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A NEW DISINFECTANT TESTING MACHINE.

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In performing laboratory tests to determine the bactericidal power of disinfectants, some of the organisms, living or dead, upon which the disinfecting solutions have been allowed to act, are transferred at stated intervals from the disinfectant solutions to test tubes containing nutrient broth. The bacteria are thus placed in favorable conditions for multiplication, if they have not been killed by the disinfectant solution. As growth will appear in those tubes into which live organisms have been introduced, the results of the tests may be observed and from these observations an opinion formed as to the efficiency of the disinfectant under the conditions of the test. In testing a disinfectant a number of dilutions are used, thus necessitating a number of transfers for each time interval.

It is obvious that in performing these transfers by hand only one transfer can be made at a time; thus the conditions throughout the experiment may constantly be subjected to certain variations in those important factors of time and temperature upon which the uniformity of the tests depends. Moreover, as these transfers must be made in sequence, a single error in technique, disturbing the sequence of manipulation, may ruin the entire experiment. The precise inoculation of a considerable number of tubes at intervals of 15 seconds, as is sometimes required, and in a certain sequence, using different suspensions of bacteria, is a tedious task even if correctly done by an expert in the work. The serial inoculation may well be dispensed with if a method equally satisfactory, as regards the accuracy of the results, can be devised.

In performing disinfectant tests, the use of a machine has a certain obvious advantage over a technique depending wholly upon manual dexterity, in so far as the precision of a mechanical device is substituted for the variations in accuracy of the hand movements of one or more laboratory workers. In addition to this general advantage the machine to be described has certain other definite advantages when contrasted with the hand technique. By the use of the machine, all the transfers due to be made at any particular

time interval are made at the same time and in the same way, thus securing identical conditions for each dilution of the disinfectant or disinfectants used. Furthermore, the machine makes 15 transfers at once, thus doing away with the strain of inoculating a large number of tubes singly in a certain sequence.

It has been recognized that in using a machine greater difficulty as regards the exclusion of air contamination is likely to be encountered; however, this machine has been so designed as to overcome that disadvantage.

Actual comparison of the two methods has shown that the use of the machine greatly simplifies the practice of disinfectant testing.

Construction of the Machine.¹

A table (T), 31 inches high, 36 inches wide, and 30 inches from front to back, supports the following essential parts of the apparatus: A water bath (B), a large test tube rack (R3), a traveling carriage (Ca), and a flaming device (F.).

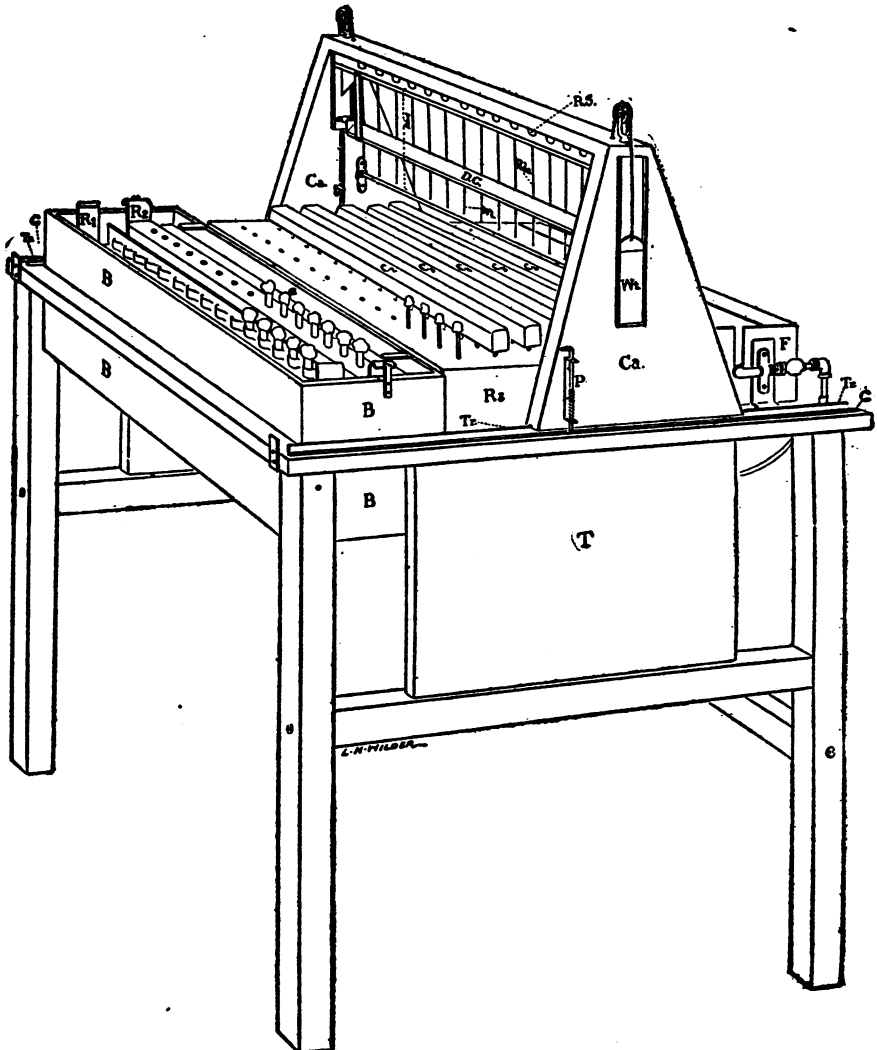
The water bath (B) is countersunk, so that half of its depth is below the level of the table top. The external dimensions of the bath are $30\frac{1}{2}$ by 10 by 10 inches; the internal dimensions are $26\frac{1}{2}$ by $5\frac{1}{2}$ by $7\frac{1}{2}$ inches. The space between the outer wooden casing of the bath and its galvanized iron lining (Li), is occupied with sawdust (Sd), for insulation. Two galvanized-iron racks hang in the bath supported at the ends. The first (R1), consists of an angled piece of galvanized iron 26 inches long. To the vertical portion of the rack are riveted 15 brass clips into which fit 15 disinfectant tubes (Td), their bottoms resting on the horizontal portion of the rack. The clips are so arranged that the centers of the tubes are exactly $1\frac{1}{2}$ inches from each other. Clear glass test tubes, 3 inches by $\frac{1}{8}$ inch, are used. They are plugged with cotton and sterilized by dry heat. The second rack consists of three sheets of galvanized iron 26 inches long by $2\frac{1}{2}$ inches wide, the upper two being perforated with a row of 15 holes 1 inch in diameter. Into these fits a row of tubes for the test bacteria (Te), exactly similar to those used in rack No. 1. The tubes in rack No. 2 are so placed that their centers are $1\frac{1}{2}$ inches apart and that they are exactly in line with the corresponding tubes in rack No. 1. The water level (W. L.) in the bath is maintained about an inch below the top of the lining of the bath.

The test tube rack (R3) consists of 3 sheets of galvanized iron, $26\frac{1}{2}$ by $10\frac{1}{2}$ inches, joined together by uprights at the ends. The top of the rack is $3\frac{3}{4}$ inches above the table top and is perforated for test tubes, as is the second sheet, which is secured 3 inches below the top.

¹ The letters refer to similar designations on the illustrations. They are repeated with a complete list of the parts to which they refer at the close of the article.

The bottom sheet rests upon the table top and supports the test tubes. The holes for the test tubes are $\frac{5}{8}$ inch in diameter. They are arranged in six rows of 15 each. In these holes are placed test tubes (B. T.), 6 inches by $\frac{1}{2}$ inch, containing about 7 c.c. of sterile

DISINFECTANT TESTING MACHINE



U.S. PUBLIC HEALTH SERVICE

FIG. 1.

broth. The rack is so adjusted on the table by means of guides as to bring the test tubes into alignment with the tubes in rack No. 2. The centers of the tubes in the rows are $1\frac{1}{8}$ inches apart, and the rows are this same distance from each other. When the usual cotton plugs

The traveling carriage (Ca) consists of two triangular-shaped wooden uprights 16 inches high. These are placed 31 inches apart and are connected with a crosspiece (CR). Small wheels are set into the bottoms of the uprights which rest upon two tracks (Tr), running from the front to the back of the table. Thus the carriage may be moved forward and backward on the table. Pins (P) on the uprights engage in holes in guides (G), running parallel to the tracks and external to them. These holes are so placed that the carriage may be accurately brought to a standstill, so that the center of the crosspiece will be exactly above the various rows of tubes described above. The inoculator (I) is hung from the crosspiece at its ends by pulleys and is so counterbalanced by weights (Wt) that after use the device will always return to its position under the crosspiece (Cr1). The inoculator consists of a crosspiece (Cr2), to the ends of which are attached vertical guides carrying small wheels (2 at each end). The wheels run upon metal tracks on the inner surfaces of the uprights of the carriage, making it possible to raise and lower the inoculator in a plane at right angles with the table top but parallel with the rows of tubes in the racks. This crosspiece is perforated with 15 holes into which fit No. 3 rubber stoppers (RS). The stoppers have one perforation in the center into which No. 8 gauge aluminum rods (Rds) $5\frac{1}{2}$ inches in length are fitted. The lower ends of the rods are flattened and here are attached pieces of No. 23 gauge nichrome wire (Wi). The wires continue downward in line with the rods for 3 inches and terminate in 4 coils, used for transferring the culture after exposure to the disinfectant. They are made of nichrome wire, No. 23 B. & S. gauge.

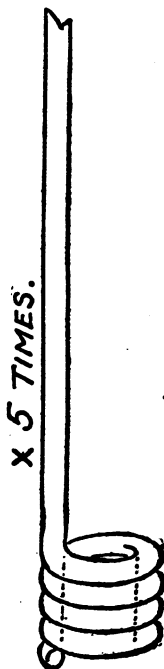


FIG. 3.—Coil for inoculator.

A close cylindrical spiral is made by winding the wire as tightly as possible about a piece of steel or other hard wire having a diameter of 0.072 inch (No. 13 B. & S. gauge). Wind about five full turns, bend the remainder of the wire sharply at a right angle to the wound portion, and parallel to the axis of the cylinder. Remove from the core and cut off the lower end, to leave exactly four complete turns. When completed the successive turns of the spiral must touch one another continuously. The coils are $7\frac{1}{4}$ inches below the crosspiece of the inoculator.

The centers of the holes in the crosspiece are $1\frac{1}{4}$ inches apart, and the machine has been so constructed that as the traveling carriage is moved back and forth the centers of the corresponding tubes in the racks will be directly below them. As the wire coils are directly below the centers of the holes in the crosspiece, they are directly

above the centers of the mouths of the test tubes. Two and one-half inches below the crosspiece, and extending entirely across the inoculator, is the dust guard (D. G.). This is attached to the guides of the inoculator and is perforated to allow the aluminum rods to pass through it. It is made of galvanized iron, and in cross section has the shape of an inverted V. An expansion device consisting of a brass cylinder fitting snugly into a metal sleeve serves to connect the dust guard with the guide of the inoculator on the right. It has been so placed as to fit snugly over the mouths of the broth test tubes in rack 3 when the inoculator is lowered. The carriage is strengthened by a brace (Br), which is an iron rod extending across the carriage, and is attached to the side pieces $6\frac{1}{2}$ inches from their bottoms and 2 inches back of the center line. The flaming device (F) consists of a Bunsen burner to which is attached a horizontal brass tube closed at the distal end. The tube is slotted every $1\frac{1}{2}$ inches, and when the apparatus is lighted the wires of the inoculator can be lowered into the flames (B, F) from these slots and sterilized.

The Performance of Disinfectants—Tests, Using the Machine.

Following is a description of a method for substituting the machine above described for hand manipulations in the testing of disinfectants. It is not our purpose at this time to discuss the technique of disinfectant tests in general, nor to describe them in particular.

In making the tests, the machine should be in a room free from dust and air currents. Before beginning work, the crosspieces of the carriage and inoculator and the internal surfaces of the uprights of the carriage are wiped clean and free from dust. The water bath is filled, and its contents are brought to the desired temperature just before beginning work. The operator now thoroughly flames the interior surface of the dust guard and the rods and wires projecting below. This is conveniently done with an ordinary Bunsen burner attached to a long rubber hose. The flaming device may be conveniently lighted at this time.

The broth tubes are now placed in rack No. 3. Just before putting each tube in its place the stopper is ignited and the mouth of the tube is quickly flamed and the stopper extinguished. When all the broth tubes are in place the stoppers are quickly removed from the row nearest the operator, and this row is covered with its sterile galvanized-iron cover as quickly as possible. The stoppers are removed from the remainder of the tubes and the covers placed on the remaining rows in like manner.

Next, the operator places the tubes containing disinfectant dilutions and the test cultures in racks No. 1 and No. 2, respectively. The cotton stoppers are now removed from the tubes in these racks and the dilutions of disinfectants in the tubes in rack No. 1 are simultaneously poured upon the test cultures in the corresponding

tubes in rack No. 2. This is done by tilting rack No. 1 away from the operator through an arc of 90 degrees.

At the instant of pouring, the time is taken and the experiment begins. The tubes in rack No. 2, now containing various dilutions of disinfectants and organisms, are covered by a semicylindrical galvanized-iron cover, previously flamed, and are gently agitated to mix the contents.

The carriage is now placed in such a position that the coils of the inoculator are over the mouths of the test tubes in rack 2, and after the proper time has elapsed the tubes are uncovered and the inoculator is lowered, immersing the wire coils in the contents of the tubes. The inoculator is raised and the tubes are covered. The operator now removes the cover from the row of broth tubes nearest him and rests it on the crosspiece of the carriage. The carriage is then pushed into such a position that the coils are over this row, the inoculator is lowered, and the coils, bearing organisms from the disinfectant-bacteria suspension, are immersed in the first row of broth tubes. The inoculator is raised, the carriage pushed back to a position over the flaming device, and the cover replaced on the first row of tubes. The inoculator is lowered, bringing the wires and coils into the Bunsen flames, which sterilize them. The operator now raises the inoculator and brings the carriage back to a position over the tubes containing disinfectant and bacteria. When the proper interval has elapsed after the first transfer, the operations described above are repeated, inoculating the 2nd row of broth tubes, and so on until the 3d, 4th, 5th, and 6th rows of tubes have been inoculated, the proper time intervals being carefully observed. The experiment is now completed and rack 3, with tubes and covers in place, is removed from the machine and placed in the incubator.

It has been found advisable to agitate gently the tubes in rack No. 2 just before each transfer is made, and also to immerse and withdraw the wire coils several times from these tubes, repeating this procedure in the broth tubes each time a transfer is made.

Comparison of Machine and Hand Tests.

The following tables illustrate the results of performing disinfectant tests by the two methods, using aliquot parts of dilutions of the same disinfectants. Tests were made within an hour of each other and portions of a single culture were used in each pair of tests.

It will be observed that for the three pairs of tests the results for the 15-minute interval correspond exactly. In the 2½-minute interval there are four pairs of tubes which failed to correspond. In each of these cases the tube planted by machine differs from the one inoculated by hand by but one dilution.

In this comparison the hand test is not taken as a standard of accuracy, as it is quite likely that the machine test represents the more reliable results. It will be noted throughout both tests that the values for the phenol control correspond very closely with the usual values obtained.

The presence or absence of growth in the broth tubes is indicated by plus or minus signs.

TABLE Ia.

Disinfectant A.

HYGIENIC LABORATORY PHENOL COEFFICIENT USING MACHINE.

Temperature of experiment, 20° C.

Culture used, *B. typhosus*, 24-hour infusion broth, filtered.

Proportion of culture and disinfectant, 0.1 cc. + 5 cc.

| Sample. | Dilution. | Time culture exposed to action of disinfectant for minutes. | | | | | | Phenol coefficient. |
|---------------------|---|---|---|---|---|---|---|--|
| | | 2½ | 5 | 7½ | 10 | 12½ | 15 | |
| Phenol..... | 1-80 1-90 1-100 1-110 1-120 1-150 1-175 1-200 1-225 1-250 1-275 1-300 1-325 1-350 1-375 | - - + + + + - + + + + + + + + | - - + + + - - - - - + + + + + | - - - - + - - - - - - - + + + | - - - - + - - - - - - - + + + | - - - - + - - - - - - - - - + | - - - - + - - - - - - - - - + | $\frac{175}{90} \times \frac{350}{110} = \frac{2}{2}$ $\frac{1.94 + 3.18}{2} =$ <p>2.56 coefficient.</p> |
| Disinfectant A..... | | | | | | | | |

TABLE I b.

Disinfectant A.

HYGIENIC LABORATORY PHENOL COEFFICIENT USING HAND TECHNIQUE.

Temperature of experiment, 20° C.

Culture used, *B. typhosus*, 24-hour meat infusion broth, filtered.

Proportion of culture and disinfectant, 0.1 cc. + 5 cc.

[illegible]

TABLE III a.

Disinfectant C.

HYGIENIC LABORATORY PHENOL COEFFICIENT USING MACHINE.

Temperature of experiment, 20° C.

Culture used, *B. typhosus*, 24-hour meat infusion broth.

Proportion of culture and disinfectant, 0.1 cc.+5 cc.

| Samples. | Dilution. | Time culture exposed to action of disinfectant for minutes. | | | | | | Phenol coefficient. |
|-------------|-----------|---|---|----|----|-----|----|---|
| | | 2½ | 5 | 7½ | 10 | 12½ | 15 | |
| Phenol..... | 1- 80 | - | - | - | - | - | - | $\frac{275 + 350}{90 + 110} = \frac{2}{2}$ $\frac{3.05 + 3.18}{2}$ 3.11 coefficient. |
| | 1- 90 | - | - | - | - | - | - | |
| | 1-100 | + | + | - | - | - | - | |
| | 1-110 | + | + | + | + | - | - | |
| | 1-120 | + | + | + | + | - | + | |
| | 1-150 | - | - | - | - | - | - | |
| | 1-175 | - | - | - | - | - | - | |
| | 1-200 | - | - | - | - | - | - | |
| | 1-225 | - | - | - | - | - | - | |
| | 1-250 | - | - | - | - | - | - | |
| | 1-275 | - | - | - | - | - | - | |
| | 1-300 | + | - | - | - | - | - | |
| | 1-325 | + | + | + | - | - | - | |
| | 1-350 | + | + | + | + | + | - | |
| | 1-375 | + | + | + | + | + | + | |

TABLE III b.

Disinfectant C.

HYGIENIC LABORATORY PHENOL COEFFICIENT USING HAND TECHNIQUE.

Temperature of experiment, 20° C.

Culture used *B. typhosus*, 24-hour meat infusion broth.

