlet fever................................................. 6

## florida

Chicken pox.................................................... 1
Dengue....................................................... 1
Diphtheria...................................................... 32
Influenza........................................................ 2

Mumps.-....................................................... 4
Paratyphoid fever.-.-....................................... 1
Pneumonia..................................................... 11
Scarlet fever..................................................... 5

Tetanus......................................................... 1
Tuberculosis........-..................................... 16
Typhoid fever................................................ 13

georgia
Chicken pox..........-...................................... 12
Conjunctivitis (acute).................................. 1
Diphtheria................................................. 71
Dysentery.................................................. 11
Influenza.-...................................................... 35

Measles ......................................................
Mumps....................................................... 2
Paratyphoid fever........................................... 6
Pellagra-.................................................... 4
Pneumonia............................................... 21
Poliomyelitis............................................... 1
Scarlet fever.................................................... 23
Septic sore throat......................................... 7
Smallpox.--................................................... 11
Tuberculosis.................................................. 14
Typhoid fever................................................. 91
Typhus fever................................................... 3
Whooping cough........................................... 5
IDAHO
Chicken pox-................................................ 3
Diphtheria-................................................. 8
Measles............................................................ 4
Mumps..-........................................................................... 1
Scarlet fever..................................................... 12
Smallpox.-...................................................... 2
Typhoid fever............................................... 4
Whooping cough............................................................... 2

ILLINOIS

Cases

Cerebrospinal miningitis:
1
Cook County
Knox County ..... 1
Madison County ..... 1
Stephenson County ..... 1
Chicken pox ..... 52
Diphtheria ..... 93
Influenza ..... 19
Lethargic encephalitis:
Cook County ..... 3
Crawford County ..... 1
Lee County ..... 1
Madison County ..... 1
Morgan County ..... 1
Peoria County ..... 1
Measles ..... 64
Mumps ..... 22
Pneumonia ..... 138
Poliomyelitis:
Lake County ..... 1
MoHenry County ..... 1
Richland County ..... 1
Scarlet fever ..... 145
Smallpox ..... 1
Tuberculosis ..... 279
Typhoid fever ..... 91
Whooping cough ..... 140
indiana
Cerebrospinal meningitis ..... 1
Chicken pox ..... 22
Diphtheria ..... 45
Influenza ..... 20
Measles ..... 9
Mumps ..... 1
Pneumonia ..... 6
Poliomyelitis ..... 1
Scarlet fever. ..... 57
Smallpox ..... 3
Trachoma ..... 4
Tuberculosis. ..... 24
Typhoid fever ..... 31
Whooping cough ..... 23
IOWA
Cerebrospinal meningitis ..... $\$$
Chicken pox
Chicken pox .....
18 .....
18
Diphtheria
Diphtheria
German measles. ..... 1
Measles ..... 4
Mumps ..... 1
Poliomyelitis ..... 5
Scarlet fever ..... 14
Smallpox ..... 2
Tuberculosis ..... 12
Typhoid fever ..... 2
Whooping cough ..... 1
kansas
Cerebrospinal meningitis-Ashland ..... 1
Chicken pox ..... 9
Diphtheria ..... 14
German measles ..... 2
Influenza ..... 2
KANSAS-continaed
Cases
Malaria ..... 3
Measles ..... 7
Mumps ..... 2
Pellagra ..... 1
Pncumonia ..... 9
Poliomyelitis:
Bison ..... 1
Hutchinson ..... 1
Hutchinson, R. F. D ..... 1
Scarlet fever ..... 37
Smallpox ..... 2
Tuberculosis ..... 15
Typhoid fever ..... 27
Whooping cough ..... 52
LOUISIANA
Diphtheria ..... 2
Influenza ..... 12
Malaria ..... 3
Paratyphoid fever ..... 1
Pneumonia ..... 21
Scarlet fever ..... 7
Smallpox ..... 2
Tuberculosis. ..... 28
Typhoid fever ..... 19
Whooping cougi ..... 9
MANE
Chicken pox ..... 9
Diphtheria ..... 3
German measles ..... 1
Influenza ..... 4
Measles ..... 24
Mumps ..... 1
Pneumonia ..... 3
Poliomyelitis ..... 1
Scarlet fever ..... 13
Tuberculosis ..... 10
Typhoid fever ..... 2
Vincent's angina ..... 1
Whooping cough ..... 4
MARYLAND 1
Chicken pox ..... 4
Diphtheria ..... 19
Dysentery ..... 5
German measles ..... 1
Influenza ..... 5
Malaria ..... 5
Measles ..... 8
Mumps ..... 6
Ophthalmia neonatorum ..... 2
Paratyphoid fever ..... 1
Pellagra ..... 1
Pneumonia (broncho) ..... 3
Pneumonia (lobar) ..... 9
Poliomyelitis ..... 2
Scarlet fever ..... 21
Tuberculosis ..... 45
Typhoid fever ..... 48
Vincent's angina ..... 1
Whooping cough ..... 39
massachüsettsCerebrospinal meningitis2
Chicken pox ..... 45
Diphtheria ..... 68
CasesInfluenzaLethargic encephalitis12
Measles ..... 1
Mumps ..... 55
Ophthalmia neonatorum ..... 2
Pneumonia (lobar) ..... 38
Poliomyelitis ..... 8
Scarlet fever ..... 124
Septic sore throat ..... 3
Tetanus ..... 2
Trachoma ..... 1
Tuberculosis (pulmonary) ..... 97
Tuberculosis (other forms) ..... 22
Typhoid fever ..... 18
Whooping cough ..... 67
michigan
Diphtheria ..... 110
Measles ..... 32
Pneumonia ..... 37
Scarlet fever ..... 87
Smallpox ..... 3
Tuberculosis ..... 281
Typhoid fever ..... 20
Whooping cough ..... 91minnesota
Chicken pox ..... 25
Diphtheria ..... 53
Lethargic encephalitis ..... 1
Measles. ..... 10
Pneumonia ..... 1
Poliomyelitis ..... 3
Scarlet fever ..... 135
Smallpos ..... 3
Tuberculosis ..... 50
Typhoid fever ..... 14
Whooping cough ..... 28
Diphtheria ..... 22
scarlet fever ..... 9
Smallpox ..... 1
Typhoid fever. ..... 28
Missocri (Exclusive of Kansas City)
Chicken pox ..... 9
Diphtheria ..... 31
Malaria ..... 1
Measles. ..... 3
Mumps ..... 2
Ophthalmia neonatorum ..... 1
Scarlet fever ..... 40
Tuberculosis ..... 23
Typhoid fever ..... 30
Whooping cough ..... 12
MONTANA
Chicken pox ..... 3
Diphtheria ..... 12
Measles ..... 4
Scarlet fever ..... 30
Smallpox ..... 3
Tuberculosis ..... 3
Typhoid fever ..... 5
Whooping cough ..... 7
nebraska Cases
Chicken pox ..... 9
Diphtheria ..... 3
oklanoma
(Exclusive of Oklahoma City and Tulsa)Cases
Mumps
Poliomyelitis ..... 1
Scarlet fever ..... 14
Smallpox ..... 5
Tuberculosis ..... 1
Whooping cough ..... 28
NEW JERSEY
Chicken pox ..... 14
Diphtheria ..... 46
Dysentery ..... 1
Measles. ..... 7
Pneumonia ..... 36
Poliomyelitis ..... 5
Scarlet fever ..... 49
Typhoid fever ..... 34
Whooping cough ..... 94
new mexico
Diphtheria ..... 7
Influenza ..... 1
Malaria ..... 5
Measles ..... 3
Mumps ..... 1
Pneumonia. ..... 2
Scarlet fever ..... 13
Trachoma ..... 1
Tuberculosis ..... 23
Typhoid fever ..... 13
Whooping cough ..... 8
NEW YORK
(Exclusive of New York City)
Anthrax1
Chicken pox ..... 61
Diphtheria ..... 37
Dysentery ..... 4
German measlos ..... 30
Influenza ..... 1
Malaria ..... 9
Measles ..... 53
Mumps ..... 25
Pneumonia ..... 81
Poliomyelitis ..... 23
Scarlet fever ..... 52
Septic sore throat ..... 2
Typhoid fever ..... 59
Vincent's angina ..... 8
Whooping cough ..... 114
NORTH CAROIINA
Chicken pox ..... 3
Diphtheria ..... 147
Dysentery (bacillary) ..... 3
German measles ..... 4
Malaria ..... 20
Measles ..... 4
Poliomyelitis ..... 3
Scarlet fever ..... 94
Septic sore throat ..... 1
Smallpox ..... 3
Typhoid fever ..... 55
Whooping cough ..... 127
${ }^{2}$ Deaths.
Diphtheria ..... 24
Influenza ..... 50
Malaria ..... 113
Pellagra ..... 8
Scarlet fever ..... 24
Typhoid fever ..... 106
Whooping cough ..... 25
oregon
Cerebrospinal meningitis ..... 1
Chicken pox ..... 15
Diphtheria ..... 5
Influenza ..... 12
Malaria ..... 1
Measles. ..... 9
Mumps ..... 9
Pneumonia ..... 29
Poliomyelitis ..... 1
Scarlet fever ..... 39
Smallpox ..... 8
Tuberculosis ..... 19
Typhoid fever ..... 18
Whooping cough ..... 2
PENNSYLVANIA
Chicken pox ..... 110
Diphtheria ..... 14
German measles ..... 4
Impetigo contagiosa ..... 18
Measles ..... 194
Mumps ..... 15
Pncumonia ..... 17
Poliomyelitis: ..... 1
Bradio
Chambersburg ..... 1
Clearfield ..... 1
Reading ..... 1
Rouseville ..... 1
Scabies ..... 6
Scarlet fever ..... 153
Tetanus ..... 2
Tuberculosis ..... 106
Typhoid fever ..... 91
Whooping cough ..... 299
Diphtheria ..... 2
Influenza ..... 2
Measles. ..... 1
Scarlet fever ..... 3
Tuberculosis. ..... 12
Typhoid fever ..... 6
Whooping cough ..... 8
Anthrax SOETH DAEOTA ..... 2
Diphtheria ..... 5
Measles ..... 19
Mumps ..... 2
Pneumonia ..... 2
Scarlet fever ..... 27
Tuberculosis ..... 1
Typhoid lever ..... 3
Whooping cough ..... 7


