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THE GROWTH-PROMOTING PROPERTIES OF FOODS DERIVED FROM CORN AND WHEAT.

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The authors in a preceding paper have shown that the whole wheat or corn grain contains an abundance of antineuritic vitamine, whereas the "highly milled" products derived from these cereals are deficient in this respect. This conclusion was drawn from experiments on adult animals. As growing animals require the presence of all dietary constituents to a greater extent than do adults, it seemed desirable to continue the investigation along this line. Recent studies on growth have furnished the necessary information to answer the question as to what constitutes a diet complete enough to insure growth. It is now generally held that a physiologically sufficient diet must contain an adequate caloric value derived from protein of proper composition, carbohydrate, and fat. In addition it must contain a sufficient amount of antineuritic and fat-soluble vitamines and of necessary inorganic salts.

The dietary deficiencies of the whole wheat and corn kernel in the diet of growing animals have already been investigated. Thus Hart and McCollum (1914), working with young albino rats and hogs, have shown that normal growth is obtained when the wheat kernel is supplemented by the addition of inorganic salts, fat-soluble vitamine, and casein. Subnormal growth was observed with rations consisting of wheat plus casein and salts; wheat plus casein and butter fat; wheat plus salts and butter fat.

McCollum, Simmonds, and Pitz (1916) have made similar observations with corn. In this case also the grain requires an improvement in its protein moiety, its salt content, and an added supply of fat-soluble vitamine. Of these three additions the correction of the deficiency in certain inorganic salts seemed to be of the greatest importance, inasmuch as this correction in itself furnished a ration on which rats did grow fairly well for several months.

Hart, Halpin, and Steenbock (1917) report experiments with pullets weighing 2 to 3 pounds on corn and wheat rations These investigators found that corn and wheat meal do not support growth in this species of animals; fortifying the cereals with an appropriate

inorganic salt mixture, protein of proper composition, and a small amount of fat-soluble vitamine (2 per cent butter fat) leads to normal growth. These authors also call attention to the possibility of intoxication as a result of excessive wheat feeding, which they attribute to the presence of some toxic substance in the wheat kernel.

The purpose of the present investigation was to answer the question as to whether the corn and wheat products used in human nutrition exhibit similar dietary deficiencies as those of the whole grains. The bulk of the corn and wheat foods of the American dietary are derived from the wheat and corn kernel by means of a process of milling (roller mills) which is known to eliminate most of the germ and superficial layers of the grain. It, therefore, seemed to us a question of practical importance to determine whether the milling process improves, or causes a decrease in, the dietary value of the milled product. Moreover, it was desirable to decide whether or not the food additions made to flour (yeast, salt, milk) in the preparation of bread improve the nutritive value of this food.

Experimental.

The experiments were carried out on squabs, young albino mice, and a few hogs. Most of the work was done with wheat, and only a few incomplete experiments were made with foods obtained from corn.

We are not aware of any previous records where squabs have been used for studies on growth. For this reason the following details are given, as they may be of interest to workers in this field. The growth period of pigeons is extremely short, as will be seen from the records. Almost maximum body weight is reached, on an adequate diet, within 40 days after the squabs are hatched. The feathers develop gradually, and by the time full growth is reached the body is completely covered. The birds begin to fly at the age of about 40 days. This is usually followed by a slight loss of body weight, which is probably due to the strenuous muscular work performed in flying. It should be pointed out that squabs can not feed themselves during the first two weeks of life. During this period the parents feed the young by regurgitating food which has been softened in their crops. The function of the crop consists in the preparation of the cereal food for gastric digestion. It is very doubtful whether active digestion takes place within the crop, and it is more likely that this organ simply softens the food by means of water in order to facilitate its disintegration by the stomach. In the absence of the crop, gastric digestion of cereals would be a rather slow process, even in the case of the bird's stomach with its powerful muscular wall and the gravel which takes the place of millstones.

In order to obtain a sufficient number of squabs for experiments on growth, about 70 to 100 healthy pigeons were kept in a well-ventilated room containing numerous cages (wire screened), the doors of which were left open. Usually the birds built their nests in these cages and after laying the eggs the parents were caught, confined to the cage, and put on the diet to be tested for its growth-promoting properties. When it happened that eggs were laid outside of the cages, the pigeons were allowed to hatch and the young squabs were then transferred, with the nest and the parent birds, to the nearest cage. We found that it was impossible to move the eggs, as the birds refused to sit after the eggs had been handled. The sitting period of pigeons is about 17 days. The male bird sits from about 9 a. m. to 5 p. m.; the female from 5 p. m. to 9 a. m.

The stock pigeons were fed for nearly two years, while this work was in progress, on an exclusive diet of corn and wheat, crushed oyster shells, and river sand. Fresh running water was supplied. On this diet the birds bred very well throughout the year, with the exception of the moulting season.

The average egg weighed about 16 grams; the contents, minus the shell, weighed about 15 grams, and the weight of the squab immediately after hatching was about 13 grams. It was found that squabs which were below the average body weight and those that had difficulty in hatching, were of low vitality. The squabs were weighed as soon after hatching as possible and every three days thereafter during the morning hours (9 a. m.). The growth curve during the first 10 days is almost a straight line, slight deviations being due to variations of crop content. The birds which died as a result of a diet of inadequate composition were necropsied and the sciatic nerves examined for the presence of myelin degeneration.

The great advantage of using squabs for growth experiments is due to the possibility of immediately starting the newborn animal on a ration which is to be investigated. It is obvious that this can not be done when mammals are used.

The experiments with albino mice were carried out on young animals weighing approximately 6 to 8 grams and obtained from a healthy stock kept in the laboratory. Recent work has sufficiently demonstrated that mice are as well suited for growth experiments as albino rats. The animals were placed in wide glass jars with a wire screened top. Sawdust was used as bedding. Under these conditions the mice could be kept in excellent health on an adequate diet for nearly a year. The animals were weighed every three or four days.[1]

The hogs used were young animals, either purchased on the open market or raised in the laboratory. They were kept in stalls with a concrete floor. The bedding was wheat straw, some of which was eaten by the animals. Tap water was supplied. The experiments on hogs are somewhat complicated, as the straw and tap water may perhaps be considered as a source of inorganic salts and fat-soluble vitamine. However, this factor remained approximately constant in each experiment.

Food used.—When the whole wheat was fed to mice it was usually crushed in an ordinary kitchen mill. The wheat flour, either alone or with other foods, was made into cakes by means of water. The wet cakes were dried at 45° C. and broken up into small pieces. The white flour used was bought under the name of "patent" flour and came from one of the largest roller mills of the West. The wheat "middlings" were obtained from a roller mill in Washington, D. C. The "whole wheat" bread used was purchased in Washington, D. C., and the bakery volunteered the following information in regard to the food materials used in the preparation of this bread: Standard loaves were made from crushed whole wheat, with the addition of canned eggs, some salt, olive oil, molasses, compound lard, wheat bran, and pressed yeast. The accurate proportions of the various constitutents could not be obtained. The "white" bread was made from "highly milled" wheat flour, with the addition of sodium chloride, compound lard, yeast, and evaporated milk. For 900 standard loaves of this bread, 588 pounds of flour, 47 pounds of evaporated milk, and 8¾ pounds of pressed yeast were used.

In the experiments where the "white" bread was supplemented by other foods, the bread was first dried at 40 to 50° C., crushed in a mill, and mixed with the other food in the desired proportions. The casein was a purified preparation made in this laboratory. The crushed oyster shells, fed to the pigeons, consisted largely of calcium carbonate, with traces of organic matter. When the rations contained chemically pure calcium carbonate in place of the oyster shells, exactly the same results were obtained so far as the growth of squabs was concerned. The grit was

[1] The normal growth curve of mice was taken from the article by Mitchell, J., Biol. Chem., 1916, vol. 26, p. 24.

well-washed river sand, consisting mainly of silicates. The so-called "activated" Lloyd's reagent was used as a source of antineuritic vitamine.[1]

In some experiments the "inactive" Lloyd's reagent was included in the rations. Fuller's earth, which had not been in contact with the yeast filtrate, was used in this case. The highest proportion of activated Lloyd's reagent contained in any of the rations was 3 per cent. In most cases 0.6 per cent or 1.5 per cent were used with equal success. When the activated Lloyd's reagent forms 0.6 or 1.5 per cent of the ration, the total nitrogen derived from this source represents only 15 to 37 milligrams.

It should be pointed out that squabs do not well tolerate the addition of considerable quantities of fat to the diet. In some experiments, where 5 per cent of lard was incorporated in the ration, the birds showed diarrhea and poor growth, followed by decline and death.

Summary.

It seems superfluous to enter into a detailed discussion of the results obtained in this investigation, as the accompanying charts illustrate the results in a comprehensive manner. For this reason only the main points will be referred to in this summary.

1. The "highly milled" products are, without exception, inferior in dietary value, as regards growth, to foods prepared from the whole grain. It is rather surprising that such delicate organs as the gastro-intestinal tract of young mice can tolerate a diet containing a large amount of bran. This fact, however, does not necessarily mean that it is advantageous to include the bran in foods intended for human nutrition. On the contrary, the experiences with "war bread" would rather indicate that persons with delicate digestion are subject to temporary digestive disturbances as a result of a change from "white" bread to bread containing a considerable percentage of bran ("war bread"). On the other hand, from the standpoint of dietary completeness, a bread including all of the grain, with the exception of the superficial cellulose layer, is undoubtedly superior to the so-called white bread, made from "highly milled" flour, and would not possess the above-mentioned objectionable features.

2. The "white" bread used in these experiments was not adequate for maintaining normal growth, in spite of the fact that it was prepared with some evaporated milk and yeast. The most significant defect of "white" flour is the deficiency in antineuritic and fat-soluble vitamine; it is also deficient in adequate protein and inorganic salts.

3. A wheat flour, containing a considerable part of the germ and superficial layers of the grain, supports growth of mice and pigeons especially well when supplemented with inorganic salts. The same is true of "whole wheat" bread.

[1] It was prepared from autolyzed brewer's yeast by treatment with hydrochloric acid and filtration. This yeast filtrate was then treated with a special grade of fuller's earth, which removed a considerable part of the active vitamine from the yeast filtrate. The dried preparation was free of protein and gave negative tests for tryptophan, cystin, and tyrosin. No lysin could be isolated but the activated Lloyd's reagent contained a substance which in its reactions resembled histidine. The total nitrogen content of the dried reagent was about 2.5 per cent, and this consisted largely of adenine and other basic substances derived from yeast filtrate.

4. "Highly milled" corn grits, forming the exclusive food of young hogs, leads to failure of growth in these animals, whereas the whole corn kernel, supplemented by inorganic salts, promotes growth.

5. Newborn squabs are suitable animals for growth experiments.

6. No evidence of a toxic action of a whole wheat diet was obtained in the experiments on squabs which were fed on whole wheat meal, supplemented by a suitable salt mixture.

7. In the light of our present knowledge, it would appear that bread made from "whole wheat" flour, or old-fashioned corn meal, should be used in preference to "white" bread and "highly milled" corn foods, whenever the diet is restricted to these cereal foods to the more or less complete exclusion of other foods possessing greater dietary values.

Bibliography.

Hart, Halpin, and Steenbock. 1917. J. Biol. Chem., vol. 31, p. 415.
Hart and McCollum. 1914. J. Biol. Chem., vol. 19, p. 373.
McCollum, Simmonds, and Pitz. 1916. J. Biol. Chem., vol. 28, p. 153.
Mitchell. 1916. J. Biol. Chem., vol. 26, p. 24.

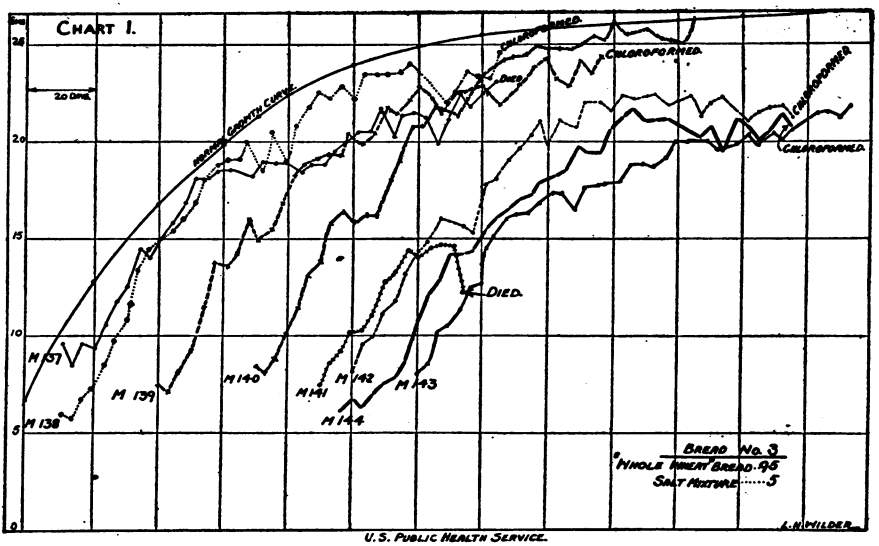

CHART 1.—Shows satisfactory growth of mice when "whole wheat" bread is supplemented with 5 per cent of salt mixture. Evidently the whole wheat bread used in this experiment was slightly deficient in inorganic salts, as seen from chart 2, where the bread was fed without the addition of the salt mixture. The composition of the salt mixture used in this investigation was as follows: NaCl, 0.50 gm.; K_2HPO_4, 1.21 gm.; $CaH_4(Po_4)$, H_2O, 0.256 gm.; Calcium lactate, 2.944 gm.; Ferric citrate, 0.100 gm.

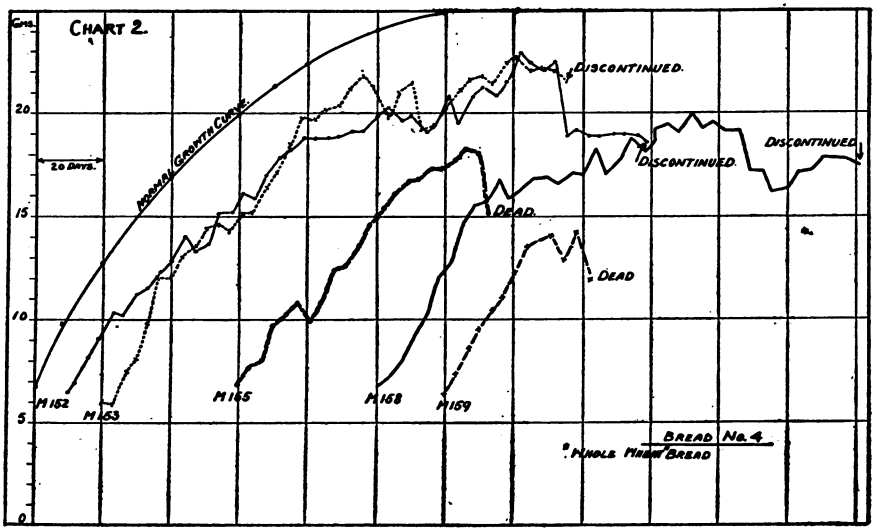

CHART 2.—Illustrates the growth of mice on "whole wheat" bread. The retardation of growth is mainly due to the deficiency of this diet in inorganic salts. (See chart 1.)

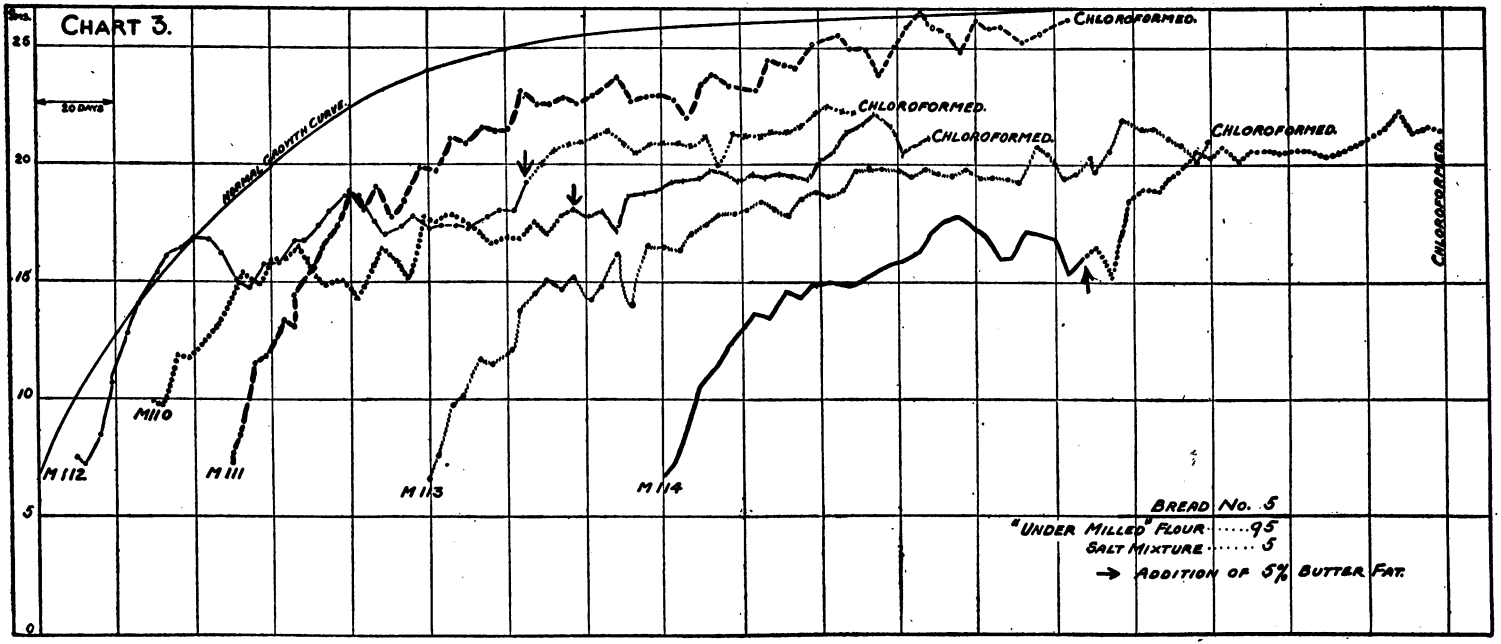

CHART 3.—Growth of mice. Shows beneficial effect of the addition of salt mixture to "undermilled" flour (compare with chart 4). Addition of 5 per cent butterfat to the diet (as indicated by arrows) increased rate of growth of mouse 114, but not of mice 110 and 112. From charts 3 and 4 it seems that this "undermilled" flour is deficient in certain inorganic salts and possibly fat soluble vitamine.

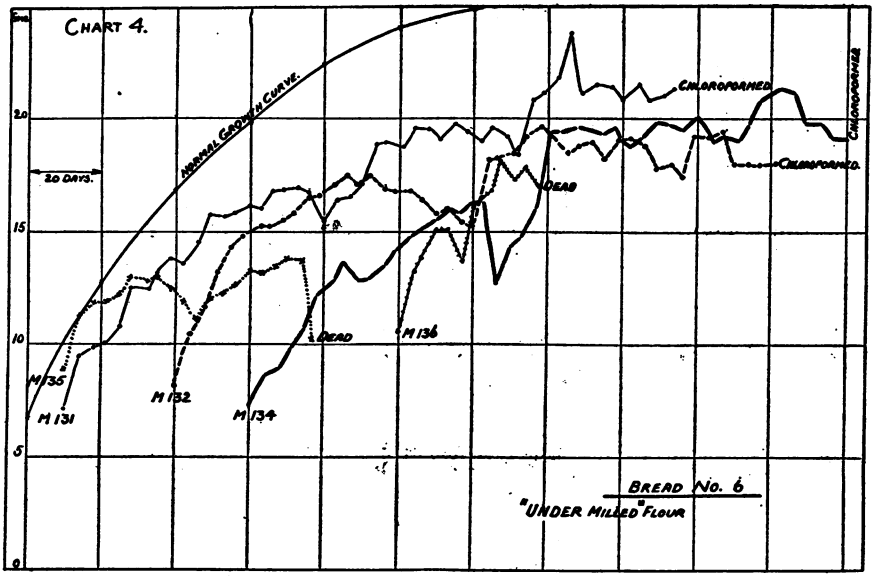

CHART 4.—Illustrates the subnormal growth of mice on a diet of "under milled" flour. This flour was obtained from a roller mill and was bought as "second clear." It contained 0.92 per cent P_2O_5. From the phosphorous content of this flour it would appear that this product is the grade of flour intermediate between a "first and second clear."

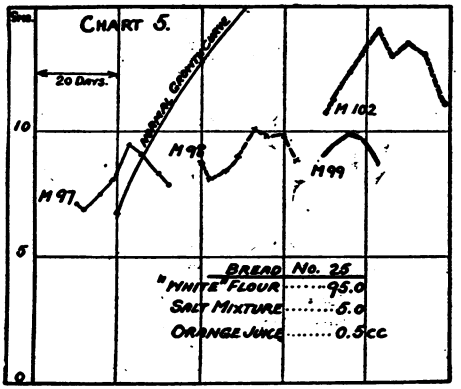

CHART 5.—Shows insignificant growth of mice when "white" flour is supplemented with a salt mixture. The orange juice was added to the drinking water with the idea of preventing scorbutic symptoms. The "white" flour was bought under the name of "patent" flour and contained 0.25 per cent of P_2O_5. The sciatic nerves of mouse 102, 96, and 97 showed marked myelin degeneration. These animals probably died of polyneuritis.

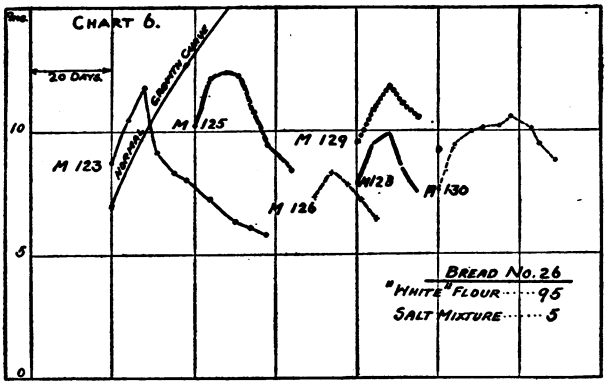

CHART 6.—Illustrates early failure of growth, followed by death of mice on a diet of "white" flour plus salt mixture. The sciatic nerves of these mice showed marked myelin degeneration. The results of this experiment are therefore identical with the one which is illustrated by chart 5.

