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STUDIES ON THE BIO-ASSAY OF PITUITARY EXTRACTS.¹

Concerning the Use of a Desiccated Infundibular Powder as a Standard in the Physiological Evaluation of Pituitary Extracts.

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INTRODUCTION.

It is needless to enter here into a discussion concerning the necessity for accurately standardizing extracts prepared from the infundibular lobe of the pituitary gland so as to insure uniformity in potency of the various commercial products. This has been sufficiently emphasized by various workers in this field, and the matter has been considered of so great importance that the Ninth Decennial Revision of the United States Pharmacopoeia adopted a method for the bio-assay of pituitary extracts and made it obligatory that the commercial products conform to a certain standard (1). Several years have elapsed since this went into effect; nevertheless, pituitary extracts from various commercial houses of to-day show as much variation in potency as prevailed before the method of assay was adopted. Obviously, either the commercial firms failed to adhere to the prescribed standard or else the standard or method is unreliable. It appears that there is truth in both deductions. Several years of experience with this method of assay of pituitary extracts convinced workers in this field of the unreliability of the standard (Beta-aminazolethylamine, or, briefly, histamine) originally proposed by Roth in 1914 (2). Expressions of dissatisfaction with the standard are found in the publications of Fenger (3), Pittenger and Vanderkleed (4), Eckler (5), and others. In 1918, Spaeth wrote in reference to this standard that his "experiments confirm the evidence that histamine, on account of its deterioration and for other reasons, is not a practical standard" (6). Consequently we find that one commercial firm standardizes its pituitary extracts by a method which it finds most suitable, without regard for what other manufacturers do, and thus one firm puts out extracts of a potency that bears no relation whatever to that of extracts made by other firms.

¹ A detailed report of this work will appear in a Bulletin of the Hygienic Laboratory in the near future.

In 1918 Spaeth (*loc. cit.*), not being satisfied with histamine as a standard for the bio-assay of pituitary extracts, suggested potassium chloride as a standard. He based this upon his observation that the reaction of the isolated uterus of the guinea pig to potassium chloride is qualitatively of the same order as that to pituitary extracts. Spaeth's experiments led him to believe that there is also a very close quantitative relationship in the reaction of the isolated uterus of the guinea pig to certain concentrations of potassium chloride and of pituitary extracts. This did not find confirmation in the hands of Nelson (7). During the months of March and April, 1922, one of us (M. I. S.) carried out a series of observations on the use of potassium chloride as a standard, and it was found that out of a series of experiments upon the isolated uterus of the guinea pig with a given pituitary extract it was possible to get a number of experiments yielding perfectly concordant results, giving a definite ratio of activity between the extract and potassium chloride. Many experiments, however, were encountered showing variations from the established ratio all the way up to 500 per cent. It has not been possible to define clearly the conditions under which consistent results could be obtained with uniformity, and it was therefore concluded that there is no constant parallelism in the irritability of different uteri or of the same uterus under different conditions toward potassium chloride and pituitary extracts.

Perhaps the clearest criticism against the use of both histamine and potassium chloride as standards in the bio-assay of pituitary extracts was brought out recently by Burn and Dale (8) in a publication which appeared at a time when the work detailed in this paper had progressed so far as to enable us to draw some very definite conclusions.

We believe that any attempt at utilizing an artificial standard for the bio-assay of pituitary extracts would be doomed to failure unless it were known definitely that the mechanism of pharmacologic action of the standard and of pituitary extracts on the uterine muscle, the test object, were identical in every respect. This is admittedly impossible with our present state of knowledge; for even if we had definite knowledge of the action of the proposed standard, we should have no exact information as to the mode of action of pituitary extracts on the uterine muscle. Much less do we know what influences slight deviations in the composition of the medium bathing the isolated uterine segment might have upon its reactivity to pituitary extracts. In our judgment, preparations from the pituitary gland alone, and, since the chemistry of its active principles is virtually unknown, preparations that represent the entire infundibular lobe only, should be used as a standard for the physiological assay

of pituitary extracts by the isolated uterus of the guinea pig, which, as is generally recognized, is the most useful test object.

With this aim in view we have attempted to discover a preparation of the infundibular portion of the pituitary gland which would show a reasonable degree of uniformity in potency, which would keep a reasonable length of time without deterioration, and which could be prepared without an undue amount of chemical manipulation.