Reports for Week Ended September 25, 1926

| digtrict of columbia | Cases | north dakota-continued | Cases |
| :---: | :---: | :---: | :---: |
|  |  | Typhoid fever. |  |
| Chicken pox. |  | Whooping cough |  |
| Diphtheria. |  | Whooping cough |  |
| Measles. |  | SOUTH Carolina |  |
| Pneumonia. |  | Chicken pox |  |
| Scarlet fever. | 7 | Dengue. |  |
| Tuberculosis. | 39 | Diphtheria | 64 |
| Typhoid fever. | 6 | Hookworm disease. | 48 |
| Whooping cough. | 8 | Influenza. | 195 |
|  |  | Malaria | 624 |
|  |  | Mealses. |  |
| NORTH DAKOTA |  | Paratyphoid fever |  |
| Chicken pox-... | 6 | Pellagra... | 53 |
| Measles. | 6 | Poliomyelitis. | $8$ |
| Mumps... | 3 | Scarlet fever. | 20 |
| Pneumonia | 1 | Smallpox. |  |
| Scarlet fever. | 24 | Tuberculosis | 47 |
| Trachoma. | 47 | Typhoid fever. | 82 |
| Tuberculosis. | 5 | Whooping cough | $33$ |

## SUMMARY OF MONTHLY REPORTS FROM STATES

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


## GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

Diphtheria.-For the week ended September 18, 1926, 38 States reported 1,058 cases of diphtheria. For the week ended September 19,1925 , the same States reported 1,095 cases of this disease. Ninetyseven cities, situated in all parts of the country and having an aggregate population of more than $30,100,000$, reported 484 cases of diphtheria for the week ended September 18, 1926. Last year for the corresponding week they reported 537 cases. The estimated expectancy for these cities was 708 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.-Thirty-five States reported 637 cases of measles for the week ended September 18, 1926, and 277 cases of this disease for the week ended September 19, 1925. Ninety-seven cities reported 160 cases of measles for the week this year, and 164 cases last year.

Poliomyelitis.-The health officers of 38 States reported 115 cases of poliomyelitis for the week ended September 18, 1926. The same States reported 275 cases for the week ended September 19, 1925.

Scarlet fever.-Scarlet fever was reported for the week as follows: Thirty-eight States-this year, 1,044 cases; last year, 831 cases; 97 cities-this year, 386 cases; last year, 343 cases; estimated expectancy, 361 cases.

Smallpox.-For the week ended September 18, 1926, 38 States reported 98 cases of smallpox. Last year for the corresponding week they reported 119 cases. Ninety-seven cities reported smallpox for the week as follows: 1926, 6 cases; 1925, 34 cases; estimated expectancy, 23 cases. No deaths from smallpox were reported by these cities for the week this year.

Typhoid fever.-One thousand three hundred and thirty-six cases of typhoid fever were reported for the week ended September 18, 1926, by 38 States. For the corresponding week of 1925 the same States reported 1,190 cases of this disease. Ninety-seven cities reported 307 cases of typhoid fever for the week this year and 281 cases for the corresponding week last year. The estimated expectancy for these cities was 240 cases.

Influenza and pneumonia.-Deaths from influenza and pneumonia were reported for the week by 91 cities, with a population of more than 29,480,000, as follows: 1926, 323 deaths; 1925, 358 deaths.

## City reports for week ended September 18, 1926


#### Abstract

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

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1917 is included. In obtaining the estimated expectancy the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.


| Division, State, and city | $\begin{aligned} & \text { Population } \\ & \text { July 1, } \\ & \text { 1925, } \\ & \text { estimated } \end{aligned}$ | Chicken pox, cases reported | Diphtheria |  | Influenza |  | Measles, cases reported | Mumps, cases ported | Pneumonia, deaths reported |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cases, estimated expectancy | Cases reported | Cases reported | Deaths reported |  |  |  |
| NEW ENGLAND |  |  |  |  |  |  |  |  |  |
| Maine: <br> Portland | 75,333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| New Hampshire: |  |  |  |  |  |  |  |  |  |
| Concord...... | 22,546 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Manchester.-. | 83,097 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 |
| Vermont: |  |  |  |  |  |  |  |  |  |
| Barre............... | 10,008 24,089 | 0 | 0 1 | 0 | 0 | 0 | 0 | 0 | 0 |