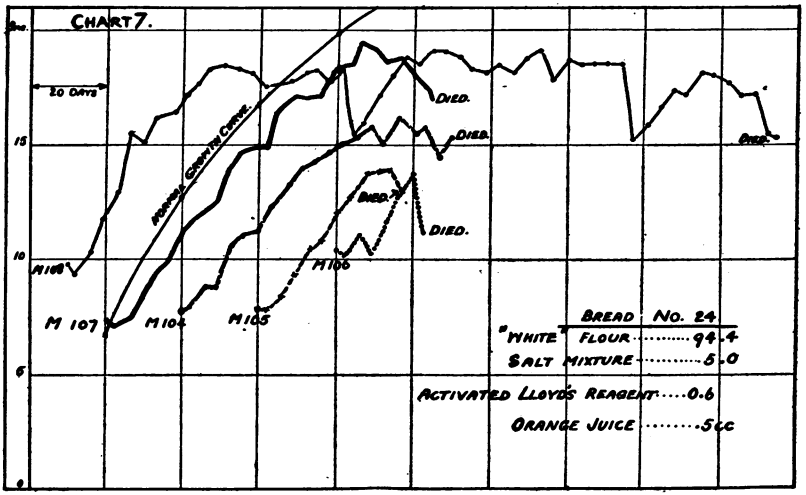

CHART 7.—Growth of mice. Illustrates beneficial effect of the addition of antineuritic vitamine in the form of activated Lloyd's reagent to a mixture of "white" flour and inorganic salts. Compare with charts 5 and 6. Bread No. 24 is not a complete diet, probably deficient in fat-soluble vitamine and certain essential amino acids.

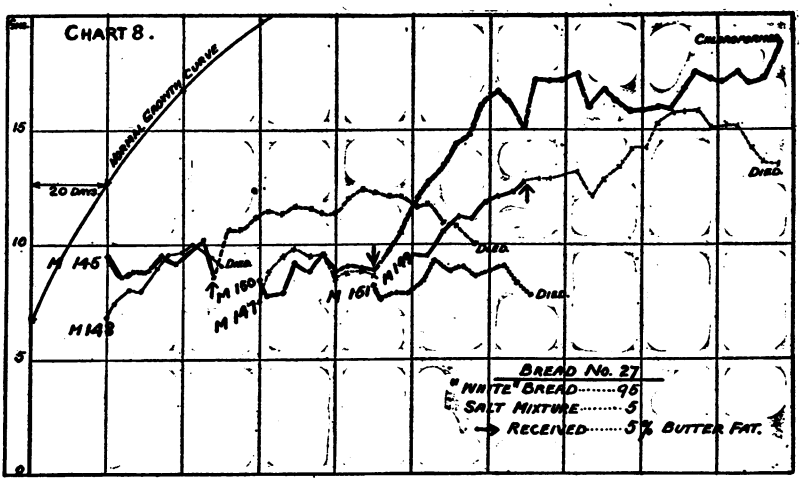

CHART 8.—Practically no growth (except in mouse 149) was obtained on a diet of "white" bread and salt mixture. The addition of 5 per cent butter fat (as indicated by arrows) caused considerable growth in mouse 150. Mice 145 and 149 showed somewhat better growth as a result of the butter-fat addition, but both animals died later on in the experiment. The sciatic nerve of one animal of this group and which was examined after death showed considerable myelin degeneration. (Indication that this diet is deficient in antineuritic substance.)

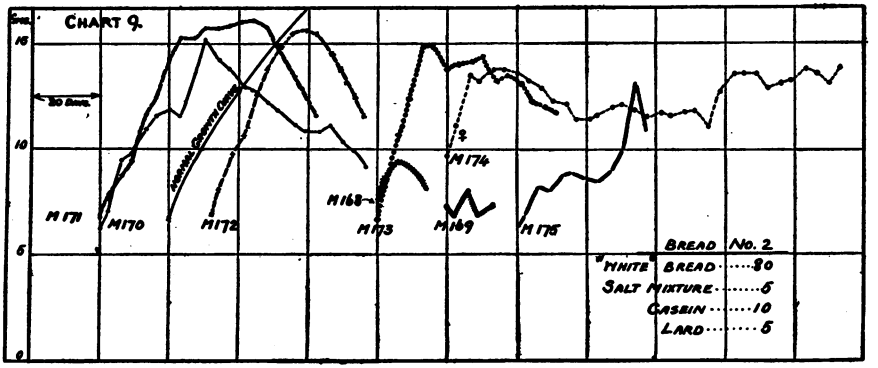

CHART 9.—Shows beneficial effect on growth of mice as a result of the addition of casein and lard to bread No. 27 (see chart 8). All of the animals died, however, with the exception of mouse 174. The "white" bread is evidently deficient in antineuritic vitamine and amino acids, essential for normal growth. Bread No. 2 is also deficient in antineuritic vitamine (compare with chart 11). Bread No. 2 is same as bread 27, except that the former is supplemented by casein and lard.

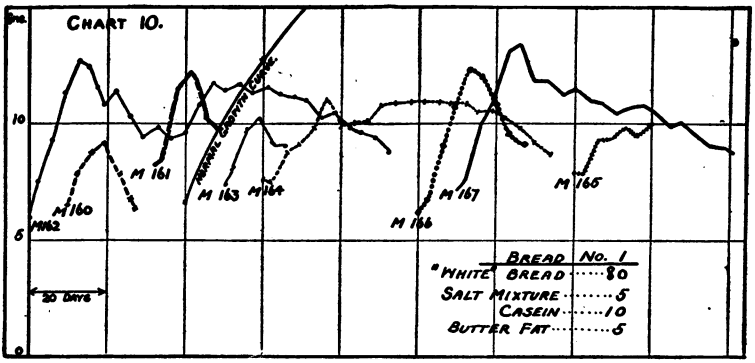

CHART 10.—Illustrates deficiency of bread No. 1 in antineuritic vitamine. Compare with chart 12. All the mice of this series died after periods ranging from 16 to 93 days.

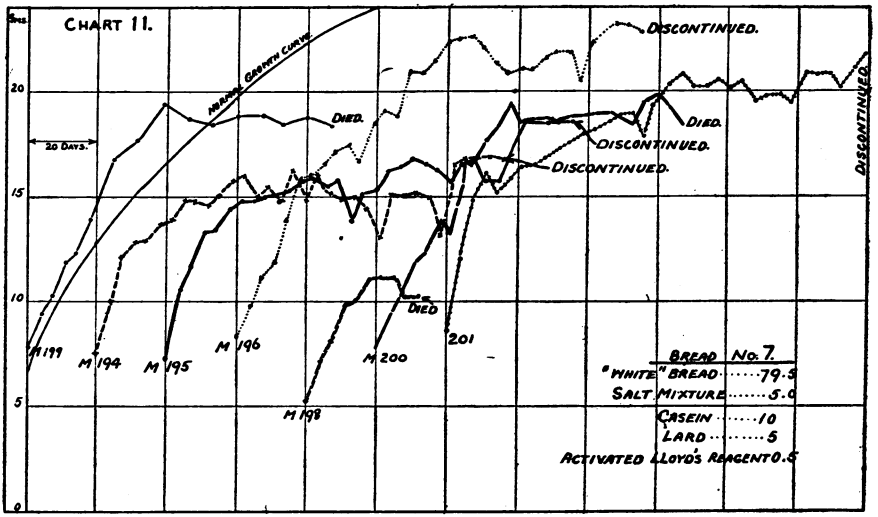

CHART 11.—Bread No. 7, which is deficient in fat-soluble vitamine, leads to fairly good growth in mice. Mice 196 and 201 showed normal growth for a considerable length of time (120 days) and reached nearly maximum weight. The other mice of this series stopped growing after having been on this diet for 40 days.

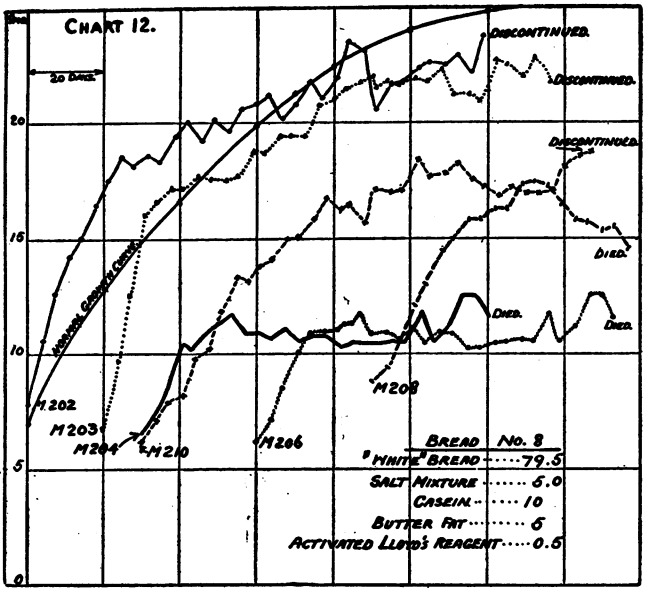

CHART 12.—Illustrates the fairly good growth of mice on bread No. 8. Completion of growth was not obtained with all the mice of this series. Mice 204 and 206 did not grow well after having reached about 12 gm. of body weight.

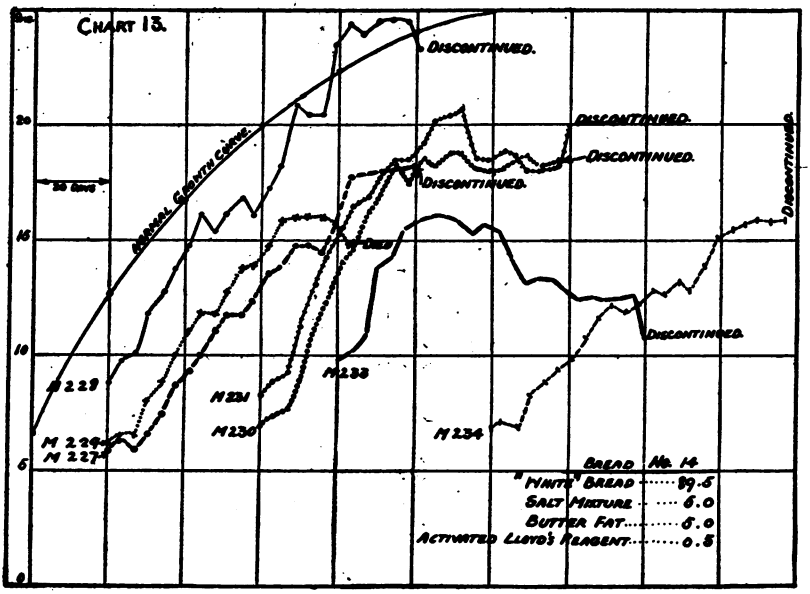

CHART 13.—Growth of mice.

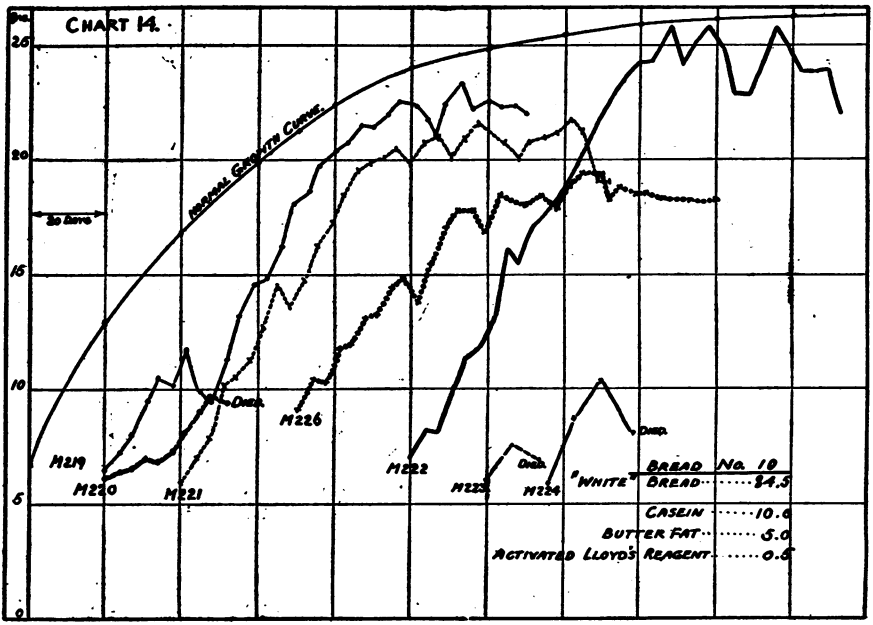

CHART 14.—Shows retardation of growth of mice on bread No. 10, deficient in inorganic salts.

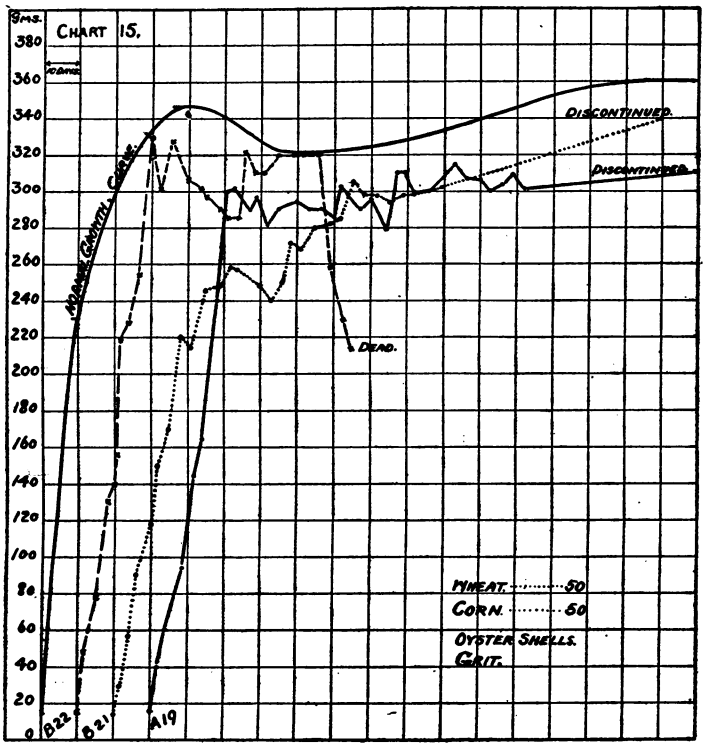

CHART 15.—Shows satisfactory growth of squabs on a diet limited to the corn and wheat kernel, supplemented by the addition of calcium carbonate (oyster shells). The oyster shells were crushed and fed to the parents ad libitum. Squab B22 reached normal body weight in 20 days, but died suddenly at the age of 75 days. The cause of death is unknown. The other two squabs of this series showed normal growth and development and lived for 150 days, when the experiment was discontinued. The appearance of the birds at this time was normal in every respect.

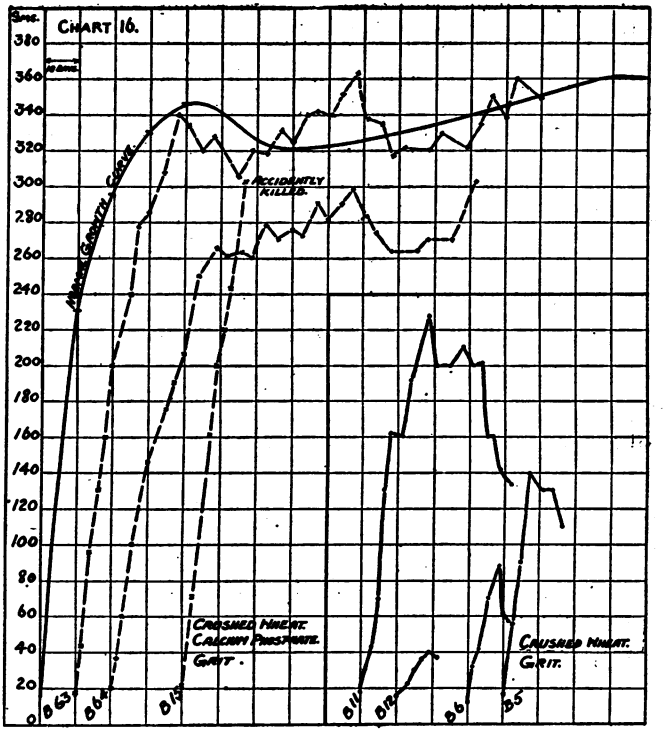

CHART 16.—Shows failure of growth of squabs on a diet of whole wheat alone. The birds evidently suffered from privation of mineral salts. The skeleton was poorly developed, calcification being very deficient. When the wheat kernel was supplemented by the addition of calcium phosphate practically normal growth was obtained. Sciatic nerve of Squab B11, B5, and B6 shows no myelin degeneration.

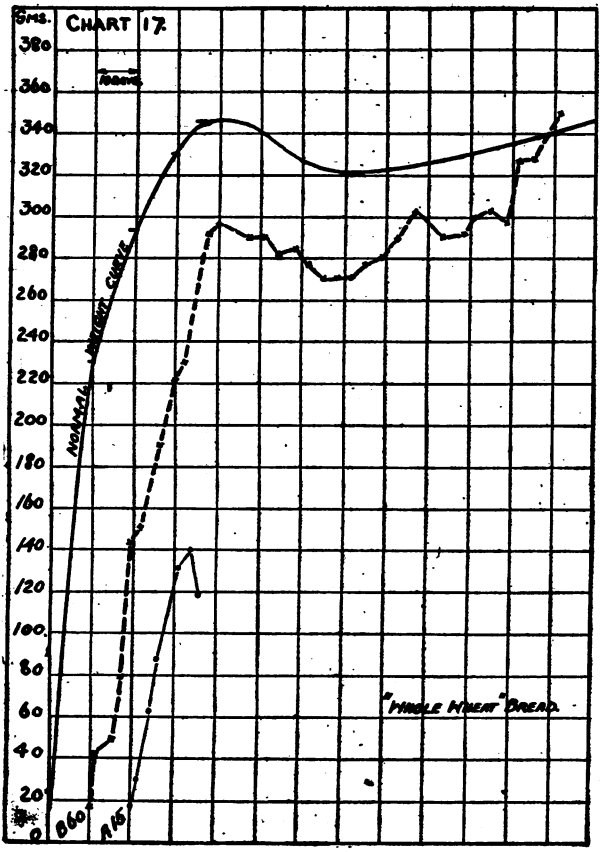

CHART 17.—Shows delayed growth and failure of growth of squabs on "whole wheat bread." This food is deficient in calcium salts. Compare with chart 18. Sciatic nerve of squab A15 did not reveal any myelin degeneration.

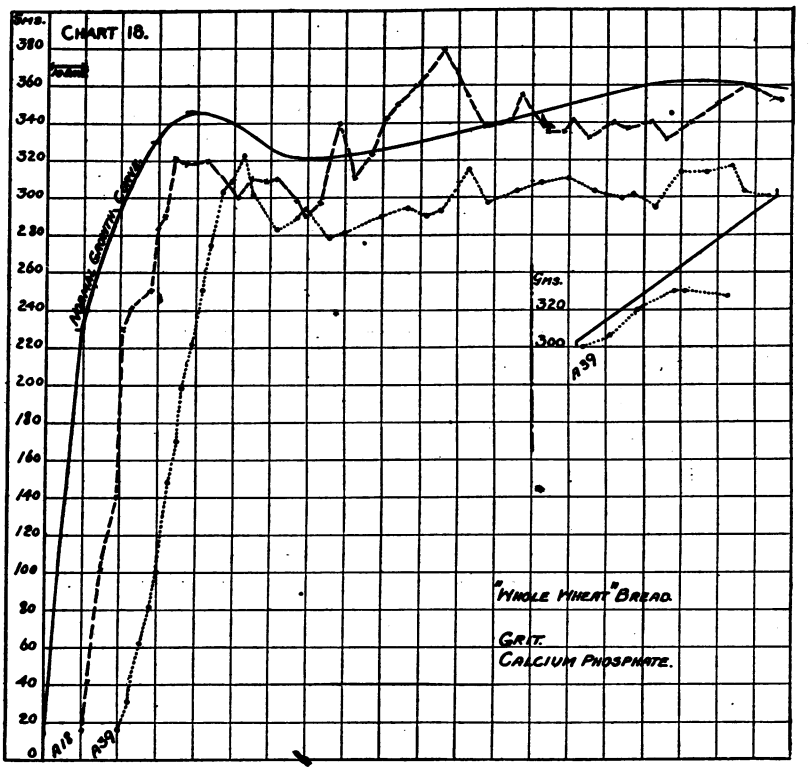

CHART 18.—Illustrates normal growth and development of squabs on a diet of "whole wheat" bread and calcium phosphate. The parents of these two squabs raised two other pairs of squabs while being fed on this diet. This proves that growth, reproduction, and maintenance of normal nutrition are possible on a simple diet as "whole wheat" bread supplemented by calcium salts.

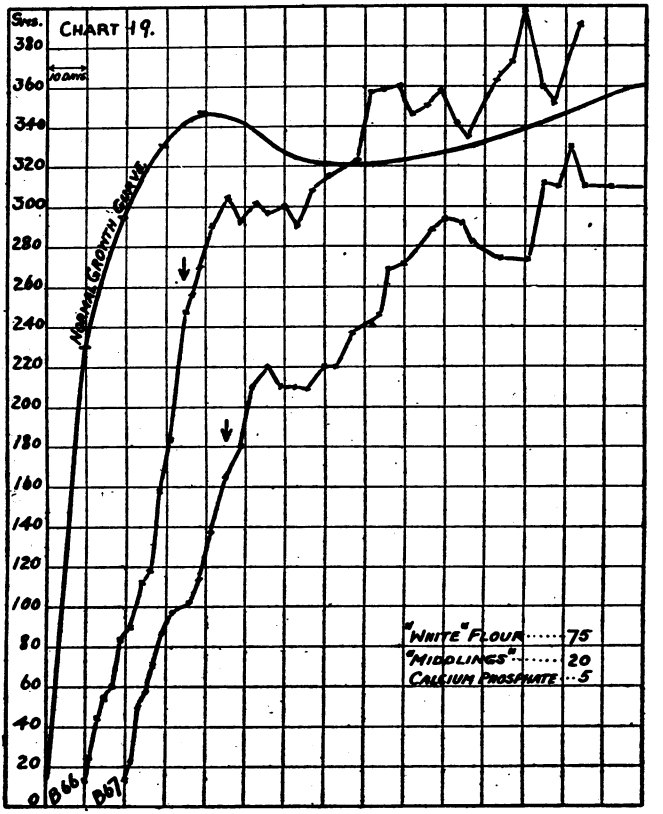

CHART 19.—Growth of squabs. Shows beneficial effect of addition of "middlings" and calcium phosphate to "highly milled" flour. The "middlings" fed with the mixture for the first 25 days of the experiment had the appearance of wheat bran and contained 1.88 per cent P_2O_5. The mixture of "white" flour and "middlings" contained 1.21 per cent P_2O_5. Compare this chart with chart 28.