Preparation of culture and disinfectant, 0.1 cc.+5 cc.

| Samples. | Dilution. | Time culture exposed to action of disinfectant for minutes. | | | | | | Phenol coefficient. |
|-------------|-----------|---|---|----|----|-----|----|---|
| | | 2½ | 5 | 7½ | 10 | 12½ | 15 | |
| Phenol..... | 1- 80 | - | - | - | - | - | - | $\frac{250 + 350}{80 + 110} =$ $\frac{3.12 + 3.18}{2} =$ 3.15 coefficient. |
| | 1- 90 | + | - | - | - | - | - | |
| | 1-100 | + | - | + | - | - | - | |
| | 1-110 | + | + | + | + | - | - | |
| | 1-120 | + | + | + | + | + | + | |
| | 1-150 | - | - | - | - | - | - | |
| | 1-175 | - | - | - | - | - | - | |
| | 1-200 | - | - | - | - | - | - | |
| | 1-225 | - | - | - | - | - | - | |
| | 1-250 | - | - | - | - | - | - | |
| | 1-275 | + | - | - | - | - | - | |
| | 1-300 | + | - | - | - | - | - | |
| | 1-325 | + | + | + | + | - | - | |
| | 1-350 | + | + | + | + | - | - | |
| | 1-375 | + | + | + | + | + | + | |

List of Parts of the Machine.

| | | | |
|--------|-----------------------------|-------|-------------------------------------|
| B. | =Water bath. | P. | =Pins. |
| B. F. | =Bunsen flame. | R. 1. | =Rack for disinfectant tubes. |
| Br. | =Brace. | R. 2. | =Rack for tubes for test organisms. |
| B. T. | =Broth tubes. | R. 3. | =Broth tube rack. |
| C. | =Covers for broth tubes. | R. S. | =Rubber stoppers. |
| Ca. | =Carriage. | Rds. | =Rods. |
| Cr. 1. | =Cross piece of carriage. | T. | =Table. |
| Cr. 2. | =Cross piece of inoculator. | Td. | =Disinfectant tubes. |
| Ct. | =Cotton. | Te. | =Tubes for test organisms. |
| D. G. | =Dust guard. | Tr. | =Tracks. |
| F. | =Flaming device. | Sd. | =Sawdust. |
| G. | =Guides. | Wi. | =Wires. |
| I. | =Inoculator. | W. L. | =Water level. |
| Li. | =Lining of water bath. | Wt. | =Weight. |

ARSPHENAMINE (SALVARSAN) AND NEO-ARSPHENAMINE (NEO-SALVARSAN).

LICENSES ORDERED AND RULES AND STANDARDS PRESCRIBED FOR THEIR MANUFACTURE.

Upon the recommendation of the Public Health Service the rules and standards copied below were adopted by the Federal Trade Commission on March 4, 1918, for the control of establishments licensed for the manufacture and sale of arspenamine and neo-arsphenamine.

So far licenses for the manufacture of these products have been issued to the following establishments:

Dermatological Research Laboratories, 1818 Lombard Street, Philadelphia, Pa.

Takamine Laboratory (Inc.), 120 Broadway, New York City.

Farbwerke-Hoechst Co., 122 Hudson Street, New York City.

Diarsenol Co. (Inc.), 475 Ellicott Square, Buffalo, N. Y.

RULES AND STANDARDS PRESCRIBED BY THE UNITED STATES PUBLIC HEALTH SERVICE FOR THE CONTROL OF LICENSEES FOR THE MANUFACTURE AND SALE OF ARSPHE- NAMINE.

(1) Except as provided in paragraph (3) hereof, only the abbreviated chemical term Arspenamine immediately followed by the descriptive chemical name shall be used on packages to designate the preparation.

(2) Arspenamine shall be offered for sale only in colorless glass ampules containing an atmosphere of an inert gas.

(3) Each package shall be plainly marked so as to show the license number, the lot number, the name of the preparation, the actual amount of arspenamine in the container, and the name and address of the manufacturer, in the following manner:

License No. ———. Lot No. ———.

This package contains ——— grams of Arspenamine (hydrochloride of 3-diamino-4-dihydroxy-1-arsenobenzene), prepared under regulations issued by the Federal Trade Commission, and conforms with tests approved by the United States Public Health Service. Made by ———

No names of diseases or symptoms shall appear on any label or package.

The licensee shall use the name Arspenamine, immediately followed by the extended scientific name of the article. The word Arspenamine, when used upon labels attached to packages and cartons, shall be printed in 10-point Roman capitals. On ampules, 8-point Roman capitals may be used.

The licensee may, if he desires, use upon labels and packages his particular brand or trade name, provided that whenever any such brand or trade name is used it shall invariably be accompanied without intervening printed matter, with the name Arspenamine and the extended scientific name of the article, as provided in the preceding paragraph.

(4) Before placing on the market, each lot shall be tested by the manufacturer as regards toxicity and arsenic content, and shall comply with the requirements of paragraphs (5) and (6) following. Detailed and permanent records of these tests shall be kept by the manufacturer and copies furnished to the commission immediately upon the completion of the tests.

(5) The total arsenic content of the air-dried drug shall not be below 29.5 nor above 31.57 per cent.

(6) The maximum tolerated dose for healthy albino rats shall not be below 60 milligrams per kilo body weight when a 2 per cent slightly alkaline solution of the drug in freshly glass-distilled water is injected intravenously at the rate of not more than 0.5 cubic centimeter per minute.

For each toxicity test a series of animals of not less than four shall be used, and at least 75 per cent of the animals injected with the maximum tolerated dose should survive 48 hours from the time of injection.

The rats shall not be anesthetized for the injection and shall weigh between 100 and 150 grams. Pregnant animals shall not be used.

(7) In addition to tests by the manufacturer, tests shall be made from time to time by the United States Public Health Service. For this purpose samples of each lot shall be forwarded by the manufacturer to the Hygienic Laboratory of the United States Public Health Service. The number of samples supplied shall be not less than 10 ampules from any lot, and from lots of over 1,000 ampules, 1 per cent shall be furnished. Each ampule forwarded shall contain at least 0.6 gram of Arsphenamine.

Officers of said service or of the Federal Trade Commission, when duly detailed, may enter establishments for the purpose of securing samples and conducting inspections.

(8) When lots have passed satisfactorily the prescribed tests, they may be offered for sale, but the right is reserved to require the withdrawal from the market of any lot designated by the Federal Trade Commission.

(9) Manufacturers shall retain 2 per cent of the ampules from each lot for a period of three months from the time the preparation is put in ampules; but the number retained need not exceed 10 ampules from each lot.

**RULES AND STANDARDS PRESCRIBED BY THE UNITED STATES PUBLIC HEALTH SERVICE
FOR THE CONTROL OF LICENSEES FOR THE MANUFACTURE AND SALE OF NEO-
ARSPHENAMINE.**

(1) Except as provided in paragraph (3) hereof, only the abbreviated chemical term Neo-Arsphenamine, immediately followed by the descriptive designation, shall be used on packages to designate the preparation.

(2) Neo-Arsphenamine shall be offered for sale only in colorless glass ampules containing an atmosphere of an inert gas.

(3) Each package shall be plainly marked so as to show the license number, the lot number, the name of the preparation, the actual amount of Neo-Arsphenamine in the container, and the name and address of the manufacturer in the following manner:

License No. _____. Lot No. _____.

This package contains _____ grams of Neo-Arsphenamine (a compound prepared from Arsphenamine by means of formaldehyd-sulphoxylate), prepared under regulations issued by the Federal Trade Commission, and conforms with tests approved by the United States Public Health Service. Made by _____.

No name of diseases or symptoms shall appear on any label or package.

The licensee shall use the name Neo-Arsphenamine, immediately followed by the descriptive designation of the article. The word Neo-Arsphenamine, when used upon labels attached to packages and cartons, shall be printed in 10-point roman capitals. On ampules 8-point roman capitals may be used.

The licensee may, if he desires, use upon labels and packages his particular brand or trade name, provided that whenever any such brand or trade name is used it shall invariably be accompanied, without intervening printed matter, with the name Neo-Arsphenamine and the descriptive designation of the article, as provided in the preceding paragraph.

(4) Before placing on the market, each lot shall be tested by the manufacturer as regards toxicity and arsenic content, and shall comply with the requirements of paragraphs (5) and (6), following. Detailed and permanent records of these tests shall be kept by the manufacturer and copies furnished to the commission immediately upon the completion of the tests.

(5) The total arsenic content of the air-dried drug shall not be below 18 per cent nor above 20 per cent.

(6) The maximum tolerated dose for healthy albino rats shall not be below 90 milligrams per kilo body weight when a 2 per cent aqueous solution of the drug in freshly glass-distilled water is injected intravenously at the rate of not more than 0.5 cubic centimeter per minute.

For each toxicity test a series of animals of not less than four shall be used, and at least 75 per cent of the animals injected with the maximum tolerated dose should survive seven days from the time of injection.

The rats shall not be anesthetized for the injection and shall weigh between 100 and 150 grams. Pregnant animals shall not be used.

(7) In addition to tests by the manufacturer, tests shall be made from time to time by the United States Public Health Service. For this purpose samples of each lot shall be forwarded by the manufacturer to the hygienic laboratory of the United States Public Health Service. The number of samples supplied shall not be less than 10 ampules from any lot, and from lots of over 1,000 ampules 1 per cent shall be furnished. Each ampule forwarded shall contain at least 0.9 gram of Neo-Arsphenamine.

Officers of said service or of the Federal Trade Commission, when duly detailed, may enter establishments for the purpose of securing samples and conducting inspections.

(8) When lots have passed satisfactorily the prescribed tests, they may be offered for sale; but the right is reserved to require the withdrawal from the market of any lot designated by the Federal Trade Commission.

(9) Manufacturers shall retain 2 per cent of the ampules from each lot for a period of three months from the time the preparation is put in ampules, but the number retained need not exceed 10 ampules from any lot.

PREVALENCE OF DISEASE.

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

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED APR. 9.

CAMP BEAUREGARD ZONE, LA.

| Alexandria: | Cases. |
|---------------------|--------|
| Chicken pox..... | 2 |
| Diphtheria..... | 1 |
| Malaria..... | 1 |
| Mumps..... | 28 |
| Pellagra..... | 2 |
| Pneumonia..... | 2 |
| Smallpox..... | 4 |
| Typhoid fever..... | 1 |
| Whooping cough..... | 2 |
| Boyce: | |
| Pneumonia..... | 2 |
| Pineville: | |
| Mumps..... | 3 |
| Smallpox..... | 2 |

CAMP BOWIE ZONE, TEX.

| | |
|-------------------------------|---|
| Fort Worth: | |
| Cerebrospinal meningitis..... | 1 |
| Chicken pox..... | 3 |
| Gonorrhea..... | 1 |
| Measles..... | 1 |
| Scarlet fever..... | 2 |
| Smallpox..... | 3 |
| Syphilis..... | 1 |

CAMP DEVENS ZONE, MASS.

| | |
|-----------------|----|
| Chicken pox: | |
| Lancaster..... | 4 |
| Lunenburg..... | 4 |
| German measles: | |
| Lancaster..... | 1 |
| Lunenburg..... | 14 |
| Measles: | |
| Ayer..... | 7 |
| Lancaster..... | 1 |
| Shirley..... | 2 |
| Mumps: | |
| Lancaster..... | 3 |

CAMP DODGE ZONE, IOWA.

| | |
|---------------------|----|
| Des Moines: | |
| Gonorrhea..... | 10 |
| Measles..... | 8 |
| Scarlet fever..... | 21 |
| Smallpox..... | 9 |
| Syphilis..... | 15 |
| Whooping cough..... | 1 |

CAMP DODGE ZONE, IOWA—continued.

| | |
|--------------------|--------|
| Ankeny: | Cases. |
| Diphtheria..... | 1 |
| Gonorrhea..... | 1 |
| Scarlet fever..... | 1 |

CAMP FUNSTON ZONE, KANS.

| | |
|--------------------|----|
| Chicken pox: | |
| Manhattan..... | 1 |
| Diphtheria: | |
| Randolph..... | 1 |
| Measles: | |
| Army City..... | 1 |
| Manhattan..... | 11 |
| Mumps: | |
| Junction City..... | 2 |
| Manhattan..... | 8 |
| Pneumonia: | |
| Manhattan..... | 2 |
| Scarlatina: | |
| Riley..... | 1 |
| Scarlet fever: | |
| Manhattan..... | 3 |
| Whooping cough: | |
| Junction City..... | 8 |

CAMP GORDON ZONE, GA.

| | |
|---------------------------|----|
| Cerebrospinal meningitis: | |
| Atlanta..... | 1 |
| Chicken pox: | |
| Atlanta..... | 6 |
| Diphtheria: | |
| Atlanta..... | 1 |
| German measles: | |
| Atlanta..... | 3 |
| Gonorrhea: | |
| Atlanta..... | 3 |
| Malaria: | |
| Atlanta..... | 1 |
| Measles: | |
| Atlanta..... | 14 |
| Mumps: | |
| Atlanta..... | 21 |
| Clarkston..... | 1 |
| Decatur..... | 3 |
| Engleside..... | 5 |
| Scottdale..... | 1 |

CAMP GORDON ZONE, GA.—continued.

| Pneumonia: | Cases. |
|---------------------|--------|
| Atlanta..... | 3 |
| Decatur..... | 3 |
| Scottdale..... | 1 |
| Scarlet fever: | |
| Atlanta..... | 3 |
| Syphilis: | |
| Atlanta..... | 3 |
| Tuberculosis: | |
| Atlanta..... | 8 |
| Typhoid fever: | |
| Atlanta..... | 3 |
| Whooping cough: | |
| Scottdale..... | 1 |
| Stone Mountain..... | 1 |

CAMP GREENE ZONE, N. C.

| | |
|-------------------------|----|
| Charlotte Township: | |
| Diphtheria carrier..... | 1 |
| German measles..... | 3 |
| Gonorrhea..... | 10 |
| Measles..... | 6 |
| Mumps..... | 1 |
| Syphilis..... | 10 |
| Trachoma..... | 3 |
| Whooping cough..... | 5 |

GULFPORT HEALTH DISTRICT, MISS.

| | |
|-------------------------------|---|
| Gulfport Health District: | |
| Cerebrospinal meningitis..... | 1 |
| Conjunctivitis..... | 1 |
| Dysentery..... | 5 |
| Malaria..... | 9 |
| Measles..... | 7 |
| Mumps..... | 2 |
| Pneumonia..... | 1 |
| Syphilis..... | 1 |
| Tuberculosis, pulmonary..... | 1 |

CAMP HANCOCK ZONE, GA.

| | |
|-------------------------------|----|
| Augusta: | |
| Cerebrospinal meningitis..... | 1 |
| Chicken pox..... | 1 |
| German measles..... | 1 |
| Measles..... | 22 |
| Mumps..... | 2 |
| Pneumonia, lobar..... | 1 |
| Whooping cough..... | 1 |

CAMP JACKSON ZONE, S. C.

| | |
|-------------------------------|---|
| Columbia: | |
| Cerebrospinal meningitis..... | 2 |
| Diphtheria..... | 1 |
| Measles..... | 2 |
| Mumps..... | 1 |

CAMP JOSEPH E. JOHNSTON ZONE, FLA.

| | |
|-------------------------|---|
| Diarrhea: | |
| Fishers Corner..... | 1 |
| Dysentery: | |
| Highway..... | 2 |
| Jacksonville..... | 7 |
| South Jacksonville..... | 1 |
| Youkon..... | 1 |
| Gonorrhea: | |
| Fishers Corner..... | 1 |
| Hookworm: | |
| Highway..... | 2 |

CAMP JOSEPH E. JOHNSTON ZONE, FLA.—continued.

| Malaria: | Cases. |
|-------------------------|--------|
| Eastport..... | 1 |
| Jacksonville..... | 1 |
| Mandarin..... | 1 |
| Measles: | |
| Jacksonville..... | 14 |
| South Jacksonville..... | 2 |
| Mumps: | |
| Jacksonville..... | 3 |
| Smallpox: | |
| Jacksonville..... | 2 |
| Syphilis: | |
| Jacksonville..... | 5 |
| Trachoma: | |
| Jacksonville..... | 3 |
| Tuberculosis: | |
| Jacksonville..... | 2 |
| Whooping cough: | |
| Jacksonville..... | 25 |

FORT LEAVENWORTH ZONE, KANS.

| | |
|-----------------------|----|
| Leavenworth: | |
| Chicken pox..... | 1 |
| Diphtheria..... | 5 |
| German measles..... | 1 |
| Measles..... | 14 |
| Mumps..... | 1 |
| Pneumonia, lobar..... | 2 |
| Smallpox..... | 2 |
| Tuberculosis..... | 1 |
| Leavenworth County: | |
| Measles..... | 7 |
| Scarlet fever..... | 1 |
| Smallpox..... | 3 |

CAMP LEE ZONE, VA.

| | |
|---------------------------|----|
| Chicken pox: | |
| Hopewell..... | 1 |
| Prince George County..... | 6 |
| Diphtheria: | |
| Hopewell..... | 1 |
| Petersburg..... | 2 |
| German measles: | |
| Ettricks..... | 3 |
| Petersburg..... | 1 |
| Malaria: | |
| Hopewell..... | 1 |
| Measles: | |
| City Point..... | 1 |
| Ettricks..... | 3 |
| Hopewell..... | 11 |
| Petersburg..... | 6 |
| Mumps: | |
| Ettricks..... | 6 |
| Hopewell..... | 4 |
| Pneumonia: | |
| Ettricks..... | 2 |
| Septic sore throat: | |
| Chesterfield County..... | 1 |
| Ettricks..... | 3 |
| Petersburg..... | 5 |
| Tuberculosis: | |
| Petersburg..... | 3 |
| Typhoid fever: | |
| Petersburg..... | 1 |
| Whooping cough: | |
| Ettricks..... | 1 |

CAMP LEWIS ZONE, WASH.

| German measles: | Cases. |
|----------------------|--------|
| Dupont..... | 2 |
| Lakeview..... | 1 |
| Oak Knoll..... | 3 |
| Parkland..... | 2 |
| Spanaway..... | 1 |
| Stellacoom Lake..... | 2 |
| Mumps: | |
| Dupont..... | 1 |
| Scarlet fever: | |
| Dupont..... | 1 |
| Parkland..... | 1 |
| Tuberculosis: | |
| Clover Creek..... | 1 |
| Greendale..... | 1 |
| Tenino..... | 1 |
| Whooping cough: | |
| Parkland..... | 4 |

CAMP LOGAN ZONE, TEX.

| | |
|-------------------------------|-----|
| Houston: | |
| Cerebrospinal meningitis..... | 1 |
| German measles..... | 1 |
| Gonorrhea..... | 124 |
| Measles..... | 17 |
| Mumps..... | 7 |
| Pneumonia..... | 3 |
| Syphilis..... | 31 |
| Tuberculosis..... | 1 |
| Whooping cough..... | 1 |
| Humble: | |
| Gonorrhea..... | 1 |
| Syphilis..... | 6 |
| Magnolia Park: | |
| Measles..... | 1 |

CAMP MACARTHUR ZONE, TEX.

| | |
|-----------------------------|----|
| Waco: | |
| Chicken pox..... | 10 |
| Measles..... | 13 |
| Meningitis, tubercular..... | 1 |
| Mumps..... | 41 |
| Pneumonia, lobar..... | 4 |
| Polio-myelitis..... | 1 |
| Smallpox..... | 3 |
| Tuberculosis..... | 1 |
| Typhoid fever..... | 1 |
| Whooping cough..... | 1 |

CAMP MCCLELLAN ZONE, ALA.

| | |
|------------------|---|
| Chicken pox: | |
| Anniston..... | 2 |
| Measles: | |
| Anniston..... | 1 |
| Precinct 23..... | 3 |
| Mumps: | |
| Anniston..... | 3 |
| Pneumonia: | |
| Anniston..... | 2 |
| Smallpox: | |
| Anniston..... | 9 |
| Oxford..... | 1 |
| Precinct 15..... | 1 |
| Precinct 22..... | 1 |
| Tuberculosis: | |
| Anniston..... | 2 |

FORT OGLETHORPE ZONE, GA.

| | |
|---------------------------|--------|
| Cerebrospinal meningitis: | Cases. |
| Chattanooga..... | 1 |
| Chicken pox: | |
| Chattanooga..... | 2 |
| Gonorrhea: | |
| Chattanooga..... | 2 |
| Rossville..... | 1 |
| Measles: | |
| East Lake..... | 1 |
| Mumps: | |
| Chattanooga..... | 13 |
| East Chattanooga..... | 7 |
| East Lake..... | 1 |
| Scarlet fever: | |
| North Chattanooga..... | 1 |
| Smallpox: | |
| Chattanooga..... | 3 |
| Tuberculosis: | |
| Chattanooga..... | 1 |
| Typhoid fever: | |
| Chattanooga..... | 2 |
| Whooping cough: | |
| Chattanooga..... | 20 |