City reports for week ended September 18, 1926-Continued

| Division, State, and city | $\begin{aligned} & \text { Population } \\ & \text { July 1, } \\ & \text { 1925, } \\ & \text { estimated } \end{aligned}$ | Chicken pox, cases reported | Diphtheria |  | Influenza |  | Measles. cases reported | Mumps, cases $\underset{\substack{\text { re- } \\ \text { ported }}}{ }$ | Pneumonia, deaths reported |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cases, estimated expectancy | $\begin{gathered} \text { Cases } \\ \text { re- } \\ \text { ported } \end{gathered}$ | Cases reported |  |  |  |  |
| NEW ENGLAND-con. |  |  |  |  |  |  |  |  |  |
| Massachusetts: |  |  |  |  |  |  |  |  |  |
| Boston. | 779.620 | 1 | 32 | 7 | 2 | 0 | 6 | 8 | 11 |
| Fall River | 128,993 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 |
| Springfield | 142,065 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 |
| W orcester...... | 190,757 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | 1 |
| Rhede Island: Pawtucket-. | 69, 760 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |
| Providence....... | 267,918 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 1 |
| Connecticut: |  |  |  |  |  |  |  |  |  |
| Bridgeport. | ${ }^{(1)}$ | 0 | 5 | 4 | 0 | 0 | 0 | 1 | 0 |
| Hartford.-. | 160, 197 | 2 | 4 | 0 | 1 | 0 | 0 | 0 | 4 |
| New Haven. | 178,927 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 |
| midnle atlantic |  |  |  |  |  |  |  |  |  |
| New York: |  |  |  |  |  |  |  |  |  |
| Buffalo. | 538, 016 | 5 | 16 | 4 |  | 0 | 0 | 0 | 0 |
| New York | 5, 873,356 | 13 | 105 | 85 | 19 | 4 | 8 | 70 | 72 |
| Rochester | 316,786 | 2 | 4 | 2 |  | 0 | 4 | 1 | 0 |
| Syracuse. | 182, 003 | 5 | 5 | 0 |  | 0 | 3 | 0 | 2 |
| New Jersey: |  |  |  |  |  |  |  |  |  |
| Newark. | 452, 513 | 0 | 9 | 4 | 0 | 0 | 1 | 2 | 1 |
| Trenton. | 132, 020 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  |  |  |  |  |  |  |  |  |
| Philadelphia-.-...-- | 1,979,364 | 4 | 49 | 23 |  | $\stackrel{2}{2}$ | 1 | 2 | 20 |
| Pittsburgh | 631,563 112.707 | 4 | 19 2 | ${ }_{0}^{6}$ | -.- | 0 | 3 0 | 0 0 | 1 |
| Reading -- | 112.707 | 1 | 2 | 0 |  | 0 | 0 | 0 | 1 |
| east north central |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cleveland | 936,485 | 10 | 28 | 20 | 0 | 1 | 0 | 0 | 7 |
| Columbus | 279, 836 | 1 | 4 | 3 | 0 | 0 | 0 | 1 | 5 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fort Wayne........ Indianapolis | 97,846 $\mathbf{3 5 8 , 8 1 9}$ | 0 | $\frac{2}{7}$ | 0 4 | 0 |  | 0 | 0 | 5 |
| South Bend. --.....- | 358,819 S0, 091 | 0 | 1 | $\stackrel{4}{2}$ | 0 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chicago. | 2,995, 239 | 8 | 72 | 35 | 6 | 2 | 22 | 5 | 21 |
| Peoris.- | 81,564 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 2 |
| Springfield -.........-- | 63,923 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 1 |
|  |  |  |  |  |  |  |  |  |  |
| Flint | 1, 130,316 | 4 | 6 | 1 | 0 | 0 | 2 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kenosha-. | 50, 891 | 0 | 1 | 0 | 0 | 1 |  | 0 | 0 |
| Madison-..-......-- | 46,385 | 1 | 0 | 1 | 0 | 0 | 2 | 3 | 1 |
| Milwaukee. | 509. 192 | 8 | 12 | 7 | 0 | 0 | 1 | 9 | 3 |
| Racine...-.-.---..- | 67,707 |  | 1 |  |  |  |  |  |  |
| Superior-...-.-.-.-.--- | 39,671 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| West north central |  |  |  |  |  |  |  |  |  |
| Minnesota: |  |  |  |  |  |  |  |  |  |
| Duluth..... | 110,502 | 0 | 2 | 1 | 0 | 0 | 3 | 0 | 1 |
| Minneapolis | 42J, 435 | 1 | 20 | 12 | 0 | 0 | 0 | 0 | 4 |
| St. Paul-.---.....-- | 246,001 | 0 | 14 | 6 ! | 0 : | 0 |  | 0 | 3 |
| Iowa: |  |  |  |  |  |  |  |  |  |
| Davenport | 52,469 141,441 | 0 | 1 | 0 | 0 |  | 4 0 | 0 |  |
| Sioux City | 76,411 | 1 | 1 | 2 | 0 |  | 0 | 1 |  |
| Missouri: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas City | 367, 481 | 0 | 6 | 1 | 1 | 1 | 0 | 0 | 6 |
| St. Joseph .-.------- | 78,342 | 0 | $\stackrel{2}{2}$ | 0 ) | 0 | 0 | 0 | 0 | 1 |
| St. Louis -........... | 821, 543 | 0 | 22 ! | 24 | 0 ! | 0 | 0 | 2 |  |

[^6]City reports for week ended September 18, 1925-Continued

${ }^{1}$ No estimate inade.