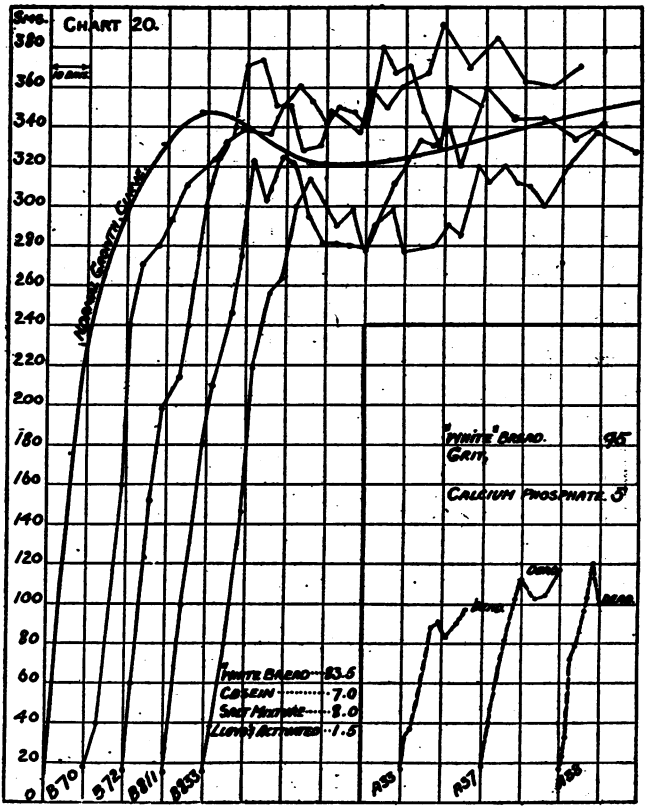

CHART 20.—Illustrates failure of growth, followed by death of squabs, on a diet of "white" bread and calcium phosphate (A33, A37, and A38). When the "white" bread is further supplemented by casein and a preparation containing antineuritic vitamine, normal growth and development results. Squabs B70, 72, 811, 833 reached nearly maximum normal weight at the age of about 30 days. Sciatic nerves of A33, A37, and A38 exhibit myelin degeneration.

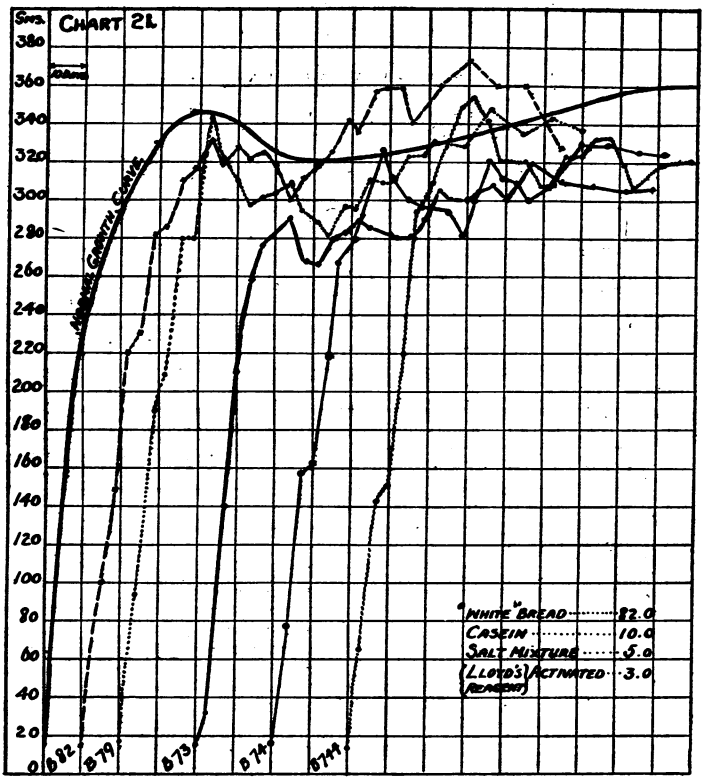

CHART 21.—Shows satisfactory growth of squabs when the "white" bread is supplemented by protein of proper composition, inorganic salts, and antineuritic vitamine. In this experiment the amount of the latter food accessory is twice as large as in the experiments illustrated by chart 20.

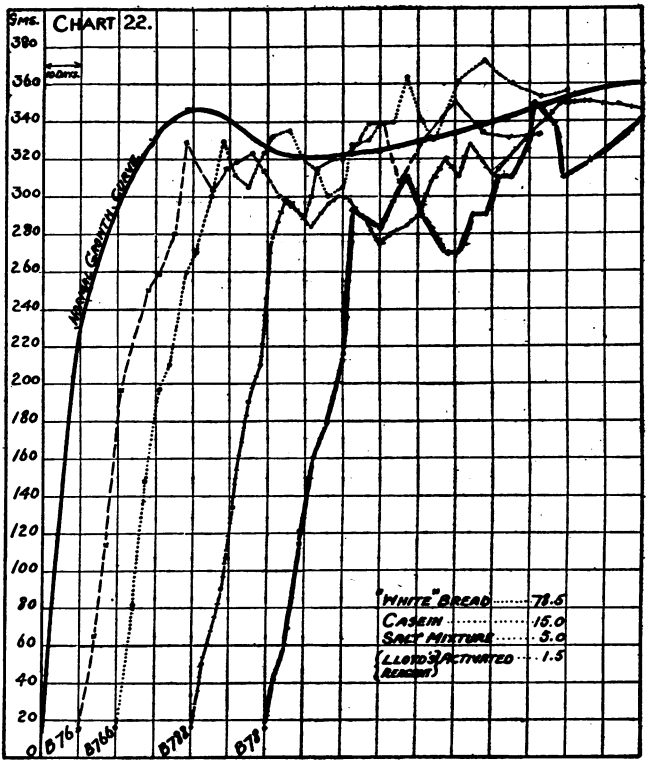

CHART 22.—Growth of squabs. The diet used in this experiment must be considered as physiologically complete. The "white" bread evidently contains sufficient fat-soluble vitamine (derived from evaporated milk) to render this ration adequate for growth.

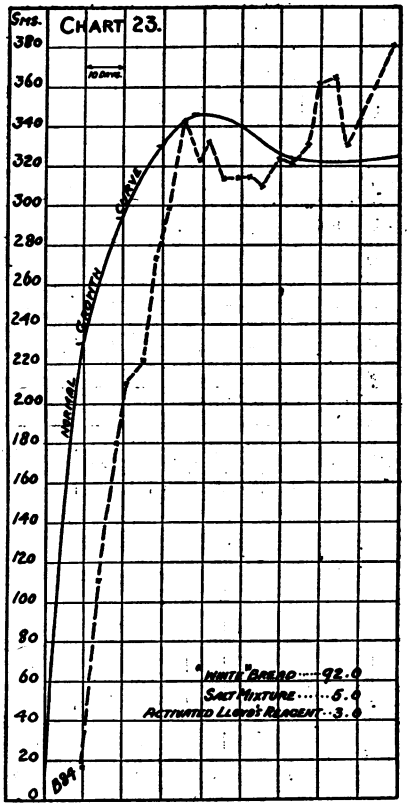

CHART 23.—Shows good growth of a squab on a diet of "white bread," which was supplemented by inorganic salts and antineuritic vitamine. Evidently the "white bread" used in this investigation was prepared with sufficient evaporated milk to correct the deficiency of the highly milled flour in fat-soluble vitamine and protein of proper composition.

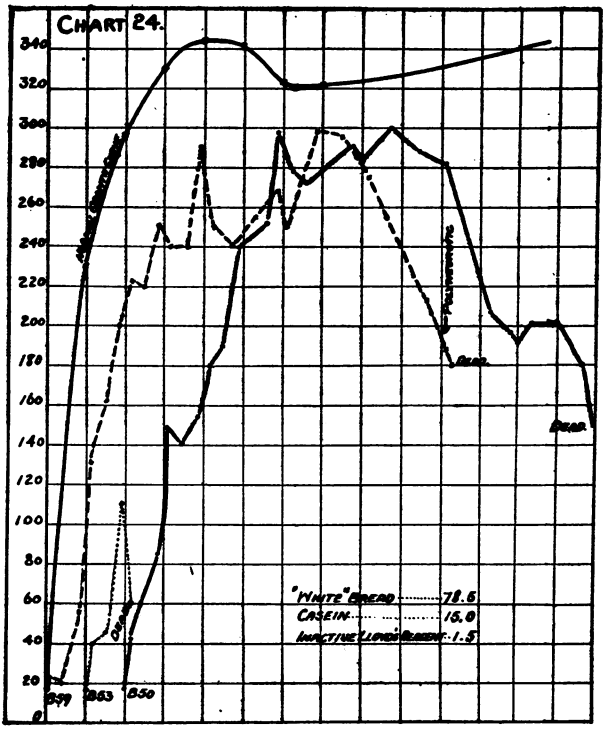

CHART 24.—Shows subnormal growth of squabs on a diet which is deficient in inorganic salts and antineuritic vitamine. The inactive Lloyd's reagent which was added to the diet had not been treated with autolyzed yeast and therefore did not contain the antineuritic substance. Both birds developed polyneuritic symptoms shortly before death.

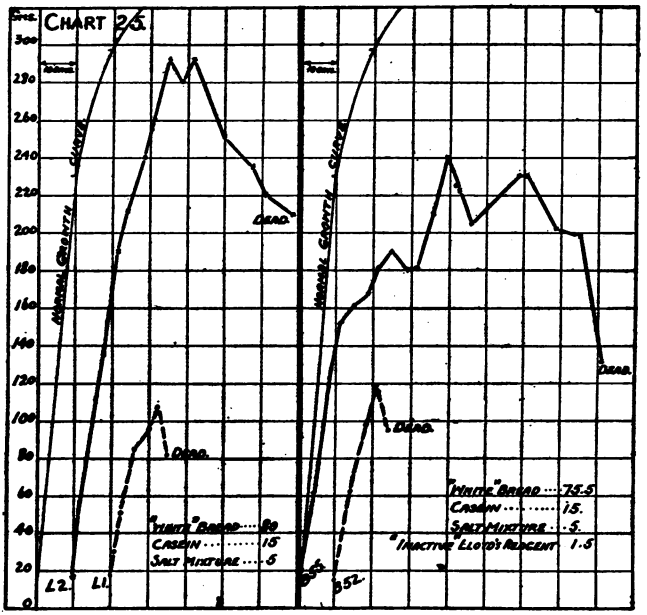

CHART 25.—Shows subnormal growth of squabs, followed by polyneuritis and death, when the "white" bread is supplemented by casein and a salt mixture (L2 and L1). The addition of "inactive" Lloyd's reagent, which has not been treated with autolyzed yeast, does not alter the result (B55 and B52).

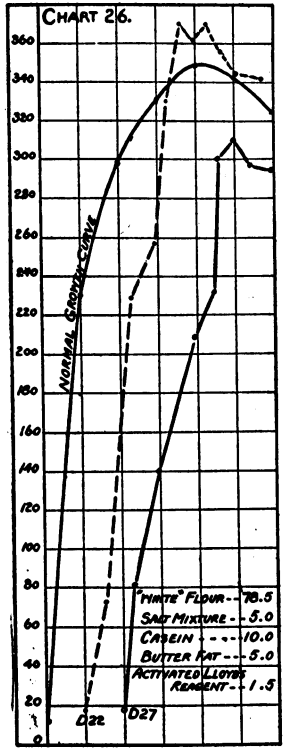

CHART 26.—Shows that squabs grow normally when the "white" flour is supplemented by inorganic salts, protein of proper composition, fat soluble vitamine, and antineuritic vitamine.

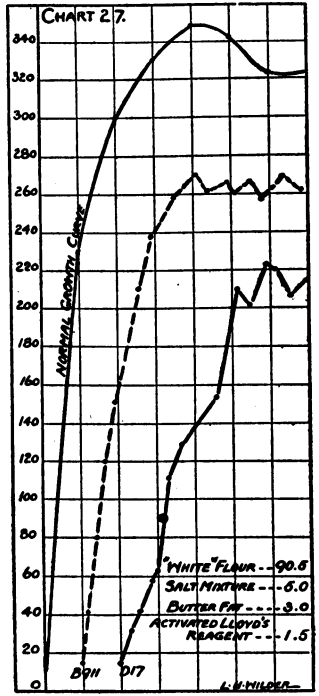

CHART 27.—Illustrates subnormal growth of squabs on a diet which is deficient in protein of proper composition. Compare with charts 28 and 26.

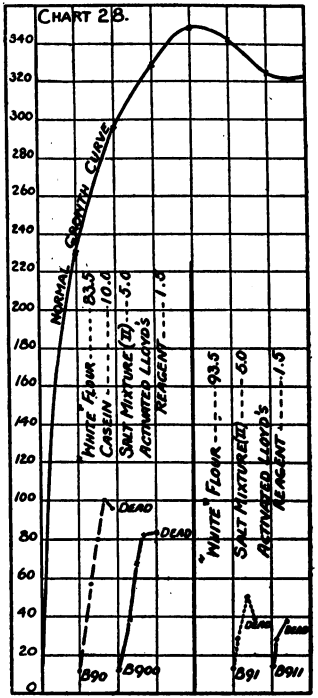

CHART 28.—Growth of squabs on diets deficient in fat soluble vitamine (B90 and B900) or fat soluble vitamine and protein of proper composition (B91 and B911).

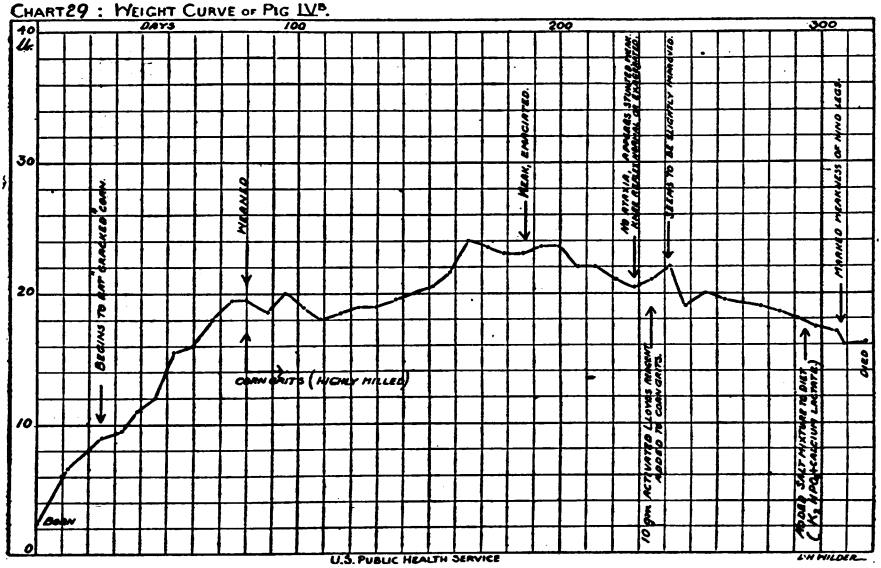

CHART 29.—Illustrates the failure of growth of young hogs on a diet of "highly milled" corn grits. This food was obtained from a roller mill and represents the endosperm of the corn kernel. The animal was born of a hog which had been raised in the laboratory on a diet of cracked corn, wheat straw, and tap water. On the corn grits the animal did not gain more than a few pounds during nine months, in spite of the addition of a supplementary salt mixture and antineuritic vitamine. The animal finally died. The necropsy revealed the following abnormalities: Emphysema of lungs, chronic gastritis, small injected areas in small intestine, chronic passive congestion of liver, congestion of spleen, no scorbutic changes. Sciatic shows marked myelin degeneration. Another pig of the same litter showed a similar growth curve on a diet of corn grits. Here also correction of the salt content and antineuritic vitamine of the diet did not prevent death. Necropsy findings were the same as in Pig IVB.

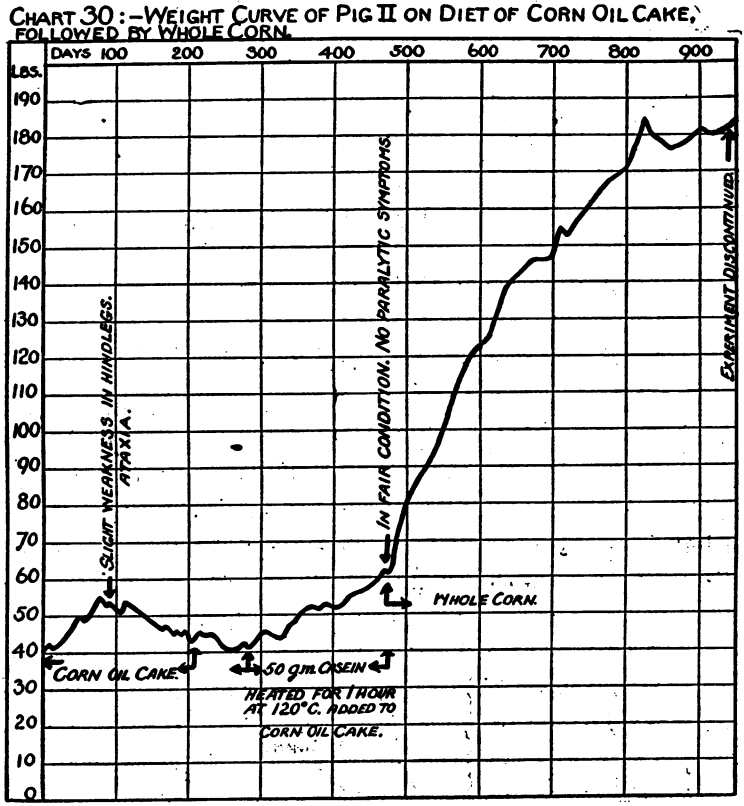

CHART 30.—Illustrates failure of growth of a hog fed on corn oil cake. This product is obtained commercially on a large scale by pressing out the oil from the corn embryo. As soon as this diet was changed to whole corn a rapid increase in the rate of growth followed. This animal reached nearly full size and was in excellent condition at the end of the experiment. Compare this chart with chart 29, where "highly milled" corn grits was fed.

BIOLOGICAL PRODUCTS.

ESTABLISHMENTS LICENSED FOR THE PROPAGATION AND SALE OF VIRUSES, SERUMS, TOXINS, AND ANALOGOUS PRODUCTS.

The following table contains a list of the establishments holding licenses issued by the Treasury Department in accordance with the act of Congress approved July 1, 1902, entitled "An act to regulate the sale of viruses, serums, toxins, and analogous products in the District of Columbia, to regulate interstate traffic in said articles, and for other purposes."

The licenses granted to the following establishments for the products mentioned do not imply an indorsement of the claims made by the manufacturers for their respective preparations. The granting of a license means that inspections of the establishment concerned and laboratory examinations of samples of its products are made regularly to insure the observance of safe methods of manufacture, to ascertain freedom from contamination, and to determine the potency of diphtheria antitoxin, tetanus antitoxin, antidysenteric serum, antimeningococcic serum, antipneumococcic serum, and typhoid vaccine, the only products for which potency standards or tests have been established.

The enumeration of the products is as follows: Serums are placed first, the antitoxins, being the older and more important, heading the list. The other products called antigens because they are supposed to stimulate the production of antibodies are arranged generally in the order of their origin, those considered most important being placed first. The items in each class are arranged alphabetically.

The order may be resumed thus:

1. Antitoxins (alphabetically).
2. Other serums (alphabetically).
3. Vaccine virus.
4. Rabies vaccine.
5. Tuberculins—
   - Old.
   - T. R.
   - B. E.
   - B. F.
   - Miscellaneous.
6. Bacterial vaccines (alphabetically by bacteria).
7. Sensitized bacterial vaccines (alphabetically by bacteria).
8. Miscellaneous products (alphabetically).

Establishments Licensed and Products for which Licenses have been Issued.

AMERICAN ESTABLISHMENTS.

Parke, Davis & Co., Detroit, Mich.—License No. 1:

Diphtheria antitoxin; tetanus antitoxin; antigonococcic serum; antimeningococcic serum; antipneumococcic serum; antistreptococcic serum; hemostatic serum (Lapenta); normal horse serum, thyroidectomized horse serum; vaccine virus; rabies vaccine (Cumming); tuberculin old; tuberculin T. R.; tuberculin B. E.; tuberculin B. F.; bacterial vaccines made from acne bacillus, acne diplococcus, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, prodigiosus bacillus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus; cholera prophylactic (Strong); diphtheria toxin-antitoxin mixture; modified bacterial derivatives prepared from colon bacillus, diphtheria bacillus, gonococcus, paratyphoid bacillus A, paratyphoid bacillus B, pneumococcus, pyocyaneus bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus and typhoid bacillus; pollen extract.

H. K. Mulford Co., Philadelphia, Pa.—License No. 2:

Diphtheria antitoxin; tetanus antitoxin; antianthrax serum; antidysenteric serum; antimelitensis serum; antimeningococcic serum; antipneumococcic serum; antistreptococcic serum; normal horse serum; vaccine virus; rabies vaccine; tuberculin old; tuberculin T. R.; tuberculin B. E.; tuberculin B. F.; tuberculin proteose-free (Lyons); bacterial vaccines prepared from acne bacillus, cholera vibrio, colon bacillus, diphtheria bacillus, dysentery bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, plague bacillus, pneumococcus, pseudodiphtheria bacillus, pyocyaneus bacillus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus; sensitized bacterial vaccines prepared from acne bacillus, cholera vibrio, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus; pollen extract.

The Cutter Laboratory, Berkeley, Cal.—License No. 8:

Diphtheria antitoxin; tetanus antitoxin; antimeningococcic serum; antipneumococcic serum; antistreptococcic serum; normal horse serum; vaccine virus; rabies vaccine; tuberculin old; tuberculin T. R.; tuberculin B. E.; tuberculin B. F.; bacterial vaccines prepared from acne bacillus, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus.

Bureau of Laboratories, Department of Health, New York City.—License No. 14:

Diphtheria antitoxin; tetanus antitoxin; antimeningococcic serum; antipneumococcic serum; normal horse serum; vaccine virus; rabies vaccine; tuberculin old; and bacterial vaccines prepared from gonococcus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus; diphtheria toxin-antitoxin mixture.

National Vaccine and Antitoxin Institute, Washington, D. C.—License No. 16:

Diphtheria antitoxin; tetanus antitoxin; normal horse serum; rabies vaccine; bacterial vaccines prepared from acne bacillus, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, micrococcus tetragenus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, pyocyaneus bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus.

Lederle Antitoxin Laboratories, Pearl River, N. Y.—License No. 17:

Diphtheria antitoxin, tetanus antitoxin, antianthrax serum, antidysenteric serum, antigonococcic serum, antimeningococcic serum, antipneumococcic serum, antistreptococcic serum, normal horse serum, vaccine virus, rabies vaccine, tuberculin B. F., tuberculin bacillary suspension, bacterial vaccines prepared from acne bacillus, cholera vibrio, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, plague bacillus, pneumococcus, pseudodiphtheria bacillus, pyocyaneus bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus, diphtheria toxin-antitoxin, pollen extract.

Bacterio-Therapeutic Laboratory, Asheville, N. C.—License No. 23:

Tuberculin old, tuberculin B. E., watery extract of tubercle bacilli (von Ruck), modified tubercle bacillus derivative (von Ruck).

Dr. G. H. Sherman, 3334 Jefferson Avenue, Detroit, Mich.—License No. 30:

Bacterial vaccines prepared from acne bacillus, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, nonvirulent tubercle bacillus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus.

Hygienic Laboratory, California State Board of Health, Berkeley, Cal.—License No. 40:
Rabies vaccine, sensitized sedimented typhoid vaccine (Gay-Claypole).

The Abbott Laboratories, 4735 East Ravenswood Avenue, Chicago, Ill.—License No. 43:
Bacterial vaccines prepared from acne bacillus, colon bacillus, Friedländer bacillus, gonococcus, micrococcus catarrhalis, pertussis bacillus pneumococcus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus.