THE METHOD AND TECHNIQUE OF THE BIO-ASSAY OF PITUITARY EXTRACTS.

In carrying out the assay of pituitary extracts we have, in general, used the method described by Dale and Laidlaw (9) in 1912.

During the early part of this work we were frequently confronted with the difficulty of the rapidly increasing sensitiveness of the uterine preparation toward pituitary extracts, so that successive reactions to a given dose of the extract rapidly increased to a maximum. This made it impossible to get more than a very few, and often only approximate, comparisons, and at the end of an experiment there would still be some doubt as to the relative potency of the two extracts examined. We suspected that the oxygen which we were using contained some impurity which tended to augment the tone of the uterine muscle and to sensitize it to pituitary extracts. We then attempted to wash the oxygen in an effort to free it of its hypothetic impurity, and we discovered that by washing the oxygen through a solution of sodium bicarbonate we obtained incomparably better results. We then proceeded to determine, by means of indicators such as are used in hydrogen ion concentration work, whether there is a measurable amount of acidity in the oxygen. The results were negative; but it was observed that as the oxygen bubbled through the solution of sodium bicarbonate a small amount of carbon dioxide was blown over with it, and it was concluded that it is the small amount of carbon dioxide admixed with the oxygen that tends to maintain the tone and irritability of the uterine muscle at a uniform level. Whether the effect is due to the direct action of carbon dioxide on the uterine muscle or to an indirect effect, owing to the maintenance of an optimum balance of ions in the bathing fluid, can not be answered at present.

We did not attempt to work out in detail the optimum concentration of carbon dioxide. This would obviously require a very large number of experiments. In our experience, 500 c. c. of a 2 per cent solution of sodium bicarbonate, renewed every 7 to 10 days, has given us very good results.

We have used throughout this work guinea pigs weighing not over 250 grams, nor under 180 grams, most generally 200 to 240 grams.

We are convinced, however, that the age of the animal is a far better guide than its weight. We have frequently encountered useless preparations obtained from small guinea pigs, not weighing much over 200 grams, especially if brought into the laboratory from outside breeders. We therefore use as a routine, guinea pigs of our own stock, which are weaned and segregated at the age of 10 to 14 days, yielding very useful preparations at the age of 3 to 5 weeks. It is seldom (if ever) that uteri obtained from such animals have to be discarded. Trendelenburg and Borgmann (10) have called attention to the great convenience of working with quiescent uteri obtained from young virgin guinea pigs, and we can confirm them. Such uteri require very little weighting, are easily adjusted, and show a considerable degree of sensitiveness to pituitary extracts.

The animal is killed by a blow on the head, and at once both horns of the uterus are removed and placed in Locke's solution. One entire horn, freed from the broad ligament, ovary, and fallopian tube, is suspended in the bath of Locke's solution at 38° C. We have never seen the necessity for retaining the ovary and fallopian tube, as some workers do, but have felt, on the contrary, that it might introduce an error or at least some difficulty in the interpretation of results, owing to gradual stretching of the fallopian tube during the course of an experiment. Since we know of no special advantage for their retention, we have uniformly discarded them.

After complete relaxation, which takes from 15 to 30 minutes, the preparation is so adjusted as to write a base line with but slight spontaneous movements. With small uteri of young animals, this is readily accomplished by the weight of the lever or a small additional weight if necessary. We have found the Harvard aluminium heart lever, with a magnification of approximately 4, to answer the purpose very well. This gives such a degree of magnification on the tracing as to make it easy to note the effect of small differences in dosage. The extracts to be tested are always prediluted with Locke's solution, so that the dose added to the bath of 100 c. c. is about 0.5 c. c., and never exceeds 1 c. c. We usually make the dilutions of such order as to require nearly equal volumes of standard and unknown to elicit equivalent reactions. Each dose is carefully measured with pipettes accurately graduated to 0.01 c. c. After an equivalent dose of the unknown is found for a given dose of the standard, the respective doses are then increased or decreased, or both, by 10 to 20 per cent. This not only confirms the earlier finding, but also gives assurance of the sensitivity of the uterine segment to small increases or decreases of dosage.