City reports for week ended September 18, 1926-Continued


[^7]City reports for week ended September 18, 1926-Continued

| Division, State, and city | Scarlet fever |  | Smallpox |  |  | Tuberculosis, deaths reported | Typhoid fever |  |  | Whooping cough, cases reported | $\begin{gathered} \text { Deaths, } \\ \text { all } \\ \text { causes } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\|\begin{array}{c} \text { Cases, } \\ \text { esti- } \\ \text { mated } \\ \text { expect- } \\ \text { ancy } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { Cases } \\ \text { re } \\ \text { ported } \end{gathered}\right.$ | $\begin{gathered} \text { Cases, } \\ \text { esti- } \\ \text { mated } \\ \text { expect- } \\ \text { ancy } \end{gathered}$ | $\begin{gathered} \text { Cases } \\ \text { re- } \\ \text { ported } \end{gathered}$ | Deaths reported |  | Cases estimated expect ancy | $\begin{gathered} \text { Cases } \\ \text { re- } \\ \text { ported } \end{gathered}$ | $\begin{gathered} \text { Deaths } \\ \text { re-- } \\ \text { ported } \end{gathered}$ |  |  |
| middle atlantic |  |  |  |  |  |  |  |  |  |  |  |
| New York: Buffalo.. | 6 | 2 | 0 | 0 | 0 | 6 | 3 | 2 | 1 | 7 | 122 |
| New York | 34 | 43 | 0 | 0 | 0 | ${ }^{193}$ | 44 | 71 | 2 | 87 | 1,130 |
| Rochester....- | 3 | 2 | 0 | 0 | 0 | 4 | 2 | 3 | 0 | 3 | 48 |
| Syracuse.....-- | 4 | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 12 | 51 |
| New Jersey: |  |  |  |  |  |  |  |  |  |  |  |
| Camden | 2 5 | 2 | 0 | 0 | 0 | 2 5 | 1 2 | $\stackrel{2}{8}$ | 0 0 | 50 | 18 |
| Trenton...-...-- | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 2 | 25 |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |
| Philadelphia_- | 19 | 28 | 0 | 0 | 0 | 36 | 13 | 15 | 1 | 36 | 401 |
| Pittsburgh...- | 15 | 4 | 0 | 0 | 0 | 7 | 4 | 4 | 0 | 32 | 148 |
| Reading......- | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 16 | 24 |
| $\begin{aligned} & \text { EAST North cen- } \\ & \text { tral } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| Ohio: ${ }_{\text {Sincinnat }}$ |  |  |  |  |  |  |  |  |  |  |  |
| Cincinnati....- | 5 | 5 | 1 | 0 | 0 | 88 | 2 | 4 | 1 | 4 57 | 114 |
| Columbus....-- | ${ }_{3}$ | 3 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 7 | 59 |
| Toledo.......-. | 5 | 3 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 25 | 57 |
| Indiana: |  |  |  |  |  |  |  |  |  |  |  |
| Fort Wayne--- | 1 | 2 5 | 0 | 0 | 0 | 0 5 | 2 3 | $\stackrel{2}{3}$ | 0 | ${ }^{7}$ | ${ }_{92}^{26}$ |
| South Bend...- | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 8 |
| Terre Haute... | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Illinois: |  |  |  |  |  |  |  |  |  |  |  |
| Chicago.-...-- | 36 | 29 | 1 | 0 | 0 | 53 | 8 | 3 | 0 | 54 | 606 |
| Peoria. | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 16 |
| Springfield...--- | 0 |  | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 16 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Detroit <br> Flint | $\begin{array}{r}30 \\ 4 \\ \hline\end{array}$ | 19 3 | 2 | 0 | 0 | 22 0 | 5 | 20 | 1 0 | 68 4 | 252 29 |
| Frand Rapids- | 3 | 3 | 0 | 0 | 0 | 0 | 1 |  | 0 | 3 | 32 |
| W isconsin: |  |  |  |  |  |  |  |  |  |  |  |
| Kenosha | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 9 |
| Madison...---- | 13 | 6 8 | 0 1 | 0 | 0 | 1 | 0 | 0 1 | 0 | 6 45 | 82 |
| Racine..--.---- | 2 |  | 0 |  |  |  | 1 |  |  |  |  |
| Superior......-- | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| west north Central |  |  |  |  |  |  |  |  |  |  |  |
| Minnesota: |  |  |  |  |  |  |  |  |  |  |  |
| Duluth........ | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 22 |
| Minneapolis..- | 16 | 21 | 0 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 75 |
| St. Paul.-...-- | 7 | 9 | 2 | 0 | 0 | 1 | 2 | 0 | 1 | 8 | 59 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Davenport.-.- | 0 | 1 | 0 | 0 |  | .- | 0 | 0 | -- | 0 | -..-- |
| Des Moines.-- | 3 | 0 | 1 | 0 |  | -- | 0 | 0 | --- | 2 | --- |
| Sioux City | 1 | 3 | 0 | 0 |  |  | 0 | 0 | ....... | 3 | ---- |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas City..-- | 1 | 1 | 0 | 0 | 0 | 7 0 | 3 1 | 2 | ${ }_{0}^{2}$ | ${ }_{0}^{2}$ | 109 20 |
| St. Joseph....---- | 13 | 14 | 0 | 0 | 0 | 5 | 7 | 4 | 0 | 12 | 179 |
| North Dakota: |  |  |  |  |  |  |  |  |  |  |  |
| South Dakota: | 1 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 12 |
|  | 2 | 0 | 0 | 0 |  |  | 0 | 0 |  | 0 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln.......- | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | ${ }_{6} 15$ |
| Kansas: |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wichita......... | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 : | 5 | 31 |

[^8]City reports for week ended September 18, 1926-Continued

| Division, State, and city | Scarlet fever |  | Smallpox |  |  | Tuberculosis, deaths reported | Typhoid fever |  |  | $\begin{gathered} \text { Whoop- } \\ \text { ing } \\ \text { cough, } \\ \text { cases } \\ \text { re- } \\ \text { ported } \end{gathered}$ | $\begin{aligned} & \text { Deaths, } \\ & \text { all } \\ & \text { causes } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Cases, } \\ \text { esti- } \\ \text { mated } \\ \text { expect- } \\ \text { ancy } \end{gathered}$ | $\left\|\begin{array}{c} \text { Cases } \\ \text { re- } \\ \text { ported } \end{array}\right\|$ | $\left\|\begin{array}{c} \text { Cases, } \\ \text { esti- } \\ \text { mat ed } \\ \text { expect- } \\ \text { ancy } \end{array}\right\|$ | $\begin{gathered} \text { Cases } \\ \text { re- } \\ \text { ported } \end{gathered}$ | $\begin{gathered} \text { Deaths } \\ \text { re- } \\ \text { ported } \end{gathered}$ |  | $\begin{gathered} \text { Cases, } \\ \text { esti- } \\ \text { mated } \\ \text { expect- } \\ \text { ancy } \end{gathered}$ | $\begin{gathered} \text { Cases } \\ \text { re- } \\ \text { ported } \end{gathered}$ | Deaths reported |  |  |
| SOCTH ATLANTIC |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland: <br> Baltimore__-- |  |  |  |  |  |  |  |  |  |  |  |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 13 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia: |  |  |  |  |  |  |  |  |  |  |  |
| Virginia: |  |  |  |  |  |  |  |  |  |  |  |
| Lynchburg.-.- | 0 | 3 | 0 | 0 | 0 | 2 | 2 | 1 | 1 | 3 | 17 |
| Norfolk.......-- | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 13 |  |
| Richmond....-- | 5 | 4 | 0 | 0 | 0 | 2 | 2 | 6 | 0 | 0 | 47 |
| Roanoke.....-- | 1 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 13 |
| West Virginia: |  |  |  |  |  |  |  |  |  |  |  |
| Huntington..- | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina: Raleigh..----- | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 9 | 7 |
| Wilmington---- | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 8 | 11 |
| Winston-Salem | 1 | 3 | 1 | 0 | 0 | 2 | 2 | 0 | 1 | 2 | 17 |
| South Carolina: |  |  |  |  |  |  |  |  |  |  |  |
| Charleston.-- - | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 2 0 | 0 | 25 |
| Greenville------ | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 1 | 0 | 3 | 11 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Atlanta...--.-- | 4 | 4 | 1 | 0 | 0 | 5 | 4 | 7 | 1 | 4 | 61 |
| Brunswick...- | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
|  |  |  | 1 | 1 |  |  | 1 | 3 | 0 | 0 | 32 |
| Florida: |  |  |  |  |  |  |  |  |  |  |  |
| Miami St. Petersburg | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 21 |
| Tampa-------- | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |  |
| EAST SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Covington..--- | 0 | 12 | 0 | 0 | 0 | 6 | 5 | 11 | 0 | 3 | 85 |
| Tennessee: | 1 | 12 | 0 | 0 | 0 |  | 5 |  |  |  | 85 |
| Memphis. | 1 | 5 | 0 | 0 | 0 | 1 | 6 | 11 | 4 | 16 | 62 |
| Nashville...-.-- | 3 | 2 | 0 | 0 | 0 | 6 | 5 | 17 | 5 | 11 | 54 |
| Alabama: |  |  |  |  |  |  |  |  |  |  |  |
| Birmingham..- | 4 | 4 | 0 | 0 | 0 | 5 | 7 | 9 | 1 | 11 | 49. |
| Mobile.-.----- | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 15 |
| Montgomery-- | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 13 |
| WEST SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |
| Arkansas: 0 ath 0 |  |  |  |  |  |  |  |  |  |  |  |
| Fort Smith...- | 1 | 0 | 0 | 0 |  |  | 0 | 0 |  | 1 | --- |
| Little Rock...-- | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | -- |
| Louisiana: |  |  |  |  |  |  |  |  |  |  |  |
| New Orleans .- <br> Shreveport | 2 | 1 3 | 0 | 0 | 0 | 13 | 5 | 6 3 | 0 | 0 | 155 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Oklahoma City | 1 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 26 |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |
| Dallas | 1 | 2 | 1 | 1 | 0 | 3 | 2 | 2 | 0 | 0 | 48 |
| Galveston....-. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Houston.-.-.--- | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 51 |
| San Antonio.-- | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 60 |
| MOUNTAN |  |  | - |  |  |  |  |  |  |  |  |
| Montana: |  |  |  |  |  |  |  |  |  |  |  |
| Billings........- | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Great Falls...- | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 7 |
| Helena....-.-- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Missoula..$--{ }^{\text {- }}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $1)$ | 0 | 0 | 8 |