Dr. W. T. McDougall, 640 Minnesota Avenue, Kansas City, Kans.—License No. 49:
Rabies vaccine.

St. Louis Pasteur Institute, 928 North Grand Avenue, St. Louis, Mo.—License No. 50:
Rabies vaccine (dilution method).

The Upjohn Co., Kalamazoo, Mich.—License No. 51:
Bacterial vaccines prepared from colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, micrococcus catarrhalis, micrococcus tetragenus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus.

E. R. Squibb & Sons' Research and Biological Laboratories, New Brunswick, N. J.—License No. 52:
Diphtheria antitoxin, tetanus antitoxin, antigonococcic serum, antimeningococcic serum, antipneumococcic serum, antistreptococcic serum, normal horse serum, vaccine virus, rabies vaccine, bacterial vaccines prepared from acne bacillus, cholera vibrio, colon bacillus, dysentery bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, ozena bacillus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, pyocyaneus bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus, leucocytic extract from the horse.

Laboratory of Clinical Pathology, 1208 Wyandotte Street, Kansas City, Mo.—License No. 53:
Rabies vaccine.

Dr. James McI. Phillips, 2057 North High Street, Columbus, Ohio.—License No. 54:
Rabies vaccine.

Eli Lilly & Co., Indianapolis, Ind.—License No. 56:
Diphtheria antitoxin, tetanus antitoxin, antistreptococcic serum, normal horse serum, normal sheep serum, vaccine virus, rabies vaccine (Harris), tuberculin old, tuberculin T. R., tuberculin B. E., tuberculin B. F., bacterial vaccines prepared from acne bacillus, cholera vibrio, colon bacillus, diphtheria bacillus, Friedländer bacillus, gonococcus, influenza bacillus, meningococcus, micrococcus catarrhalis, micrococcus tetragenus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, plague bacillus, pneumococcus, pyocyaneus bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus.

Swan Myers Co., 219 North Senate Avenue, Indianapolis, Ind.—License No. 58:
Bacterial vaccines prepared from acne bacillus, colon bacillus, Friedländer bacillus, gonococcus, influenza bacillus, micrococcus catarrhalis, micrococcus tetragenus, paratyphoid bacillus A, paratyphoid bacillus B, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus.

Greeley Laboratories (Inc.), 655 Huntington Avenue, Boston, Mass.—License No. 60:
Bacterial vaccines prepared from acne bacillus, colon bacillus, gonococcus, micrococcus catarrhalis, pertussis bacillus, pneumococcus, pseudodiphtheria bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, and streptococcus.

Gilliland Laboratories, Ambler, Pa.—License No. 63:
Diphtheria antitoxin; tetanus antitoxin; normal horse serum; vaccine virus; rabies vaccine; tuberculin, old; tuberculin, T. R.; tuberculin B. E.; tuberculin B. F.; bacterial vaccine prepared from the typhoid bacillus.

Antitoxin and Vaccine Laboratory, Massachusetts State Department of Health, Boston, Mass.—License No. 64:
Diphtheria antitoxin; vaccine virus; bacterial vaccines prepared from paratyphoid bacillus A, paratyphoid bacillus B, and typhoid bacillus.

United States Standard Serum Co., Woodworth, Wis.—License No. 65:
Diphtheria antitoxin.

FOREIGN ESTABLISHMENTS.

Institut Pasteur de Paris, Paris, France.—License No. 11. Selling agents for the United States: Pasteur Laboratories of America, 366 West Eleventh Street, New York City:
Diphtheria antitoxin; tetanus antitoxin; venom antitoxin; antidysenteric serum; antimeningococcic serum; antiplague serum; antistreptococcic serum; bacterial vaccine prepared from plague bacillus.

Burroughs, Wellcome & Co., London, England.—License No. 18:
Diphtheria antitoxin; tetanus antitoxin; anticolon bacillus serum; antidysenteric serum; antigonococcic serum; antimeningococcic serum; antistaphylococcic serum; antistreptococcic serum; antityphoid serum; normal horse serum; tuberculin, old; tuberculin, T. R.; tuberculin, B. E.; tuberculin, B. F.; tuberculin (Wellcome); bacterial vaccines prepared from acne bacillus, cholera vibrio, colon bacillus, influenza bacillus, gonococcus, micrococcus catarrhalis, micrococcus melitensis, pneumococcus, septus bacillus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, streptococcus, and typhoid bacillus.

Swiss Serum and Vaccine Institute, Berne, Switzerland—License No. 21:
Diphtheria antitoxin; tetanus antitoxin; antidysenteric serum; antimeningococcic serum; antiplague serum; antipneumococcic serum; antistreptococcic serum; tuberculin, old; bacterial vaccines prepared from cholera vibrio, colon bacillus, plague bacillus, pneumococcus, staphylococcus albus, staphylococcus aureus, streptococcus, and typhoid bacillus.

Institut Bactériologique de Lyon, Lyon, France.—License No. 22:
Diphtheria antitoxin; normal goat serum.

Dr. Carl Spengler, Davos-Platz, Switzerland.—License No. 35:
Antitubercle blood (Spengler).

Laboratorio di Terapia Sperimentale (Bruschettini), Genoa, Italy.—License No. 38:
Tuberculosis serum extract (Bruschettini); tuberculosis extract (Bruschettini).

Inoculation Department, St. Mary's Hospital, London, England.—License No. 48:
Bacterial vaccines prepared from acne bacillus, gonococcus, influenza bacillus, pneumococcus, staphylococcus albus, staphylococcus aureus, staphylococcus citreus, and streptococcus; pollen extract.

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 MAY 28.

CAMP BEAUREGARD ZONE, LA.

	Cases.
Alexandria:	
Gonorrhea	2
Malaria	3
Measles	1
Mumps	23
Smallpox	7
Tuberculosis	2
Typhoid fever	1
Pineville:	
Mumps	2
Rural district:	
Malaria	2

CAMP BOWIE ZONE, TEX.

Fort Worth:	
Chicken pox	8
Gonorrhea	16
Malaria	1
Measles	2
Mumps	8
Scarlet fever	1
Smallpox	33
Syphilis	19
Tuberculosis	2
Typhoid fever	2
Whooping cough	1

CAMP DEVENS ZONE, MASS.

Chicken pox:	
Lunenburg	2
Measles:	
Forge Village	2
Townsend	1
Westford	4
Tuberculosis, pulmonary:	
Ayer	1
Whooping cough:	
Ayer	1

CAMP DONIPHAN ZONE, OKLA.

Cerebrospinal meningitis:	
Elgin	1
Smallpox:	
Cache	6
Fletcher	2
Letitia	1

CAMP DONIPHAN ZONE, OKLA—continued.

	Cases.
Syphilis:	
Lawton	1
Typhoid fever:	
Lawton	1
Whooping cough:	
Lawton	1

CAMP EBERTS ZONE, ARK.

Chancroid:	
England	1
Chicken pox:	
Carlisle	1
Cabot	2
Diphtheria:	
Scott, route 2	1
Gonorrhea:	
Carlisle	1
Lonoke	2
Kerr	1
Kerr, route 1	1
Malaria:	
England	1
Carlisle	2
Lonoke	2
Kerr	1
Kerr, route 1	1
Cabot	2
Cabot, route 1	1
Measles:	
England, route 1	1
Ward	1
Cabot, route 3	4
Austin	1
Austin, route 2	4
Mumps:	
England	1
Lonoke	1
County Farm	3
Scott, route 1	2
Pellagra:	
Lonoke	1
Smallpox:	
England	2
Carlisle	1
Kerr, route 1	1
Scott, route 1	1

CAMP EBERTS ZONE, ARK.—continued.

Syphilis:	Cases.
Lonoke	2
Scott	1
Tuberculosis:	
Scott, route 1	1
Whooping cough:	
England, route 2	1

CAMP FUNSTON ZONE, KANS.

Junction City:	
Mumps	3
Manhattan:	
Measles	1
Mumps	4
Smallpox	2
Whooping cough	1

CAMP GORDON ZONE, GA.

Cerebrospinal meningitis:	
Decatur	1
Chicken pox:	
Atlanta	1
Diphtheria:	
Atlanta	1
Gonorrhea:	
Atlanta	8
Hookworm:	
Atlanta	1
Measles:	
Atlanta	4
Decatur	3
Mumps:	
Atlanta	13
Scarlet fever:	
Atlanta	1
Hapeville	1
Smallpox:	
Atlanta	9
Armour	1
Syphilis:	
Atlanta	1
Doraville	1
Tuberculosis:	
Atlanta	9
Tucker	1
Whooping cough:	
Atlanta	5

CAMP GREENE ZONE, N. C.

Charlotte Township:	
Chicken pox	4
Chancroid	3
Gonorrhea	13
Measles	7
Syphilis	9
Tuberculosis	2
Whooping cough	41

GULFPORT HEALTH DISTRICT, MISS.

Gulfport Health District:	
Malaria	9
Mumps	4
Typhoid fever	2

CAMP HANCOCK ZONE, GA.

Augusta:	Cases.
Cerebrospinal meningitis	1
Chicken pox	5
German measles	1
Gonorrhea	1
Malaria	3
Measles	4
Tuberculosis, pulmonary	2
Typhoid fever	1
Whooping cough	1

CAMP JOSEPH E. JOHNSTON ZONE, FLA.

Chicken pox:	
Jacksonville	5
Dysentery:	
Jacksonville	5
Lackawanna	1
Malaria:	
Fishers Corner	1
Measles:	
Jacksonville	7
Fishers Corner	4
Mumps:	
Jacksonville	7
Panama	1
Pellagra:	
Jacksonville	1
Pneumonia:	
Jacksonville	2
Syphilis:	
Fishers Corner	1
Panama	1
Trachoma:	
Jacksonville	1
Tuberculosis:	
Jacksonville	3
Orange Park	1
Ortega	1
Typhoid fever:	
Jacksonville	4
Whooping cough:	
Jacksonville	21
Lackawanna	3

FORT LEAVENWORTH ZONE, KANS.

Leavenworth:	
Measles	1
Pneumonia, lobar	1
Smallpox	5
Leavenworth County:	
Measles	21
Pneumonia, lobar	2
Scarlet fever	2
Smallpox	5
Typhoid fever	1

CAMP LEE ZONE, VA.

Chancroid:	
Petersburg	1
Chicken pox:	
Prince George County	1
Gonorrhea:	
Petersburg	6

CAMP LEE ZONE, VA.—continued.

	Cases.
Malaria:	
Ettricks	2
Petersburg	4
Mumps:	
Hopewell	7
Petersburg	2
Prince George County	5
Pneumonia:	
Prince George County	1
Scarlet fever:	
Hopewell	1
Syphilis:	
Petersburg	4
Tuberculosis:	
Ettricks	1
Dinwiddie County	2
Petersburg	1

CAMP LEWIS ZONE, WASH.

German measles:	
Parkland	1
Mumps:	
Dupont	1
Lacamas	1
Parkland	1
Spanaway	3
Whooping cough:	
Parkland	1

CAMP LOGAN ZONE, TEX.

Houston:	
Chancroid	2
Diphtheria	1
Gonorrhea	31
Measles	1
Malaria	2
Mumps	1
Pneumonia	1
Syphilis	24
Tuberculosis	1
Typhoid fever	1
Goose Creek:	
Gonorrhea	1

CAMP MACARTHUR ZONE, TEX.

Waco:	
Measles	1
Mumps	8
Poliomyelitis	3
Syphilis	1
Tuberculosis	1
Typhoid fever	1
Whooping cough	3

CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Diphtheria	1
Measles	7
Mumps	2

NORFOLK COUNTY NAVAL DISTRICT, VA.

Chicken pox:	
Norfolk County	2
Diphtheria:	
Ocean View	1

NORFOLK COUNTY NAVAL DISTRICT, VA.—contd.

	Cases.
Malaria:	
Port Norfolk	1
Ocean View	2
Measles:	
Pinners Point	1
Norfolk	1
South Norfolk	1
Portsmouth	1
Mumps:	
South Norfolk	2
Norfolk County	1
Norfolk	4
Portsmouth	2
Scarlet fever:	
Portsmouth	1
Tuberculosis:	
Norfolk County	1
Ocean View	1
Whooping cough:	
Norfolk	1

FORT OGLETHORPE ZONE, GA.

Gonorrhea:	
Chattanooga	4
Malaria:	
Greens Lake	1
Mumps:	
Chattanooga	1
East Chattanooga	1
Paratyphoid fever:	
North Chattanooga	2
Pneumonia:	
Chattanooga	1
Scarlet fever:	
Chattanooga	1
Smallpox:	
Chattanooga	11
Syphilis:	
Chattanooga	7
Chickamauga, Ga	1
Tuberculosis:	
Chattanooga	3
Whooping cough:	
Chattanooga	8

CAMP PIKE ZONE, ARK.

Cerebrospinal meningitis:	
Little Rock	1
Chancroid:	
North Little Rock	1
Chicken pox:	
Little Rock	2
Diphtheria:	
Little Rock	1
Gonorrhea:	
Little Rock	10
North Little Rock	2
Malaria:	
Little Rock	15
North Little Rock	1
Scotts	1
Nonresidents treated	1
Measles:	
Little Rock	2
Nonresidents treated	

CAMP PIKE ZONE, ARK.—continued.

	Cases.
Mumps:	
Little Rock	3
North Little Rock	1
Pellagra:	
Galloway	1
Pneumonia:	
Little Rock	1
Scarlet fever:	
Little Rock	2
Smallpox:	
Little Rock	10
Little Maumelle	1
Syphilis:	
Little Rock	7
North Little Rock	2
Baucum	1
Tuberculosis:	
Little Rock	10
Wrightsville	1
Whooping cough:	
Little Rock	1

CAMP SEVIER ZONE, S. C.

Cerebrospinal meningitis:	
Chick Springs Township	2
Mumps:	
Chick Springs Township	3
Tuberculosis, pulmonary:	
Chick Springs Township	1
Greenville Township	1

CAMP SHELBY ZONE, MISS.

Hattiesburg:	
Chicken pox	3
Malaria	7
Mumps	10
Pellagra	1
Smallpox	1
Typhoid fever	1
Venereal	2
Whooping cough	8

CAMP SHERIDAN ZONE, ALA.

Montgomery:	
Chancroid	2
Chicken pox	1
Gonorrhea	22
Malaria	37
Measles	2
Mumps	2
Syphilis	2
Tuberculosis	2
Typhoid fever	2
Whooping cough	2

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Chicken pox	1
Diphtheria	1
Gonorrhea	2
Scarlet fever	5
Smallpox	1
Tuberculosis, pulmonary	1
Liberty Township:	
Measles	3
Scarlet fever	1

CAMP ZACHARY TAYLOR ZONE, KY.

Jefferson County:	
Trachoma	3
Typhoid fever	2
Louisville:	
Chicken pox	1
Diphtheria	2
Malaria	1
Measles	5
Mumps	2
Scarlet fever	1
Smallpox	3
Trachoma	1
Tuberculosis, pulmonary	16
Whooping cough	5
New Albany, Ind.:	
Tuberculosis, pulmonary	1
United States Government clinic:	
Chancroid	2
Gonorrhea	32
Syphilis	34

TIDEWATER HEALTH DISTRICT, VA.

Cerebrospinal meningitis:	
Phoebus	1
Chancroid:	
Newport News	1
Chicken pox:	
Hampton	1
German measles:	
Newport News	1
Gonorrhea:	
Newport News	14
Measles:	
Newport News	4
Mumps:	
Newport News	6
Scarlet fever:	
Newport News	6
Hampton	2
Smallpox:	
Newport News	2
Syphilis:	
Newport News	2
Tuberculosis:	
Morrison	1
Whooping cough:	
Phoebus	8

CAMP WHEELER ZONE, GA.

Bibb County:	
Gonorrhea	1
East Macon:	
Chicken pox	1
Syphilis	2
Macon:	
Chicken pox	1
Gonorrhea	7
Malaria	2
Measles	1
Scarlet fever	1
Smallpox	5
Syphilis	16
Tuberculosis	3
Typhoid fever	2

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General, United States Army, for the week ended May 17, 1918:

Annual admission rate per 1,000 (disease only):	
All troops	1,166.2
Divisional camps	736
Cantonments	1,227.2
Departmental and other troops	1,177.3
Noneffective rate per 1,000 on day of report:	
All troops	39.5
Divisional camps	33
Noneffective rate per 1,000 on day of report—Continued.	
Cantonments	44.7
Departmental and other troops	38.4
Annual death rate per 1,000 (disease only):	
All troops	6.3
Divisional camps	3.1
Cantonments	9.9
Departmental and other troops	4.2

NOTE.—On account of frequent changes in organizations and personnel, it is no longer practicable to group troops separately as National Army, National Guard, and Regular Army as has been done previously in this report. The new grouping is considered more accurate.

New cases of special diseases reported during the week ended May 17, 1918.

Camp.	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.
				Total.	New infections.						
Beauregard	8	.....	19	40	4	2	.....	.....	5	1,084.1	53.5
Bowie	3	.....	4	80	74	.....	.....	.....	.....	870.9	31.1
Cody	10	1	.....	5	2	.....	.....	.....	3	432.3	22.7
Doniphan	1	.....	.....	10	.....	1	.....	.....	1	2,156.2	68.6
Fremont	3	.....	.....	46	45	28	.....	1	1	1,209.2	38.5
Greene	.....	.....	.....	6	6	3	.....	.....	1	540.1	23.4
Kearny	3	.....	2	6	.....	3	.....	1	5	855.1	33.1
Logan	3	3	2	40	21	1	2	1	.....	514.9	29.7
MacArthur	.....	.....	.....	.....	.....	.....	.....	.....	1	749.5	47.3
McClellan	.....	.....	.....	95	21	.....	.....	.....	.....	854.5	31.5
Sevier	3	.....	4	46	20	9	1	1	2	242.4	20.7
Shelby	.....	4	2	12	2	1	1	.....	2	652.4	36.9
Sheridan	1	.....	2	20	15	.....	.....	4	2	398.9	20.3
Wadsworth	.....	.....	.....	116	.....	4	.....	1	.....	1,305.8	33.8
Wheeler	2	1	.....	14	4	.....	1	.....	1	774.7	42.7
Custer	26	.....	.....	45	2	5	1	4	6	630.3	25
Devens	9	.....	.....	36	6	23	.....	2	5	782.9	43.4
Dix	9	.....	3	108	21	25	.....	3	1	994.1	32.8
Dodge	36	.....	.....	136	.....	44	.....	3	14	1,843.3	82.6
Funston	42	.....	1	29	11	13	1	2	9	1,016.2	44.1
Gordon	57	.....	3	30	1	68	1	.....	19	2,036	66.3
Grant	15	.....	.....	33	1	22	.....	15	4	500.6	24.2
Jackson	31	1	1	334	3	26	1	.....	14	1,888.4	59.7
J. E. Johnston	24	.....	1	30	20	12	.....	.....	1	1,047.5	34.7
A. A. Humphreys	2	.....	.....	18	2	18	.....	.....	2	893	16.2
Lee	6	.....	1	246	16	11	.....	.....	6	968.3	43.9
Lewis	17	.....	5	74	5	10	.....	11	2	1,023.3	34.7
Meade	14	.....	.....	54	17	5	4	1	2	801	33
Pike	37	.....	.....	63	16	21	2	2	10	2,036.7	71.4
Sherman	4	.....	.....	114	6	12	.....	5	3	1,145.4	39.4
Taylor	14	.....	.....	69	2	13	.....	3	5	909.4	57.4
Travis	55	2	6	54	3	4	.....	.....	11	2,503.2	40.2
Upton	14	.....	.....	218	43	3	2	6	3	1,016.1	39.3
Northeastern department	1	.....	.....	36	23	3	.....	.....	.....	855.7	30.2
Eastern Department	1	.....	3	31	25	9	.....	2	4	851.3	27.7
Southeastern Department	1	.....	.....	75	8	6	.....	1	3	1,100.7	32.4
Central Department	3	.....	.....	22	14	16	.....	7	.....	1,263.5	62.3
Southern Department	10	.....	3	170	69	8	.....	6	6	1,418.4	41.7
Western Department	3	.....	.....	38	17	7	.....	6	2	1,007	18.5
Aviation, Signal Corps	21	.....	2	163	.....	14	3	13	11	1,228.1	34.8
Alcatraz Disciplinary Barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	645.9	15.5
Columbus Barracks	1	.....	.....	8	.....	.....	.....	1	1	643	21.1
Depot, Provisional Corps, and Army troops	10	.....	1	62	.....	3	5	2	.....	1,515.3	35.7
Edgewood-Aberdeen	.....	.....	.....	.....	.....	1	.....	.....	.....	443.2	13.3
El Paso	.....	.....	.....	.....	.....	.....	.....	.....	.....	268.3	13.3

New cases of special diseases reported during the week ended May 17, 1918—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal. Total.	Venereal. New infections.	Measles.	Meningitis.	Scarlet fever.	Deaths.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
Hoboken	14	.....	2	113	9	13	3	7	3	647.1	48.8
Holabird	.....	.....	.....	.....	.....	1	.....	.....	.....	478.5	4.1
Jefferson Barracks	6	.....	.....	371	2	7	1	3	2	3,589	84.9
Leavenworth Disciplinary Barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,160.1	40.7
Logan, Fort	.....	.....	.....	6	2	1	.....	5	.....	1,608.8	77
McDowell, Fort	.....	.....	1	63	.....	2	.....	1	.....	2,740.5	78.6
Newport News	10	4	3	146	3	5	1	1	4	1,286.1	53.4
Raritan	3	.....	.....	33	.....	.....	.....	.....	1	1,059.5	34.2
Slocum, Fort	3	.....	.....	33	.....	.....	.....	.....	1	1,059.5	34.2
Springfield Armory	.....	.....	.....	.....	.....	.....	.....	.....	.....	804.1	30.9
Thomas, Fort	2	.....	.....	24	.....	5	.....	.....	.....	1,622.9	27.6
Watervliet	.....	.....	.....	2	.....	.....	.....	.....	.....	406.2	39
West Point	.....	.....	.....	.....	.....	.....	.....	.....	.....	448.8	8.6
National Guard departments	.....	.....	.....	13	.....	7	1	1	.....	.....	.....
National Army departments	8	.....	1	293	115	23	1	39	1	.....	.....
Total	543	16	72	3,901	666	522	32	161	178	[1] 1,106.2	[1] 39.5

[1] All troops.

Annual rate per 1,000 for special diseases.

Disease.	All troops in United States.[1]	Departmental and other troops.[1]	Divisional camps.[1]	Cantonments.[1]	Expeditionary forces.[2]
Pneumonia	21.8	12.5	6.7	36.7	21.7
Dysentery	0.6	0.58	1.6	0.2	0.1
Malaria	2.9	2.1	6.4	1.8	1.1
Venereal	156.9	196.1	98	151.2	32.3
Paratyphoid	0.0	0.0	0.0	0.0	0.0
Typhoid	0.0	0.0	0.0	0.0	0.2
Measles	21	14.6	0.5	30.2	9.3
Meningitis	1.28	1.9	0.9	1.1	2.1
Scarlet fever	6.4	8	1.6	17.1	6.4

[1] Week ended May 17, 1918. [2] Week ended May 9, 1918.