CAMP PIKE ZONE, ARK.

| | |
|---------------------|----|
| Little Rock: | |
| Chancroid..... | 2 |
| Chicken pox..... | 2 |
| Diphtheria..... | 2 |
| Gonorrhea..... | 13 |
| Malaria..... | 5 |
| Measles..... | 4 |
| Mumps..... | 10 |
| Pneumonia..... | 16 |
| Scarlet fever..... | 3 |
| Smallpox..... | 6 |
| Syphilis..... | 12 |
| Tetanus..... | 1 |
| Trachoma..... | 1 |
| Tuberculosis..... | 3 |
| Typhoid fever..... | 1 |
| North Little Rock: | |
| German measles..... | 1 |
| Mumps..... | 3 |
| Pneumonia..... | 2 |
| Smallpox..... | 2 |
| Tuberculosis..... | 1 |
| Scotts: | |
| Diphtheria..... | 1 |
| Mumps..... | 1 |
| Syphilis..... | 1 |

CAMP SEVIER ZONE, S. C.

| | |
|-----------------------------|---|
| Cerebrospinal meningitis: | |
| Greenville Township..... | 1 |
| Pneumonia, broncho: | |
| Chick Springs Township..... | 1 |

CAMP SHELBY ZONE, MISS.

| | |
|------------------|----|
| Hattiesburg: | |
| Chicken pox..... | 2 |
| Hookworm..... | 2 |
| Malaria..... | 7 |
| Measles..... | 1 |
| Mumps..... | 24 |

CAMP SHELBY ZONE, MISS.—continued.

| Hattiesburg—Continued. | Cases. |
|------------------------------|--------|
| Pneumonia, lobar..... | 5 |
| Smallpox..... | 5 |
| Tuberculosis, pulmonary..... | 6 |
| Typhoid fever..... | 1 |
| Whooping cough..... | 6 |

CAMP SHERIDAN ZONE, ALA.

| | |
|--------------------------------|----|
| Montgomery: | |
| Chancroid..... | 2 |
| Chicken pox..... | 2 |
| Gonorrhea..... | 4 |
| Malaria..... | 63 |
| Measles..... | 6 |
| Mumps..... | 8 |
| Ringworm..... | 20 |
| Smallpox..... | 3 |
| Syphilis..... | 3 |
| Rural district in 5-mile zone: | |
| Smallpox..... | 1 |

CAMP SHERMAN ZONE, OHIO.

| | |
|-------------------------|----|
| Chancroid: | |
| Chillicothe..... | 1 |
| Gonorrhea: | |
| Chillicothe..... | 2 |
| Measles: | |
| Chillicothe..... | 19 |
| Green Township..... | 1 |
| Jefferson Township..... | 10 |
| Liberty Township..... | 4 |
| Mumps: | |
| Chillicothe..... | 2 |
| Scioto Township..... | 1 |
| Scarlet fever: | |
| Chillicothe..... | 4 |
| Smallpox: | |
| Chillicothe..... | 1 |
| Typhoid fever: | |
| Chillicothe..... | 1 |

CAMP ZACHARY TAYLOR ZONE, KY.

| | |
|-------------------------------|----|
| Jefferson County: | |
| Cerebrospinal meningitis..... | 1 |
| Rabies in animals..... | 1 |
| Tuberculosis, pulmonary..... | 2 |
| Typhoid fever..... | 1 |
| Louisville: | |
| Cerebrospinal meningitis..... | 3 |
| Chicken pox..... | 3 |
| Diphtheria..... | 12 |
| Measles..... | 18 |
| Pneumonia, lobar..... | 3 |
| Rabies in animals..... | 1 |
| Scarlet fever..... | 5 |
| Smallpox..... | 8 |
| Trachoma..... | 2 |
| Tuberculosis, pulmonary..... | 26 |
| Typhoid fever..... | 1 |
| Whooping cough..... | 3 |

TIDEWATER HEALTH DISTRICT, VA.

| Chicken pox: | Cases. |
|-------------------|--------|
| Newport News..... | 1 |
| Phoebe..... | 1 |
| German measles: | |
| Phoebe..... | 2 |
| Measles: | |
| Hampton..... | 2 |
| Newport News..... | 12 |
| Phoebe..... | 7 |
| Mumps: | |
| Newport News..... | 5 |
| Pneumonia: | |
| Phoebe..... | 1 |
| Scarlet fever: | |
| Hampton..... | 1 |
| Newport News..... | 6 |
| Phoebe..... | 1 |
| Smallpox: | |
| Newport News..... | 2 |
| Tuberculosis: | |
| Newport News..... | 2 |
| Whooping cough: | |
| Newport News..... | 1 |

CAMP TRAVIS ZONE, TEX.

| | |
|-------------------|----|
| San Antonio: | |
| Dysentery..... | 2 |
| Erysipelas..... | 1 |
| Gonorrhea..... | 26 |
| Measles..... | 9 |
| Mumps..... | 3 |
| Pneumonia..... | 4 |
| Syphilis..... | 6 |
| Tuberculosis..... | 9 |

CAMP WADSWORTH ZONE, S. C.

| | |
|----------------------------|---|
| Glenn Springs: | |
| Chicken pox..... | 3 |
| Gonorrhea..... | 2 |
| Pauline: | |
| Chicken pox..... | 1 |
| German measles..... | 1 |
| Spartanburg: | |
| Diphtheria..... | 2 |
| German measles..... | 1 |
| Measles..... | 4 |
| Mumps..... | 3 |
| Ophthalmia neonatorum..... | 1 |
| Pneumonia..... | 1 |
| Smallpox..... | 3 |
| Tuberculosis..... | 4 |
| Whooping cough..... | 4 |

CAMP WHEELER ZONE, GA.¹

| | |
|---------------------|----|
| East Macon: | |
| Mumps..... | 5 |
| Macon: | |
| Chicken pox..... | 6 |
| German measles..... | 1 |
| Mumps..... | 11 |
| Scarlet fever..... | 1 |
| Smallpox..... | 1 |

¹ For week ended Apr. 8, 1918.

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General, United States Army, for the week ended March 29, 1918:

Annual admission rate per 1,000 (disease only):

| | |
|---------------------------|---------|
| All troops..... | 1,522.0 |
| National Guard camps..... | 1,103.5 |
| National Army camps..... | 1,514.7 |
| Regular Army..... | 1,513.8 |

Noneffective rate per 1,000 on day of report:

| | |
|-----------------|------|
| All troops..... | 49.4 |
|-----------------|------|

Noneffective rate per 1,000—Continued.

| | |
|---------------------------|------|
| National Guard camps..... | 39.1 |
| National Army camps..... | 58.7 |
| Regular Army..... | 44.4 |

Annual death rate per 1,000 (disease only):

| | |
|---------------------------|------|
| All troops..... | 9.8 |
| National Guard camps..... | 3.6 |
| National Army camps..... | 14.0 |
| Regular Army..... | 10.1 |

New cases of special diseases reported during the week ended Mar. 29, 1918.

| Camps. | Pneumonia. | Dysentery. | Malaria. | Veneral. | Measles. | Meningitis. | Scarlet fever. | Deaths. | Annual admission rate per 1,000 (disease only). | Noneffective per 1,000 on day of report. |
|--|------------|------------|----------|----------|----------|-------------|----------------|---------|---|--|
| Wadsworth..... | 2 | | | 14 | 8 | 1 | 4 | 1 | 628.4 | 22.3 |
| Hancock..... | | | | 24 | 5 | | 1 | 4 | 413.2 | 26.2 |
| McClellan..... | 5 | | 1 | 17 | | 1 | | 1 | 838.4 | 29.6 |
| Sovier..... | 6 | | 1 | 15 | 2 | | | 1 | 1,044.9 | 37.5 |
| Wheeler..... | 4 | | 4 | 36 | | | | 4 | 773.7 | 36.3 |
| Logan..... | 8 | | | 45 | 4 | 1 | | 4 | 1,060.0 | 34.2 |
| Cody..... | 5 | | | 10 | | | 1 | 5 | 673.7 | 30.8 |
| Doniphan..... | 11 | | | 46 | | | | 3 | 1,981.3 | 44.5 |
| Bowie..... | 23 | | 1 | 35 | | | | 2 | 2,534.6 | 67.0 |
| Sheridan..... | 2 | | | 14 | | | 1 | 1 | 438.4 | 24.2 |
| Shelby..... | | | | 25 | 1 | | | 2 | 1,117.2 | 50.9 |
| Beauregard..... | 13 | | 8 | 21 | | 1 | | 1 | 1,472.5 | 53.8 |
| Kearney..... | | | | 34 | | | 3 | | 1,337.2 | 53.7 |
| Devens..... | 16 | | | 16 | 10 | 2 | 3 | 4 | 1,360.4 | 46.9 |
| Upton..... | 16 | | | 60 | 13 | | 1 | 9 | 811.2 | 28.4 |
| Dix..... | 4 | | | 9 | 7 | 1 | 1 | 4 | 969.2 | 35.7 |
| Meade..... | 19 | | | 5 | 11 | | 6 | | 578.6 | 32.5 |
| Lee..... | 2 | | | 180 | 15 | 1 | | 6 | 1,295.5 | 60.5 |
| Jackson..... | 17 | | | 31 | 22 | 6 | | 6 | 1,730.4 | 56.4 |
| Gordon..... | 9 | | | 19 | 16 | 3 | | 2 | 1,433.5 | 45.3 |
| Sherman..... | 16 | | | 53 | 2 | | 20 | 6 | 1,328.5 | 53.2 |
| Taylor..... | 30 | | | 10 | 107 | 1 | 2 | 2 | 2,028.0 | 73.9 |
| Custer..... | 5 | | | 24 | 4 | | 8 | 5 | 1,712.3 | 45.1 |
| Grant..... | 11 | | | 4 | 6 | | 5 | 5 | 704.6 | 26.2 |
| Pike..... | 42 | | 1 | 58 | 17 | 2 | 7 | 20 | 3,531.4 | 87.0 |
| Dodge..... | 44 | | | 25 | 83 | 2 | 12 | 15 | 2,741.1 | 52.8 |
| Funston..... | 24 | 1 | | 10 | 11 | 2 | 3 | 18 | 1,679.2 | 82.2 |
| Travis..... | 25 | 2 | 8 | 39 | 38 | 3 | | 6 | 4,799.2 | 90.1 |
| Lewis..... | 9 | | | 40 | 13 | | 17 | 4 | 3,087.6 | 94.7 |
| Northeastern Department..... | 6 | | | 20 | 2 | | 1 | | 1,673.5 | 44.6 |
| Eastern Department..... | 3 | | 1 | 23 | 15 | 1 | | 5 | 1,170.3 | 30.0 |
| Southeastern Department..... | 11 | | 2 | 34 | 30 | 5 | 4 | 3 | 1,199.1 | 50.2 |
| Central Department..... | 31 | | | 33 | 17 | | 25 | 9 | 2,219.2 | 50.4 |
| Southern Department..... | 13 | 2 | | 67 | 15 | 2 | 11 | 8 | 1,242.4 | 43.1 |
| Western Department..... | 9 | | | 48 | 9 | 1 | 7 | 2 | 1,747.8 | 37.9 |
| Aviation, S. C..... | 62 | 2 | | 165 | 105 | 6 | 56 | 30 | 1,462.5 | 41.4 |
| Camp Greene..... | 11 | | | 38 | 22 | 1 | 5 | 4 | 1,004.8 | 39.0 |
| Camp Fremont..... | 4 | | 1 | 28 | 7 | | | | 1,739.9 | 73.3 |
| El Paso..... | | | | 11 | 3 | | 1 | | 932.8 | 7.4 |
| Columbus Barracks..... | 1 | | | 15 | 4 | | 4 | 1 | 2,054.2 | 65.6 |
| Jefferson Barracks..... | 21 | | | 59 | 16 | | 5 | 2 | 3,128.1 | 112.5 |
| Fort Logan..... | 5 | | | 3 | 7 | | 2 | 2 | 2,562.9 | 78.5 |
| Fort McDowell..... | 5 | | | 2 | 11 | | 3 | 2 | 2,329.8 | 51.9 |
| Fort Slocum..... | 3 | | | 13 | 3 | | | 4 | 2,085.7 | 45.1 |
| Disciplinary Barracks, Alcatraz..... | | | | | | | | | 1,561.6 | 27.0 |
| Disciplinary Barracks, Fort Leavenworth..... | 15 | | | | | | | 2 | 3,864.5 | 56.6 |
| A. A. Humphreys..... | 1 | | | 4 | | | | | 654.8 | 3.7 |
| J. E. Johnston..... | 1 | | | 24 | 4 | | 1 | 1 | 1,152.3 | 39.2 |
| Camp Merritt..... | 43 | | 2 | 45 | 8 | | 12 | 9 | 1,303.4 | 57.8 |
| Camp Stuart..... | 40 | | | 29 | 6 | 1 | 3 | 5 | 2,170.4 | 53.4 |
| West Point, N. Y..... | | | | | | | | 1 | 1,484.8 | 9.3 |

New cases of special diseases reported during the week ended Mar. 29, 1918—Continued.

| Camps. | Pneumonia. | Dysentery. | Malaria. | Venereal. | Measles. | Meningitis. | Scarlet fever. | Deaths. | Annual admission rate per 1,000 (disease only). | Noneffective per 1,000 on day of report. |
|---|------------|------------|----------|-----------|----------|-------------|----------------|---------|---|--|
| Edgewood-Aberdeen..... | 2 | ..... | ..... | 4 | 1 | ..... | ..... | ..... | 2,313.9 | 25.8 |
| Provisional depot for corps and Army troops..... | 2 | ..... | ..... | 24 | 12 | 2 | 8 | ..... | 1,451.7 | 34.4 |
| Camp Holabird..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | 6,246.2 | 3.0 |
| Camp Raritan..... | ..... | ..... | ..... | ..... | 2 | 1 | ..... | ..... | ..... | ..... |
| General hospitals..... | 1 | ..... | 1 | 31 | 2 | 1 | ..... | 2 | ..... | ..... |
| National Guard in departments..... | 2 | ..... | ..... | 8 | 2 | ..... | ..... | 3 | ..... | ..... |
| National Army in departments..... | 28 | ..... | ..... | 91 | 41 | ..... | 29 | 7 | ..... | ..... |
| Fort Thomas..... | 4 | ..... | ..... | 6 | 2 | ..... | ..... | ..... | 1,573.3 | 64.4 |
| Total..... | 692 | 7 | 31 | 1,745 | 741 | 48 | 269 | 249 | 11,522.0 | 149.4 |

¹ All troops.*Annual rate per 1,000 for special diseases.*

| Disease. | All troops in United States. ¹ | Regulars in United States. ¹ | National Guard, all camps. ¹ | National Army, all camps. ¹ | Expeditionary forces. ² |
|--------------------|---|---|---|--|------------------------------------|
| Pneumonia..... | 31.7 | 43.4 | 13 | 34.9 | 46.4 |
| Dysentery..... | .3 | .5 | ..... | .3 | .5 |
| Malaria..... | 1.3 | .7 | 2.5 | 1.1 | .2 |
| Venereal..... | 74.3 | 87.2 | 55.4 | 70.4 | 59 |
| Paratyphoid..... | ..... | ..... | ..... | ..... | .2 |
| Measles..... | 31.5 | 37.7 | 3.3 | 45.3 | 8.9 |
| Meningitis..... | 2.1 | 2.5 | .6 | 2.8 | 3.5 |
| Scarlet fever..... | 11.4 | 17.9 | 1.8 | 10.4 | 22.6 |

¹ Week ended Mar. 29, 1918.² Week ended Mar. 21, 1918.**CURRENT STATE SUMMARIES.****Arkansas.**

From Collaborating Epidemiologist Garrison, by telegraph, for week ended April 6, 1918:

Smallpox: Union County 5, Mississippi 2, Faulkner 1, Drew 3, Jefferson 2, Fort Smith 3, Logan 4, Washington 34, Monroe 2. Measles: Drew 3, Sebastian 28, Fort Smith 1, Lee 1, Logan 15, Desha 7. Chicken pox: Sebastian 36, Fort Smith 2, Logan 20, Chicot 1. Malaria: Lafayette 1, Traskwood 2, Jefferson 1, Sebastian 1, Logan 1, Ouachita 1, Chicot 2. Tuberculosis: Drew 3, Jefferson 1, Logan 4, Ouachita 2. Scarlet fever: Sebastian 6. Diphtheria: Jefferson 1, Lee 1.

Connecticut.

From Collaborating Epidemiologist Black, by telegraph, for week ended April 6, 1918:

Infantile paralysis: Hartford 1. Meningitis: New London 1, Windsor Locks 1.

Illinois.

From Collaborating Epidemiologist Drake, by telegraph, for week ended April 6, 1918:

Smallpox: One hundred and thirty-three, of which Chicago 9, Quincy 14, Bryant 5, Virden 6, White City 7, Alton 15, Peoria 15, Belleville 5, Harlem Township 7, Mill-creek 8. **Scarlet fever:** One hundred and seven, of which Chicago 60. **Meningitis:** Chicago 10, Washington 1. **Poliomyelitis:** Chicago 3, Springfield 1. **Diphtheria:** One hundred and twenty-eight, of which Chicago 94.

Indiana.

From the State Board of Health of Indiana, by telegraph, for week ended April 6, 1918:

Measles: Epidemic North Manchester, South Bend. **Diphtheria:** One death each Brownsburg, Anderson, Greensburg, Phlox; epidemic Salem, Napoleon. **Smallpox:** Epidemic Davies County, Lawrenceburg. **Whooping cough:** Epidemic Banta; one death Windfall. **Gastroenteritis:** Shop workers, munition plant Kokomo, Michigan City, South Bend.

Kansas.

From Collaborating Epidemiologist Crumbine, by telegraph, for week ended April 6, 1918:

Smallpox (10 or more cases): By counties—Allen 14, Bourbon 10, Cherokee 30, Crawford 15, Graham 28, Jackson 14, Kingman 15, Labette 13; by cities—Kansas City 16, Topeka 14, Wichita 13. **Meningitis:** By cities—Eldorado 1, De Soto 1, Edna 1, Chanute 1, Norton 1, Kansas City 2. **Scarlet fever** (over 10 cases): Topeka 26.

Louisiana.

From Collaborating Epidemiologist Dowling, by telegraph, for week ended April 6, 1918:

Meningitis, excluding Rapides Parish: Calcasieu Parish, Gerstnerfield 1, Orleans Parish 1. **Poliomyelitis** 1.

Massachusetts.

From Collaborating Epidemiologist Hitchcock, by telegraph, for week ended April 6, 1918:

Unusual prevalence. German measles: Attleboro 14, Brookline 41, Lunenburg 25, Manchester 20, Nahant 8, Newton 33. Measles: Beverly 34, Brookline 45, Chelsea 48, Newbury 10, Norwood 18, Quincy 58, Woburn 14.

Minnesota.

From Collaborating Epidemiologist Bracken, by telegraph, for week ended April 6, 1918:

Smallpox (new foci): Carver County, Cologne village 3; Clay County, Oakport Township 1; Douglas County, Drandon Township 1; Filmore County, Spring Valley Township 2, Forestville Township 1; Kittson County, Humboldt village 4, Hill Township 2, St. Vincent Township 24; Pine County, Rock Creek Township 4; Traverse County, Monson Township 1; Wright County, Cokato Township 18. Five cerebro-spinal meningitis, 1 poliomyelitis, reported since April 1.

Nebraska.