City reports for week anded September 18, 1926-Continued


City reports for week ended September 18, 1926-Continued

${ }^{1}$ Dingue; 11 cases at Charleston, S. C.
The following table gives the rates per 100,000 population for 101 cities for the five-week period ended September 18, 1926, compared with those for a like period ended September 19, 1925. The population figures used in computing the rates are approximate estimates as of July 1, 1925 and 1926, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had an estimated aggregate population of nearly $30,000,000$ in 1925 , and nearly $30,500,000$ in 1926. The 95 cities reporting deaths had more than $29,200,000$ estimated population in 1925 and more
than $29,730,000$ in 1926. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, August 15 to September 18, 1926-Annual rates per 100,000 population, compared with rates for the corresponding period of $1925^{1}$

DIPHTHERIA CASE RATES

|  | Week ended- |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aug. <br> ${ }_{1925}^{22}$ | $\begin{gathered} \text { Aug. } \\ 21, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Aug. } \\ 29, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Aug. } \\ 28, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 5, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 4,{ }_{2} \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 12, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 11, \\ 1926 \end{gathered}$ | Sept. 1925 <br> 1925 | Sept. <br> 18, <br> 1926 |
| 101 cities. | 68 | 268 | ${ }^{3} 72$ | 265 | 470 | 74 | 92 | 76 | 895 | '84 |
| New England. | 50 | 47 | 41 | 50 | 43 | 26 | 74 | 38 | 139 | 35 |
| Middle Atlantic.. | 73 | 59 | 63 | 56 | 61 | 59 | 89 | 53 | 83 | 63 |
| East North Central. | 51 | 287 | 68 | 275 | 57 | 101 | 70 | 80 | 76 | 795 |
| West North Central | 100 | 83 | 117 | 81 | 100 | 66 | 143 | 75 | 145 | 95 |
| South Atlantic. | 60 | 60 | ${ }^{3} 68$ | 62 | 106 | 69 | 119 | 137 | 88 | 111 |
| East South Central. | 58 | 21 | 37 | 57 | 32 | 42 | 74 | 104 | 74 | ${ }^{1} 116$ |
| West South Central. | 57 | 65 | 92 | 34 | 31 | 60 | 119 | 86 | 57 | 77 |
| Mountain. | 74 | 146 | 166 | 73 | 305 | 91 | 194 | 173 | ${ }^{8} 217$ | 237 |
| Pacific. | 110 | 62 | 105 | 92 | ${ }^{4} 76$ | 135 | 75 | 92 | 130 | ${ }^{9} 97$ |

measles case rates

sCarlet fever case rates

| 101. | 51 | ${ }^{2} 48$ | ${ }^{3} 45$ | ${ }^{2} 55$ | 454 | 51 | 51 | 58 | ${ }^{6} 6$ | ${ }^{6} 67$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England: | 89 | 73 | 67 | 54 |  |  | 62 | 80 |  |  |
| East North Central | 23 54 5 | $\begin{array}{r}29 \\ 247 \\ \hline 18\end{array}$ | ${ }_{45}^{27}$ | 32 25 25 | 30 58 5 | 25 59 | 31 57 5 | $\begin{array}{r}32 \\ 62 \\ \hline\end{array}$ | 46 58 58 | ${ }_{764}^{4}$ |
| West North Central. | 145 | 119 | 110 | 133 | 123 | 131 | 102 | 93 | 133 | 129 |
| South Atlantic. | 40 | 39 | ${ }^{3} 39$ | 58 | 56 | 38 | 54 | 56 | 36 | 49 |
| East South Central. | 32 | ${ }^{36}$ | ${ }^{26}$ | 62 | 131 | 57 | 110 | 109 | 53 | ${ }^{8127}$ |
| West South Central | 48 | 17 | 18 | 26 | 35 | 26 | 31 | 47 | 40 | 30 |
| Mountain....- | 65 | 36 | 28 | 64 | 74 | 82 | ${ }^{37}$ | ${ }^{73}$ | ${ }^{5} 161$ | 82 |
| Pacif | 41 | 78 | 66 | 75 | ${ }^{5} 50$ | 70 | 36 | 89 | 64 | ${ }^{\circ} 123$ |

${ }^{1}$ The figures given in this table are rates for 100,000 population, arnual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1925, and 1926, respectively.
${ }^{2}$ Madison, Wis., not included.
${ }^{3}$ Greenvilic, S. C., not included.
${ }^{4}$ Spokane, Wash., not included.
${ }^{5}$ Helena, Mont., not included.
${ }^{6}$ Racine, Wis., Covington, Ky., and Tacoma. Wash., not included.

- Racine, Wis., not included.
${ }^{6}$ Covington, Ky., not included.
- Tacoma, W ash., not ineluded.

Summary of weekly reports from cities, August 15 to September 18, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1925-Continued

SMALLPOX CASE RATES

|  | Week ended- |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Aug. } \\ 22, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Aug. } \\ 21, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Aug. } \\ 29, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Aug. } \\ \text { 28, } \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 5, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 4, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 12, \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 11, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 19, \\ 1925 \end{gathered}$ | $\begin{gathered} \text { Sept. } \\ 18 . \\ 1926 \end{gathered}$ |
| 101 cities. | 6 | 22 | 38 | 24 | 45 | 2 | 5 | 2 | ${ }^{5} 6$ | 61 |
| New England. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middle Atlantic...- | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| East North Central. | 2 | 22 | 8 | 27 | 5 | 0 | 2 | 2 | 2 | ${ }^{7}$ |
| West North Central | 6 | 4 | 4 | 0 | 4 | 0 | 0 | 2 | 2 | 0 |
| South Atlantic--.-. | 4 | 6 | ${ }^{3} 12$ | 9 | 2 | 9 | 12 | 2 | 12 | 9 |
| East South Central. | 37 | 5 | 53 | 0 | 11 | 10 | 21 | 0 | 37 | ${ }^{1}$ |
| West South Central. | 4 | 0 | -13 | 9 | 4 | 4 | 4 | 0 | 4 | 4 |
| Mountain..-......... | 9 | 0 | 9 | 0 | 9 | 0 | 18 | 0 | ${ }^{5}$ | 0 |
| Pacific.- | 41 | 5 | 28 | 13 | 438 | 13 | 41 | 16 | 47 | ${ }^{\circ}$ |