CURRENT STATE SUMMARIES.

Connecticut.

From Collaborating Epidemiologist Black, by telegraph, for week ended May 25, 1918:

Smallpox: Hartford 1, Voluntown 1, Griswold 4; contact with a Griswold case located State pier, New London. Meningitis: Bridgeport 2. Poliomyelitis: Essex 1. Septic sore throat: Farmington 50; in private school, epidemic abated.

Georgia.

From Collaborating Epidemiologist Abercrombie, by telegraph, for week ended May 25, 1918:

Dysentery, bacillary, Washington County 28 cases, 6 deaths.

Illinois.

From Collaborating Epidemiologist Drake, by telegraph, for week ended May 25, 1918:

Diphtheria: One hundred forty-one, of which in Chicago 122. Scarlet fever: Seventy-eight, of which in Chicago 51. Smallpox: One hundred twenty-three, of which in Morrisonville 9, Evansville 7, Eldorado 12, Springfield 6, Belleville 8, East St. Louis 7, Quincy 5, Onarga 5, Danville 5. Meningitis: Six, of which in Chicago 4, Chicago Heights 1, Springfield 1. Poliomyelitis: Six, of which in Woodstock 2, Chicago 4.

Indiana.

From the State Board of Health of Indiana, by telegraph, for week ended May 25, 1918:

Smallpox: Epidemic Kendallville, Seymour. Rabies (dogs): Sullivan, Mauckport, Anderson, Francesville, Evansville.

Kansas.

From Collaborating Epidemiologist Crumbine, by telegraph, for week ended May 25, 1918:

Smallpox (10 or more cases): By counties—Bourbon 11, Cherokee 24, Haskell 12, Pratt 10; by cities—Fort Scott 20, Kansas City 17, Salina 13, Wichita 51. Meningitis: By cities—Belvue 1, Bendena 1, Junction City 2.

Louisiana.

From Collaborating Epidemiologist Dowling, by telegraph, for week ended May 25, 1918:

Dengue: Iberia Parish 3. Typhoid fever 51, smallpox 60, malaria 85.

Massachusetts.

From Collaborating Epidemiologist Hitchcock, by telegraph, for week ended May 25, 1918:

Unusual prevalence. Measles: Lawrence 185, Malden 51, Norwood 26, Shirley 12, Waltham 29. Scarlet fever: Erving 6, Montague 16. Whooping cough: Avon 19, Whitman 30.

Minnesota.

From Collaborating Epidemiologist Bracken, by telegraph, for week ended May 25, 1918:

Smallpox (new foci): Faribault County, Emerald Township; Fillmore County, Preston village; Kittson County, St. Joseph Township; Millelacs County, Onamia village; Norman County, Fossum Township; each 1 case; Goodhue County, Welch Township, 7.

Nebraska.

From the State Board of Health of Nebraska, by telegraph, for week ended May 25, 1918:

Smallpox: North part Garden County, Merrick County, and Neligh. Scarlet fever: Omaha.

New Jersey.

From Collaborating Epidemiologist Bowen, by telegraph, for week ended May 25, 1918:

Unusual prevalence measles Clifton city.

South Carolina.

From Collaborating Epidemiologist Hayne, by telegraph, for week ended May 25, 1918:

Meningitis: McClellanville 1, Mount Pleasant 1.

Virginia.

From the State Board of Health of Virginia, by telegraph, for week ended May 25, 1918:

One case smallpox Montgomery County, 1 Prince George, 1 Halifax. Two cases cerebrospinal meningitis Grayson County, 1 Charlotte, 1 Petersburg.

Washington.

From Collaborating Epidemiologist Tuttle, by telegraph, for week ended May 25, 1918:

Scarlet fever: Four cases Ritzville (Adams County), 36 cases Tacoma, 20 cases Seattle. Measles: Fifty-one cases Seattle, 13 cases Tacoma, 3 cases Walla Walla. Typhoid: Elma 5 cases, Wenatchee 2 cases.

RECIPROCAL NOTIFICATION.

Minnesota.

Cases of communicable diseases referred during April, 1918, to other State health departments by department of health of the State of Minnesota.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Diphtheria:		
Duluth Health Department, St. Louis County.	Turtle Lake, Barron County, Wis.....	Taken sick at Turtle Lake, Mar. 24, quarantined in Duluth Apr. 1.
Paratyphoid:		
Minneapolis Health Department, Hennepin County.	Winter, Sawyer County, Wis.....	Taken sick at Winter—came to Minneapolis, where he was admitted to City Hospital.
Smallpox:		
Minneapolis Health Department, Hennepin County.	Woodstock, McHenry County, Ill.....	Father, mother, and son exposed to smallpox at Minneapolis, left for home in Illinois.
Stillwater, Washington County.	Peoria, Peoria County, Ill.....	Patient broke quarantine, left Minnesota for Illinois.
Minneapolis Health Department, Hennepin County.	Holdrege, Phelps County, Nebr.....	Sick on arrival in Minnesota from Nebraska.
St. Paul Bureau of Health, Ramsey County.	Lisbon, Ransom County, N. Dak.....	Traveling salesman, stopped at Lisbon while in infectious stage.
St. Louis Park, Hennepin County.	Pittsburgh, Allegheny County, Pa.....	Exposed to smallpox in Minnesota; left for Pennsylvania.
Pipestone, Pipestone County..	Flandreau, Moody County, S. Dak.....	Contracted smallpox after visit to South Dakota.
Tuberculosis:		
Mayo Clinic, Rochester, Olmsted County.	Indianapolis, Marion County, Ind.; Summitville, Madison County, Ind.; Bourbon, Marshall County, Ind.; Fort Wayne, Allen County, Ind.; Belmond, Wright County, Iowa.; Le Mars, Plymouth County, Iowa (2 cases); New Hampton, Chickasaw County, Iowa; Mason City, Cerro Gordo County, Iowa; Hubbard, Hardin County, Iowa; Dike, R. No. 1, Grundy County, Iowa; Burlington, Des Moines County, Iowa; Nora Springs, Floyd County, Iowa; Burlington, Des Moines County, Iowa; Hubbell, Houghton County, Mich.; Hancock, Houghton County, Mich.; Sault Ste. Marie, Chippewa County, Mich.; Maryville, Nodaway County, Mo.; St. Louis, St. Louis County, Mo.; Carl Junction, Jasper County, Mo.; Great Falls, Cascade County, Mont.; Burwell, Garfield County, Nebr.; Holdrege, Phelps County, Nebr.; Enderlin, Ransom County, N. Dak.; Dresden, Cavalier County, N. Dak.; Ravenna, Portage County, Ohio; Sioux Falls, Minnehaha County, S. Dak.; Westport, Brown County, S. Dak.; Hatland, Kingsbury County, S. Dak.; Aberdeen, Grays Harbor County, Wash.; Minong, Washburn County, Wis.; Emo, Ontario, Canada; Indian Head, Saskatchewan, Canada; Luseland, Saskatchewan, Canada.	6 moderately advanced, 11 advanced, 5 incipient, 1 apparently cured, 2 apparently arrested, 3 (stage of disease not given) cases left Mayo Clinic for homes, 3 moderately advanced, 2 advanced, 1 (stage of disease not given) cases left Mayo Clinic for home.
Pokegama sanatorium, Pine County.	Havre, Hill County, Mont.; Spokane, Spokane County, Wash; Liberty, Sullivan County, N. Y.	Improved cases left Pokegama sanatorium for homes.
Thomas Hospital.....	Enderlin, Ransom County, N. Dak.; Grafton, Walsh County, N. D.; Milwaukee, Milwaukee County, Wis.; Sprague, Manitoba, Canada.	2 improved cases, 2 (stage of disease not given) cases left Thomas Hospital for homes.
Ottertail County sanatorium, Ottertail County.	McClusky, Sheridan County, N. Dak..	Case left Ottertail County sanatorium for home.

CEREBROSPINAL MENINGITIS.

State Reports for April, 1918.

Place.	New cases reported.
District of Columbia	8
Minnesota:	
Blue Earth County—	
Mankato	1
Fillmore County—	
York Township	1
Hennepin County—	
Dunwoody Institute	1
St. Louis County—	
Duluth	2
Scott County—	
Belle Plaine Borough	1
Stearns County—	
St. Cloud	1
St. Augusta Township	1
Total	8
North Carolina:	
Durham County	2
Forsyth County	9
Graham County	1
Guilford County	1
Hyde County	2
Madison County	1
Mecklenburg County	1
Montgomery County	1
Pasquotank County	1
Sampson County	1
Total	20
Pennsylvania:	
Allegheny County	14
Beaver County	1
Berks County	1
Clearfield County	1
Dauphin County	1
Delaware County	2
Elk County	2
Erie County	1
Lackawanna County	4
Lehigh County	1
Pennsylvania—Continued.	
Luzerne County	19
Lycoming County	1
Mercer County	2
Philadelphia County	35
Schuylkill County	2
Tioga County	1
Westmorland County	1
York County	3
Total	92
Rhode Island:	
Bristol County—	
Warren (town)	1
Newport County—	
Newport	2
Providence County—	
Johnston (town)	1
Providence	9
Total	13
South Carolina:	
Charleston County	3
Darlington County	2
Greenville County	12
Laurens County	2
Richland County	6
Spartanburg County	2
Union County	1
York County	3
Total	31
South Dakota:	
Hyde County	1
Lake County	1
Total	2
West Virginia:	
Summers County	1

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.
Atlanta, Ga		1
Baltimore, Md	5	3
Beacon, N. Y		1
Berkeley, Cal	1	
Birmingham, Ala	4	2
Boston, Mass	2	2
Buffalo, N. Y	2	
Chicago, Ill	10	2
Chillicothe, Ohio	1	
Cleveland, Ohio	1	
Dayton, Ohio		1
Detroit, Mich	1	
Elwood, Ind		1
Fall River, Mass	1	
Flint, Mich		1
Galveston, Tex	1	
Hackensack, N. J		2
Independence, Kans	1	
Indianapolis, Ind	1	
Lexington, Ky	1	1
Lincoln, Nebr		1
Little Rock, Ark	3	
Lynn, Mass	1	
Milwaukee, Wis	6	6
Minneapolis, Minn	1	1
Nashville, Tenn	2	
Newark, N. J	1	1
New Britain, Conn	1	1
New Orleans, La	1	
Newport, R. I	1	
New York, N. Y	22	7
Passaic, N. J	1	
Philadelphia, Pa	5	5
Pittsburgh, Pa	6	
Pittsfield, Mass		1
Providence, R. I	3	
Raleigh, N. C	1	1
St. Louis, Mo	3	1
San Diego, Cal	3	1
Schenectady, N. Y	1	1
Scranton, Pa	1	
Sioux City, Ia	1	1
Washington, D. C	2	
Washington, Pa	1	
Wilkes-Barre, Pa	1	
Worcester, Mass	1	1
Youngstown, Ohio	1	
Zanesville, Ohio	1	1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 894.

ERYSIPELAS.

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		Henderson, Ky		1
Alameda, Cal	1		Jackson, Mich	1	
Anderson, Ind	1		Kalamazoo, Mich	2	
Atlanta, Ga	1		Los Angeles, Cal	3	
Baltimore, Md	1		Louisville, Ky	1	1
Bayonne, N. J	1		Manitowoc, Wis	1	
Beacon, N. Y		2	Milwaukee, Wis	1	4
Beloit, Wis	1		Minneapolis, Minn	4	2
Berkeley, Cal	1		Mishawaka, Ind		1
Brockton, Mass	1		Moline, Ill		1
Buffalo, N. Y	2	1	Moundsville, W. Va	1	
Burlington, Vt	1	1	Newark, N. J	5	2
Cambridge, Mass		1	New York, N. Y		6
Camden, N. J	2		North Attleboro, Mass		1
Charleston, W. Va	1		Oklahoma City, Okla		● 1
Chicago, Ill	12		Peoria, Ill		1
Cincinnati, Ohio	2		Philadelphia, Pa	5	
Cleveland, Ohio	4		Pittsfield, Mass		1
Danville, Ill	1		Portland, Oreg	1	
Denver, Colo	1		Providence, R. I		2
Detroit, Mich	4		Rome, N. Y	1	
Duluth, Minn	3		St. Louis, Mo	10	1
Elgin, Ill	1		San Francisco, Cal	6	1
Fort Wayne, Ind		2	Schenectady, N. Y	1	
Frederick, Md	1		Troy, N. Y		1

MALARIA.

State Report for April, 1918.

Place.	New cases reported.	Place.	New cases reported.
South Carolina:		South Carolina—Continued.	
Abbeville County	4	Edgefield County	2
Beaufort County	2	Laurens County	2
Calhoun Conty	25	Marion County	8
Chester County	3		
Chesterfield County	18	Total	64

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alexandria, La	3		Memphis, Tenn	1	
Birmingham, Ala	4		Montgomery, Ala	2	
Charleston, W. Va	1		Natick, Mass	1	
Hattiesburg, Miss	4		New Orleans, La	1	1
Independence, Mo	1	1	New York, N. Y		1
Joplin, Mo	3		North Little Rock, Ark	2	
Little Rock, Ark	4		Palestine, Tex	31	
Long Beach, Cal	1		Richmond, Va		2
Macon, Ga	5		Tuscaloosa, Ala	2	
Marshall, Tex	1		Waco, Tex	1	

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 894.

PELLAGRA.

State Report for April, 1918.

Place.	New cases reported.	Place.	New cases reported.
South Carolina:		South Carolina—Continued.	
Abbeville County	3	Laurens County	4
Beaufort County	1	Richland County	2
Chester County	1	Spartanburg County	10
Chesterfield County	3		
Edgefield County	2	Total	27
Greenville County	1		

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alexandria, La	6		Los Angeles, Cal	1	
Anniston, Ala	1		Louisville, Ky		1
Atlanta, Ga		2	Marshall, Tex	1	
Augusta, Ga		2	Memphis, Tenn	3	
Beaumont, Tex		1	Montgomery, Ala		1
Birmingham, Ala	1	1	Nashville, Tenn	3	2
Charleston, S. C		3	North Little Rock, Ark	1	
Concord, N. H		1	Palestine, Tex	2	
Corpus Christi, Tex	1		Raleigh, N. C		1
El Paso, Tex		1	Richmond, Va		1
Hattiesburg, Miss	3		Rocky Mount, N. C	1	
Houston, Tex		2	Tuscaloosa, Ala	1	1
Lincoln, Nebr		1	Winston-Salem, N. C		1

PNEUMONIA.

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alameda, Cal	1	1	Hattiesburg, Miss	1	
Amesbury, Mass	1		Haverhill, Mass	2	
Anderson, Ind	1		Holyoke, Mass	2	1
Anniston, Ala	1		Hornell, N. Y	1	
Arlington, Mass	2		Houston, Tex	1	5
Auburn, N. Y	2	2	Hudson, N. Y	1	1
Bakersfield, Cal	1	1	Jackson, Mich	1	1
Baltimore, Md	40	10	Jamestown, N. Y	4	1
Battle Creek, Mich	1	1	Joplin, Mo	1	
Berkeley, Cal	1		Kalamazoo, Mich	3	
Beverly, Mass	1		Kansas City, Kans	2	
Boston, Mass	17	20	Kewance, Ill	2	2
Bridgeport, Conn	1	3	Lawrence, Mass	4	1
Buffalo, N. Y	2	13	Little Rock, Ark	6	3
Cambridge, Mass	7	5	Los Angeles, Cal	9	5
Cambridge, Ohio	2	2	Louisville, Ky	5	9
Chelsea, Mass	6		Lyon, Mass	2	2
Chicago, Ill	184	104	Manchester, N. H	4	4
Cincinnati, Ohio	1	6	Mansfield, Ohio	1	1
Cleveland, Ohio	25	25	McKeesport, Pa	2	1
Clinton, Mass	2	1	Melrose, Mass	4	
Cohoes, N. Y	1	1	Middletown, N. Y	2	1
Dayton, Ohio	2	7	Morgantown, W. Va	3	
Detroit, Mich	14	33	Natick, Mass	1	
Duluth, Minn	12	2	New Albany, Ind	1	1
Elmira, N. Y	3	3	Newark, N. J	82	12
Evansville, Ind	1	1	New Bedford, Mass	6	4
Everett, Mass	2		New Castle, Ind	1	1
Flint, Mich	3		Newport, Ky	2	2
Fort Worth, Tex	1	1	Newton, Mass	4	1
Fostoria, Ohio	1		North Little Rock, Ark	2	1
Framingham, Mass	1		Ogden, Utah	2	2
Fremont, Ohio	1		Oshkosh, Wis	1	1
Fresno, Cal	2	2	Oswego, N. Y	2	
Grand Rapids, Mich	7	4	Pasadena, Cal	1	
Greenfield, Mass	1		Philadelphia, Pa	102	54
Harrison, N. J	1		Pittsfield, Mass	3	2

PNEUMONIA—Continued.

City Reports for Week Ended May 11, 1918—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths
Pontiac, Mich	1	1	Springfield, Mass	10	2
Quincy, Mass	5	1	Toledo, Ohio	1	2
Rochester, N. Y	4	7	Waco, Tex	1	.....
Sacramento, Cal	1	1	Waterloo, Iowa	1	.....
San Francisco, Cal	12	6	Westfield, Mass	3	4
San Diego, Cal	4	3	Wichita, Kans	7	1
Santa Cruz, Cal	1	.....	Winthrop, Mass	1	.....
Schenectady, N. Y	4	2	Worcester, Mass	5	6
Sheboygan, Wis	2	2	Yonkers, N. Y	5	1
Somerville, Mass	5	.....	Youngstown, Ohio	6	7
Spartanburg, S. C	1	.....			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April, 1918.

Place.	New cases reported.	Place.	New cases reported.
Michigan:		Pennsylvania:	
Kent County—		Allegheny County	2
Grand Rapids	1	Beaver County	1
Calhoun County—		Dauphin County	2
Battle Creek	1	Lawrence County	1
Bay County—		Tioga County	1
Frankenlust Township	1	Washington County	1
Total	3	Total	7
Minnesota:		South Dakota:	
Olmsted County—		Spink County	1
Rochester	1		
Polk County—			
Roome Township	1		
Total	2		

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Cambridge, Mass	1	.....	New York, N. Y	1	1
Framingham, Mass	2	.....	Palestine, Tex	1	.....
Milwaukee, Wis	1	1	San Francisco, Cal	1	.....
Minneapolis, Minn	1	1			

RABIES IN ANIMALS.

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Place.	Cases.
Ann Arbor, Mich	1	Rochester, N. Y	1
Hudson, N. Y	1	Waco, Tex	2
Louisville, Ky	1		

RABIES IN MAN.

City Reports for Week Ended May 11, 1918.

During the week ended May 11, 1918, there were reported at Birmingham, Ala., one case and one death from rabies in man.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 894.

SMALLPOX.

State Reports for April, 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.
Michigan:						
Alcona County—						
Curtis Township	6				6	
Mitchel Township	5				5	
Alpena County—						
Green Township	1				1	
Ossinike Township	1				1	
Antrim County—						
Banks Township	7			3	4	
Bay County—						
Pinconning Township	5			2	3	
Williams Township	3			1	2	
Benzie County—						
Benzonia Township	1				1	
Inland Township	2				2	
Berrien County—						
Benton Harbor	9				9	
Niles	3				3	
Calhoun County—						
Bedford Township	1					1
Albion	21				21	
Charlevoix County—						
Boyne Valley Township	1					1
Cheboygan County—						
Aloha Township	1				1	
Chippewa County—						
Sault Ste Marie	4				4	
Dickinson County—						
Norway	2				2	
Eaton County—						
Grand Ledge	2				2	
Genesee County—						
Benton Township	1				1	
Flushing Township	2				1	1
Richfield Township	1				1	
Vienna Township	1			1		
Clio	1					1
Mount Morris	4				4	
Flint	5				5	
Gladwin County—						
Butman Township	1				1	
Gratiot County—						
Newark Township	1				1	
Hillsdale County—						
Fayette Township	2				2	
Hillsdale Township	3				3	
Scipio Township	1				1	
Huron County—						
Dwight Township	1				1	
Meade Township	2				2	
Ingham County—						
Alaridon Township	1				1	
Delhi Township	2				2	
Meridian Township	3				3	
Lansing	12				12	
Iosco County—						
Sherman Township	1				1	
Wilber Township	5				5	
Isabella County—						
Chippewa Township	2				2	
Jackson County—						
Concord Township	1				1	
Kalamazoo County—						
Comstock Township	3				2	1
Kalamazoo Township	1					1
Kalamazoo	31			1	25	5

SMALLPOX—Continued.

State Reports for April, 1918—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan—Continued.						
Kalkaska County—						
Rapid River Township	5				1	4
Kent County—						
Grand Rapids Township	1				1	
Sparta Township	1					1
Tyrone Township	6				6	
Sparta	1				1	
Grand Rapids	11				11	
Lapeer County—						
Goodland Township	1				1	
Lenawee County—						
Ogden Township	1				1	
Hudson	1				1	
Livingston County—						
Geneva Township	1				1	
Macomb County—						
Memphis Township	1				1	
Mount Clemens	2				2	
Manistee County—						
Filer Township	7				7	
Norman Township	1				1	
Manistee	9				9	
Marquette County—						
Marquette	4				4	
Mecosta County—						
Fork Township	7				7	
Menominee County—						
Menominee	2				2	
Monroe County—						
Bedford Township	1				1	
La Salle Township	1				1	
Monroe Township	1				1	
Monroe	6				6	
Montcalm County—						
Pierson Township	1				1	
Montmorency County—						
Avery Township	1				1	
Muskegon County—						
Muskegon Township	1				1	
Norton Township	1				1	
Montague	1				1	
Muskegon	2				2	
Newaygo County—						
Sheridan Township	2				2	
Fremont	1			1		
Oakland County—						
Novi Township	1			1		
Southfield Township	1				1	
Twy Township	1					1
Pontiac	19				19	
Oceana County—						
Crystal Township	1				1	
Ogemaw County—						
Hill Township	1				1	
Osceola County—						
Sherman Township	1				1	
Sylvan Township	1				1	
Otsego County—						
Gaylord	1				1	
Ottawa County—						
Crockery Township	2				2	
Holland	1				1	
Presque Isle County—						
North Allis Township	1					1
Saginaw County—						
Saginaw	3				3	
St. Clair County—						
Clyde Township	2				2	
Columbus Township	2				2	
Kimball Township	2				2	
St. Clair Township	1				1	
St. Clair	2			1	1	

SMALLPOX—Continued.