From the State Board of Health of Nebraska, by telegraph, for week ended April 6, 1918:

Smallpox: Harvard, Allen, Miller, Red Cloud, Omaha, Pawnee City, Burchard, Steinauer, Mayberry, Tamora, Clay County. Scarlet fever: Clay Center. Cerebrospinal meningitis: Nebraska City.

New Jersey.

From Collaborating Epidemiologist Bowen, by telegraph, for week ended April 6, 1918:

Measles: Unusually prevalent in Newark, East Orange, Paterson.

South Carolina.

From Collaborating Epidemiologist Hayne, by telegraph, for week ended April 8, 1918:

Meningitis: Greenville 2, Charleston 3, Hartsville 1, Darlington 1, Richland 1, Columbia 1.

Vermont.

From Collaborating Epidemiologist Dalton, by telegraph, for week ended April 6, 1918:

Smallpox: Guild Hall 1, Canaan 1. No other outbreak or unusual prevalence.

Virginia.

From Collaborating Epidemiologist Traynham, by telegraph, for week ended April 6, 1918:

Smallpox: By counties—Franklin 5, Alleghany 3, Alexandria 2, Botetourt 2, York 1, city of Newport News 3. Cerebrospinal meningitis: Newport News 1, Culpeper County 3.

Washington.

From Collaborating Epidemiologist Tuttle, by telegraph, for week ended April 6, 1918:

Investigating outbreak of possible meningitis in Douglas County. Scarlet fever in Tacoma seems to be subsiding.

ANTHRAX.

Louisiana.

During the month of March, 1918, 2 cases of anthrax were notified in Louisiana, 1 case from Caddo Parish and 1 from Vermilion Parish. The source of infection was not positively determined in either case.

CEREBROSPINAL MENINGITIS.

State Reports for February, 1918.

| Place. | New cases reported. | Place. | New cases reported. |
|-------------------------|---------------------|------------------------------|---------------------|
| Alabama: | | California—Continued. | |
| Calhoun County..... | 9 | Orange County..... | 1 |
| Colbert County..... | 2 | Merced County..... | 1 |
| Heuston County..... | 1 | Riverside County— | |
| Jefferson County..... | 20 | Riverside..... | 1 |
| Lamar County..... | 1 | San Diego County— | |
| Limestone County..... | 1 | Naval Training Camp..... | 2 |
| Madison County..... | 1 | Camp Kearney..... | 1 |
| Marshall County..... | 1 | San Francisco County— | |
| Montgomery County..... | 3 | San Francisco..... | 4 |
| Morgan County..... | 3 | Solano County..... | 1 |
| Tuscaloosa County..... | 10 | Mare Island..... | 3 |
| Total..... | 52 | Stanislaus County— | |
| | | Modesto..... | 1 |
| California: | | Total..... | 24 |
| Alameda County..... | 2 | | |
| Oakland..... | 2 | Nevada: | |
| Contra Costa County— | | Nye County..... | 1 |
| Martinez..... | 1 | | |
| Los Angeles County..... | 3 | | |
| Los Angeles..... | 1 | | |

City Reports for Week Ended Mar. 23, 1918.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|------------------------|--------|---------|-----------------------------|--------|---------|
| Augusta, Ga..... | 1 | | Muncie, Ind..... | | 1 |
| Baltimore, Md..... | 7 | 2 | Nashville, Tenn..... | 2 | |
| Birmingham, Ala..... | 3 | 2 | Newark, N. J..... | 4 | 1 |
| Boston, Mass..... | 6 | 6 | Newburyport, Mass..... | 1 | |
| Buffalo, N. Y..... | | 1 | New Haven, Conn..... | 1 | |
| Charlotte, N. C..... | 1 | | New Orleans, La..... | 1 | 1 |
| Chattanooga, Tenn..... | 1 | | New York, N. Y..... | 7 | 11 |
| Chicago, Ill..... | 7 | 6 | North Little Rock, Ark..... | 1 | |
| Cleveland, Ohio..... | 1 | | Omaha, Nebr..... | 1 | |
| Columbia, S. C..... | 1 | | Orange, N. J..... | 1 | |
| Dallas, Tex..... | 1 | | Petersburg, Va..... | | 1 |
| Dayton, Ohio..... | 2 | 1 | Philadelphia, Pa..... | 4 | 8 |
| Detroit, Mich..... | 1 | | Pittsburgh, Pa..... | 2 | 1 |
| Elizabeth, N. J..... | 2 | | Portsmouth, Va..... | 1 | |
| Evansville, Ind..... | 1 | | Poughkeepsie, N. Y..... | 1 | |
| Fall River, Mass..... | 1 | 1 | Providence, R. I..... | 3 | 2 |
| Flint, Mich..... | 1 | 1 | Quincy, Mass..... | 1 | 1 |
| Fort Wayne, Ind..... | 1 | 1 | Richmond, Va..... | | |
| Grand Haven, Mich..... | 1 | | St. Louis, Mo..... | 2 | 2 |
| Hartford, Conn..... | 1 | | St. Paul, Minn..... | 1 | |
| Haverhill, Mass..... | 1 | 1 | Salt Lake City, Utah..... | 1 | 1 |
| Houston, Tex..... | 1 | | San Francisco, Cal..... | 1 | |
| Jersey City, N. J..... | | 2 | Savannah, Ga..... | 2 | 1 |
| Kansas City, Kans..... | 2 | | Scranton, Pa..... | 1 | 2 |
| Lawrence, Mass..... | 2 | | Seattle, Wash..... | 1 | |
| Leavenworth, Kans..... | 2 | 1 | Somerville, Mass..... | 1 | |
| Louisville, Ky..... | | 1 | Springfield, Ill..... | 1 | |
| Lowell, Mass..... | | 1 | Stockton, Cal..... | 1 | |
| Macon, Ga..... | 1 | | Troy, N. Y..... | 1 | |
| Manchester, N. H..... | 2 | | Washington, D. C..... | 3 | |
| Milwaukee, Wis..... | 8 | 5 | Wichita, Kans..... | 1 | |
| Minneapolis, Minn..... | 1 | 1 | Wilkes-Barre, Pa..... | 1 | |
| Montgomery, Ala..... | 7 | | Worcester, Mass..... | 1 | |

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 553.

ERYSIPELAS.**City Reports for Week Ended Mar. 23, 1918.**

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|--------------------------|--------|---------|--------------------------|--------|---------|
| Bridgeport, Conn..... | 2 | ----- | Oakland, Cal..... | 1 | ----- |
| Buffalo, N. Y..... | 5 | 1 | Oklahoma City, Okla..... | 3 | ----- |
| Chicago, Ill..... | 25 | 1 | Passaic, N. J..... | 2 | 1 |
| Cincinnati, Ohio..... | 3 | 1 | Peoria, Ill..... | ----- | 1 |
| Cleveland, Ohio..... | 8 | 1 | Petersburg, Va..... | 1 | ----- |
| Dayton, Ohio..... | 1 | ----- | Philadelphia, Pa..... | 3 | 1 |
| Detroit, Mich..... | 5 | 1 | Pittsburgh, Pa..... | 9 | 2 |
| Dubuque, Iowa..... | 1 | ----- | Pontiac, Mich..... | 1 | ----- |
| Fargo, N. Dak..... | 1 | ----- | Portland, Oreg..... | 2 | ----- |
| Flint, Mich..... | 1 | ----- | Providence, R. I..... | 1 | 1 |
| Grand Forks, N. Dak..... | 1 | ----- | Racine, Wis..... | 1 | ----- |
| Hartford, Conn..... | 1 | ----- | Richmond, Va..... | 2 | ----- |
| Jacksonville, Fla..... | 1 | ----- | Rochester, N. Y..... | 1 | ----- |
| Lexington, Ky..... | ----- | 1 | Sacramento, Cal..... | 1 | ----- |
| Los Angeles, Cal..... | 5 | 1 | St. Louis, Mo..... | 9 | 1 |
| Louisville, Ky..... | 4 | ----- | St. Paul, Minn..... | 1 | ----- |
| Milwaukee, Wis..... | 6 | ----- | San Francisco, Cal..... | 5 | ----- |
| Morristown, N. J..... | 1 | ----- | Springfield, Ill..... | 1 | ----- |
| Nashville, Tenn..... | 1 | ----- | Steubenville, Ohio..... | 1 | ----- |
| Newark, N. J..... | 6 | ----- | Superior, Wis..... | 1 | 1 |
| New Orleans, La..... | ----- | 1 | Wilkinsburg, Pa..... | 1 | ----- |
| New York, N. Y..... | ----- | 7 | Yonkers, N. Y..... | 1 | 1 |

LEPROSY.**California—Los Angeles.**

On April 9, 1918, a case of leprosy was notified at Los Angeles, Cal., in the person of W. G., living at 500 East Ninth Street.

City Reports for Week Ended Mar. 23, 1918.

During the week ended March 23, 1918, there were three cases of leprosy reported; one at Los Angeles, Cal., one at New Orleans, La., and one at San Francisco, Cal. There was also one death from this disease reported at New Orleans.

MALARIA.**State Reports for February, 1918.**

| Place. | New cases reported. | Place. | Newcases reported. |
|------------------------|---------------------|--------------------------------|--------------------|
| Alabama: | | California: | |
| Bullock County..... | 1 | Glenn County..... | 3 |
| Butler County..... | 1 | Los Angeles County..... | 4 |
| Chambers County..... | 1 | Merced County..... | 1 |
| Houston County..... | 1 | San Francisco County— | |
| Jefferson County..... | 4 | U. S. N. Training Station..... | 1 |
| Lee County..... | 1 | San Joaquin County..... | 1 |
| Limestone County..... | 2 | Stockton..... | 1 |
| Madison County..... | 1 | Total..... | 11 |
| Shelby County..... | 2 | | |
| Talladega County..... | 1 | | |
| Tuscaloosa County..... | 3 | | |
| Total..... | 18 | | |

MALARIA—Continued.**City Reports for Week Ended Mar. 23, 1918.**

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|------------------------|--------|---------|-----------------------------|--------|---------|
| Atlanta, Ga..... | 2 | ..... | Little Rock, Ark..... | 1 | ..... |
| Berkeley, Cal..... | 2 | ..... | Newark, N. J..... | 1 | ..... |
| Birmingham, Ala..... | 1 | ..... | North Little Rock, Ark..... | 4 | ..... |
| Evansville, Ind..... | ..... | 1 | Pittsfield, Mass..... | 1 | ..... |
| Hattiesburg, Miss..... | 1 | ..... |  |  |  |

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 558.

PELLAGRA.**State Reports for February, 1918.**

| Place. | New cases reported. | Place. | New cases reported. |
|------------------------|---------------------|---------------------------|---------------------|
| Alabama: | | Alabama—Continued. | |
| Bibb County..... | 1 | Shelby County..... | 1 |
| Calhoun County..... | 2 | Tuscaloosa County..... | 7 |
| Elmore County..... | 1 | Winston County..... | 1 |
| Etowah County..... | 2 | | |
| Hale County..... | 1 | Total..... | 56 |
| Henry County..... | 1 | | |
| Jackson County..... | 3 | California: | |
| Jefferson County..... | 13 | Los Angeles County— | |
| Lamar County..... | 1 | Los Angeles..... | 1 |
| Macon County..... | 1 | San Diego County— | |
| Madison County..... | 8 | San Diego..... | 2 |
| Mobile County..... | 6 | Total..... | 3 |
| Montgomery County..... | 6 | | |
| Pickens County..... | 1 | | |

City Reports for Week Ended Mar. 23, 1918.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|-----------------------|--------|---------|-----------------------|--------|---------|
| Atlanta, Ga..... | ..... | 1 | Memphis, Tenn..... | ..... | 1 |
| Austin, Tex..... | ..... | 1 | New Orleans, La..... | 1 | ..... |
| Birmingham, Ala..... | 2 | ..... | Norfolk, Va..... | ..... | 1 |
| Boston, Mass..... | 1 | 1 | Philadelphia, Pa..... | ..... | 1 |
| Charleston, S. C..... | ..... | 1 | Somerville, Mass..... | 1 | ..... |
| Dallas, Tex..... | 1 | 1 | Wilmington, N. C..... | ..... | 1 |
| Fort Worth, Tex..... | 1 | 1 | Worcester, Mass..... | 1 | ..... |
| Lexington, Ky..... | ..... | 1 | | | |

PNEUMONIA.**City Reports for Week Ended Mar. 23, 1918.**

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|-------------------------|--------|---------|-------------------------|--------|---------|
| Akron, Ohio..... | 1 | ..... | Boston, Mass..... | 40 | 30 |
| Alameda, Cal..... | 1 | 1 | Braddock, Pa..... | 4 | ..... |
| Altoona, Pa..... | 9 | ..... | Bridgeport, Conn..... | 17 | 23 |
| Anderson, Ind..... | 1 | 1 | Brookton, Mass..... | 2 | 1 |
| Anniston, Ala..... | 1 | ..... | Brookline, Mass..... | 1 | 1 |
| Atlanta, Ga..... | 7 | 5 | Barnbridge, Mass..... | 7 | 2 |
| Baltimore, Md..... | 112 | 37 | Charlestown, W. Va..... | 1 | 1 |
| Barre, Vt..... | 1 | ..... | Chelsea, Mass..... | 12 | 8 |
| Battle Creek, Mich..... | 2 | ..... | Chicago, Ill..... | 444 | 162 |
| Berkeley, Cal..... | 1 | 1 | Chicopec, Mass..... | 2 | 1 |

PNEUMONIA—Continued.

City Reports for Week Ended Mar. 23, 1918—Continued.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|-------------------------|--------|---------|-----------------------------|--------|---------|
| Cleveland, Ohio..... | 55 | 24 | Moundsville, W. Va..... | 5 | 2 |
| Clinton, Mass..... | 3 | 2 | Newark, N. J..... | 199 | 42 |
| Columbia, S. C..... | 1 | ..... | New Bedford, Mass..... | 4 | 4 |
| Dallas, Tex..... | 3 | 7 | New Britain, Conn..... | 3 | 1 |
| Dayton, Ohio..... | 2 | 8 | Newburyport, Mass..... | 1 | ..... |
| Detroit, Mich..... | 26 | 41 | Newcastle, Pa..... | 1 | ..... |
| Fall River, Mass..... | 1 | 1 | Newport, Ky..... | 2 | 2 |
| Flint, Mich..... | 6 | 3 | Newton, Mass..... | 4 | 1 |
| Fort Worth, Tex..... | 7 | 7 | Northampton, Mass..... | 1 | ..... |
| Grand Rapids, Mich..... | 14 | 2 | North Little Rock, Ark..... | 1 | 1 |
| Hagerstown, Md..... | 2 | ..... | Oakland, Cal..... | 7 | 15 |
| Harrisburg, Pa..... | 2 | 7 | Parkersburg, W. Va..... | 2 | 1 |
| Hattiesburg, Miss..... | 1 | ..... | Philadelphia, Pa..... | 159 | 121 |
| Haverhill, Mass..... | 6 | 1 | Pittsburg, Pa..... | 37 | 30 |
| Holyoke, Mass..... | 1 | ..... | Pittsfield, Mass..... | 1 | 8 |
| Jackson, Mich..... | 3 | ..... | Pontiac, Mich..... | 3 | 2 |
| Jacksonville, Fla..... | 2 | 6 | Richmond, Va..... | 3 | 6 |
| Jersey City, N. J..... | ..... | 25 | Rochester, N. Y..... | 21 | 2 |
| Kalamazoo, Mich..... | 1 | 1 | Rutland, Vt..... | 2 | 2 |
| Kansas City, Kans..... | 25 | ..... | St. Joseph, Mo..... | 1 | 3 |
| Lancaster, Pa..... | 2 | ..... | San Diego, Cal..... | 23 | 15 |
| Lawrence, Mass..... | 3 | 3 | Schenectady, N. Y..... | 4 | 1 |
| Leavenworth, Kans..... | 2 | 3 | Sheboygan, Wis..... | 1 | 1 |
| Lexington, Ky..... | 3 | 7 | Somerville, Mass..... | 4 | 1 |
| Lincoln, Nebr..... | 4 | 1 | Springfield, Mass..... | 17 | 7 |
| Little Rock, Ark..... | 17 | 2 | Springfield, Ohio..... | 1 | 3 |
| Long Beach, Cal..... | 3 | 1 | Steubenville, Ohio..... | 1 | ..... |
| Lorain, Ohio..... | 1 | ..... | Stockton, Cal..... | 4 | ..... |
| Los Angeles, Cal..... | 2 | 6 | Waco, Tex..... | 2 | 1 |
| Lowell, Mass..... | 2 | 5 | Waltham, Mass..... | 1 | 1 |
| Lynn, Mass..... | 6 | 5 | Wichita, Kans..... | 5 | 1 |
| Manchester, N. H..... | 2 | 2 | Worcester, Mass..... | 28 | 5 |
| Michigan City, Ind..... | 1 | 1 | Yonkers, N. Y..... | 13 | 3 |
| Morgantown, W. Va..... | 7 | ..... | York, Pa..... | 2 | ..... |
| Morristown, N. J..... | 1 | ..... |  |  |  |

POLIOMYELITIS (INFANTILE PARALYSIS).

California Report for February, 1918.

During the month of February, 1918, 1 case of poliomyelitis was reported at Delano, Kern County, Cal.

City Reports for Week Ended Mar. 23, 1918.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|-----------------------|--------|---------|---------------------|--------|---------|
| Cambridge, Mass..... | 1 | ..... | Newark, N. J..... | 2 | ..... |
| Chicago, Ill..... | 1 | ..... | New York, N. Y..... | 2 | 1 |
| Cleveland, Ohio..... | 1 | 1 | Pittsburgh, Pa..... | 3 | 1 |
| Fall River, Mass..... | 1 | ..... | Racine, Wis..... | 1 | 1 |
| Lowell, Mass..... | 2 | ..... | Toledo, Ohio..... | 1 | ..... |
| Milwaukee, Wis..... | 17 | 10 | | | |

RABIES IN MAN.

City Reports for Week Ended Mar. 23, 1918.

There were 2 deaths from rabies reported during the week ended March 23, 1918; 1 at Galveston, Tex., and 1 at Louisville, Ky.

RABIES IN ANIMALS.

City Report for Week Ended Mar. 23, 1918.

During the week ended March 23, 1918, there was 1 case of rabies in animals reported at Detroit, Mich.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 558.

SMALLPOX.**Kansas—Fort Scott.**

During the period from April 1 to 6, 1918, 2 cases of smallpox were notified at Fort Scott, Kans., making a total of 24 cases reported at that place since the beginning of the outbreak, December 10, 1917.

California Report for February, 1918.

| Place. | New cases reported. | Deaths. | Vaccination history of cases. | | | |
|----------------------------|---------------------|---------|--|--|---------------------------------------|--|
| | | | Number vaccinated within 7 years preceding attack. | Number last vaccinated more than 7 years preceding attack. | Number never successfully vaccinated. | Vaccination history not obtained or uncertain. |
| California: | | | | | | |
| Alameda County..... | 1 | | | | 1 | |
| Oakland..... | 2 | | 1 | | 1 | |
| Fresno County..... | 4 | | | | 4 | |
| Fresno..... | 3 | | | | 3 | |
| Selma..... | 1 | | | | 1 | |
| Imperial County..... | 4 | | | | 4 | |
| Calxico..... | 2 | | | | 2 | |
| Kern County..... | 2 | | | 1 | 1 | |
| Lake County..... | 1 | | | | 1 | |
| Madera County..... | 1 | | | | 1 | |
| Marin County— | | | | | | |
| Sausalito..... | 1 | | | | 1 | |
| Orange County..... | 3 | | | | 1 | 2 |
| Santa Ana..... | 5 | | | | 5 | |
| Los Angeles County..... | 3 | | | | 3 | |
| Los Angeles..... | 9 | | | | 7 | 2 |
| Riverside County..... | 3 | | | | 3 | |
| Sacramento County— | | | | | | |
| Sacramento..... | 1 | | | | | 1 |
| San Bernardino County..... | 2 | | | | 2 | |
| San Diego County— | | | | | | |
| San Diego..... | 2 | | | | 1 | 1 |
| San Francisco County— | | | | | | |
| San Francisco..... | 12 | | | | 12 | |
| San Joaquin County..... | 1 | | | 1 | | 1 |
| Stockton..... | 1 | | | | 1 | |
| San Mateo County..... | 1 | | | | 1 | |
| Shasta County— | | | | | | |
| Redding..... | 1 | | | | 1 | |
| Siskiyou County— | | | | | | |
| Dunsmuir..... | 3 | | | | 3 | |
| Tahama County..... | 5 | | | 1 | 1 | 3 |
| Total..... | 74 | | 1 | 3 | 61 | 9 |

SMALLPOX—Continued.