TYPHOID FEVER CASE RATES

| 101 cities. | 55 | ${ }^{2} 41$ | ${ }^{3} 45$ | 240 | 438 | 40 | 41 | 45 | 849 | ${ }^{6} 5$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England. | 31 | 17 | 20 | 19 | 29 | 12 | 34 | 17 | 29 | 33 |
| Middle Athatic | 44 | 34 | 30 | 39 | 29 | 34 | 27 | 34 | 35 | 55 |
| East North Central | 29 | 217 | 26 | ${ }^{2} 18$ | 17 | 20 | 20 | 20 | 18 | ${ }^{7} 28$ |
| West North Central | 47 | 48 | 35 | 42 | 22 | 42 | 57 | 50 | 57 | 26 |
| South Atlantic. | 104 | 94 | ${ }^{3} 89$ | 56 | 58 | 92 | 48 | 105 | 104 | 81 |
| East South Central | 168 | 187 | 163 | 233 | 168 | 176 | 226 | 285 | 194 | ${ }^{8} 264$ |
| West South Central. | 128 | 43 | 106 | 39 | 167 | 43 | 70 | 39 | 159 | 69 |
| Mountain | 102 | 73 | 111 | 18 | 28 | 9 | 129 | 18 | 585 | 82 |
| Pacific. | 61 | 24 | 52 | 38 | 429 | 46 | 28 | 27 | 28 | ${ }^{9} 37$ |

INFLUENZA DEATH RATES


PNEUMONIA DEATH RATES

| 95 cities. | 53 | 254 | ${ }^{3} 61$ | 248 | 70 | 51 | 61 | 51 | ${ }^{8} 60$ | 653 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England. | 38 | 40 | 41 | 33 | 53 | 50 | 50 | 40 | 67 | 54 |
| Middle Atlantic. | 65 | 58 | 65 | 56 | 84 | 59 | 68 | 65 | 61 | 51 |
| East North Central | 40 | 234 | 50 | ${ }^{2} 38$ | 59 | 34 | 46 | 37 | 44 | 741 |
| West North Central | 30 | 49 | 54 | 42 | 32 | 36 | 36 | 30 | 45 | 51 |
| South Atlantic- | 60 | 86 | ${ }^{3} 80$ | 58 | 54 | 64 | 60 | 41 | 81 | 54 |
| East South Central | 74 | 36 | 63 | 47 | 131 | 52 | 142 | 42 | 79 | ${ }^{50}$ |
| West South Central | 77 | 71 | 106 | 76 | 73 | 52 | 82 | 104 | 77 | 123 |
| Mountain.-- | 65 | 82 | 74 | 73 | 83 | 64 | 37 | 64 | -113 | 118 |
| Pacific. | 47 | 78 | 62 | 21 | 95 | 78 | 91 | 57 | 62 | - 57 |

[^9]Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1925 and 1926, respectively

| Group of cities | Number of cities reporting cases | Number of cities reporting deaths | Aggregate population of cities reporting cases |  | Aggregate population of cities reporting deaths |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1925 | 1926 | 1925 | 1926 |
| Total | 101 | 95 | 29, 900, 058 | 30, 427, 598 | 29, 221, 531 | 29, 733, 613 |
| New England | 12 | 12 | 2,176, 124 | 2, 206, 124 | 2,176,124 | 2,206, 124 |
| Middle Atlantic. | 10 | 10 | 10, 346, 970 | 10, 476, 970 | 10, 346, 970 | 10,476,970 |
| East North Central | 16 | 16 | 7, 481, 656 | 7, 655, 436 | 7, 481, 656 |  |
| West North Central | 12 | 10 | 2, 550, 024 | 2, 589, 131 | 2, 431, 253 | 2, 468, 448 |
| South Atlantic-- | 21 | 21 | 2, 716, 070 | 2, 776, 075 | 2,716,070 | $2,776,070$ |
| East South Central | 7 | 7 | 993, 103 | 1,004,953 | 993,103 | 1,004,953 |
| West South Central | 8 | 6 | 1, 184, 057 | 1, 212,057 | 1,078, 198 | 1, 103, 695 |
| Mountain | 9 | 9 | 1563, 912 | 1572,773 | 563,912 | , 572, 773 |
| Pacific. | 6 | 4 | 1, 888, 142 | 1,934, 084 | 1, 434, 245 | 1, 469, 144 |

## FOREIGN AND INSULAR

## PLAGUE ON VESSEL

Steamship "Zaria"—At Liverpool, England, from Lagos, Nigeria, Africa.-On September 12, 1926, the steamship Zaria arrived at Liverpool, England, from Lagos, Nigeria, with history of two fatal cases of plague occurring on board at sea in the persons of two colored firemen. It was not ascertained whether these firemen had been ashore at African ports. The steamship Zaria was stated to be a passenger ship and freighter plying between Liverpool and the West Coast of Africa, with stops at several African ports. On arrival at Liverpool four dead rats from the ship were found plague infected.

THE FAR EAST

Report for week ended September 4, 1926.-The following report for the week ended September 4, 1926, was transmitted by the far eastern bureau of the secretariat of the health section of the League of Nations, located at Singapore, to the headquarters at Geneva:

| Maritime towns | Plague |  | Cholera |  | Smallpox |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| Egypt: Alexandria... | 038 | 0 | 0 | 0 | 3 | 0 |
| Madagascar: |  | 38 |  |  |  |  |
| Tamatave |  |  | 0 | 0 | 0 | 0 |
| British India:- |  | 8 |  |  | 0 |  |
| Bombay. |  | 0 | -- | 0 | 4 | 3 |
| Madras. |  | 0 |  | 1 | 6 | 2 |
| Vizagapatam. |  | 0 |  | 0 | 1 | 0 |
| Rangoon-...- |  | 14 |  | 1 | 0 | 3 |
| Siam: Bangkok | 0 |  | 3 | 0 | 5 |  |
| China: |  |  |  |  |  |  |
| Amoy | 0 | 0 | 38 |  | 0 | 0 |
| Shanghai | 0 | 0 | 122 | 19 | 0 | 0 |
| Manchuria: Harbin | 0 | 0 | 46 | 19 | 0 | 0 |
| Kwantung: Dairen-....- | 0 | 0 | 2 | 1 | 0 | 0 |
| U. S. S. R.: Vladivostok. |  | 0 | 0 | 0 | 1 | 0 |