State Reports for April, 1918—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan—Continued.						
St. Joseph County—						
Florence Township	1				1	
Centerville	2				2	
Colon	2				2	
Mendon	3				3	
Three Rivers	3				3	
Sanilac County—						
Argyle Township	1			1		
Lamotte Township	2				2	
Moore Township	1				1	
Sanilac Township	1				1	
Crosswell	1				1	
Sandusky	1				1	
Tuscola County—						
Almer Township	17				12	5
Juanita Township	1				1	
Koylton Township	1				1	
Akron	1				1	
Van Buren County—						
Gobleville	3				3	
Washtenaw County—						
Ann Arbor	1				1	
Wayne County—						
Highland Park	4				3	1
Northville	2			1		1
St. Clair Heights	4				4	
Detroit	91					91
Wexford County—						
Cherry Grove Township	1				1	
Liberty Township	2				2	
Selma Township	4				4	
Cadillac	4				4	
Total	441			13	312	116
Minnesota:						
Beltrami County—						
Bemidji	2				2	
Kelliher Township	1				1	
Carver County—						
Chaska	2				2	
Cologne	3				3	
Chisago County—						
Rush City	1				1	
Clay County—						
Moorhead	1			1		
Oak Port Township	1				1	
Crow Wing County—						
Brainerd	5			1	4	
Douglas County—						
Brandon Township	1				1	
Faribault County—						
Elmore	1				1	
Fillmore County—						
Rushford	3			1	2	
Forestville Township	1					1
Spring Valley Township	4				2	2
Freeborn County—						
Riceland Township	2			1		1
Goodhue County—						
Kenyon	71				71	
Cherry Grove Township	19			1	18	
Hennepin County	1					1
Minneapolis	69			6	63	
Eden Prairie Township	1				1	
Houston County—						
Spring Grove	2				2	
Hubbard County—						
Akeley	1				1	
Nevis	1				1	

SMALLPOX—Continued.

State Reports for April, 1918—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Minnesota—Continued.						
Isanti County						
Maple Ridge Township	1				1	
Jackson County—						
Heron Lake	1				1	
Alba Township	1				1	
La Crosse Township	4				4	
Kittson County—						
Humboldt	4				4	
Lancaster	1				1	
Township 162, R. 45	1				1	
Lyon County—						
Clifton Township	1				1	
Stanley Township	1				1	
Mahnomen County—						
Waubon	1				1	
Meeker County—						
Dassel	1				1	
Mower County—						
Austin	4				4	
Adams Township	1				1	
Austin Township	1				1	
Murray County—						
Lake Wilson	1				1	
Norman County—						
Strand Township	3			3		
Olmsted County—						
Rochester	11				11	
Pine County—						
Rock Creek Township	4				4	
Pipestone County—						
Pipestone	1					1
Polk County—						
Climax	1				1	
Ramsey County—						
St. Paul	26				26	
Renville County—						
Fairfax	2			1	1	
Morton	1					1
Bandon Township	3				3	
Camp Township	4				4	
Wellington Township	1				1	
Rice County—						
Richland Township	9				9	
Roseau County—						
Malung Township	1				1	
Mickinock Township	1				1	
St. Louis County—						
Duluth	3				3	
Virginia	1				1	
Stearns County—						
St. Cloud	1				1	
Traverse County—						
Monson Township	1				1	
Wabasha County—						
Greenfield Township	1				1	
Washington County—						
Forest Lake	1			1		
Wilkin County—						
Breckenridge	6				6	
Winona County—						
St. Charles	1				1	
Winona	2				2	
Wright County—						
Cokato Township	1				1	
French Lake Township	1				1	
Total	304			16	281	7
Rhode Island:						
Woonsocket	1	1			1	

SMALLPOX—Continued.

Miscellaneous State Reports for April, 1918.

Place.	Cases.	Deaths.
District of Columbia	5	
North Carolina:		
Anson County	1	
Ashe County	1	
Avery County	12	
Bladen County	1	
Buncombe County	5	
Burke County	2	
Cabarrus County	3	
Caswell County	1	
Cherokee County	4	
Cumberland County	1	
Currituck County	1	
Davidson County	1	
Durham County	1	
Edgecombe County	3	
Forsyth County	9	
Gaston County	5	
Haywood County	3	
Henderson County	4	
Lee County	3	
Macon County	1	
Madison County	6	
McDowell County	4	
Mecklenburg County	2	
Montgomery County	5	
Pitt County	1	
Robeson County	4	
Rockingham County	15	
Rowan County	2	
Rutherford County	1	
Stanly County	1	
Surry County	3	
Swain County	3	
Total	109	
Pennsylvania:		
Adams County	1	
Allegheny County	4	
Armstrong County	9	
Beaver County	1	
Blair County	1	
Cambria County	11	
Center County	1	
Clarion County	1	
Clearfield County	12	
Crawford County	1	
Dauphin County	13	
Delaware County	1	
Erie County	2	
Franklin County	5	
Huntingdon County	3	
Lackawanna County	1	
Luzerne County	1	
Mercer County	4	
Mifflin County	1	
Philadelphia County	7	
Somerset County	9	
Warren County	1	
Westmoreland County	1	
York County	10	
Total	101	
South Carolina:		
Spartanburg County	5	
Union County	3	
Total	8	
South Dakota:		
Bon Homme County	1	
Brown County	6	
Charles Mix County	10	
Clark County	1	
Codington County	7	
Davison County	3	
Dewey County	2	
Gregory County	1	
Hutchinson County	6	
Hyde County	11	1
Lake County	2	
McCook County	8	
Miner County	4	
Minnehaha County	4	
Perkins County	1	
Spink County	4	
Sully County	2	
Turner County	1	
Yankton County	5	
Total	79	1
Vermont:		
Caledonia County	10	
Orleans County	6	
Windsor County	3	
Total	19	
West Virginia:		
Cabell County	5	
Calhoun County	11	
Fayette County	10	
Harrison County	1	
Kanawha County	21	
Lewis County	2	
Lincoln County	29	
Logan County	4	
McDowell County	3	
Marion County	3	
Mercer County	7	
Mingo County	22	
Monongalia County	3	
Nicholas County	9	
Ohio County	1	
Pocahontas County	10	
Putnam County	7	
Raleigh County	2	
Ritchie County	23	
Roane County	1	
Summers County	2	
Taylor County	5	
Webster County	2	
Wirt County	1	
Wood County	16	
Total	200	

SMALLPOX—Continued.

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	10		Kalamazoo, Mich	7	
Alexandria, La	1		Kansas City, Kans	3	
Alton, Ill	2		Knoxville, Tenn	9	
Anderson, Ind	2		Leavenworth, Kans	1	
Anniston, Ala	8		Lima, Ohio	9	
Atlanta, Ga	3		Lincoln, Nebr	11	
Augusta, Me	2		Little Rock, Ark	7	
Barberton, Ohio	2		Louisville, Ky	4	
Billings, Mont	1		Macon, Ga	4	
Birmingham, Ala	17		Madison, Wis	3	
Boston, Mass	2		Massillon, Ohio	1	
Buffalo, N. Y	1		Memphis, Tenn	3	
Butte, Mont	3		Menominee, Mich	2	
Cairo, Ill	1		Middletown, Ohio	4	
Canton, Ohio	7		Milwaukee, Wis	5	
Cedar Rapids, Iowa	2		Minneapolis, Minn	16	
Charleston, W. Va	2		Mobile, Ala	3	
Chattanooga, Tenn	4		Montgomery, Ala	1	
Chicago, Ill	1		Muscatine, Iowa	1	
Chillicothe, Ohio	1		Muskogee, Okla	5	
Cincinnati, Ohio	10		Nashville, Tenn	7	
Cleveland, Ohio	38		Newark, Ohio	1	
Clinton, Iowa	1		New Orleans, La	1	
Coffeyville, Kans	10		New York, N. Y	1	
Columbia, S. C	1		Oklahoma City, Okla	30	
Columbus, Ohio	5		Omaha, Nebr	37	
Council Bluffs, Iowa	7		Oshkosh, Wis	1	
Danville, Ill	6		Owensboro, Ky	2	
Davenport, Iowa	1		Parkersburg, W. Va	1	
Dayton, Ohio	1		Peoria, Ill	4	
Denver, Colo	24		Philadelphia, Pa	1	
Des Moines, Iowa	10		Pittsburgh, Pa	1	
Detroit, Mich	19		Pocatello, Idaho	1	
Dubuque, Iowa	10		Pontiac, Mich	4	
Duluth, Minn	2		Portland, Me	1	
East Liverpool, Ohio	4		Quincy, Ill	21	
Elgin, Ill	1		Rock Island, Ill	1	
Elyria, Ohio	3		St. Joseph, Mo	8	
Evansville, Ind	2		St. Louis, Mo	19	
Fargo, N. Dak	3		Salt Lake City, Utah	25	
Flint, Mich	3		Sandusky, Ohio	1	
Fort Scott, Kans	1		San Francisco, Cal	3	
Fort Smith, Ark	5		Shelbyville, Ind	2	
Fort Worth, Tex	31		Sioux City, Iowa	4	
Fresno, Cal	3		Spartanburg, S. C	2	
Galveston, Tex	2		Spokane, Wash	11	
Gary, Ind	1		Springfield, Mo	4	
Grand Rapids, Mich	2		Springfield, Ohio	1	
Greeley, Colo	2		Steelton, Pa	2	
Hammond, Ind	4		Steubenville, Ohio	1	
Hartford, Conn	1		Superior, Wis	1	
Hattiesburg, Miss	1		Toledo, Ohio	14	
Houston, Tex	1		Waco, Tex	5	
Independence, Kans	2		Warren, Ohio	3	
Independence, Mo	4		Washington, D. C	2	
Indianapolis, Ind	31		Waterloo, Iowa	2	
Iola, Kans	4		Wichita, Kans	40	
Jamestown, N. Y	1		Winona, Minn	2	
Joplin, Mo	2		Youngstown, Ohio	3	

TETANUS.

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Augusta, Ga		1	Schenectady, N. Y		1
Birmingham, Ala	1		Taunton, Mass	1	1
Burlington, Vt	1	1	Toledo, Ohio		1
Marshall, Tex	1		Warren, Ohio	1	1
Palestine, Tex	2		Yonkers, N. Y	1	

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 891.

TYPHOID FEVER.

State Reports for April, 1918.

Place.	New cases reported.
District of Columbia	6
Minnesota:	
Beltrami County—	
Bemidji	2
McDougald Township	1
Bigstone County—	
Graceville	1
Blue Earth County—	
Mankato	1
Carlton County—	
Cloquet	1
Cass County—	
State Sanatorium	3
Slater Township	1
Chippewa County—	
Montevideo	1
Crow Wing County—	
Brainerd	1
Faribault County—	
Clark Township	1
Freeborn County—	
Alden Township	1
Goodhue County—	
Red Wing	1
Zumbrota	3
Hennepin County—	
Minneapolis	23
Champlin Township	1
Jackson County—	
Jackson	1
Kittson County—	
Cannon Township	1
Hampden Township	1
Koochiching County—	
International Falls	1
Lesueur County—	
Waterville	1
Marshall County—	
Oslo	1
Mower County—	
Racine Township	1
Norman County—	
Halstad	1
Olmsted County—	
Rochester	1
Ottertail County—	
Fergus Falls	1
Roseau County—	
Roseau	1
St. Louis County—	
Duluth	2
Eveleth	1
Hibbing	1
Virginia	2
Leiding Township	1
Wabasha County—	
Mazeppa	1
Total	61
Michigan:	
Alpena County—	
Long Rapids Township	1
Bay County—	
Bay City	7
Berrien County—	
Watervliet	1
Calhoun County—	
Burlington Township	1
Battle Creek	1
Dickson County—	
Iron Mountain	1
Eaton County—	
Grand Ledge	1
Genesee County—	
Flint	3
Gladwin County—	
Gladwin	1
Michigan—Continued.	
Gratiot County—	
North Star Township	1
Ingham County—	
Steckbridge	1
Ionia County—	
Muir	1
Isabella County—	
Denver Township	2
Jackson County—	
Blackman Township	1
Kent County—	
Grand Rapids	4
Lapeer County—	
Lapeer	11
Mecosta County—	
Big Rapids	1
Midland County—	
Wells Township	1
Midland	2
Oakland County—	
Southfield Township	1
Saginaw County—	
Saginaw	3
Shiawassee County—	
Bennington Township	1
Total	47
North Carolina:	
Buncombe County	1
Duplin County	2
Durham County	2
Forsyth County	7
Gaston County	2
Graham County	4
Guilford County	1
Harnett County	1
Johnston County	2
Madison County	1
Martin County	3
Mecklenburg County	1
Northampton County	1
Pitt County	1
Richmond County	1
Robeson County	2
Stokes County	1
Swain County	1
Warren County	1
Wayne County	1
Wilson County	1
Yancey County	1
Total	38
Pennsylvania:	
Adams County	5
Allegheny County	39
Armstrong County	3
Beaver County	11
Bedford County	2
Berks County	6
Blair County	4
Bradford County	5
Bucks County	12
Butler County	2
Cambria County	3
Centre County	1
Chester County	5
Clearfield County	1
Clinton County	1
Columbia County	6
Cumberland County	2
Dauphin County	5
Delaware County	8
Erie County	4
Fayette County	5
Franklin County	6

TYPHOID FEVER—Continued.

State Reports for April, 1918—Continued.

Place.	New cases reported.
Pennsylvania—Continued.	
Huntingdon County	2
Jefferson County	2
Lackawanna County	7
Lancaster County	16
Lawrence County	5
Lebanon County	10
Lehigh County	11
Luzerne County	6
Lycoming County	2
Mercer County	5
Mifflin County	1
Montgomery County	20
Montour County	1
Northampton County	4
Northumberland County	18
Philadelphia County	7
Schuylkill County	11
Somerset County	3
Tioga County	1
Union County	1
Venango County	1
Warren County	1
Washington County	7
Westmoreland County	5
York County	5
Total	288
Rhode Island:	
Kent County—	
Warwick (town)	1
West Warwick (town)	2
Providence County—	
Johnston (town)	10
Pawtucket	1
Providence	6
Woonsocket	3
Washington County—	
Westerly (town)	1
Total	24
South Carolina:	
Calhoun County	1
Charleston County	4
Chesterfield County	2
Greenville County	1
Marion County	1
Richland County	2
Total	11
South Dakota:	
Miner County	4
Perkins County	1
Yankton County	2
Total	7
Vermont:	
Bennington County	1
West Virginia:	
Braxton County	4
Clay County	2
Fayette County	2
Hardy County	2
Kanawha County	16
Logan County	4
McDowell County	2
Marion County	18
Mercer County	2
Mingo County	3
Monongalia County	10
Monroe County	1
Morgan County	1
Ohio County	31
Putnam County	2
Randolph County	6
Tucker County	1
Total	107

City Reports for Week Ended May 11, 1918.

Place.	Cases.	Deaths.
Akron, Ohio	1	
Allentown, Pa	4	
Altoona, Pa	1	
Baltimore, Md	2	
Battle Creek, Mich	1	
Birmingham, Ala	1	1
Boston, Mass	3	1
Brookline, Mass	1	
Buffalo, N. Y	1	2
Burlington, Vt	1	
Cambridge, Mass	1	
Charleston, S. C	2	
Charleston, W. Va		1
Chattanooga, Tenn	1	
Chelsea, Mass	1	
Chicago, Ill	7	1
Cleveland, Ohio	2	2
Columbia, S. C	1	
Columbus, Ohio	1	
Corpus Christi, Tex	1	
Detroit, Mich	5	2
Dover, N. H	2	
Dubuque, Iowa	1	
East Liverpool, Ohio		2
East Orange, N. J	1	
Fairmont, W. Va	1	
Fall River, Mass	3	
Fort Scott, Kans	1	
Fresno, Cal		1
Grand Rapids, Mich	3	
Greeley, Colo	1	
Hartford, Conn	1	
Hattiesburg, Miss	1	
Houston, Tex	1	
Indianapolis, Ind	1	
Ithaca, N. Y	1	
Kewanee, Ill	1	
Lawrence, Mass	1	
Louisville, Ky	2	
Lynchburg, Va	2	
Macon, Ga	1	
Memphis, Tenn	1	1
Middletown, Ohio	1	
Milwaukee, Wis	3	
Minneapolis, Minn	3	
Moline, Ill	1	
Newark, N. J		1
New Castle, Pa	1	
New Haven, Conn	1	
New Orleans, La	8	5
Newton, Mass		1
New York, N. Y	17	2
North Adams, Mass	1	
Oakland, Cal	1	1

TYPHOID FEVER—Continued.

City Reports for Week Ended May 11, 1918—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ogden, Utah	1	1	Shenandoah, Pa.	1	
Omaha, Nebr.		1	South Bend, Ind.		1
Orange, N. J.	1		Spokane, Wash.	1	
Oswego, N. Y.	2	1	Springfield, Ill.	1	
Peoria, Ill.		1	Springfield, Ohio	1	1
Philadelphia, Pa.	13	2	Trenton, N. J.	1	
Pittsburgh, Pa.	2		Troy, N. Y.		1
Portland, Oreg.	1		Walla Walla, Wash.	2	
Providence, R. I.	1		Warren, Ohio	1	
Reno, Nev.	1		Washington, D. C.	1	
Richmond, Va.	1		West Warwick, R. I.	1	
St. Joseph, Mo.	1	1	Wheeling, W. Va.	5	1
St. Louis, Mo.	2		Wichita, Kans.	2	1
Salt Lake City, Utah	2		Wilkes-Barre, Pa.	1	
San Francisco, Cal.	2		Wilmington, N. C.	3	
Scranton, Pa.	1		Yonkers, N. Y.	1	
Seattle, Wash.	1		York, Pa.	3	
Sheboygan, Wis.	1	1	Zanesville, Ohio	1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for April, 1918.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
District of Columbia	55	2,007	132	Rhode Island	92	1,022	72
Michigan	377	1,255	720	South Carolina	93	240	2
Minnesota	364	409	607	South Dakota	7	301	87
North Carolina	57	1,498	29	Vermont	18	56	20
Pennsylvania	1,002	10,593	905	West Virginia	27	430	31

City Reports for Week Ended May 11, 1918.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	589,621		15	2	463	5	14	1	26	44
Boston, Mass.	756,476	234	64	1	385	8	40	2	100	35
Chicago, Ill.	2,497,722	753	78	14	165	2	33		422	96
Cleveland, Ohio.	674,073	202	11	1	74	1	7		28	27
Detroit, Mich.	571,784	225	49	4	135	7	36	4	40	27
Los Angeles, Cal.	503,812	121	15		104	1	8		66	25
New York, N. Y.	5,602,841	1,597	263	21	1,109	31	100	5	360	246
Philadelphia, Pa.	1,709,518	619	68	12	845	12	42	1	105	69
Pittsburgh, Pa.	579,090		28		319		20		48	
St. Louis, Mo.	757,309	227	55	1	88		28	1	50	20
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	468,558	158	11		166		13	1	30	23
Cincinnati, Ohio.	410,476		18	1	39	1	8		20	21
Jersey City, N. J.	306,345		11		36		11		21	
Milwaukee, Wis.	436,535	116	7	1	385	4	21	1	30	10
Minneapolis, Minn.	363,454		14	5	79	3	29	2	6	9
Newark, N. J.	408,894	117	17	1	475	7	12	1	48	15
New Orleans, La.	371,747	166	6	1	13	2	2		40	23
San Francisco, Cal.	463,516	134	19		45	1	17		36	12
Seattle, Wash.	348,639		2		59		17		14	
Washington, D. C.	363,980	150	12	1	242	4	21	1	37	15

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

City Reports for Week Ended May 11, 1918—Continued.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio	214,878	66	3	.....	24	.....	19	1	6	9
Denver, Colo.	260,800	79	3	.....	45	.....	38	.....	.....	11
Indianapolis, Ind	271,708	.....	18	2	31	.....	38	.....	10	12
Louisville, Ky	238,910	74	8	.....	13	.....	1	.....	18	6
Portland, Oreg.	295,463	66	3	.....	140	1	5	.....	7	6
Providence, R. I.	254,960	64	15	2	157	2	11	.....	1	10
Rochester, N. Y.	256,417	80	12	2	127	.....	15	.....	9	5
St. Paul, Minn.	247,232	78	36	2	10	.....	24	.....	21	7
From 100,000 to 200,000 inhabitants:										
Atlanta, Ga.	190,558	56	1	.....	16	.....	2	.....	13	5
Birmingham, Ala.	181,762	71	.....	.....	11	.....	2	.....	8	5
Bridgeport, Conn.	121,576	38	1	.....	8	.....	8	.....	4	5
Cambridge, Mass.	112,921	31	12	1	79	.....	2	.....	10	3
Camden, N. J.	106,233	.....	1	.....	11	.....	2	.....	5	.....
Dayton, Ohio	127,244	.....	.....	.....	3	.....	3	.....	4	6
Des Moines, Iowa	101,598	.....	3	.....	.....	.....	17	.....	.....	.....
Fall River, Mass.	128,366	42	4	1	12	.....	4	.....	12	6
Fort Worth, Tex.	104,562	20	.....	.....	1	.....	3	.....	1	1
Grand Rapids, Mich.	128,291	38	4	2	19	.....	11	.....	6	1
Hartford, Conn.	110,900	50	5	.....	2	.....	4	.....	4	1
Houston, Tex.	112,307	51	1	.....	9	.....	1	.....	1	2
Lawrence, Mass.	100,560	27	.....	.....	148	1	.....	.....	6	4
Lowell, Mass.	113,245	33	2	.....	23	.....	1	.....	5	2
Lynn, Mass.	102,425	26	3	.....	60	.....	1	.....	4	2
Memphis, Tenn.	148,995	46	9	1	11	.....	11	.....	10	8
Nashville, Tenn.	117,057	49	.....	.....	30	.....	1	.....	2	6
New Bedford, Mass.	118,158	42	1	.....	10	.....	2	.....	11	6
New Haven, Conn.	149,685	56	1	.....	7	.....	.....	.....	13	5
Oakland, Cal.	198,604	51	2	1	14	.....	4	.....	7	7
Omaha, Nebr.	165,470	53	12	1	20	.....	11	.....	.....	1
Reading, Pa.	109,381	.....	1	.....	116	.....	3	.....	2	.....
Richmond, Va.	156,687	73	2	.....	54	2	4	.....	.....	6
Salt Lake City, Utah	117,399	30	3	1	34	.....	17	1	.....	.....
Scranton, Pa.	146,811	.....	8	.....	17	.....	6	.....	.....	.....
Spokane, Wash.	150,323	.....	.....	.....	.....	.....	2	.....	1	.....
Springfield, Mass.	105,942	33	6	1	60	.....	7	.....	11	2
Syracuse, N. Y.	155,624	45	4	.....	74	2	14	.....	14	5
Tacoma, Wash.	112,770	.....	1	.....	17	.....	50	.....	.....	.....
Toledo, Ohio	191,554	82	1	1	11	.....	3	.....	.....	12
Trenton, N. J.	111,593	38	2	.....	6	.....	.....	.....	6	6
Worcester, Mass.	163,314	54	3	1	8	.....	7	.....	14	8
Youngstown, Ohio	108,385	22	.....	.....	19	.....	3	.....	3	1
From 50,000 to 100,000 inhabitants:										
Akron, Ohio	85,625	20	3	.....	9	.....	7	.....	10	.....
Allentown, Pa.	63,505	.....	5	.....	39	.....	3	.....	4	.....
Altoona, Pa.	58,659	.....	1	.....	10	.....	1	.....	.....	.....
Atlantic City, N. J.	57,660	.....	.....	.....	17	.....	2	.....	2	1
Augusta, Ga.	50,245	24	.....	.....	6	.....	1	.....	1	1
Bayonne, N. J.	69,893	.....	4	.....	42	.....	2	.....	3	.....
Berkeley, Cal.	57,653	6	.....	.....	5	.....	3	.....	2	1
Brockton, Mass.	67,449	17	2	.....	59	.....	2	.....	4	1
Canton, Ohio	69,852	16	.....	.....	.....	.....	3	.....	.....	1
Charleston, S. C.	60,734	33	.....	1	.....	.....	.....	.....	.....	3
Chattanooga, Tenn.	60,675	3	.....	.....	1	.....	3	.....	.....	1
Covington, Ky.	57,144	25	1	.....	3	.....	1	.....	2	3
Duluth, Minn.	94,495	23	3	.....	4	.....	3	.....	5	3
El Paso, Tex.	63,705	44	1	.....	8	.....	.....	.....	.....	8
Erie, Pa.	75,195	.....	4	.....	199	.....	2	.....	.....	.....
Evansville, Ind.	76,078	23	2	.....	10	.....	.....	.....	6	3
Flint, Mich.	54,772	22	2	1	3	.....	4	.....	.....	2
Fort Wayne, Ind.	76,183	20	4	.....	25	.....	.....	.....	5	.....
Harrisburg, Pa.	72,045	.....	4	.....	11	.....	1	.....	.....	.....
Hoboken, N. J.	77,214	8	4	.....	5	.....	5	.....	.....	.....
Holyoke, Mass.	66,286	14	1	.....	8	.....	.....	.....	2	2
Johnstown, Pa.	68,529	.....	10	.....	19	.....	3	.....	1	.....
Kansas City, Kans.	99,437	.....	2	.....	30	.....	1	.....	4	.....
Lancaster, Pa.	50,863	.....	.....	.....	14	.....	1	.....	.....	.....