Miscellaneous State Reports.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|-----------------------------|--------|---------|---------------------------------|------------|--------------|
| Alabama (Feb. 1-28): | | | Alabama (Feb. 1-28)—Con. | | |
| Autauga County..... | 3 | ..... | Limestone County..... | 2 | ..... |
| Baldwin County..... | 11 | ..... | Macon County..... | 2 | ..... |
| Barbour County..... | 1 | ..... | Madison County..... | 1 | ..... |
| Bibb County..... | 5 | ..... | Mobile County..... | 51 | ..... |
| Butler County..... | 14 | ..... | Monroe County..... | 2 | ..... |
| Calhoun County..... | 50 | ..... | Montgomery County..... | 54 | ..... |
| Chambers County..... | 14 | ..... | Morgan County..... | 3 | ..... |
| Cherokee County..... | 6 | ..... | Pickens County..... | 16 | ..... |
| Chilton County..... | 3 | ..... | Pike County..... | 6 | ..... |
| Cleburne County..... | 6 | ..... | Shelby County..... | 6 | 1 |
| Coffee County..... | 1 | ..... | St. Clair County..... | 12 | ..... |
| Colbert County..... | 1 | ..... | Sumter County..... | 1 | ..... |
| Coosa County..... | 6 | ..... | Talladega County..... | 99 | ..... |
| Covington County..... | 4 | ..... | Tuscaloosa County..... | 8 | ..... |
| Cullman County..... | 8 | ..... | Washington County..... | 3 | ..... |
| Dale County..... | 25 | ..... | Total..... | 925 | 4 |
| DeKalb County..... | 2 | ..... |  |  |  |
| Etowah County..... | 10 | ..... | Nevada (Feb. 1-28): | | |
| Fayette County..... | 1 | ..... | Elko County..... | 8 | ..... |
| Greene County..... | 1 | ..... | Nye County..... | 3 | ..... |
| Jefferson County..... | 472 | 3 | Washoe County..... | 1 | ..... |
| Lamar County..... | 6 | ..... | Total..... | 12 | ..... |
| Lauderdale County..... | 4 | ..... |  |  |  |
| Lee County..... | 5 | ..... |  |  |  |

City Reports for Week Ended Mar. 23, 1918.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|-----------------------------|-----------|--------------|-------------------------------|----------|--------------|
| Akron, Ohio..... | 26 | ..... | Jacksonville, Fla..... | 1 | ..... |
| Alton, Ill..... | 17 | ..... | Janesville, Wis..... | 5 | ..... |
| Anderson, Ind..... | 8 | ..... | Kalamazoo, Mich..... | 2 | ..... |
| Ann Arbor, Mich..... | 1 | ..... | Kansas City, Mo..... | 41 | ..... |
| Anniston, Ala..... | 17 | ..... | Knoxville, Tenn..... | 5 | ..... |
| Atlanta, Ga..... | 8 | ..... | Kokomo, Ind..... | 1 | ..... |
| Baltimore, Md..... | 3 | ..... | La Crosse, Wis..... | 8 | ..... |
| Barre, Vt..... | 2 | ..... | La Fayette, Ind..... | 1 | ..... |
| Battle Creek, Mich..... | 5 | ..... | Leavenworth, Kans..... | 3 | ..... |
| Birmingham, Ala..... | 64 | ..... | Lima, Ohio..... | 7 | ..... |
| Butte, Mont..... | 2 | ..... | Lincoln, Nebr..... | 7 | ..... |
| Canton, Ohio..... | 6 | ..... | Little Rock, Ark..... | 11 | ..... |
| Cedar Rapids, Iowa..... | 4 | ..... | Lorain, Ohio..... | 2 | ..... |
| Charlotte, N. C..... | 1 | ..... | Los Angeles, Cal..... | 1 | ..... |
| Chicago, Ill..... | 12 | ..... | Louisville, Ky..... | 8 | ..... |
| Cincinnati, Ohio..... | 16 | ..... | Macon, Ga..... | 1 | ..... |
| Cleveland, Ohio..... | 47 | ..... | Madison, Wis..... | 1 | ..... |
| Clinton, Iowa..... | 2 | ..... | Memphis, Tenn..... | 22 | ..... |
| Coffeyville, Kans..... | 3 | ..... | Michigan City, Ind..... | 14 | ..... |
| Colorado Springs, Colo..... | 1 | ..... | Milwaukee, Wis..... | 12 | ..... |
| Columbus, Ohio..... | 10 | ..... | Minneapolis, Minn..... | 20 | ..... |
| Council Bluffs, Iowa..... | 20 | ..... | Mishawaka, Ind..... | 1 | ..... |
| Dallas, Tex..... | 35 | ..... | Missoula, Mont..... | 1 | ..... |
| Davenport, Iowa..... | 2 | ..... | Mobile, Ala..... | 5 | ..... |
| Dayton, Ohio..... | 6 | ..... | Moline, Ill..... | 2 | ..... |
| Des Moines, Iowa..... | 22 | ..... | Montgomery, Ala..... | 5 | ..... |
| Detroit, Mich..... | 30 | ..... | Muncie, Ind..... | 8 | ..... |
| Dubuque, Iowa..... | 6 | ..... | Muskegon, Mich..... | 6 | ..... |
| East Chicago, Ind..... | 1 | ..... | Muskogee, Okla..... | 1 | ..... |
| El Paso, Tex..... | 1 | ..... | Nashville, Tenn..... | 5 | ..... |
| Elwood, Ind..... | 3 | ..... | New Britain, Conn..... | 1 | ..... |
| Erie, Pa..... | 1 | ..... | New Castle, Ind..... | 3 | ..... |
| Evansville, Ind..... | 3 | ..... | New Orleans, La..... | 9 | ..... |
| Flint, Mich..... | 6 | ..... | New York, N. Y..... | 1 | ..... |
| Fort Wayne, Ind..... | 11 | ..... | Norfolk, Va..... | 1 | ..... |
| Fort Worth, Tex..... | 16 | ..... | North Little Rock, Ark..... | 1 | ..... |
| Fresno, Cal..... | 4 | ..... | Oakland, Cal..... | 1 | ..... |
| Galesburg, Ill..... | 26 | ..... | Oklahoma City, Okla..... | 29 | ..... |
| Grand Forks, N. Dak..... | 8 | ..... | Omaha, Nebr..... | 53 | ..... |
| Grand Rapids, Mich..... | 3 | ..... | Oshkosh, Wis..... | 2 | ..... |
| Harrisburg, Pa..... | 1 | ..... | Parkersburg, W. Va..... | 1 | ..... |
| Hartford, Conn..... | 2 | ..... | Peoria, Ill..... | 6 | ..... |
| Hattiesburg, Miss..... | 1 | ..... | Pittsburgh, Pa..... | 6 | ..... |
| Indianapolis, Ind..... | 63 | ..... | Pontiac, Mich..... | 7 | ..... |

SMALLPOX—Continued.

City Reports for Week Ended Mar. 23, 1918—Continued.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|---------------------------|--------|---------|--------------------------|--------|---------|
| Pueblo, Colo..... | 2 | ..... | San Francisco, Cal..... | 9 | ..... |
| Quincy, Ill..... | 6 | ..... | Seattle, Wash..... | 4 | ..... |
| Racine, Wis..... | 1 | ..... | Shelbyville, Ind..... | 1 | ..... |
| Richmond, Ind..... | 2 | ..... | South Bend, Ind..... | 4 | ..... |
| Richmond, Va..... | 1 | ..... | Spartanburg, S. C..... | 5 | ..... |
| Roanoke, Va..... | 4 | ..... | Superior, Wis..... | 7 | ..... |
| Rock Island, Ill..... | 1 | ..... | Terre Haute, Ind..... | 5 | ..... |
| Rutland, Vt..... | 2 | ..... | Toledo, Ohio..... | 12 | ..... |
| St. Joseph, Mo..... | 10 | ..... | Topeka, Kans..... | 5 | ..... |
| St. Louis, Mo..... | 15 | ..... | Washington, D. C..... | 1 | ..... |
| St. Paul, Minn..... | 2 | ..... | Wichita, Kans..... | 12 | ..... |
| Salt Lake City, Utah..... | 27 | ..... | Winston-Salem, N. C..... | 4 | ..... |
| Sandusky, Ohio..... | 5 | ..... | York, Pa..... | 2 | ..... |

TETANUS.

City Reports for Week Ended Mar. 23, 1918.

There were reported during the week ended March 23, 1918, three deaths from tetanus; one each at Cincinnati, Ohio, Mobile, Ala., and New Orleans, La.

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 558.

TYPHOID FEVER.

State Reports for February, 1918.

| Place. | New cases reported. | Place. | New cases reported. |
|-------------------------|---------------------|---------------------------|---------------------|
| Alabama: | | California—Continued. | |
| Colbert County..... | 1 | Merced County..... | 1 |
| Conecuh County..... | 1 | Monterey County..... | 1 |
| Cullman County..... | 3 | Orange County— | |
| Etowah County..... | 1 | Fullerton..... | 1 |
| Fayette County..... | 1 | Riverside County— | |
| Franklin County..... | 1 | Riverside..... | 1 |
| Houston County..... | 1 | Sacramento County— | |
| Jefferson County..... | 32 | Sacramento..... | 1 |
| Lamar County..... | 1 | San Francisco County— | |
| Limestone County..... | 2 | San Francisco..... | 7 |
| Madison County..... | 1 | San Diego County— | |
| Mobile County..... | 3 | San Diego..... | 2 |
| Montgomery County..... | 2 | San Mateo County..... | 2 |
| Pike County..... | 1 | Santa Barbara County..... | 1 |
| Washington County..... | 1 | Santa Clara County..... | 3 |
| Total..... | 52 | San Joaquin County— | |
| California: | | Stockton..... | 7 |
| Alameda County— | | Siskiyou County— | |
| Oakland..... | 2 | Etna..... | 1 |
| Colusa County..... | 1 | Total..... | 53 |
| Fresno County..... | 3 | Nevada: | |
| Fresno..... | 2 | Washoe County..... | 1 |
| Imperial County..... | 2 | White Pine County..... | 1 |
| Brawley..... | 1 | Total..... | 2 |
| Calexico..... | 4 | | |
| Los Angeles County..... | 1 | | |
| Los Angeles..... | 9 | | |

TYPHOID FEVER—Continued.

City Reports for Week Ended Mar. 23, 1918.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|----------------------|--------|---------|-----------------------|--------|---------|
| Altoona, Pa. | 1 | — | Lowell, Mass. | 1 | — |
| Anderson, Ind. | 1 | — | Macon, Ga. | 1 | — |
| Atlanta, Ga. | 1 | — | Manchester, N. H. | 2 | 1 |
| Atlantic City, N. J. | 2 | — | McKeesport, Pa. | 2 | — |
| Austin, Tex. | — | 1 | Milwaukee, Wis. | — | 1 |
| Baltimore, Md. | 5 | 1 | Minneapolis, Minn. | 6 | 1 |
| Birmingham, Ala. | 1 | 1 | Moline, Ill. | 1 | 1 |
| Boston, Mass. | 1 | — | Morgantown, W. Va. | 1 | — |
| Brookline, Mass. | 1 | — | New Bedford, Mass. | 3 | 1 |
| Buffalo, N. Y. | 1 | 2 | Newburgh, N. Y. | 10 | — |
| Charleston, S. C. | 1 | — | New Orleans, La. | 2 | 1 |
| Charleston, W. Va. | 1 | — | Newton, Mass. | 1 | — |
| Chattanooga, Tenn. | 1 | — | New York, N. Y. | 4 | 3 |
| Chicago, Ill. | 8 | 2 | Norristown, Pa. | 1 | — |
| Cincinnati, Ohio. | 2 | 1 | Oakland, Cal. | 1 | — |
| Cleveland, Ohio. | 2 | — | Philadelphia, Pa. | 2 | 1 |
| Columbia, S. C. | 1 | — | Pittsburgh, Pa. | 6 | 1 |
| Covington, Ky. | 1 | — | Pontiac, Mich. | 1 | — |
| Cumberland, Md. | 1 | — | Portland, Me. | 1 | — |
| Denver, Colo. | 1 | — | Portland, Oreg. | 1 | — |
| Detroit, Mich. | 4 | 2 | Pueblo, Colo. | 1 | 1 |
| Dubuque, Iowa. | 5 | — | Quincy, Ill. | 2 | — |
| Duluth, Minn. | 1 | — | Rock Island, Ill. | 1 | — |
| East Chicago, Ind. | 5 | — | Saginaw, Mich. | 2 | — |
| East Orange, N. J. | 1 | — | Salt Lake City, Utah. | 1 | — |
| Elizabeth, N. J. | 1 | — | Sandusky, Ohio. | 1 | — |
| Elwood, Ind. | 1 | — | San Francisco, Cal. | — | 1 |
| Green Bay, Wis. | — | 1 | Schenectady, N. Y. | 1 | — |
| Hammond, Ind. | 2 | — | Somerville, Mass. | 1 | — |
| Haverhill, Mass. | 1 | — | Superior, Wis. | — | 1 |
| Hoboken, N. J. | 1 | — | Syracuse, N. Y. | 3 | — |
| Holyoke, Mass. | 1 | — | Taunton, Mass. | 1 | — |
| Indianapolis, Ind. | 1 | — | Toledo, Ohio. | — | 1 |
| Kansas City, Kans. | 3 | — | Washington, D. C. | 1 | — |
| Kenosha, Wis. | 1 | — | Washington, Pa. | 2 | — |
| La Crosse, Wis. | 1 | 1 | Wheeling, W. Va. | 2 | 1 |
| Lorain, Ohio. | 1 | — | Wilmington, Del. | 1 | — |
| Los Angeles, Cal. | 3 | — | Winston-Salem, N. C. | 1 | — |
| Louisville, Ky. | — | 1 | | | |

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for February, 1918.

For the month of February, 1918, there were reported in Alabama 35 cases of diphtheria, 1,345 cases of measles, and 28 cases of scarlet fever; in California, 262 cases of diphtheria, 5,299 cases of measles, and 407 cases of scarlet fever; in Nevada, 8 cases of measles and 24 cases of scarlet fever.

City Reports for Week Ended Mar. 23, 1918.

| City. | Popula- tion as of July 1, 1916. (Es- timated by U. S. Census Bureau.) | Total deaths from all causes. | Diph- theria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | |
|---------------------------|---|---|------------------|---------|----------|---------|-------------------|---------|--------------------|---------|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Over 500,000 inhabitants: | | | | | | | | | | |
| Baltimore, Md. | 589,621 | 311 | 9 | ----- | 420 | 2 | 11 | 1 | 32 | 43 |
| Boston, Mass. | 756,476 | ----- | 89 | 3 | 192 | 2 | 35 | 1 | 79 | 32 |
| Chicago, Ill. | 2,497,722 | 893 | 116 | 17 | 61 | ----- | 51 | 1 | 393 | 103 |
| Cleveland, Ohio. | 674,073 | 210 | 18 | ----- | 19 | 1 | 8 | ----- | 33 | 31 |
| Detroit, Mich. | 571,784 | 241 | 60 | 10 | 37 | 1 | 53 | ----- | 49 | 30 |
| Los Angeles, Cal. | 503,812 | 135 | 32 | ----- | 195 | ----- | 10 | ----- | 31 | 24 |
| New York, N. Y. | 5,602,841 | 2,246 | 267 | 31 | 1,562 | 41 | 153 | 3 | 320 | 300 |
| Philadelphia, Pa. | 1,709,518 | 796 | 58 | 9 | 525 | ----- | 50 | 1 | 118 | 105 |
| Pittsburgh, Pa. | 579,090 | 228 | 21 | 3 | 139 | 3 | 12 | ----- | 43 | 16 |
| St. Louis, Mo. | 757,309 | 252 | 53 | 1 | 119 | ----- | 30 | 1 | 48 | 21 |

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

City Reports for Week Ended Mar. 23, 1918—Continued.