Telegraphic areports from the following maritime towns indicated that no case of plague, cholera, or smallpox was reported during the week:

```
                                    ASIA
Arabia.-Aden.
Iraq.-Basra.
British India.-Karachi, Chittagong, Cochin, Negapatam, Tuticorin.
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Ceylon.-Colombo.
Federated Mulay States.-Port Swettenham.
Straits Settlements.-Penang, Singapore.
Dutch East Indies.-Batavia, Sarabaya, Samarang, Cheribon, Belawan Deli, Palembang, Sabang, Makassar, Banjermasin, Tarakan, Padang, Samarinda, Pontianak, Menado.

Sarawak.-Kuching.
British North Borneo.—Sandakan, Jesselton, Kudat, Tawao.
Portuguese Timor.-Dilly.
Philippine Islands.-Manila, Iloilo, Jolo, Cebu, Zamboanga.
French Indo-China.-Saigon and Cholon, Turane, Haiphong.
China.-Hongkong.
Formosa.-Keelung.
Japan.-Yokohama, Osaka, Nagasaki, Moji, Kobe, Niigata, Tsuruga, Hakodate, Simonoseki.

Korea.-Chemulpo, Fusan.
Manchuria.-Antung, Mukden, Changchun.
Kwantung.-Port Arthur.

## AUSTRALASIA AND OCEANIA

Australia.-Adelaide, Melbourne, Sydney, Brisbane, Rockhampton, Townsville, Port Darwin, Broome, Fremantle, Carnarvon, Thursday Island.

New Guinea.-Port Moresby.
New Zealand.-Auckland, Wellington, Christchurch, Invercargill; Dunedin.
New Caledonia.-Noumea.
Fiji.-Suva.
Hawaii.-Honolulu.
Society Islands.-Papeete.
AFRICA
Egypt.-Port Said, Suez.
Anglo-Egyptian Sudan.-Port Sudan, Suakin.
Eritrea.-Massaua.
French Somaliland.-Jibuti.
British Somaliland.-Berbera.
Italian Somaliland.-Mogadiscio.
Kenya.-Mombasa.
Tanzibar.-Zanzibar.
Tanganyiki.-Dar-es-Salaam.
Scychelles.-Victoria.
Mauritius.-Port Louis.
Portuguese East Africa.-Mozambique, Beira, Lourenço Marques.
Union of South Africa.-Durban, East London, Port Elizabeth, Cape Town.
Reports had not been received in time for distribution from-
British India.-Calcutta.
Dutch East Indics.-Balik-Papan.

## ALGERIA

Plague-Philipperille-September 7, 1926.-Under date of September 7, 1926, a case of plague was reported at Philippeville, Algeria.

## BRAZII

Leprosy-Rio Grande do Sul.-Information received under date of August 21, 1926, shows leprosy present in the State of Rio Grande do Sul, Brazil, and to be increasing in prevalence.

Smallpox-Rio de Janeiro-August 15-September 4, 1926.-Smallpox continued to be reported at Rio de Janciro, with 786 cases, 406 deaths reported for the three weeks ended September 4, 1926.

CANADA
Communicable diseases-Week ended September 18, 1926.-The Canadian Ministry of Health reports cases of certain communicable diseases in seven Provinces of Canada for the week ended September 18,1926 , as follows:

| Disease | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saskatch ewan | Alberta | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cerebrospinal fe |  |  |  | 830 | 1 | 1 |  | 562267 |
| Poliomyelitis... |  |  |  |  |  |  |  |  |
| Smallpox-....- |  |  |  |  |  | 5 3 | 6 |  |
| Typhoid fever. | 3 | 11 | 8 |  | 6 | 3 | 6 |  |

## CHINA

Cholera-Amoy-August 8-21, 1926.-During the two weeks ended August 21, 1926, 13 cases of cholera were reported at Amoy, China. The disease was stated to be present in epidemic form.

## JAPAN

Summary of cholera-September 10, 1926.-A total of 35 cases of cholera has been reported in Japan to September 10, 1926. The greatest number of cases occurred in Kagakawa ken, viz, 8; in Kanagawa ken, including Yokohama, 3 cases; in Osaka, 6; in Hyogo and Ookayama kens, 7 cases each. In Wakayama ken two cases were reported, and in Hiroshima and Kochi one case each.

## MALTA

Communicable diseases-August, 1926.-During the month of August, 1926, communicable diseases were reported in the island of Malta as follows:

| Disease | Cases | Disease | Cases |
| :---: | :---: | :---: | :---: |
| Broncho-pneumonia | 4 | Pneumonia |  |
| Chicken pox-- | 1 | Puerperal fever-- | ${ }_{99}$ |
| Erysipelas.- | 12 | Tuberculosis | 14 |
| Lethargic encephalitis | 3 | Typhoid fever- | 32 |
| Measles....--- | ${ }_{30}$ | Whooping cough |  |

Population, civil, estimated, 223,088.

## UNION OF SOUTH AFRICA

Plague-Cape Province-August 14, 1926.-During the week ended August 14, 1926, plague was reported present in the Cape Province, Union of South Africa, with one case, white, occurring in Calvinia District and one fatal case, native, in Maraisburg District. Both cases were on farms.

Area of rodent infection-Natural defenses-Measures proposed.The known area of plague infection in veld rodents, affecting chiefly Namaqua gerbilles (jerboa) and Cape hares, in the northwestern section of the Cape Province, has been stated to extend to the south and west as far as Calvinia and Nieuwhoudtville and thence southward along the coastal belt to the Cape Peninsula. The Roggeveld and Cedarberg Mountains and the Doorn and Olifants Rivers, with their irrigation canals, form natural barriers to spread of the infection. It is proposed to supplement these natural defenses by clearing of rodents a belt of country about 2 miles wide and 6 miles long between the Doorn River and Klaver, and to similarly clear of rodents the strip, to the extent of about a mile wide, between the Olifants River and the irrigation canal on the right bank, to a point beyond which the river is impassable to rodents.

## VIRGIN ISLANDS

Communicable diseases-August, 1926.-During the month of August, 1926, communicable diseases were reported in the Virgin Islands of the United States as follows:


## GHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

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

## Reports Received During Week Ended October 8, $1926{ }^{1}$

CHOLERA


## PLAGUE



## SMALLPOX



[^10]
## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER-Continued

Reports Received During Week Ended October 8, 1926-Continued
SMALLPOX-Continued


TYPHUS FEVER

| Algeria: |  |  |  |
| :---: | :---: | :---: | :---: |
| Algiers. <br> Chile: | Aug. 21-31.......-- | 1 |  |
| Valparaiso. | Aug. 22-28. | 2 |  |
| China: <br> Antung | Aug. 23-29. | 2 |  |
| Palestine: Haifa district | A | 2 |  |
| Persia: Teheran... | May 23-June 22...- |  | 1 |

Reports Received from June 26 to October 1, $1926{ }^{1}$
CHOLERA

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

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

Reports Received from June 26 to October 1, 1926-Continued
CHOLERA-Continued


## PLAGUE



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

Reports Received from June 26 to October 1, 1926 -Continued
PLAGUE-Continued


# ChOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER-Continuel 

Reports Received from June 26 to October 1, 1926-Continued
PLAGUE-Continued

| Place | Date | Cases | Deaths | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| Senegal. |  |  |  | Nov. 1-30, 1826: Cases, 3; deaths, 2. Mar. 1-Apr. 30, 1926: Cases, 15; deaths, 4. |