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

City Reports for Week Ended May 11, 1918—Continued.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
Little Rock, Ark.	57,343	10	.....	.....	1	.....	1	.....	4	1
Malden, Mass.	51,155	10	3	.....	78	.....	1	.....	3	1
Manchester, N. H.	78,283	23	2	.....	10	.....	.....	.....	12	1
Mobile, Ala.	58,221	20	1	.....	7	.....	.....	.....	1	5
New Britain, Conn.	53,794	23	.....	.....	8	.....	1	.....	.....	.....
Oklahoma City, Okla.	92,943	22	.....	.....	.....	1	3	1	.....	2
Passaic, N. J.	71,744	19	.....	.....	33	.....	.....	.....	3	2
Peoria, Ill.	71,458	27	4	.....	2	.....	2	.....	.....	3
Portland, Me.	63,867	23	.....	.....	4	.....	.....	.....	.....	1
Rockford, Ill.	55,185	18	.....	.....	36	.....	2	.....	.....	3
Sacramento, Cal.	65,895	24	.....	.....	9	.....	5	.....	3	3
Saginaw, Mich.	55,642	16	2	.....	2	.....	2	.....	.....	1
St. Joseph, Mo.	85,236	32	2	.....	.....	.....	.....	.....	.....	.....
San Diego, Cal.	53,330	24	.....	.....	10	.....	2	.....	.....	.....
Schenectady, N. Y.	99,519	21	1	.....	38	.....	.....	.....	18	3
Sioux City, Iowa.	57,078	.....	.....	.....	.....	.....	5	.....	.....	.....
Somerville, Mass.	87,039	18	4	.....	46	.....	2	.....	7	5
South Bend, Ind.	68,946	25	.....	.....	3	.....	.....	.....	.....	.....
Springfield, Ill.	61,120	25	.....	.....	40	.....	.....	.....	.....	2
Springfield, Ohio.	51,550	20	1	.....	4	.....	1	.....	1	2
Terre Haute, Ind.	66,093	14	1	.....	1	.....	2	.....	3	1
Troy, N. Y.	77,916	39	2	1	9	.....	2	.....	7	2
Wichita, Kans.	70,722	.....	.....	.....	21	.....	1	.....	1	.....
Wilkes-Barre, Pa.	76,776	.....	6	.....	45	.....	1	.....	5	.....
Wilmington, Del.	94,265	32	1	1	16	.....	4	.....	.....	2
Yonkers, N. Y.	99,838	20	7	1	186	.....	1	.....	.....	2
York, Pa.	51,656	.....	4	.....	24	.....	3	.....	.....	.....
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	27,732	3	3	.....	29	.....	1	.....	.....	.....
Auburn, N. Y.	37,385	8	1	.....	19	.....	1	.....	.....	1
Battle Creek, Mich.	29,480	.....	1	.....	76	.....	4	1	.....	.....
Beaumont, Tex.	27,711	10	.....	.....	.....	1	.....	.....	.....	2
Boise, Idaho.	33,846	.....	.....	.....	3	.....	.....	.....	.....	.....
Brookline, Mass.	32,730	4	1	.....	25	.....	1	.....	.....	1
Butler, Pa.	27,632	.....	.....	.....	9	.....	.....	.....	4	.....
Butte, Mont.	43,425	.....	.....	.....	.....	.....	16	.....	.....	.....
Cedar Rapids, Iowa.	37,308	.....	3	1	.....	.....	6	.....	.....	.....
Central Falls, R. I.	25,636	.....	1	.....	1	.....	.....	.....	.....	.....
Charleston, W. Va.	29,941	12	2	.....	12	.....	.....	.....	.....	.....
Charlotte, N. C.	39,823	13	.....	.....	3	.....	2	.....	2	3
Chelsea, Mass.	46,192	11	.....	.....	18	.....	4	.....	4	.....
Chester, Pa.	41,396	.....	3	.....	12	.....	3	.....	4	.....
Chicopee, Mass.	29,319	5	1	1	1	.....	.....	.....	2	1
Clinton, Iowa.	27,386	.....	1	.....	20	.....	.....	.....	.....	.....
Cohoes, N. Y.	25,211	4	.....	.....	.....	.....	2	.....	1	1
Colorado Springs, Colo.	32,971	11	3	1	7	.....	.....	.....	.....	7
Columbia, S. C.	34,611	.....	.....	.....	2	.....	.....	.....	.....	.....
Council Bluffs, Iowa.	31,484	7	.....	.....	11	.....	3	.....	.....	.....
Cranston, R. I.	25,987	4	.....	.....	15	.....	.....	.....	.....	1
Cumberland, Md.	26,074	9	1	1	32	.....	3	.....	2	.....
Danville, Ill.	32,261	16	.....	.....	5	.....	.....	.....	.....	1
Davenport, Iowa.	48,811	1	1	.....	1	.....	6	1	.....	.....
Dubuque, Iowa.	39,873	.....	1	.....	1	.....	.....	.....	.....	.....
Durham, N. C.	25,061	8	.....	.....	8	.....	.....	.....	.....	1
Easton, Pa.	30,530	.....	.....	.....	20	.....	.....	.....	1	.....
East Orange, N. J.	42,458	8	.....	.....	31	.....	1	.....	4	.....
Elgin, Ill.	28,203	5	.....	.....	1	.....	.....	.....	1	1
Elmira, N. Y.	38,120	3	.....	.....	40	.....	2	.....	.....	.....
Evanston, Ill.	28,591	8	.....	.....	.....	.....	1	.....	.....	.....
Everett, Mass.	39,233	7	2	.....	10	.....	1	.....	7	.....
Everett, Wash.	35,486	.....	.....	.....	.....	.....	.....	.....	1	.....
Fort Smith, Ark.	28,638	6	1	.....	2	.....	1	.....	.....	.....
Fresno, Cal.	34,958	14	.....	.....	12	.....	.....	.....	.....	.....
Galveston, Tex.	41,863	15	.....	.....	1	.....	.....	.....	1	.....
Green Bay, Wis.	29,353	9	.....	.....	4	.....	1	.....	.....	.....
Hammond, Ind.	26,171	10	.....	.....	.....	.....	3	.....	4	.....
Haverhill, Mass.	48,477	.....	2	.....	17	1	.....	.....	.....	.....
Hazelton, Pa.	28,491	.....	.....	.....	42	.....	.....	.....	.....	.....
Jackson, Mich.	35,396	8	.....	.....	17	.....	13	.....	.....	.....
Jamestown, N. Y.	36,580	11	1	.....	28	.....	1	.....	4	.....

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

City Reports for Week Ended May 11, 1918—Continued.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Joplin, Mo.	33,216				5		2		6	
Kalamazoo, Mich.	48,886	18			3				3	
Kenosha, Wis.	31,576	6	4		13		4			
Knoxville, Tenn.	38,676		1		3				1	1
La Crosse, Wis.	31,677	7	1						1	
Lexington, Ky.	41,097	16			11				1	2
Lima, Ohio.	35,384	7								1
Lincoln, Nebr.	46,515	10	5	1	2		4			
Long Beach, Cal.	27,587	12	1		18	1			2	
Lorain, Ohio.	36,946				3					
Lynchburg, Va.	32,940	9			5				2	1
Macon, Ga.	45,757	28			2		1		4	1
Madison, Wis.	30,699	8	1		27		16			2
McKeesport, Pa.	47,521		3		4					
Medford, Mass.	26,234	6	2		10		2		2	1
Moline, Ill.	27,451	9	1		32		1			
Montclair, N. J.	26,318	2	1		13				1	
Montgomery, Ala.	43,285	11			8					1
Mount Vernon, N. Y.	37,009	7	1		12		1		2	
Muncie, Ind.	25,424	6	2						1	1
Muskegon, Mich.	26,100	5							2	
Muskogee, Okla.	44,210				4					
Nashua, N. H.	27,327	6								
Newark, Ohio.	29,635	2			6					
Newburgh, N. Y.	29,603	11	1		1		1			4
New Castle, Pa.	41,133				10		1			
Newport, Ky.	31,927	5							1	1
Newport, R. I.	30,108	2	2		1		3			
Newton, Mass.	43,715	12	7	1	11		1		1	
Niagara Falls, N. Y.	37,353	14			2		3		3	1
Norristown, Pa.	31,401				1					
Norwalk, Conn.	26,899						2			
Oak Park, Ill.	26,654	10	1		11					
Ogden, Utah.	31,404	10			36				2	
Orange, N. J.	33,080	13	1		63				10	
Oshkosh, Wis.	36,065	13							1	1
Pasadena, Cal.	46,450	11	1		65		2		1	2
Petersburg, Va.	25,582	18							1	3
Pittsfield, Mass.	38,629	17			3		2		4	
Poughkeepsie, N. Y.	30,390	10	2		51		1		3	
Quincy, Ill.	36,798	11			2					1
Quincy, Mass.	38,136	12	2		57		5		5	
Racine, Wis.	46,486	14							2	1
Roanoke, Va.	43,284	13	1		30				1	1
Rock Island, Ill.	28,926		2		20		6			
Salem, Mass.	48,562	16			51		2		1	2
San Jose, Cal.	38,902				18				1	
Sheboygan, Wis.	28,559	1	1				2			
Shenandoah, Pa.	29,201		1							
Springfield, Mo.	40,341	15			1		4			2
Steubenville, Ohio.	27,445	12			7		1		3	
Superior, Wis.	46,266	19	1				6			1
Taunton, Mass.	36,283	17	1		2					2
Waco, Tex.	33,385	12					1		4	2
Waltham, Mass.	30,570	10	1		50					
Warwick, R. I.	29,969						1			
Waterloo, Iowa.	35,559	11			4					
Watertown, N. Y.	29,894	1								
West Hoboken, N. J.	43,139	7			4		2		3	
Wheeling, W. Va.	43,377	17	2		3		1	1		
Williamsport, Pa.	33,809						1			
Wilmington, N. C.	29,892	17			10					
Winston-Salem, N. C.	31,155	22	1	1	2				4	5
Zanesville, Ohio.	30,863				2					2
From 10,000 to 25,000 inhabitants:										
Aberdeen, S. Dak.	15,218									1
Alexandria, La.	15,333	5			3				1	
Alton, Ill.	22,874	8			2		1			1
Amesbury, Mass.	10,157	2	2						1	
Anderson, Ind.	23,996	6			3		1			

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

City Reports for Week Ended May 11, 1918—Continued.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 10,000 to 25,000 inhabitants—Continued.										
Ann Arbor, Mich	15,010	11			20					
Anniston, Ala	14,112				4					
Ansonia, Conn	16,704				2		1		1	
Appleton, Wis	17,834	5			2					
Arlington, Mass	12,811	2			1				1	
Asbury Park, N. J	14,007	1			22					
Ashtabula, Ohio	21,498	7							1	
Attleboro, Mass	19,282	3							2	1
Augusta, Me	14,170				1					
Bakersfield, Cal	16,874	17			2					4
Barberton, Ohio	13,212		4				1	1		1
Barre, Vt	12,169	3	2							1
Beaver Falls, Pa	13,532				7					
Bedford, Ind	10,349	2								
Bellaire, Ohio	14,348	6					1			
Beloit, Wis	18,072	7	3		26	2				
Bethlehem, Pa	14,142		4		29		1		4	
Beverly, Mass	21,645	3			8					
Billings, Mont	14,422		1		1		3			
Bloomington, Ind	11,383	2								
Braddock, Pa	21,685				18					
Bradford, Pa	[1] 14,544				17		1			
Burlington, Vt	21,617	12			1		1			1
Cairo, Ill	15,794	7			1					
Cambridge, Ohio	13,483	2								
Canton, Ill	13,262	5		1	1					
Cape Girardeau, Mo	10,775		1							
Carbondale, Pa	19,242				5					
Carlisle, Pa	10,726				1					
Carnegie, Pa	11,632				6				1	
Chanute, Kans	12,455				8		2			
Chillicothe, Ohio	15,470	4	3		2		2		1	1
Clinton, Mass	[1] 13,075	7			9					
Coatesville, Pa	14,455				1				1	
Coffeyville, Kans	17,548				4		3		1	
Concord, N. H	22,669	9			4					1
Corpus Christi, Tex	10,432	4								
Cortland, N. Y	13,069	2								
Dedham, Mass	10,433				6				1	
Dover, N. H	13,272	4					1			
Dunkirk, N. Y	20,743	6			1					
Dunmore, Pa	20,776		1		1					
East Liverpool, Ohio	22,586	7					2			1
East Providence, R. I	18,113						1			
Eau Claire, Wis	18,807		1		16					1
Elwood, Ind	[1] 11,038	6	1		1					1
Elyria, Ohio	18,618	3	1		2					1
Fairmont, W. Va	15,506		1							
Fargo, N. Dak	17,389	9	1							
Farrell, Pa	[1] 10,190				1					
Findlay, Ohio	[1] 14,845				95					
Fort Scott, Kans	10,550	10			1					
Fostoria, Ohio	10,770	2			1					
Framingham, Mass	13,982				1		2		2	1
Frederick, Md	11,112	2								
Fremont, Ohio	10,882	2			5					
Fulton, N. Y	11,908	7								1
Galesburg, Ill	24,276	6			8					
Gardner, Mass	17,140	1			16				2	
Gary, Ind	[1] 16,802	8	3				2			
Glens Falls, N. Y	16,894	4			1				2	
Greeley, Colo	11,420		1		1		5			
Greenfield, Mass	11,998	2			4				2	
Greensboro, N. C	19,577	4			1					
Greensburg, Pa	15,483						1			
Hackensack, N. J	16,945	7	1		9				3	
Harrison, N. J	16,950		1		8				2	
Hattiesburg, Miss	16,482				1				1	1

[1] Population Apr. 15, 1910; no estimate made.

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

City Reports for Week Ended May 11, 1918—Continued.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 10,000 to 25,000 inhabitants—Continued.										
Henderson, Ky	12,192	7								
Homestead, Pa	22,466						1			
Hopkinsville, Ky	10,762						3			
Hornell, N. Y	14,685	3			2				1	
Hudson, N. Y	12,705	2			2	1			3	
Independence, Kans	14,506	4			2					
Independence, Mo	11,672	4	1		4				1	1
Iola, Kans	11,068				1					
Ithaca, N. Y	15,848	2			3					
Janesville, Wis	14,339	6					3			1
Johnstown, N. Y	10,646				7					
Kankakee, Ill	14,230				1					
Kearny, N. J	23,539	7			19		2		2	
Kewanee, Ill	13,561	7	1		3		3			1
Kokomo, Ind	20,930	8	1		1					
Lackawanna, N. Y	15,987	6							1	1
La Fayette, Ind	21,286	9							1	1
Lancaster, Ohio	15,670				4		3			
Leavenworth, Kans	[1] 19,363	7	1		5					
Lincoln, R. I	10,383				5					
Little Falls, N. Y	13,451	2								
Manitowoc, Wis	13,805	7	1						2	1
Mansfield, Ohio	22,734				14				1	
Marinette, Wis	[1] 14,610	4			12		1	1		
Marion, Ind	19,834	1								1
Marshall, Tex	13,712	3	1						2	
Massillon, Ohio	15,310	5			3					
Melrose, Mass	17,445	4	2							
Menominee, Mich	[1] 10,507	3					5			
Michigan City, Ind	21,512	5								
Middletown, N. Y	15,810	1			1				1	
Middletown, Ohio	15,625	7			2				1	
Millville, N. J	13,624		1		5					
Mishawaka, Ind	16,385	3								1
Missoula, Mont	18,214	5							1	1
Monessen, Pa	21,630		5		5		1			
Morgantown, W. Va	13,709	4			3					
Morristown, N. J	13,284				29				3	
Moundsville, W. Va	11,153	3								
Mount Carmel, Pa	20,268		3		2					
Muscatine, Iowa	17,500				1					
Nanticoke, Pa	23,126						3		1	
Natick, Mass	10,102	3			12				1	1
New Albany, Ind	23,629	4							1	
Newburyport, Mass	15,243	10	1		4					
New Castle, Ind	13,241	1					2			
New London, Conn	20,985	9	1		3		5			2
North Adams, Mass	[1] 22,019	9	2				1		1	
Northampton, Mass	19,926	8			4		2		1	2
North Attleboro, Mass	11,014	4	3		7					
North Braddock, Pa	15,148		1		2					
North Little Rock, Ark	14,907	2			2				1	1
North Yakima, Wash	20,951				5		3			
Norwood, Ohio	22,286	1								
Olean, N. Y	16,624	5								
Oswego, N. Y	24,101		1		2		5		1	
Owensboro, Ky	17,784	10				1	1			2
Palestine, Tex	11,854		1		1				2	
Parkersburg, W. Va	20,612	3							1	1
Phoenixville, Pa	11,714				3					
Plainfield, N. J	23,805	6			5				1	
Plattsburgh, N. Y	12,837	3							1	
Plymouth, Mass	13,743	3								
Plymouth, Pa	19,100		1							
Pocatello, Idaho	12,293				1					
Pontiac, Mich	17,524		7		3		1		1	3
Port Chester, N. Y	16,183	4			10	1			1	

[1] Population Apr. 15, 1910; no estimate made.

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

City Reports for Week Ended May 11, 1918—Continued.

City.	Population as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 10,000 to 20,000 inhabitants—Continued.										
Pottsville, Pa	23,372				4				1	
Provo, Utah	10,645	3								
Rahway, N. J	10,219								1	
Raleigh, N. C	20,127	12			11				2	2
Redlands, Cal	14,000	1			5				1	1
Reno, Nev	14,869	6	1							
Richmond, Ind	24,697	7								
Riverside, Cal	19,763	7			2					
Rocky Mount, N. C	12,067	7								2
Rome, N. Y	23,737		3						1	
Rutland, Vt	14,831	8								
Sandusky, Ohio	20,193	4	1		1					
Sanford, Me	10,916	3								
Santa Ana, Cal	10,627	4			15					
Santa Cruz, Cal	14,592	5			5					1
Saratoga Springs, N. Y	13,821	3			5				1	1
Shamokin, Pa	21,129		4				3			
Shelbyville, Ind	10,965	6								1
Southbridge, Mass	14,205	2			4				1	
Spartanburg, S. C	21,365	8			5				1	1
Steelton, Pa	15,548						1		2	
Tuscaloosa, Ala	10,488	3	1		1				2	1
Uniontown, Pa	20,780				3					
Vallejo, Cal	13,461				3					
Vancouver, Wash	13,180				22		3			
Warren, Ohio	13,059	12			3					
Warren, Pa	14,737						1			
Washington, Pa	21,618		4		20		4		2	
Watertown, Mass	14,687	3			5		2		1	
Wausau, Wis	19,239	5					3	1		1
West Chester, Pa	13,176				4		1			
Westfield, Mass	18,391	10	1		18		1			2
West Warwick, R. I	15,782	6								1
White Plains, N. Y	22,465	6			4		3			
Wilkinsburg, Pa	23,228				11		1			
Winchester, Mass	10,603	4			1					
Winona, Minn	[1] 18,583	3								2
Winthrop, Mass	12,692		1		7		5		1	

[1] Population Apr. 15, 1910; no estimate made.

FOREIGN.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Apr. 21-30, 1918.		Cases remaining under treatment Apr. 30, 1918.	Disease.	Apr. 21-30, 1918.		Cases remaining under treatment Apr. 30, 1918.
	New cases.	Deaths.			New cases.	Deaths.	
Diphtheria	12		18	Paratyphoid fever			1
Leprosy			13	Scarlet fever	1		[2] 2
Malaria	8		[1] 43	Typhoid fever	44	2	[3] 86
Measles	1		8	Varicella	17		22

[1] From the interior, 38.
[2] From the interior, 1.
[3] From the interior, 41. Foreign, 1; from Regla, 1.

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

Reports Received During Week Ended May 31, 1918.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Feb. 17-23	3	3	
Java:				
West Java				Feb. 1-21, 1918: Cases, 11.
Batavia	Feb. 1-21	11		
Philippine Islands:				
Provinces				Mar. 31-Apr. 6, 1918: Cases, 96; deaths, 85.
Bohol	Mar. 31-Apr. 6	28	23	
Misamis	do	48	31	
Occidental Negros	do	2	5	
Surigao	do	18	26	

PLAGUE.

India				Feb. 17-23, 1918: Cases, 36,768; deaths, 29,709.
Bombay	Feb. 17-23	35	30	
Indo-China:				
Saigon	Mar. 18-31	25	14	
Java:				
East Java				Jan. 15-Feb. 4, 1918: Cases, 60; deaths, 60.
Surabaya	Jan. 15-Feb. 4	17	17	

[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 May 31, 1918—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Mar. 1-31	36	6	
Canada:				
New Brunswick—				
St. John				May 13, 1918: 14 cases.
Nova Scotia—				
Halifax	Apr. 28-May 11	9		
Sydney	May 5-11	1		
Ontario—				
Sarnia	May 11-18	2		
Quebec—				
Quebec	May 5-11	1		
France:				
Paris	Mar. 31-Apr. 6		1	
India:				
Bombay	Feb. 17-23	179	72	
Indo-China:				
Saigon	Mar. 18-24	300	97	
Java:				
East Java				Jan. 15-Feb. 4, 1918: Cases, 11.
Surabaya	Jan. 29-Feb. 4	1		
Mid-Java				Jan. 30-Feb. 13, 1918: Cases, 18.
West Java				Feb. 1-21, 1918: Cases, 141; deaths, 43.
Batavia	Feb. 1-7	1		
Newfoundland:				
St. Johns	May 4-14	14		
Philippine Islands:				
Manila	Mar. 31-Apr. 6	17	11	Varioloid, 41.
Spain:				
Coruna	Mar. 1-Apr. 6		14	
Madrid	Mar. 1-31		7	

TYPHUS FEVER.