| City. | Popula- tion as of July 1, 1916. (Es- timated by U. S. Census Bureau.) | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | | |
|---|---|---|-------------|---------|----------|---------|-------------------|---------|--------------------|---------|--|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | |
| From 300,000 to 500,000 inhabit- ants: | | | | | | | | | | | |
| Buffalo, N. Y. | 468,558 | 144 | 11 | 3 | 84 | — | 8 | — | 27 | 17 | |
| Cincinnati, Ohio. | 410,476 | 160 | 10 | 2 | 25 | 1 | 7 | — | 24 | 26 | |
| Jersey City, N. J. | 306,345 | 137 | 15 | 1 | 61 | 2 | 16 | — | 9 | 12 | |
| Milwaukee, Wis. | 436,585 | 127 | 5 | 1 | 281 | 2 | 45 | 1 | 23 | 7 | |
| Minneapolis, Minn. | 363,454 | — | 14 | 1 | 28 | 1 | 16 | — | — | — | |
| Newark, N. J. | 408,894 | — | 23 | — | 369 | 8 | 26 | 1 | 39 | 20 | |
| New Orleans, La. | 371,747 | 129 | 12 | — | 7 | — | 1 | — | 46 | 23 | |
| San Francisco, Cal. | 463,516 | 175 | 16 | — | 124 | 2 | 14 | — | 30 | 13 | |
| Seattle, Wash. | 348,639 | — | — | — | 62 | 3 | — | 1 | 11 | 5 | |
| Washington, D. C. | 363,980 | 211 | 9 | — | 510 | 2 | 41 | 1 | 17 | 22 | |
| From 200,000 to 300,000 inhabit- ants: | | | | | | | | | | | |
| Columbus, Ohio. | 214,873 | 74 | — | — | 31 | — | 18 | — | 9 | 8 | |
| Denver, Colo. | 260,800 | 79 | 6 | — | 211 | — | 40 | — | — | 19 | |
| Indianapolis, Ind. | 271,708 | 90 | 20 | — | 65 | — | 31 | 1 | 14 | 10 | |
| Louisville, Ky. | 238,910 | 98 | 7 | — | 13 | — | 1 | — | 16 | 17 | |
| Portland, Oreg. | 295,463 | 58 | 3 | — | 281 | — | 7 | — | — | 5 | |
| Providence, R. I. | 254,960 | 87 | 10 | 1 | 51 | — | 9 | — | — | 8 | |
| Rochester, N. Y. | 256,417 | 77 | 6 | — | 59 | 1 | 16 | 1 | 11 | 7 | |
| St. Paul, Minn. | 247,232 | 64 | 35 | 1 | 26 | — | 41 | 2 | 18 | 7 | |
| From 100,000 to 200,000 inhabit- ants: | | | | | | | | | | | |
| Atlanta, Ga. | 190,558 | 51 | 5 | — | 17 | — | 2 | — | 3 | 7 | |
| Birmingham, Ala. | 181,762 | 56 | 4 | — | 33 | — | 1 | — | 7 | 8 | |
| Bridgeton, Conn. | 121,579 | 77 | 11 | 1 | 9 | 1 | 3 | — | 7 | 5 | |
| Cambridge, Mass. | 112,981 | 29 | 8 | — | 57 | 1 | 6 | — | 4 | 5 | |
| Camden, N. J. | 106,233 | — | 2 | — | 24 | — | 5 | — | 4 | — | |
| Dallas, Tex. | 124,527 | 11 | 2 | — | 40 | 1 | 1 | — | 3 | 1 | |
| Dayton, Ohio | 127,224 | — | 3 | — | 43 | — | 5 | — | — | 5 | |
| Des Moines, Iowa | 101,598 | — | 3 | 1 | 10 | — | 13 | 1 | — | — | |
| Fall River, Mass. | 128,366 | 54 | 3 | 4 | 3 | — | 2 | — | 11 | 6 | |
| Fort Worth, Tex. | 104,562 | 30 | 4 | 1 | — | — | — | 9 | — | — | |
| Grand Rapids, Mich. | 128,291 | 45 | 5 | 2 | 14 | — | 10 | — | 6 | 5 | |
| Hartford, Conn. | 110,900 | 52 | 3 | — | 5 | — | 8 | — | 9 | 2 | |
| Houston, Tex. | 112,307 | 41 | 2 | — | 34 | — | — | — | 9 | 4 | |
| Lawrence, Mass. | 100,560 | 32 | 1 | — | 16 | 1 | — | — | 6 | 3 | |
| Lowell, Mass. | 113,245 | 40 | 6 | 1 | 8 | — | 3 | — | 7 | 1 | |
| Lynn, Mass. | 102,425 | 33 | 5 | 1 | 21 | — | 7 | — | 4 | 2 | |
| Memphis, Tenn. | 148,995 | 74 | 12 | — | 23 | — | 7 | — | 29 | 13 | |
| Nashville, Tenn. | 117,057 | 57 | — | — | 9 | — | 1 | — | 3 | 8 | |
| New Bedford, Mass. | 118,158 | 48 | 2 | — | 10 | — | 2 | — | 12 | 4 | |
| New Haven, Conn. | 149,685 | 56 | 3 | — | 1 | — | — | — | 15 | 5 | |
| Oakland, Cal. | 198,604 | 56 | — | — | 45 | — | 6 | — | 11 | 6 | |
| Omaha, Nebr. | 165,470 | 48 | 3 | 1 | 20 | — | 9 | — | — | 5 | |
| Reading, Pa. | 109,381 | 29 | 9 | 5 | 50 | — | 10 | — | — | 1 | |
| Richmond, Va. | 156,687 | 55 | 6 | 1 | 42 | — | 11 | — | 8 | 7 | |
| Salt Lake City, Utah. | 117,399 | 38 | 5 | — | 27 | — | 18 | 1 | — | 3 | |
| Scranton, Pa. | 146,811 | 45 | 3 | — | 3 | — | 7 | — | 4 | 5 | |
| Springfield, Mass. | 105,942 | 39 | 5 | 1 | 25 | 1 | 8 | — | 4 | 4 | |
| Syracuse, N. Y. | 155,624 | 46 | 8 | — | 200 | 3 | 12 | — | 8 | 6 | |
| Tacoma, Wash. | 112,770 | — | 1 | — | 8 | — | 31 | — | — | — | |
| Toledo, Ohio | 191,554 | 77 | — | — | 18 | — | 11 | — | 52 | 10 | |
| Trenton, N. J. | 111,593 | 51 | — | — | 8 | — | 1 | — | 12 | 7 | |
| Worcester, Mass. | 163,314 | — | 5 | 2 | 13 | — | 4 | — | 7 | 4 | |
| From 50,000 to 100,000 inhabit- ants: | | | | | | | | | | | |
| Akron, Ohio | 85,625 | — | 9 | — | 18 | — | 8 | — | 3 | — | |
| Altoona, Pa. | 58,659 | — | 6 | — | 8 | — | — | — | 1 | — | |
| Atlantic City, N. J. | 57,660 | — | — | — | 18 | — | — | — | 5 | 1 | |
| Augusta, Ga. | 50,245 | 28 | — | — | 16 | — | — | — | — | 3 | |
| Bayonne, N. J. | 69,893 | — | 2 | — | 140 | — | 2 | — | 1 | — | |
| Berkeley, Cal. | 57,653 | 13 | 1 | — | 4 | — | 3 | — | — | — | |
| Binghamton, N. Y. | 53,973 | 22 | 1 | 1 | 9 | — | 6 | — | 2 | 3 | |
| Brockton, Mass. | 67,449 | 14 | 1 | — | 13 | — | 5 | — | 1 | — | |
| Canton, Ohio | 60,852 | 13 | 1 | — | 2 | — | 3 | — | 2 | 1 | |
| Charleston, S. C. | 60,734 | 31 | 1 | 1 | 4 | 1 | — | — | — | 3 | |
| Chattanooga, Tenn. | 60,075 | 7 | — | — | 1 | — | — | — | 1 | 3 | |
| Covington, Ky. | 57,144 | 30 | 1 | — | 10 | — | 1 | — | 2 | 7 | |
| Duluth, Minn. | 94,495 | 24 | 6 | 1 | 12 | — | 1 | — | 5 | 4 | |
| Elizabeth, N. J. | 86,690 | 41 | 4 | — | 47 | — | 7 | — | 11 | 5 | |

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

City Reports for Week Ended Mar. 23, 1918—Continued.

| City. | Popula- tion as of July 1, 1916. (Estimated by U. S. Census Bureau.) | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | |
|--|--|---|-------------|---------|----------|---------|-------------------|---------|--------------------|---------|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| From 50,000 to 100,000 inhabit- ants—Continued: | | | | | | | | | | |
| El Paso, Tex. | 63,705 | 34 | 1 | | 19 | | | | | 8 |
| Erie, Pa. | 75,195 | 33 | 4 | 1 | 16 | | 7 | | 10 | 5 |
| Evansville, Ind. | 76,078 | 35 | 5 | | 11 | | 2 | | 8 | 3 |
| Flint, Mich. | 54,772 | 26 | 7 | | 1 | | 3 | | 2 | |
| Fort Wayne, Ind. | 76,183 | 24 | 8 | | | | 2 | | | 5 |
| Harrisburg, Pa. | 72,015 | 38 | 2 | | 27 | | 5 | | 10 | 1 |
| Hoboken, N. J. | 77,214 | 37 | 4 | 2 | 8 | | | | 10 | 4 |
| Holyoke, Mass. | 65,286 | 21 | | | 3 | | 3 | | 1 | 1 |
| Jacksonville, Fla. | 76,101 | 29 | 1 | 1 | 13 | | | | 3 | 2 |
| Johnstown, Pa. | 68,529 | 25 | 7 | | 1 | | 10 | | | 1 |
| Kansas City, Kans. | 99,437 | | 1 | | 2 | | | 1 | 7 | |
| Lancaster, Pa. | 50,853 | | | | 40 | | 4 | | | |
| Little Rock, Ark. | 57,343 | 17 | | | 7 | | | | | 1 |
| Malden, Mass. | 51,155 | 13 | 5 | 2 | 9 | | 4 | | 4 | 2 |
| Manchester, N. H. | 78,283 | 27 | 1 | | 41 | | 3 | | 12 | 2 |
| Mobile, Ala. | 58,221 | 20 | | | 1 | | | | | 2 |
| New Britain, Conn. | 53,794 | 16 | 2 | | 27 | | 8 | | | |
| Norfolk, Va. | 89,612 | | 1 | | 11 | | 2 | | | 1 |
| Oklahoma City, Okla. | 92,943 | 18 | | | | | 1 | | | 5 |
| Passaic, N. J. | 71,744 | 26 | 4 | | 4 | | | | 4 | 4 |
| Pawtucket, R. I. | 59,411 | | | | 3 | 2 | | | | 2 |
| Peoria, Ill. | 71,458 | 24 | 1 | | 10 | | 1 | | | 2 |
| Portland, Me. | 63,867 | 17 | 1 | | 7 | | 2 | | | |
| Pueblo, Colo. | 54,462 | 12 | 1 | | 9 | | | | | |
| Rockford, Ill. | 55,185 | 20 | | | 34 | | 1 | | 3 | 2 |
| Sacramento, Cal. | 66,895 | 21 | | | 59 | | 3 | | 1 | 4 |
| Saginaw, Mich. | 55,642 | 25 | | | 3 | | 2 | | | 3 |
| St. Joseph, Mo. | 85,236 | 31 | 5 | 1 | 7 | | | | 1 | 3 |
| San Diego, Cal. | 53,330 | 21 | 3 | | 101 | 1 | 4 | | 5 | 1 |
| Savannah, Ga. | 68,805 | 24 | | | 5 | | | | 3 | 3 |
| Schenectady, N. Y. | 99,519 | 21 | 1 | | 17 | | 3 | | 3 | 1 |
| Somerville, Mass. | 87,039 | 24 | 8 | | 31 | | 5 | | 3 | 4 |
| South Bend, Ind. | 68,946 | 14 | 1 | | 28 | | 3 | | 4 | |
| Springfield, Ill. | 61,120 | 17 | 1 | | 65 | | | | | 2 |
| Springfield, Ohio. | 51,550 | | 1 | | 3 | | 1 | | 4 | 2 |
| Terre Haute, Ind. | 66,083 | 16 | 5 | | 2 | | 1 | | 4 | 3 |
| Troy, N. Y. | 77,916 | 24 | 1 | | 6 | | 10 | | 5 | |
| Wichita, Kans. | 70,722 | | | | 42 | 1 | 3 | | 4 | 7 |
| Wilkes-Barre, Pa. | 76,776 | 31 | 8 | | 28 | | 7 | | 1 | |
| Wilmington, Del. | 94,265 | 58 | 2 | | 58 | | 2 | | | 7 |
| Yonkers, N. Y. | 99,838 | | 1 | 1 | 15 | | 1 | | 2 | 2 |
| York, Pa. | 51,666 | 32 | | | 17 | | 1 | | 1 | |
| From 25,000 to 50,000 inhabit- ants: | | | | | | | | | | |
| Alameda, Cal. | 27,732 | 9 | 3 | | 12 | | 2 | | 1 | 1 |
| Austin, Tex. | 34,814 | 18 | | | | | | | | 5 |
| Battle Creek, Mich. | 26,480 | | 7 | 2 | 65 | | 3 | | | |
| Bellingham, Wash. | 32,985 | 7 | | | 1 | | | | | |
| Brookline, Mass. | 32,730 | 9 | | | 48 | | 1 | | 3 | |
| Burlington, Iowa. | 25,030 | 6 | | | | | 1 | | | |
| Butler, Pa. | 27,632 | 11 | 5 | 1 | 35 | | | | | 1 |
| Butte, Mont. | 43,425 | 29 | 2 | | 5 | | | | | |
| Cedar Rapids, Iowa. | 37,208 | | | | | | 13 | | | |
| Charleston, W. Va. | 29,941 | | 1 | | 14 | | 7 | | | |
| Charlotte, N. C. | 39,823 | 22 | 3 | | 8 | | | | 5 | |
| Chelsea, Mass. | 46,192 | 24 | 2 | | 42 | | 1 | | 2 | |
| Chicopee, Mass. | 29,319 | 6 | 3 | | 1 | | 1 | | 3 | 2 |
| Clinton, Iowa. | 27,386 | | | | 42 | | 2 | | | |
| Colorado Springs, Colo. | 32,971 | 17 | 3 | | 38 | | | | 3 | 5 |
| Columbia, S. C. | 34,611 | | 3 | | | | | | 1 | |
| Council Bluffs, Iowa. | 31,484 | | | | | | 5 | | | |
| Cranston, R. I. | 26,987 | 6 | | | 4 | | 3 | | | 1 |
| Cumberland, Md. | 26,074 | 10 | | | 2 | | 11 | | 3 | 1 |
| Danville, Ill. | 32,261 | 10 | | | 123 | | | | 1 | 1 |
| Davenport, Iowa. | 48,811 | | 1 | | 4 | | 12 | | | |
| Dubuque, Iowa. | 39,873 | | 3 | | | | | | | 2 |
| Durham, N. C. | 25,061 | 5 | | | | | | | | 1 |
| East Chicago, Ind. | 28,743 | 12 | | | 7 | | | | | 1 |
| Easton, Pa. | 30,530 | 18 | 1 | | 17 | | | | 1 | |
| East Orange, N. J. | 42,458 | 12 | | | 43 | | | | | |

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

City Reports for Week Ended Mar. 23, 1918—Continued.

| City. | Popula- tion as of July 1, 1916. (Estimated by U. S. Census Bureau.) | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | | |
|--|--|---|-------------|---------|----------|---------|-------------------|---------|--------------------|---------|--|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | |
| From 25,000 to 50,000 inhabit- ants—Continued | | | | | | | | | | | |
| Elgin, Ill. | 28,203 | 12 | | | 8 | | 2 | | | | |
| Elmira, N. Y. | 38,120 | | 1 | | 52 | | 1 | | 6 | | |
| Evanston, Ill. | 28,591 | 6 | | | | | 1 | | | | |
| Everett, Mass. | 39,233 | | 4 | | 18 | | 4 | | 5 | | |
| Everett, Wash. | 35,486 | 2 | | | | | | | | | |
| Fitchburg, Mass. | 41,781 | 14 | | | | | | | | | |
| Fresno, Cal. | 34,958 | 5 | | | 17 | | | | | | |
| Galveston, Tex. | 41,863 | 18 | | | | | | | | 2 | |
| Green Bay, Wis. | 29,353 | 9 | | | | | | | | 1 | |
| Hagerstown, Md. | 25,679 | | | | 1 | | 1 | | | | |
| Hammond, Ind. | 26,171 | 12 | 1 | | 1 | | | | | | |
| Haverhill, Mass. | 48,477 | 16 | 1 | | 21 | | 5 | 1 | 3 | | |
| Jackson, Mich. | 35,363 | 13 | 4 | | 10 | | 23 | | 1 | 1 | |
| Jamestown, N. Y. | 36,580 | 17 | 2 | | | | | | | | |
| Kalamazoo, Mich. | 48,886 | 30 | 2 | | 3 | | | | 3 | 4 | |
| Kenosha, Wis. | 31,576 | 8 | 7 | | 5 | | 4 | | | | |
| Knoxville, Tenn. | 38,676 | | | | 6 | | | | 2 | 2 | |
| La Crosse, Wis. | 31,677 | 3 | 1 | | | | | | | 1 | |
| Lexington, Ky. | 41,097 | 20 | 1 | | 12 | | | | 1 | 3 | |
| Lima, Ohio. | 35,384 | 15 | 3 | | 10 | | | | | 2 | |
| Lincoln, Nebr. | 46,515 | 17 | 4 | | | | 8 | 1 | | | |
| Long Beach, Cal. | 27,587 | 12 | 1 | | 26 | | | | 1 | | |
| Lorain, Ohio. | 36,964 | | | | | | 1 | | | | |
| Lynchburg, Va. | 32,940 | 11 | 2 | | 15 | | | | 3 | 1 | |
| Macon, Ga. | 45,757 | 20 | | | 5 | | 1 | | 2 | 3 | |
| Madison, Wis. | 30,699 | 16 | 1 | 1 | | | 1 | | | | |
| McKeesport, Pa. | 47,521 | | 1 | | 19 | | | | | | |
| Medford, Mass. | 26,234 | 8 | 4 | | 6 | | 3 | | | | |
| Moline, Ill. | 27,451 | 11 | | | 25 | | | | 1 | | |
| Montclair, N. J. | 26,318 | 4 | | | 78 | | | | | | |
| Montgomery, Ala. | 43,285 | 21 | | | 11 | | 1 | | | | |
| Mount Vernon, N. Y. | 37,009 | 11 | 2 | | 5 | | 1 | | 2 | | |
| Muncie, Ind. | 25,424 | 8 | | | 4 | | 1 | | 1 | 1 | |
| Muskegon, Mich. | 26,100 | 11 | | | 1 | | | | | | |
| Muskogee, Okla. | 44,218 | | | | 10 | | | | | | |
| Nashua, N. H. | 27,327 | | 3 | | | | 5 | | | 1 | |
| Newburgh, N. Y. | 29,603 | 11 | 1 | | 6 | | | | 3 | 3 | |
| New Castle, Pa. | 41,133 | | | | 10 | | 1 | | | | |
| Newport, Ky. | 31,927 | 9 | 1 | | | | | | 2 | 2 | |
| Newport, R. I. | 30,108 | 3 | 1 | | | | 3 | | | | |
| Newton, Mass. | 43,715 | 7 | 1 | | 23 | 2 | 1 | | 1 | 2 | |
| Niagara Falls, N. Y. | 37,353 | 7 | 1 | | 3 | | 5 | | 1 | 1 | |
| Norristown, Pa. | 31,401 | 12 | 2 | | 1 | | | | | 2 | |
| Norwalk, Conn. | 26,899 | | 1 | | 6 | | | | 1 | 1 | |
| Oak Park, Ill. | 26,654 | 12 | 4 | | 34 | | 1 | | | | |
| Orange, N. J. | 33,080 | 9 | | | 56 | | 1 | | 2 | 1 | |
| Oshkosh, Wis. | 36,065 | 7 | | | | | | | 4 | 2 | |
| Pasadena, Cal. | 46,450 | 18 | | | 248 | | | | 1 | 3 | |
| Perth Amboy, N. J. | 41,185 | 15 | 1 | | 25 | | 1 | | 3 | | |
| Petersburg, Va. | 25,582 | | 1 | | 9 | | | | 1 | 1 | |
| Pittsfield, Mass. | 38,629 | 19 | | 1 | 1 | | 5 | | | 2 | |
| Portsmouth, Va. | 39,651 | 17 | 2 | | 15 | | 2 | | | 1 | |
| Poughkeepsie, N. Y. | 30,390 | | 1 | 1 | 58 | | 1 | | 1 | | |
| Quincy, Ill. | 36,798 | 11 | 1 | | 6 | | 3 | | | | |
| Quincy, Mass. | 38,136 | 18 | 5 | | 73 | | 6 | | | 3 | |
| Racine, Wis. | 46,486 | 11 | | | 33 | | 9 | | | 2 | |
| Roanoke, Va. | 43,284 | 16 | | | 55 | | | | 2 | 3 | |
| Rock Island, Ill. | 28,923 | 12 | | | 45 | | 2 | | 1 | | |
| Salem, Mass. | 48,562 | 23 | 3 | | 30 | | | | 3 | 2 | |
| San Jose, Cal. | 38,002 | | | | 28 | | | | | | |
| Sheboygan, Wis. | 28,550 | 7 | | | 4 | | | | 1 | 1 | |
| Steubenville, Ohio. | 27,445 | 22 | | | 3 | | | | | | |
| Stockton, Cal. | 35,353 | | 5 | | 58 | | | | 3 | | |
| Superior, Wis. | 46,226 | 11 | | | | | 4 | | | 1 | |
| Taunton, Mass. | 36,283 | 16 | | | | | | | 3 | 2 | |
| Topeka, Kans. | 48,726 | | | | 63 | | 20 | | | | |
| Waco, Tex. | 33,395 | 18 | | | 11 | | 3 | | | | |
| Waltham, Mass. | 30,570 | 14 | | | | | | | | 2 | |

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

City Reports for Week Ended Mar. 23, 1918—Continued.