| Siam: Banckok |  |  |  |  |
| Bangkok- | July 18-24 | 2 | 1 |  |
| Straits Settlements: Singapore | May 2-8 <br> July 4-17 | 1 | 1 |  |
| Syria: Do-- |  |  |  |  |
| Beirut | July 1-Aug. 10-- | 2 |  |  |
| Tunisia | May 11-June 30... | 174 |  |  |
|  | $\text { July } 1-20$ $\text { June } 9 .$ | 12 |  | 9 cases 30 miles south of Kairouan |
| Turkey: <br> Constantinople | Aug. 1-28 | 4 | 1 |  |
| Union of South Africa: |  |  |  |  |
| Cape Province...- | May 16-22. | 5 | 3 |  |
| Calvinia District | June 13-26-......- | 12 | 6 |  |
| Do-.- | June 27-July 3-... | 1 |  |  |
| Williston District... | June 13-28. | 2 |  |  |
| Do | June 27-July 3... | 1 |  |  |
| Hoopstad DistrictProtestpan. | May 9-22.-.... | 3 | 3 |  |

smallpox

| Algeria: <br> Algiers. | May 21-June 30... | 14 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Do. | July 1-Aug. 20.... | 2 |  |  |
| Belgium: |  |  |  |  |
| Antwerp. | Aug. 1-7. | 1 | 1 |  |
| via: <br> La Paz | May 1-June 30...- | 14 | 7 |  |
| Do. | July 1-31...........- | 2 | 4 |  |
| Brazil: |  |  |  |  |
| Bahia. | June 20-26..... | 1 |  |  |
| Do- | June 27-Aug. 14.-- | 46 | 23 |  |
| Manaos. | Apr. 1-30-....-...- | 26 | 5 25 |  |
| Do. | June 27-Aug. 14.-. | 18 | 11 |  |
| Pernambuco- | July 11-31....... | $\stackrel{5}{5}$ |  |  |
| Rio de Janeiro | May 2-June 19 | 132 | 91 |  |
| Do.- | July 4-Aug. 14. | 1,037 | 491 |  |
| Santos. | Mar. 1-7-.-.-. |  | 1 |  |
| Mombasa...... | July 5-11. | 5 | 4 |  |
| Tanganyika | May 1-31-........- | 252 | 46 |  |
| Uganda... | Mar. 1-May 31...- | 3 |  |  |
| British South Africa: <br> Northern Rhodesia | May 18-24. | 17 | 6 | Natives. |
| Do............ | June 8-14.. | 5 |  |  |
| Canada--- |  |  |  | May 30-June 12, 1926: Cases, 16. |
| Alberta | May 30-June 12. | 3 |  |  |
| Do..... | June 27-Sept. 11-.-- | 5 |  |  |
| Calgary | Sept. 5-11-..------ | 1 | -------- |  |
| British ColumbiaVancouver | Aug. 16-22. | 2 |  |  |
| Manitoba..... |  |  |  | May 36-June 26, 1926: Cases, 24. June 27-Sept. 11, 1926: Cases, 19. |
| Winmipeg | June 6-12 | 5 |  |  |
| Ontario Do.- | July 4-Eept. 4...-- | 12 |  |  |
| Fort william | July 25-Aug. 7 | 2 |  | June 27-Sept. $11:$ Cases, 70. |
| Kingston. | May 23-June 26.-. | 5 |  |  |
|  | July 11-17-.-.--- | 2 |  |  |
| Korth Bay. | Apr. 26-May 23 | 5 | 1 |  |
| Do. | July 25-31--.--- | 2 |  |  |
| Orilha | Apr. 29-3ay 29-.- | 7 |  |  |
| Packenham | July 18-24........-- | 1 |  |  |
| Toronto.. | July 18-Aug. $11 .-$ | 8 |  |  |
| Waterloo Saskatchewan | July 18-24.......-- | 6 |  |  |
| Saskatchewan. |  |  |  | May 30-June 26, 1926: Cases, 10. June 27-Sept.11: Cases, 54. |
| Regina.. | July 4-10........... | 2 | .......... |  |

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER-Continued

Reports Received from June 26 to October 1, 1926-Continued
SMALLPOX-Continued


## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER-Continued

## Reports Received from June 26 to October 1, 1926-Continued

SMALLPOX-Continued


## CROLWRA, PLAGEE, SMADEPOX, TYPRUS FEVER, AND YELLOW Fhyind-Contmued

## Reports Recoived from Jane 25 to October 1, 1206-Continued

SMALLPOX-Contiawed


TYPHUS PEVER


## cholera, plague, smallpox, Typhus fever, and yellow FEVER-Continued

Reports Received from June 26 to October 1, 1926-Continued
TYPHUS FEVER-Continued


YELLOW FEVER

| Brazil | Reported June 26 |  |  | Present in interior of Bahia, Pira- |
| :---: | :---: | :---: | :---: | :---: |
| Bahia | May 9-June 26..-- | 10 | 7 | pora, and Minas. |
| Gold Coast | July 4-10-........ | 1 | 3 |  |


[^0]:    ${ }^{1}$ Pfeiffer, E.: Jahrb. f. Kinderh., 1880, v. 24: 257.
    ${ }^{2}$ Sprunt and Evans: Johns Hopkins Hosp. Bull., 1920, v. 31: 410.
    ${ }^{2}$ Longcope, W. T.: Am. J. Med. Sci., 1922, v. 164: 781.
    4 Tidy and Daniels: Lancet, v. 205: 9-13.
    ${ }^{5}$ Gilbert and Coleman: Am. J. Hyg., 1925, v. 5: 35. Carlson, Brooks, and Marshall: Wisconsin Med. J., 1926, v. 25: 176. Guthrie and Pessel: Am. J. Dis. Child., 1925 v. 29: 492.
    ${ }^{6}$ From the Ofiice of Statistical Investigations, U. S. Public Fealth Service.
    A Study of Illness in a General Population Group. Hagerstown Morbidity Studies No. I: Method of Study and Generai Results, was published in the Public Health Reports, Vol. 41, No. 39, Sept. 24, 1926, pp. 2069-2088.

[^1]:    ${ }^{7}$ In 1921 there was one physician to 541 persons in cities and towns having a population of 5,000 or more, according to a statement in the American Medical Association Bulletin for December, 1923 (18:465).
    ${ }^{8}$ The method of this study has been described in the first report of this series.

[^2]:    ${ }^{9}$ At the same time rccords of illness and discase incidence were obtained from families, a record was kept by teachers in schools of all absences due to sickness. The teachers ascertained the causes of sickness so far as it was possible to do so, and their records of disease incidence were subsequently compared with the records obtained from the families observed, with the result that a very close correspondence in nearly all diseases was found, particularly for the acute infectious diseases with which we are concerned in this communication.
    ${ }^{10}$ The classification of cases under "influenza" that were not seen by physicians was based on the informant's statements. The epidemiological evidence, which will be discussed in another report, pointed very definitely to the probability that these cases were influenza as it is commonly diagnosed, as well as against the probability that many cases actually accompanied by illness were overlooked.

[^3]:    a The data for Uganda and Egypt refer to periods of 4 weeks.

    - For 3 weeks only.
    ${ }^{1}$ From the Office of Statistical Investigations, U. S. Public Health Service.

[^4]:    Footnotes at end of table.

[^5]:    ${ }^{1}$ Annual rate per 1,000 population.
    ${ }_{2}$ Deaths under 1 year per 1,000 births. Cities left blank are not in registration area for births.
    ${ }^{3}$ Data for 64 cities.
    ${ }^{4}$ Deaths for week ended Friday, Sept. 24, 1926.
    ${ }^{5}$ In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Norfolk, 38; Richmond, 32; and Washington, D. C., 25.

[^6]:    ${ }^{1}$ No estimate made.

[^7]:    ${ }^{1}$ No estimate made.

[^8]:    1 Pulmonary tuberculosis only.

[^9]:    ${ }^{2}$ Madison, Wis., not included.
    ${ }^{3}$ Greenville, S. C., not included.
    4 Spokane, Wash., not included.
    ${ }^{8}$ Helena, Mont., not included.
    ${ }^{6}$ Racine, Wis., Covington, Ky., and Tacoma, Wash., not included.
    ${ }^{7}$ Racine, Wis., not included.
    ${ }^{3}$ Covington, Ky., not included.

    - Tacoma, Wash., not included.

[^10]:    ${ }^{1}$ From medical officers of the Public Health Service, American consuls, and other sources.