Java:				
East Java				Jan. 15-Feb. 11, 1918: Cases, 23; deaths, 5.
Surabaya	Jan. 15-Feb. 11	19	3	
Mid-Java				Jan. 24-Feb. 13, 1918: Cases, 13; deaths, 2.
Samarang	Jan. 31-Feb. 6	2		
West Java				Feb. 1-21, 1918: Cases, 3.
Batavia	Feb. 1-21	20	1	
Mexico:				
Aguascalientes	Apr. 29-May 5		1	
Spain:				
Madrid	Mar. 1-31		1	
Tunisia:				
Tunis	Apr. 12-19	3	3	
Union of South Africa:				
Cape of Good Hope State				Sept. 10, 1917-Mar. 17, 1918: Cases, 4,444 (European, 34); deaths, 902 (European, 15).
Natal				Dec. 1, 1917-Mar. 17, 1918: Cases, 50; deaths, 11.

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

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. 26	216	190	
Calcutta	Sept. 16-Dec. 15	.....	135	
Do	Dec. 30-Feb. 23	.....	53	
Karachi	....do	25	6	
Madras	Nov. 25-Dec. 22	2	2	
Do	Dec. 30-Mar. 9	44	24	
Rangoon	Nov. 4-Dec. 22	5	5	
Do	Dec. 30-Mar. 2	7	3	
Indo-China:				
Provinces	.....	.....	.....	Sept. 1-Dec. 31, 1917: Cases, 198; deaths, 95.
Anam	Sept. 1-Dec. 31	24	15	
Cambodia	....do	74	54	
Cochin-China	....do	58	24	
Saigon	Nov. 22-Dec. 9	4	3	
Do	Feb. 4-Mar. 11	8	3	
Kwang-Chow-Wan	Sept. 1-30	10	2	
Java:				
East Java	Oct. 28-Nov. 3	1	1	
West Java	.....	.....	.....	Oct. 19-Dec. 27, 1917: Cases, 102; deaths, 56. Dec. 28, 1917-Jan. 31, 1918: Cases, 27; deaths, 7.
Batavia	Oct. 10-Dec. 27	49	23	
Do	Dec. 28-Jan. 31	24	1	
Palestine	.....	.....	.....	Dec. 28, 1917-Feb. 5, 1918: Cases, 31. Occurring at 7 localities; 2 cases in encampments.
Deir Seneid	Dec. 28-Jan. 31	13	.....	
Sukkarieh	....do	13	.....	
Persia	.....	.....	.....	July 30-Sept. 3, 1917: Cases, 384; deaths, 276.
Achraf	July 30-Aug. 16	90	88	
Astrabad	July 31	.....	.....	Present.
Barfrush	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	.....	.....	Present.
Kharek	May 28-June 11	21	13	
Meched	Aug. 18-Sept. 2	174	82	
Ouzoun Dare	Aug. 8	.....	.....	Do.
Sabzevar	Aug. 24	.....	.....	Do.
Sari	July 3-29	273	144	
Semnan	Aug. 31-Sept. 2	14	5	
Yekchambe Bazar	June 3	6	.....	
Philippine Islands:				
Provinces	.....	.....	.....	July 1-Dec. 29, 1917: Cases, 5,964; deaths, 3,655. Dec. 30, 1917-Mar. 30, 1918: Cases, 1,664; deaths, 1,185.
Antique	Nov. 18-Dec. 1	48	32	
Do	Feb. 3-9	4	4	
Bohol	Nov. 18-Dec. 29	169	111	
Do	Dec. 30-Mar. 30	521	413	
Capiz	Nov. 25-Dec. 29	27	21	
Do	Dec. 30-Mar. 23	219	182	
Cebu	Dec. 23-29	3	.....	
Do	Dec. 30-Mar. 30	100	54	
Davao	Mar. 10-16	10	8	
Iloilo	Nov. 25-Dec. 29	179	135	
Do	Dec. 30-Mar. 2	97	63	
Leyte	Nov. 25-Dec. 22	13	12	
Do	Feb. 3-Mar. 16	50	38	
Mindanao	Nov. 25-Dec. 29	337	196	
Do	Dec. 30-Feb. 9	341	220	
Misamis	Feb. 24-Mar. 23	106	67	
Occidental Negros	Nov. 25-Dec. 22	177	123	
Do	Jan. 13-Mar. 30	144	83	
Oriental Negros	Nov. 25-Dec. 29	99	62	
Do	Dec. 30-Mar. 30	23	15	
Romblon	Nov. 25-Dec. 1	1	1	
Surigao	Feb. 24-Mar. 23	14	9	
Zamboanga	....do	35	29	
Russia:				
Tashkentnine	May 13	.....	.....	Present.
Tzaritsin	....do	.....	.....	Do.
Siam:				
Bangkok	Sept. 16-22	1	1	
Turkey in Asia:				
Bagdad	Nov. 1-15	.....	40	

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia	Nov. 4–Dec. 15	4	4	
Do	Dec. 30–Feb. 23	4	3	
Rio de Janeiro	Dec. 23–29	1		
Do	Jan. 6–12	1	1	
British East Africa:				
Mombassa	Oct. 1–Dec. 31	31	18	
British Gold Coast:				
Axim	Jan. 8			Present.
Ceylon:				
Colombo	Oct. 14–Dec. 1	14	13	
Do	Dec. 30–Feb. 16	20	17	
China				Present in North China in January, 1918; pneumonic form.
Anhwei Province—				
Fengyanghsien	Feb. 27		9	Pneumonic.
Pengpu	do		1	Do.
Chili Province—				
Kalgan				Vicinity. Present in February, 1918.
Fukien Province—				
Amoy	Mar. 11–31			Present in vicinity.
Kiangsu Province—				
Nanking	Mar. 17–Apr. 5	19	15	
Shanshi Province				Present in February, 1918; 116 cases estimated.
Ecuador:				
Babahoyo	Feb. 1–15	1		
Duran	Feb 16–Mar. 30	2	1	
Guayaquil	Sept. 1–Nov. 30	68	24	Reported outbreak occurring about Jan. 17, 1918.
Do	Feb. 1–15	44	18	
Do	Mar. 1–30	37	14	
Egypt				Jan. 1–Nov. 15, 1917; Cases, 728; deaths, 398.
Alexandria	Jan. 14–28	1	2	
Cairo	Dec. 17–23	2		
Port Said	July 2–Dec. 23	13	7	
Suez	July 2–Oct. 20	62	38	
Hawaii:				
Laupahoehoe	May 5	1	1	
India				July 1–Dec. 29, 1917: Cases, 250,258, deaths, 212,022. Dec. 30, 1917–Feb. 16, 1918: Cases, 240,000; deaths, 192,149.
Bassein	Dec. 9–29		8	
Do	Dec. 30–Feb 23		99	
Bombay	Oct. 28–Dec. 29	147	123	
Do	Dec. 30–Feb. 16	152	112	
Calcutta	Sept. 16–29		2	
Do	Dec. 30–Feb. 2		4	
Henzada	Oct. 21–27		1	
Do	Jan. 5–Feb. 23		71	
Karachi	Oct. 21–Dec. 29	27	20	
Do	Dec. 30–Mar. 2	48	34	
Madras	Feb. 3–Mar. 9	3	3	
Madras Presidency	Oct. 31–Nov. 24	5,786	4,519	
Do	Jan. 6–Mar. 9	11,082	8,591	
Mandalay	Oct. 14–Nov. 17		89	
Do	Dec. 30–Feb. 16		781	
Moulmein	Feb. 17–23		1	
Myingyan	Dec. 30–Feb. 16		407	
Pegu	Feb. 10–23		2	
Prome	Jan. 5–12		1	
Rangoon	Oct. 21–Dec. 22		56	
Do	Dec. 30–Mar. 2	441	400	
Toungoo	Dec. 9–29		5	
Do	Dec. 30–Feb. 23		32	
Indo-China:				
Provinces				Sept. 1–Dec. 31, 1917: Cases, 171; deaths, 128.
Anam	Sept. 1–Dec. 31	45	28	
Cambodia	do	95	83	
Cochin-China	do	31	17	
Saigon	Oct. 31–Dec. 23	17	6	
Do	Dec. 31–Mar. 17	115	60	
Java:				
East Java				Oct. 8–Dec. 31, 1917: Cases, 196; deaths, 193.
Do				Jan. 1–14, 1918: Cases, 22; deaths, 21.
Residencies—				
Kediri	Oct. 8–Dec. 31	1	1	
Madioen	do	49	49	
Samarang	do	110	109	
Surabaya	do	25	23	
Surakarta	do	11	11	
West Java				Nov. 25–Dec. 9, 1917: Cases, 45; deaths, 45. Dec. 1, 1917–Jan. 15, 1918: Cases, 106.

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Peru:				
Ancachs Department—				
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—				
Catacaos	do	1		
Senegal:				
St. Louis	Feb. 2			Present.
Siam:				
Bangkok	Sept. 16-Dec. 23	13	9	
Do	Jan. 13-Mar. 16	37	27	
Straits Settlements:				
Singapore	Oct. 28-Dec. 29	5	7	
Do	Jan. 6-Mar. 9	64	57	

SMALLPOX.

Algeria:				
Algiers	Nov. 1-Dec. 31	3	2	
Do	Jan. 1-Apr. 23	213		
Australia:				
New South Wales				July 12-Dec. 20, 1917: Cases, 36; Jan. 4-17, 1918: case, 1.
Abermain	Oct. 25-Nov. 29	3		Newcastle district.
Cessnock	July 12-Oct. 11	7		
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-Mar. 23	251	84	
Sao Paulo	Oct. 29-Nov. 4		2	
British East Africa:				
Mombasa	Oct. 1-Dec. 31	9	5	
Canada:				
British Columbia—				
Vancouver	Jan. 13-Mar. 9	5		
Victoria	Jan. 7-Feb. 2	2		
Winnipeg	Dec. 30-Apr. 13	4		
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	do	41		In 5 localities.
Restigouche County	Jan. 18	60		
St. John County—				
St. John	Mar. 3-May 11	20		
Victoria County	Jan. 2	10		At Limestone and a lumber camp.
Westmoreland County—				
Moncton	Jan. 29-Apr. 27	20		
York County	Jan. 22	8		
Nova Scotia—				
Cape Sable Island				Present May 8 at Clarks Harbor
Halifax	Feb. 24-Apr. 27	10		
Sydney	Feb. 3-Apr. 27	19		
Ontario—				
Arnprior	Mar. 31-Apr. 6		1	
Hamilton	Dec. 16-22	1		
Do	Jan. 13-19	2		
Ottawa	Mar. 4-24	5		
Sarnia	Dec. 9-15	1		
Do	Jan. 6-Mar. 30	32		
Toronto	Feb. 10-Apr. 6	2		
Windsor	Dec. 30-Jan. 5	1		

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Prince Edward Island—				
Charlottetown	Feb. 7–13	1		
Quebec—				
Montreal	Dec. 16–Jan. 5	5		
Do	Jan. 6–Apr. 6	12		
Quebec	Apr. 21–27	2		
China:				
Amoy	Oct. 22–Dec. 30			Present.
Do	Dec. 31–Mar. 31			Do.
Antung	Dec. 2–23	13	2	
Do	Jan. 7–Apr. 6	13	3	
Changsha	Jan. 28–Mar. 10	6	1	
Chefoo	Jan. 27–Feb. 9			Do.
Chungking	Nov. 11–Dec. 29			Do.
Do	Dec. 30–Mar. 16			Do.
Dairen	Nov. 18–Dec. 22	3	1	
Do	Dec. 30–Apr. 6	64	5	
Hankow	Feb. 25–Mar. 3	1		
Harbin	May 14–June 30	20		Chinese Eastern Ry.
Do	July 1–Dec. 2	7		Do.
Hongkong	Dec. 23–29	1		
Do	Jan. 26–Mar. 30	19	9	
Hungtahotze Station	Oct. 28–Nov. 4	1		Do.
Manchuria Station	May 14–June 30	6		Do.
Do	July 1–Dec. 2	3		Do.
Mukden	Nov. 11–24			Present.
Do	Feb. 10–Mar. 30			Do.
Nanking	Feb. 3–Apr. 6			Do.
Shanghai	Nov. 18–Dec. 23	41	91	Cases, foreign; deaths among natives.
Do	Dec. 31–Apr. 1	38	119	Do.
Swatow	Jan. 18			Unusually prevalent.
Tientsin	Nov. 11–Dec. 22	13		
Do	Dec. 30–Apr. 6	46		
Tsingtau	Feb. 4–Mar. 31	10	2	
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–Nov. 30	26	2	
Do	Feb. 1–Mar. 31	4	*3	
Egypt:				
Alexandria	Nov. 12–18	2	1	
Do	Jan. 8–Mar. 25	10		
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–Mar. 30	9	3	
Rouen	Mar. 31–Apr. 6	26	4	
Great Britain:				
Cardiff	Feb. 3–9	4		
Hull	Mar. 17–30	3		
Greece:				
Saloniki	Jan. 27–Mar. 16		9	
Honduras:				
Santa Barbara Department	Jan. 1–7			Present in interior.
India:				
Bombay	Oct. 21–Dec. 29	50	12	
Do	Dec. 31–Feb. 2	346	134	
Calcutta	Jan. 27–Feb. 23		13	
Karachi	Nov. 18–Dec. 29	4	2	
Do	Jan. 27–Mar. 2	31	17	Nov. 11–16, 1917: 10 cases with 4 deaths; imported on s. s. Menesa from Basreh.
Madras	Oct. 31–Dec. 29	20	8	
Do	Dec. 30–Mar. 9	143	135	
Rangoon	Oct. 28–Dec. 22	6	1	
Do	Dec. 30–Mar. 2	63	11	
Indo-China:				
Provinces				Sept. 1–Dec. 31, 1917: Cases, 690; deaths, 180.
Anam	Sept. 1–Dec. 31	210	30	
Cambodia	do	19	11	
Cochin-China	do	440	133	
Saigon	Oct. 20–Dec. 30	120	26	
Do	Dec. 31–Mar. 17	795	273	
Laos	Oct. 1–Dec. 31	8	1	
Tonkin	Sept. 1–Dec. 31	18	5	

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Italy:				
Castellamare	Dec. 10	2		Among refugees.
Florence	Dec. 1–15	17	4	
Genoa	Dec. 2–31	11	3	
Do	Jan. 2–Apr. 15	52	9	
Leghorn	Jan. 7–Apr. 7	33	7	
Messina	Jan. 3–19	1		
Milan				Oct. 1–Dec. 31, 1917: Cases, 32.
Naples	To Dec. 10	2		Among refugees.
Taormina	Jan. 20–Feb. 9	6		
Turin	Oct. 29–Dec. 29	123	120	
Do	Jan. 21–Mar. 10	72	6	
Japan:				
Nagasaki	Jan. 14–Apr. 14	10	3	
Taihoku	Dec. 15–21	1		Island of Taiwan (Formosa).
Do	Jan. 8–Apr. 8	49	8	Do.
Tokyo	Feb. 11–Apr. 14	26		City and suburbs.
Yokohama	Jan. 17–Feb. 3	63		
Java:				
East Java	Oct. 7–Dec. 23	50		Dec. 25–31, 1917: Cases, 7. Jan. 1–14, 1918: Cases, 3.
Surabaya	Dec. 25–31	1		
Mid-Java				Oct. 10–Dec. 26, 1917: Cases, 86; death, 1. Dec. 28, 1917–Jan. 23, 1918: Cases, 23.
Samarang	Nov. 6–Dec. 12	4	1	
West Java				Oct. 19–Dec. 27, 1917: Cases, 231; deaths, 36. Dec. 28, 1917–Jan. 31, 1918: Cases, 116; deaths, 17.
Batavia	Nov. 2–8	1		
Mesopotamia—				
Bagdad	Jan. 1–31		10	
Mexico:				
Aguascalientes	Feb. 4–17		2	
Ciudad Juarez	Mar. 3–23	2	1	
Guadalajara	Mar. 1–31	21	4	
Mazatlan	Dec. 5–11		1	
Do	Jan. 29–Apr. 2	4	4	
Mexico City	Nov. 11–Dec. 29	16		
Do	Dec. 30–Apr. 13	111		
Piedras Negras	Jan. 11	200		
Vera Cruz	Jan. 20–Apr. 28	16	3	
Newfoundland:				
St. Johns	Dec. 8–Jan. 4	29		
Do	Jan. 5–May 3	89		45 cases in hospital.
Trepassey	Jan. 4			Outbreak with 11 cases reported.
Philippine Islands:				
Manila	Oct. 28–Dec. 8	5		
Do	Feb. 3–30	81	35	Varioloid, 130.
Porto Rico:				
San Juan	Jan. 28–Apr. 7	37		Of these, 36 varioloid.
Portugal:				
Lisbon	Nov. 4–Dec. 15	2		
Do	Dec. 30–Mar. 30	17		
Portuguese East Africa:				
Lourenço Marquez	Aug. 1–Dec. 31		16	
Do	Jan. 1–31		6	
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–Mar. 16	26	14	
Spain:				
Coruna	Dec. 2–15		4	
Do	Jan. 20–Feb. 23		5	
Madrid	Jan. 1–Feb. 28		9	Jan. 1–Dec. 31, 1917: Deaths, 77.
Malaga	Oct. 1–31		19	
Seville	Oct. 1–Dec. 30		66	
Do	Jan. 1–31		20	
Valencia	Jan. 27–Feb. 2	1		
Straits Settlements:				
Singapore	Nov. 25–Dec. 1	1	1	
Do	Dec. 30–Jan. 5	1		
Tunisia:				
Tunis	Dec. 14–20	1		
Do	Mar. 16–Apr. 12	2		

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
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.
Transvaal—				
Johannesburg	Jan. 1-31	4		
Venezuela:				
Maracaibo	Dec. 2-8		1	

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-Dec. 31	2	1	
Argentina:				
Rosario	Dec. 1-31		1	
Austria-Hungary:				
Hungary				Present in December, 1917.
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. 3-20	13	1	
Do	Dec. 31-Mar. 30	3	2	
Chosen (Korea):				
Seoul	Nov. 1-20	1		
Do	Feb. 1-28	3	2	
Egypt:				
Alexandria	Nov. 8-Dec. 28	57	15	
Do	Jan. 8-Apr. 1	688	157	
Cairo	July 23-Dec. 23	143	74	
Port Said	July 30-Nov. 11	5	5	
France:				
Marseille	Dec. 1-31		1	
Germany				Jan. 1-30, 1918: Cases, 66.
Great Britain:				
Belfast	Feb. 10-Mar. 30	21	3	
Dublin	Mar. 24-30	3		
Glasgow	Dec. 21	1		
Do	Jan. 20-Apr. 20	16		
Manchester	Dec. 2-8	1		
Greece:				
Arta	Feb. 19	2		
Janina	Feb. 14	110		Jan. 27, epidemic.
Saloniki	Nov. 11-Dec. 29		72	
Do	Dec. 30-Mar. 16		27	
Italy:				
San Remo	Mar. 10-16	2		
Japan:				
Nagasaki	Nov. 26-Dec. 16	5	5	
Do	Jan. 7-Apr. 14	18	6	
Java:				
East Java				Oct. 15-Dec. 31, 1917: Cases, 39;
Surabaya	Dec. 17-31	9	1	deaths, 7. Jan. 1-14, 1918:
Do	Jan. 1-14	10	1	Cases, 11; deaths, 2.
Mid-Java				Oct. 10-Dec. 26, 1917: Cases, 63;
Samarang	Oct. 9-Dec. 26	20	2	deaths, 2. Dec. 28, 1917-Jan.
Do	Dec. 27-Jan. 15	18		23, 1918: Cases, 11.
West Java				Oct. 19-Dec. 27, 1917: Cases, 94;
Batavia	Oct. 1-Dec. 27	50	15	deaths, 17. Dec. 28, 1917-Jan.
Do	Dec. 28-Jan. 31	27	1	31, 1918: Cases, 53; deaths, 1.
Lithuania				Dec. 30, 1917-Jan. 5, 1918: Cases, 195.
Mexico:				
Aguascalientes	Dec. 15		3	
Do	Jan. 21-Apr. 28		17	
Durango State—				
Guanacevi	Feb. 11			Epidemic.
Mexico City	Nov. 11-Dec. 29	476		
Do	Dec. 30-Apr. 13	704		

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

Reports Received from Dec. 29, 1917, to May 24, 1918—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Newfoundland:				
St. Johns	Mar. 30–Apr. 5	1	1	
Norway:				
Bergen	Feb. 1–16	3	.....	
Poland	.....	.....	.....	Nov. 18–Dec. 8, 1917: Cases, 2,568; deaths, 218. Dec. 23, 1917–Jan. 12, 1918: Cases, 3,026; deaths, 315.
Lodz	Nov. 18–Dec. 8	219	25	
Warsaw	do	1,461	141	
Portugal:				
Lisbon	Mar. 3–30	18	.....	Feb. 21: Present.
Oporto	Dec. 1–31	23	4	
Do	Jan. 1–Mar. 8	1,811	161	
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	
Spain:				
Corcubion	Apr. 11	.....	.....	Present. Province of Coruna, west coast.
Madrid	Jan. 1–31	.....	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:				
Tala	Mar. 18	.....	.....	Epidemic.
Tozer	do	.....	.....	Do.
Tunis	Nov. 30–Dec. 6	.....	1	
Do	Feb. 9–Apr. 5	37	13	Of these, 26 in outbreak in prison.
Union of South Africa:				
Cape of Good Hope State	Sept. 10–Dec. 30	4,035	830	Sept. 10–Nov. 25, 1917: Cases, 3,724 (European, 31); deaths, 761 (European, 5). Total to Feb. 17, 1918: Cases, 4,386 (European, 32); deaths, 887 (European, 5).
Natal	.....	.....	.....	From Dec. 1, 1917–Feb. 17, 1918: Cases, 43; deaths, 11.

YELLOW FEVER.

Brazil:				
Bahia	Mar. 10–16	1	1	
Ecuador:				
Babahoyo	Feb. 1–15	1	1	
Guayaquil	Sept. 1–Nov. 30	5	3	
Do	Feb. 1–15	1	.....	
Do	Mar. 1–31	12	7	
Milagro	Feb. 1–15	1	1	
Yaguachi	Nov. 1–30	1	.....	
Guatemala:				
Retalhuleu	Apr. 22–May 23	.....	.....	Present. About 25 miles from Champerico, Pacific port. Disease spreading along Pacific coast.
Honduras:				
Tegucigalpa	Dec. 16–22	.....	1	
Do	Jan. 6–19	.....	1	