| City. | Popula- tion as of July 1, 1916. (Estimated by U. S. Census Bureau.) | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | |
|---|--|---|-------------|---------|----------|---------|-------------------|---------|--------------------|---------|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| From 25,000 to 50,000 inhabit- ants—Continued. | | | | | | | | | | |
| Watertown, N. Y. | 29,894 | | | | 98 | | | | | |
| West Hoboken, N. J. | 43,139 | 3 | 2 | | 9 | | 1 | | | |
| Wheeling, W. Va. | 43,377 | 13 | 1 | | 15 | | | | 2 | 2 |
| Williamsport, Pa. | 33,809 | 11 | 1 | | 1 | | | | | |
| Wilmington, N. C. | 29,892 | 12 | | | 11 | | | | 1 | 1 |
| Winston-Salem, N. C. | 31,155 | 16 | | | 24 | | | | 3 | 1 |
| Woonsocket, R. I. | 44,360 | | 3 | 1 | | | 1 | | | |
| Zanesville, Ohio. | 30,863 | 12 | | | | | | | | 2 |
| From 10,000 to 25,000 inhabitants: | | | | | | | | | | |
| Alton, Ill. | 22,874 | 19 | 1 | 1 | | | 2 | | | 5 |
| Anderson, Ind. | 23,996 | 8 | 2 | | 3 | | 2 | | 1 | |
| Ann Arbor, Mich. | 15,010 | 13 | 5 | | 43 | | | | 1 | |
| Anniston, Ala. | 14,112 | | | | 22 | | | | 3 | |
| Barre, Vt. | 12,169 | 2 | 1 | | | | | | | |
| Bedford, Ind. | 10,349 | 1 | | | | | | | | |
| Berlin, N. H. | 13,599 | 3 | | | | | | | | 1 |
| Braddock, Pa. | 21,685 | 8 | | | | | | | | |
| Cairo, Ill. | 15,794 | 7 | | | 1 | | | | 1 | |
| Chillicothe, Ohio | 15,470 | 3 | 5 | | 5 | | | | | |
| Clinton, Mass. | 13,075 | 6 | | | 8 | | 1 | | | |
| Coffeyville, Kans. | 17,548 | | | | 5 | | | | | |
| Dover, N. H. | 13,272 | 6 | | | | | | | | |
| Elkhart, Ind. | 21,858 | | | | | | | | 1 | |
| Elwood, Ind. | 11,028 | 4 | | | 3 | | | | | |
| Fargo, N. Dak. | 17,399 | 2 | 2 | | 8 | | | | 1 | |
| Galesburg, Ill. | 24,276 | 7 | 2 | | 26 | | | | | |
| Grand Forks, N. Dak. | 15,837 | | | | 1 | | 3 | | | |
| Greenville, S. C. | 18,181 | 1 | | | | | | | 3 | |
| Hackensack, N. J. | 16,945 | | 1 | | 1 | | 1 | | | |
| Hattiesburg, Miss. | 16,482 | 3 | | | 1 | | | | 4 | |
| Janesville, Wis. | 14,339 | | 1 | | | | 3 | | | |
| Kearny, N. J. | 23,539 | 9 | | | 27 | | | | 3 | |
| Kokomo, Ind. | 20,930 | 7 | | | 7 | | 1 | | | 1 |
| La Fayette, Ind. | 21,286 | 3 | | | | | 1 | | | 1 |
| Leavenworth, Kans. | 19,363 | 21 | | 1 | 12 | | | | | 1 |
| Marquette, Wis. | 14,610 | 1 | | | | | 2 | | | |
| Martinsburg, W. Va. | 12,666 | | | | 1 | | | | | |
| Melrose, Mass. | 17,445 | 6 | 1 | | 4 | | | | | |
| Michigan City, Ind. | 21,512 | 9 | | | | | | | 2 | 2 |
| Mishawaka, Ind. | 16,385 | 7 | | | | | | | 1 | |
| Missoula, Mont. | 18,214 | 4 | | | | | | | | |
| Morgantown, W. Va. | 13,709 | 6 | | | | | | | 2 | |
| Morristown, N. J. | 13,284 | 4 | | | | | | | | |
| Moundsville, W. Va. | 11,153 | 5 | | | 1 | | | | 2 | 2 |
| Nanticoke, Pa. | 23,126 | 14 | 1 | | 3 | | 6 | | | |
| New Albany, Ind. | 23,629 | 10 | 1 | | | | | | | 1 |
| Newburyport, Mass. | 15,243 | 4 | | | | | | | 1 | |
| Newcastle, Ind. | 13,241 | 3 | | | | | | | | |
| New London, Conn. | 20,985 | 9 | | | 1 | 1 | 1 | | 1 | 1 |
| North Adams, Mass. | 22,019 | 8 | | | | | | | | |
| North Little Rock, Ark. | 14,907 | 1 | | | | | 1 | | | |
| Northampton, Mass. | 19,926 | 7 | | | | | 1 | | 2 | 2 |
| Parkersburg, W. Va. | 20,612 | 5 | | | 1 | | 1 | | | |
| Plainfield, N. J. | 23,805 | 8 | | | 11 | | 1 | | 1 | 1 |
| Pontiac, Mich. | 17,534 | 13 | 7 | | 6 | | 7 | | 3 | |
| Portsmouth, N. H. | 11,668 | | | | 6 | | 7 | | | |
| Richmond, Ind. | 24,697 | 8 | | | | | | | 4 | |
| Rocky Mount, N. C. | 12,067 | 3 | | | 2 | | | | 4 | |
| Rutland, Vt. | 14,831 | 7 | | | | | | | | |
| Sandusky, Ohio. | 20,193 | 6 | | | | | | | 1 | |
| Saratoga Springs, N. Y. | 13,821 | 7 | | | 1 | | | | 1 | 1 |
| Shelbyville, Ind. | 10,965 | 3 | | | | | | | | |
| Spartanburg, S. C. | 21,365 | 15 | | | 5 | | 1 | | 2 | 3 |
| Steelton, Pa. | 15,648 | 1 | | | | | | | | |
| Washington, Pa. | 21,618 | | | | 115 | | | | | |
| Wilkesburg, Pa. | 23,228 | 17 | 1 | | 28 | | | | 1 | 2 |
| Woburn, Mass. | 15,969 | 2 | | | | | | | | |

FOREIGN.

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

Reports Received During Week Ended Apr. 12, 1918.¹

CHOLERA.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|--------------|----------------------|--------|---------|----------|
| India: | | | | |
| Bombay..... | Jan. 6-26..... | 126 | 103 | |
| Karachi..... | Dec. 30-Jan. 26..... | 25 | 6 | |
| Madras..... | Jan. 20-26..... | 10 | 4 | |

PLAGUE.

| | | | | |
|------------------------|----------------------|-------|-------|---|
| Ceylon: | | | | |
| Colombo..... | Jan. 13-19..... | 1 | | |
| India..... | | | | Jan. 6-26, 1918: Cases, 95,630; deaths, 76,273. |
| Bassein..... | Jan. 5-19..... | | 11 | |
| Bombay..... | Jan. 5-26..... | 62 | 48 | |
| Benzada..... | Jan. 5-19..... | | 5 | |
| Karachi..... | Dec. 30-Jan. 26..... | 16 | 14 | |
| Madras Presidency..... | Jan. 20-26..... | 1,526 | 1,162 | |
| Myingyan..... | Jan. 5-12..... | | 73 | |
| Prome..... |do..... | | 1 | |
| Rangoon..... | Jan. 6-26..... | 64 | 60 | |
| Toungoo..... | Jan. 13-19..... | | 1 | |

SMALLPOX.

| | | | | |
|---------------------|----------------------|-----|----|---------------------------------|
| Brazil: | | | | |
| Rio de Janeiro..... | Feb. 3-Mar. 9..... | 73 | 41 | |
| Canada: | | | | |
| New Brunswick— | | | | |
| Moncton..... | Mar. 25-30..... | 2 | | |
| Nova Scotia— | | | | |
| Halifax..... | Mar. 17-23..... | 2 | | |
| Sydney..... | Mar. 25-30..... | 5 | | |
| Ontario— | | | | |
| Ottawa..... | Mar. 25-31..... | 1 | | |
| Sarnia..... | Mar. 24-30..... | 2 | | |
| Quebec— | | | | |
| Montreal..... |do..... | 3 | | |
| China: | | | | Present. |
| Amoy..... | Feb. 4-10..... | | | Cases, foreign; deaths, native. |
| Shanghai..... | Feb. 11-Mar. 3..... | 3 | 10 | |
| Tientsin..... | Feb. 13-23..... | 3 | | |
| India: | | | | |
| Bombay..... | Jan. 6-26..... | 132 | 39 | |
| Madras..... | Jan. 20-26..... | 27 | 5 | |
| Rangoon..... | Jan. 6-26..... | 6 | 2 | |
| Italy: | | | | |
| Milan..... | Dec. 1-31..... | 15 | | |
| Mexico: | | | | |
| Ciudad Juarez..... | Mar. 18-23..... | 1 | | |
| Mexico City..... | Mar. 3-9..... | 9 | | |
| Porto Rico: | | | | |
| San Juan..... | Mar. 11-17..... | 9 | | Varioloid. |
| Spain: | | | | |
| Coruna..... | Jan. 20-Feb. 23..... | | 5 | |
| Madrid..... | Dec. 1-31..... | | 12 | |
| Seville..... | Jan. 1-31..... | | 20 | |

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

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

Reports Received During Week Ended Apr. 12, 1918—Continued.

TYPHUS FEVER.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|------------------------------|---------------|--------|---------|---|
| Great Britain: | | | | |
| Belfast..... | Mar. 3-9..... | 1 | 1 | |
| Glasgow..... | do..... | 5 | | |
| Greece: | | | | |
| Arta..... | Feb. 19..... | 2 | | |
| Janina..... | Feb. 14..... | 110 | | |
| Mexico: | | | | |
| Mexico City..... | Mar. 3-9..... | 37 | | |
| Union of South Africa: | | | | |
| Cape of Good Hope State..... | | | | Sept. 10, 1917-Jan. 13, 1918: Cases, 4,158; deaths, 854. |
| Natal..... | | | | To Jan. 13, 1918: Cases, 37; deaths, 10. |

Reports Received from Dec. 29, 1917, to Apr. 5, 1918.

CHOLERA.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|--------------------------|----------------------|--------|---------|---|
| China: | | | | |
| Antung..... | Nov. 26-Dec. 2.... | 3 | 1 | |
| India: | | | | |
| Bombay..... | Oct. 28-Dec. 15.... | 19 | 14 | |
| Do..... | Dec. 30-Jan. 5.... | 74 | 67 | |
| Calcutta..... | Sept. 16-Dec. 15.... | | 92 | |
| Do..... | Dec. 30-Jan. 12.... | | 14 | |
| Madras..... | Nov. 25-Dec. 22.... | 2 | 2 | |
| Do..... | Dec. 30-Jan. 12.... | 3 | 3 | |
| Rangoon..... | Nov. 4-Dec. 22.... | 5 | 5 | |
| Do..... | Dec. 30-Jan. 5.... | 1 | 1 | |
| Indo-China: | | | | |
| Provinces..... | | | | Sept. 1-Nov. 30, 1917: Cases, 152; deaths, 89. |
| Anam..... | Sept. 1-Nov. 30.... | 18 | 13 | |
| Cambodia..... | do..... | 72 | 52 | |
| Cochin-China..... | do..... | 50 | 22 | |
| Saigon..... | Nov. 22-Dec. 9.... | 4 | 3 | |
| Kwang-Chow-Wan..... | Sept. 1-30..... | 10 | 2 | |
| Java: | | | | |
| East Java..... | Oct. 28-Nov. 3.... | 1 | 1 | |
| West Java..... | | | | |
| Batavia..... | Oct. 19-Dec. 27.... | 49 | 23 | Oct. 19-Dec. 27, 1917: Cases, 102; deaths, 56. Dec. 28, 1917-Jan. 10, 1918: Cases, 22; deaths, 9. |
| Persia: | | | | |
| Mazanderan Province..... | | | | July 30-Sept. 3, 1917: Cases, 384; deaths, 276. |
| Achraf..... | July 30-Aug. 16.... | 90 | 88 | Present. |
| Astrabad..... | July 31..... | | | |
| Barfush..... | July 1-Aug. 16.... | 39 | 25 | |
| Chahmirzad..... | | | | 25 cases reported July 31, 1917. |
| Chahrastagh..... | June 15-July 25.... | 10 | 8 | |
| Charoud..... | Aug. 26-Sept. 3.... | 4 | 2 | |
| Damghan..... | Aug. 26..... | | | |
| Kharek..... | May 28-June 11.... | 21 | 13 | |
| Meched..... | Aug. 18-Sept. 2.... | 174 | 82 | |
| Quzoun Dare..... | Aug. 8..... | | | Do. |
| Sabzevar..... | Aug. 24..... | | | Do. |
| Sari..... | July 3-29..... | 273 | 144 | |
| Semman..... | Aug. 31-Sept. 2.... | 14 | 5 | |
| Yekchambe-Bazar..... | June 3..... | 6 | | |
| Philippine Islands: | | | | |
| Provinces..... | | | | Nov. 18-Dec. 29, 1917: Cases, 1,053; deaths, 693. Dec. 30, 1917-Feb. 9, 1918: Cases, 914; deaths, 546. |
| Antique..... | Nov. 18-Dec. 1.... | 48 | 32 | |
| Do..... | Feb. 3-9..... | 4 | 4 | |
| Bohol..... | Nov. 18-Dec. 29.... | 169 | 111 | |
| Do..... | Dec. 30-Feb. 9.... | 213 | 181 | |
| Capiz..... | Nov. 25-Dec. 29.... | 27 | 21 | |
| Do..... | Dec. 30-Feb. 9.... | 121 | 101 | |
| Cebu..... | Dec. 23-29..... | 3 | | |
| Do..... | Dec. 30-Feb. 9.... | 69 | 36 | |
| Iloilo..... | Nov. 25-Dec. 29.... | 179 | 135 | |
| Do..... | Dec. 30-Feb. 9.... | 82 | 53 | |
| Leyte..... | Nov. 25-Dec. 22.... | 13 | 12 | |
| Do..... | Feb. 3-9..... | 9 | 8 | |

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

Reports Received from Dec. 29, 1917, to Apr. 5, 1918—Continued.

CHOLERA—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|--------------------------------------|---------------------|--------|---------|----------|
| Philippine Islands—Continued. | | | | |
| Provinces—Continued. | | | | |
| Mindanao..... | Nov. 25-Dec. 29.... | 337 | 196 | |
| Do..... | Dec. 30-Feb. 9..... | 351 | 220 | |
| Occidental Negros..... | Nov. 25-Dec. 22.... | 177 | 123 | |
| Do..... | Jan. 13-Feb. 9..... | 60 | 40 | |
| Oriental Negros..... | Nov. 25-Dec. 29.... | 99 | 62 | |
| Do..... | Dec. 30-Feb. 9..... | 15 | 13 | |
| Romblon..... | Nov. 25-Dec. 1..... | 1 | 1 | |
| Siam: | | | | |
| Bangkok..... | Sept. 16-22..... | 1 | 1 | |
| Turkey in Asia: | | | | |
| Bagdad..... | Nov. 1-15..... | ..... | 40 | |

PLAGUE.

| | | | | |
|----------------------------|---------------------|-------|-------|---|
| Brazil: | | | | |
| Bahia..... | Nov. 4-Dec. 15.... | 4 | 4 | |
| Do..... | Dec. 30-Jan. 12.... | 3 | 2 | |
| Rio de Janeiro..... | Dec. 23-29..... | 1 | ..... |  |
| Do..... | Jan. 6-12..... | 1 | 1 | |
| British Gold Coast: | | | | |
| Axim..... | Jan. 8..... | ..... | ..... | Present. |
| Ceylon: | | | | |
| Colombo..... | Oct. 14-Dec. 1..... | 14 | 13 | |
| Do..... | Dec. 30-Jan. 12.... | 6 | 5 | |
| Ecuador | | | | |
| Guayaquil..... | Sept. 1-30..... | 3 | 1 | Sept. 1-Nov. 30, 1917: Cases, 68; deaths, 24. Reported outbreak occurring about Jan. 17, 1918. |
| Do..... | Oct. 1-31..... | 20 | 8 | |
| Do..... | Nov. 1-30..... | 45 | 15 | |
| Egypt: | | | | |
| Alexandria..... | Jan. 14-28..... | 1 | 2 | Jan. 1-Nov. 15, 1917: Cases, 728; deaths, 398. |
| Port Said..... | July 21-29..... | 1 | 2 | |
| India: | | | | |
| Bassein..... | Dec. 9-29..... | ..... | 8 | Sept. 16-Dec. 23, 1917: Cases, 223,834; deaths, 174,743. Dec. 30, 1917-Jan. 5, 1918: Cases, 28,304; deaths, 22,677. |
| Do..... | Dec. 30-Jan. 12.... | ..... | 3 | |
| Bombay..... | Oct. 28-Dec. 29.... | 147 | 123 | |
| Do..... | Dec. 30-Jan. 5..... | 19 | 11 | |
| Calcutta..... | Sept. 16-29..... | ..... | 2 | |
| Do..... | Dec. 30-Jan. 12.... | ..... | 3 | |
| Henzada..... | Oct. 21-27..... | ..... | 1 | |
| Karachi..... | Oct. 21-Dec. 29.... | 27 | 20 | |
| Do..... | Dec. 30-Jan. 5..... | 1 | ..... |  |
| Madras Presidency..... | Oct. 31-Nov. 17.... | 3,294 | 2,560 | |
| Do..... | Jan. 6-12..... | 2,784 | 2,124 | |
| Mandalay..... | Oct. 14-Nov. 17.... | ..... | 89 | |
| Do..... | Dec. 30-Jan. 12.... | ..... | 236 | |
| Myingyan..... | Dec. 30-Jan. 5..... | ..... | 37 | |
| Rangoon..... | Oct. 21-Dec. 22.... | ..... | 56 | |
| Do..... | Dec. 30-Jan. 5..... | 15 | 14 | Nov. 1-30, 1917: Cases, 37; deaths, 34. |
| Toungoo..... | Dec. 9-29..... | ..... | 5 | |
| Do..... | Dec. 30-Jan. 5..... | ..... | 3 | |
| Indo-China: | | | | |
| Provinces | | | | |
| Anam..... | Sept. 1-Nov. 30.... | 28 | 25 | Sept. 1-Nov. 30, 1917: Cases, 89; deaths, 68. |
| Cambodia..... | do..... | 39 | 28 | |
| Cochin-China..... | do..... | 22 | 15 | |
| Saigon..... | Oct. 31-Dec. 23.... | 17 | 6 | |
| Do..... | Dec. 31-Feb. 3..... | 36 | 9 | |
| Java: | | | | |
| East Java..... | ..... | ..... | ..... | Oct. 27-Dec. 23, 1917: Cases, 189; deaths, 186. |
| Surabaya..... | Nov. 4-25..... | 3 | 3 | |
| West Java..... | ..... | ..... | ..... | Nov. 25-Dec. 9, 1917: Cases, 45; deaths, 45. |
| Peru: | | | | |
| Ancachs Department— | ..... | ..... | ..... | Dec. 1, 1917-Jan. 15, 1918: Cases, 106. |
| Casma..... | Dec. 1-Jan. 15.... | 2 | ..... |  |
| Lambayeque Department..... | do..... | 22 | ..... | At Chiclayo, Ferrenafe, Jayanca, Lambayeque. |
| Libertad Department..... | do..... | 72 | ..... | At Guadalupe, Mansiche, Pacasmayo, Salaverry, San Jose, San Pedro, and country district of Trujillo. |
| Lima Department..... | do..... | 9 | ..... | City and country. |
| Piura Department— | ..... | ..... | ..... |  |
| Catacay..... | do..... | 1 | ..... |  |

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

Reports Received from Dec. 29, 1917, to Apr. 5, 1918—Continued.

PLAGUE—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|----------------------|---------------------|--------|---------|----------|
| Senegal: | | | | |
| St. Louis..... | Feb. 2..... | | | Present. |
| Siam: | | | | |
| Bangkok..... | Sept. 16-Dec. 23... | 13 | 9 | |
| Straits Settlements: | | | | |
| Singapore..... | Oct. 28-Dec. 29.... | 5 | 7 | |

SMALLPOX.

| | | | | |
|----------------------------|----------------------|-----|-----|---|
| Algeria: | | | | |
| Algiers..... | Nov. 1-Dec. 31.... | 3 | 1 | |
| Do..... | Jan. 1-31..... | 2 | | |
| Australia: | | | | |
| New South Wales..... | | | | July 12-Dec. 20, 1917: Cases, 30. |
| Abermain..... | Oct. 25-Nov. 29.... | 3 | | Jan. 4-17, 1918: Cases, 1. |
| Cessnock..... | July 12-Oct. 11.... | 7 | | Newcastle district. |
| Eumangla..... | Aug. 15..... | 1 | | |
| Kurri Kurri..... | Dec. 5-20..... | 2 | | |
| Mungindi..... | Aug. 13..... | 1 | | |
| Warren..... | July 12-Oct. 25.... | 22 | | |
| Do..... | Jan. 1-17..... | 1 | | |
| Brazil: | | | | |
| Bahia..... | Nov. 10-Dec. 8.... | 3 | | |
| Pernambuco..... | Nov. 1-15..... | 1 | | |
| Rio de Janeiro..... | Sept. 30-Dec. 29.... | 703 | 190 | |
| Do..... | Dec. 30-Jan. 26.... | 158 | 42 | |
| Sao Paulo..... | Oct. 29-Nov. 4.... | | 2 | |
| Canada: | | | | |
| British Columbia— | | | | |
| Vancouver..... | Jan. 13-Mar. 9.... | 5 | | |
| Victoria..... | Jan. 7-Feb. 2..... | 2 | | |
| Winnipeg..... | Dec. 30-Jan. 5.... | 1 | | |
| New Brunswick— | | | | |
| Kent County..... | Dec. 4..... | | | Outbreak. On main line Canadian Ry., 25 miles north of Moncton. |
| Do..... | Jan. 22..... | 40 | | In 7 localities. |
| Northumberland County..... | Jan. 18..... | 60 | | In 5 localities. |
| St. John County— | | | | |
| St. John..... | Mar. 3-9..... | 2 | | |
| Victoria County..... | Jan. 22..... | 10 | | At Limestone and a lumber camp. |
| Westmoreland County— | | | | |
| Moncton..... | Jan. 20-Mar. 23.... | 9 | | |
| St. John..... | Mar. 17-23..... | 1 | | |
| York County..... | Jan. 22..... | 8 | | |
| Nova Scotia— | | | | |
| Halifax..... | Feb. 24-Mar. 2.... | 1 | | |
| Sydney..... | Feb. 3-Mar. 23.... | 8 | | |
| Ontario— | | | | |
| Hamilton..... | Dec. 16-22..... | 1 | | |
| Do..... | Jan. 13-19..... | 2 | | |
| Ottawa..... | Mar. 4-24..... | 5 | | |
| Sarnia..... | Dec. 9-15..... | 1 | | |
| Do..... | Jan. 6-Mar. 23.... | 30 | | |
| Toronto..... | Feb. 10-16..... | 1 | | |
| Windsor..... | Dec. 30-Jan. 5.... | 1 | | |
| Prince Edward Island— | | | | |
| Charlottetown..... | Feb. 7-13..... | 1 | | |
| Quebec— | | | | |
| Montreal..... | Dec. 16-Jan. 5.... | 5 | | |
| Do..... | Jan. 6-Mar. 9.... | 7 | | |
| China: | | | | |
| Amoy..... | Oct. 22-Dec. 30.... | | | Present. |
| Do..... | Dec. 31-Feb. 3.... | | | Do. |
| Antung..... | Dec. 2-23..... | 13 | 2 | |
| Do..... | Jan. 7-Feb. 17.... | 5 | 2 | |
| Changsha..... | Jan. 28-Feb. 3.... | | 1 | |
| Chefoo..... | Jan. 27-Feb. 9.... | | | Do. |
| Chungking..... | Nov. 11-Dec. 29.... | | | Do. |
| Do..... | Dec. 30-Feb. 2.... | | | Do. |
| Dairen..... | Nov. 18-Dec. 22.... | 3 | 1 | |
| Do..... | Dec. 30-Feb. 23.... | 25 | 1 | |

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

Reports Received from Dec. 29, 1917, to Apr. 5, 1918—Continued.

SMALLPOX—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|-------------------------------|---------------------|--------|---------|--|
| China—Continued. | | | | |
| Harbin..... | May 14-June 30.... | 20 | ..... | Chinese Eastern Ry. |
| Do..... | July 1-Dec. 2..... | 7 | ..... | Do. |
| Hongkong..... | Dec. 23-29..... | 1 | ..... |  |
| Do..... | Jan. 28-Feb. 9..... | 6 | 1 | |
| Hungtahoitz Station..... | Oct. 23-Nov. 4..... | 1 | ..... | Do. |
| Manchuria Station..... | May 14-June 30.... | 6 | ..... | Do. |
| Do..... | July 1-Dec. 2..... | 3 | ..... | Do. |
| Mukden..... | Nov. 11-24..... | ..... | ..... | Present. |
| Nanking..... | Feb. 3-16..... | ..... | ..... | Epidemic. |
| Shanghai..... | Nov. 18-Dec. 23.... | 41 | 91 | Cases, foreign; deaths among natives. |
| Do..... | Dec. 31-Feb. 10.... | 33 | 92 | Do. |
| Swatow..... | Jan. 18..... | ..... | ..... | Unusually prevalent. |
| Tientsin..... | Nov. 11-Dec. 22.... | 13 | ..... |  |
| Do..... | Dec. 30-Feb. 9..... | 14 | ..... |  |
| Tsingtau..... | Feb. 4-10..... | 1 | ..... |  |
| Cuba: | | | | |
| Habana..... | Jan. 7..... | 1 | ..... | Nov. 8, 1917; 1 case from Coruna; Dec. 5, 1917, 1 case. |
| Marianao..... | Jan. 8..... | 1 | ..... | 6 miles distant from Habana. |
| Ecuador | | | | |
| Guayaquil..... | Sept. 1-30..... | 8 | ..... | Sept. 1-Nov. 30, 1917: Cases, 26; deaths, 2. |
| Do..... | Oct. 1-31..... | 14 | 1 | |
| Do..... | Nov. 1-30..... | 4 | 1 | |
| Egypt: | | | | |
| Alexandria..... | Nov. 12-18..... | 2 | 1 | |
| Do..... | Jan. 8-Feb. 28.... | 5 | ..... |  |
| Cairo..... | July 23-Nov. 18.... | 6 | 1 | |
| France: | | | | |
| Lyon..... | Nov. 18-Dec. 16.... | 6 | 3 | |
| Do..... | Jan. 7-Feb. 17.... | 11 | 2 | |
| Marseille..... | Jan. 1-31..... | ..... | 2 | |
| Paris..... | Jan. 27-Feb. 23.... | 2 | ..... |  |
| Great Britain: | | | | |
| Cardiff..... | Feb. 3-9..... | 4 | ..... |  |
| Greece: | | | | |
| Saloniki..... | Jan. 27-Feb. 9..... | ..... | 7 | |
| Honduras: | | | | |
| Santa Barbara Department..... | Jan. 1-7..... | ..... | ..... | Present in interior. |
| India: | | | | |
| Bombay..... | Oct. 21-Dec. 29.... | 50 | 12 | |
| Do..... | Dec. 31-Jan. 5..... | 26 | 5 | |
| Karachi..... | Nov. 18-Dec. 29.... | 4 | 2 | Nov. 11-17, 1917: 10 cases with 4 deaths; imported on s. s. <i>Menesa</i> from Basrah. |
| Madras..... | Oct. 31-Dec. 29.... | 18 | 8 | |
| Do..... | Dec. 30-Jan. 12.... | 21 | 10 | |
| Rangoon..... | Oct. 28-Dec. 22.... | 6 | 1 | |
| Do..... | Dec. 30-Jan. 5..... | 1 | ..... |  |
| Indo-China: | | | | |
| Provinces..... | | | | Sept. 1-Nov. 30, 1917: Cases, 546; deaths, 146. |
| Anam..... | Sept. 1-Nov. 30.... | 163 | 25 | |
| Cambodia..... | do..... | 16 | 8 | |
| Cochin-China..... | do..... | 353 | 108 | |
| Saigon..... | Oct. 20-Dec. 30.... | 120 | 26 | |
| Do..... | Dec. 31-Feb. 3..... | 188 | 63 | |
| Laos..... | Oct. 1-31..... | 1 | 1 | |
| Do..... | Jan. 26-Feb. 3..... | 1 | 1 | |
| Tonkin..... | Sept. 1-Oct. 31.... | 9 | 4 | |
| Do..... | Jan. 26-Feb. 3..... | 3 | ..... |  |
| Italy: | | | | |
| Castellamare..... | Dec. 10..... | 2 | ..... | Among refugees. |
| Florence..... | Dec. 1-15..... | 17 | 4 | |
| Genoa..... | Dec. 2-31..... | 11 | 3 | |
| Do..... | Jan. 2-31..... | 30 | 2 | |
| Leghorn..... | Jan. 7-Feb. 24.... | 30 | 6 | |
| Messina..... | Jan. 3-19..... | 1 | ..... |  |
| Milan..... |  | ..... | ..... | Oct. 1-Nov. 30, 1917: Cases, 17. |
| Naples..... | To Dec. 10..... | 2 | ..... | Among refugees. |
| Taormina..... | Jan. 20-Feb. 9..... | 6 | ..... |  |
| Turin..... | Oct. 29-Dec. 29.... | 123 | 120 | |
| Do..... | Jan. 21-Feb. 3..... | 24 | 3 | |
| Japan: | | | | |
| Nagasaki..... | Jan. 14-27..... | 3 | 1 | |
| Taihoku..... | Dec. 15-21..... | 1 | ..... | Island of Taiwan (Formosa). |
| Do..... | Jan. 8-Feb. 11.... | 5 | 2 | Do. |
| Tokyo..... | Feb. 11-18..... | 8 | ..... | City and suburbs. |
| Yokohama..... | Jan. 17-Feb. 3..... | 4 | ..... |  |

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

Reports Received from Dec. 29, 1917, to Apr. 5, 1918—Continued.

SMALLPOX—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|--------------------------------|---------------------|--------|---------|---|
| Java: | | | | |
| East Java..... | Oct. 7-Dec. 23.... | 50 | ..... |  |
| Mid-Java..... | | | | |
| Samarang..... | Nov. 6-Dec. 12.... | 4 | 1 | Oct. 10-Dec. 26, 1917: Cases, 86; death, 1. |
| West Java..... | | | | Oct. 19-Dec. 27, 1917: Cases, 231; deaths, 36. Dec. 28, 1917-Jan. 10, 1918: Cases, 47; deaths, 4. |
| Batavia..... | Nov. 2-8..... | 1 | ..... |  |
| Mexico: | | | | |
| Aguascalientes..... | Feb. 4-17..... | ..... | 2 | |
| Ciudad Juarez..... | Mar. 3-9..... | 1 | 1 | |
| Mazatlan..... | Dec. 5-11..... | ..... | 1 | |
| Do..... | Jan. 29-Mar. 5..... | 4 | 3 | |
| Mexico City..... | Nov. 11-Dec. 29.... | 16 | ..... |  |
| Do..... | Dec. 30-Mar. 2..... | 52 | ..... |  |
| Piedras Negras..... | Jan. 11..... | 200 | ..... |  |
| Vera Cruz..... | Jan. 20-Mar. 2..... | 7 | 3 | |
| Newfoundland: | | | | |
| St. Johns..... | Dec. 8-Jan. 4..... | 29 | ..... |  |
| Do..... | Jan. 5-Mar. 15..... | 35 | ..... |  |
| Trepassey..... | Jan. 4..... | ..... | ..... |  |
| Philippine Islands: | | | | Outbreak with 11 cases reported. |
| Manila..... | Oct. 28-Dec. 8..... | 5 | ..... |  |
| Do..... | Jan. 13-Feb. 9..... | 12 | ..... |  |
| Porto Rico: | | | | |
| San Juan..... | Jan. 28-Mar. 3..... | 23 | ..... |  |
| Portugal. | | | | |
| Lisbon..... | Nov. 4-Dec. 15..... | 2 | ..... |  |
| Do..... | Dec. 30-Feb. 22.... | 4 | ..... |  |
| Portuguese East Africa: | | | | |
| Lourenço Marques..... | Aug. 1-Dec. 31.... | ..... | 16 | |
| Russia: | | | | |
| Archangel..... | Sept. 1-Oct. 31.... | 7 | ..... |  |
| Moscow..... | Aug. 26-Oct. 6..... | 22 | 2 | |
| Petrograd..... | Aug. 31-Nov. 18.... | 76 | 3 | |
| Siam: | | | | |
| Bangkok..... | Nov. 25-Dec. 1.... | 1 | 1 | |
| Do..... | Jan. 6-12..... | 1 | ..... |  |
| Spain: | | | | |
| Coruna..... | Dec. 2-15..... | ..... | 4 | |
| Madrid..... | | | | |
| Seville..... | Oct. 1-Dec. 30.... | ..... | 66 | Jan. 1-Dec. 31, 1917: Deaths, 77. |
| Straits Settlements: | | | | |
| Singapore..... | Nov. 25-Dec. 1.... | 1 | 1 | |
| Do..... | Dec. 30-Jan. 5..... | 1 | ..... |  |
| Tunisia: | | | | |
| Tunis..... | Dec. 14-20..... | 1 | ..... |  |
| Turkey in Asia: | | | | |
| Bagdad..... | | | | Present in November, 1917. |
| Union of South Africa: | | | | |
| Cape of Good Hope State.... | Oct. 1-Dec. 31..... | 28 | ..... |  |
| East Liverpool..... | Jan. 20-26..... | 1 | ..... | Varioloid. |
| Venezuela: | | | | |
| Maracaibo..... | Dec. 2-8..... | ..... | 1 | |

TYPHUS FEVER.

| | | | | |
|--------------------------|---------------------|-------|-------|-----------------------------|
| Algeria: | | | | |
| Algiers..... | Nov. 1-Dec. 31.... | 2 | 1 | |
| Argentina: | | | | |
| Rosario..... | Dec. 1-31..... | ..... | 1 | |
| Australia: | | | | |
| South Australia..... | | | | Nov. 14-17, 1917: one case. |
| Brazil: | | | | |
| Rio de Janeiro..... | Oct. 28-Dec. 1.... | 7 | ..... |  |
| Canada: | | | | |
| Ontario— | | | | |
| Kingston..... | Dec. 2-8..... | 3 | ..... |  |
| Quebec— | | | | |
| Montreal..... | Dec. 16-22..... | 2 | 1 | |
| China: | | | | |
| Antung..... | Dec. 3-30..... | 13 | 1 | |
| Do..... | Dec. 31-Jan. 27.... | 2 | 2 | |
| Chosen (Formosa): | | | | |
| Seoul..... | Nov. 1-20..... | 1 | ..... |  |

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

Reports Received from Dec. 29, 1917, to Apr. 5, 1918—Continued.

TYPHUS FEVER—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|-------------------------------|---------------------|--------|---------|---|
| Egypt: | | | | |
| Alexandria..... | Nov. 8-Dec. 28.... | 57 | 15 | |
| Do..... | Jan. 8-Feb. 25.... | 223 | 54 | |
| Cairo..... | July 23-Dec. 16.... | 137 | 70 | |
| Port Said..... | July 30-Nov. 11.... | 5 | 5 | |
| France: | | | | |
| Marseille..... | Dec. 1-31..... | | 1 | |
| Great Britain: | | | | |
| Belfast..... | Feb. 10-Mar. 2.... | 15 | 2 | |
| Glasgow..... | Dec. 21..... | 1 | | |
| Do..... | Jan. 20-Feb. 23.... | 4 | | |
| Manchester..... | Dec. 2-8..... | 1 | | |
| Greece: | | | | |
| Saloniki..... | Nov. 11-Dec. 29.... | | 72 | |
| Do..... | Dec. 30-Jan. 19.... | | 11 | |
| Japan: | | | | |
| Nagasaki..... | Nov. 26-Dec. 16.... | 5 | 5 | |
| Do..... | Jan. 7-Feb. 17.... | 8 | 2 | |
| Java: | | | | |
| East Java..... | | | | Oct. 15-Dec. 23, 1917: Cases, 35; deaths, 6. |
| Surabaya..... | Dec. 17-23..... | 6 | 1 | |
| Mid-Java..... | | | | Oct. 10-Dec. 26, 1917: Cases, 63; deaths, 2. |
| Samarang..... | Oct. 9-Dec. 26.... | 20 | 2 | |
| Do..... | Dec. 27-Jan. 2.... | 1 | | |
| West Java..... | | | | Oct. 19-Dec. 27, 1917: Cases, 94; deaths, 17. |
| Batavia..... | Oct. 19-Dec. 27.... | 59 | 15 | |
| Mexico: | | | | |
| Aguascalientes..... | Dec. 15..... | | 2 | |
| Do..... | Jan. 21-Feb. 10.... | | 14 | |
| Durango State— | | | | |
| Guanacevi..... | Feb. 11..... | | | Epidemic. |
| Mexico City..... | Nov. 11-Dec. 29.... | 476 | | |
| Do..... | Dec. 30-Mar. 2.... | 491 | | |
| Norway: | | | | |
| Bergen..... | Feb. 1-16..... | 3 | | |
| Portugal: | | | | |
| Lisbon..... | Feb. 21..... | | | Present. |
| Oporto..... | do..... | | | Epidemic. Dec. 24, 1917-Mar. 9, 1918: About 250 cases reported. |
| Russia: | | | | |
| Archangel..... | Sept. 1-14..... | 7 | 2 | |
| Moscow..... | Aug. 26-Oct. 6.... | 49 | 2 | |
| Petrograd..... | Aug. 31-Nov. 18.... | 32 | | |
| Do..... | Feb. 2..... | | | Present. |
| Vladivostok..... | Oct. 29-Nov. 4.... | 12 | 1 | |
| Sweden: | | | | |
| Goteborg..... | Nov. 18-Dec. 15.... | 2 | | |
| Switzerland: | | | | |
| Basel..... | Jan. 6-19..... | 1 | 1 | |
| Zurich..... | Nov. 9-15..... | 2 | | |
| Do..... | Jan. 13-19..... | 2 | | |
| Tunisia: | | | | |
| Tunis..... | Nov. 30-Dec. 6.... | | 1 | |
| Do..... | Feb. 9-15..... | 2 | | |
| Turkey: | | | | |
| Albania— | | | | |
| Janina..... | Jan. 27..... | | | Epidemic. |
| Union of South Africa: | | | | |
| Cape of Good Hope State..... | | | | Sept. 10-Nov. 25, 1917: Cases, 3,724 (European, 31; native, 3,693); deaths, 761 (European, 5; native, 756). |

YELLOW FEVER.

| | | | | |
|------------------|-----------------|---|---|---|
| Ecuador: | | | | |
| Guayaquil..... | Sept. 1-30..... | 1 | 1 | Sept. 1-Nov. 30, 1917: Cases, 5; deaths, 3. |
| Do..... | Oct. 1-31..... | 1 | | |
| Do..... | Nov. 1-30..... | 2 | 2 | |
| Yaguachi..... | do..... | 1 | | |
| Honduras: | | | | |
| Tegucigalpa..... | Dec. 16-22..... | | 1 | |
| Do..... | Jan. 6-19..... | | 1 | |