The following is the composition of Locke's solution that has been used in this work:

Sodium chloride.....	9.0	grams.
Calcium chloride.....	0.24	grams.
Potassium chloride.....	0.42	grams.
Sodium bicarbonate.....	0.50	grams.
Dextrose.....	0.50	grams.
Glass-redistilled water to make 1,000 c. c.		

Our Locke's fluid is freshly prepared each day from stock solutions of twenty-fold concentration exclusive of the dextrose. The dextrose is weighed out each time as required.

In a recent communication, Burn and Dale (*loc. cit.*) recommend the addition of a small amount of magnesium chloride to Locke's solution as a means of lessening the tendency to irregular, spontaneous rhythm in the uterine muscle. Our method of using oxygen passing through a 2 per cent solution of sodium bicarbonate, as described before, had given us results so gratifying that we have seen no necessity for trying out extensively anything new. We have, however, since the appearance of their paper, tried a few experiments with Locke's fluid containing the recommended amount of magnesium chloride (0.0005 per cent), and have found it of advantage in some experiments, though in others it seems, in our hands, to have so reduced the sensitivity of the uterine muscle to pituitary extracts that small differences in dosage did not elicit distinct differences in reaction. By our method, the uterine muscle shows very little tendency to irregular spontaneous rhythm, its tone is maintained at a uniform level for hours, and it preserves a high and fairly constant degree of sensitivity toward pituitary extracts.

THE STANDARD FOR THE BIO-ASSAY OF PITUITARY EXTRACTS.

The great variations in activity of commercial extracts, and possibly other considerations, must have led earlier workers (2) (6) to the assumption that preparations made from the infundibular lobe of the pituitary gland would lack uniformity and stability, and could not be used as a reliable standard for the assay of pituitary extracts. It is probable that such considerations as these led them to seek artificial standards. The unsatisfactory status of the artificial standards that had been proposed, as pointed out earlier in this paper, led us to investigate the feasibility of using some preparation of the infundibular portion of the pituitary gland as a standard. This was, indeed, suggested by Dale and Laidlaw (9) in 1912. Obviously, none of the objections raised against artificial standards could be entertained against a preparation from the gland itself, provided, of course, that it could be shown that such preparations

possess all the activity of the gland, show uniformity in physiological activity, and possess stability over a reasonable length of time.

Since there appears to be some ground for the belief that rapid changes, perhaps autolytic, occur in the posterior lobes of pituitary glands subsequent to their removal, we have invariably used fresh material only. The glands were removed in all cases within 10 to 20 minutes of the killing of the animal, and the posterior lobes were immediately dissected out and worked up according to the methods described below.

It appeared to us that an infundibular powder possessing the requirements as outlined above and yielding its entire activity upon simple extraction should be a most suitable standard for the assay of pituitary extracts. In order to determine the physiological activity of the infundibular powders made by us at various times, a simple acidulated saline extract of fresh infundibular lobes from the same batch was also prepared each time that glands were gathered for the preparation of an infundibular powder. These extracts were made by weighing out accurately a definite amount of fresh posterior lobe material, which was then thoroughly ground to a fine pulp in an agate mortar with a little chemically pure sand, extracted with a measured volume of one-fourth per cent acetic acid in physiological salt solution, heated quickly to boiling, and filtered. The filtrate was at once brought to the laboratory, distributed into ampules, sterilized in steam at 100° C. on three successive days for 20 minutes each, and stored in the ice box. These fresh gland extracts were uniformly made to represent 5 per cent of fresh posterior lobe material.

Primarily, these extracts were made, as stated above, to serve as a standard of comparison of the activity of the respective infundibular powders. We have had occasion, however, to assay against each other, eight such extracts made at different times during the months of June to October, and, contrary to our expectations, we were much impressed with the remarkable uniformity in their potency. We had, however, one notable exception. Five per cent fresh gland extract "G," made by one of us in August with the same technique as the others, showed only half the theoretical strength when assayed at the time of its preparation against a similar extract "D."

Furthermore, since the appearance of the recent publication of Burn and Dale (8), we have made some experiments to determine whether it would be possible to make 10 per cent extracts of uniform potency from fresh frozen posterior lobes, using the technique of those investigators.² A batch of fresh pituitary glands was ob-

² Burn and Dale made their extracts to represent 2.5 per cent of infundibular material. We made 10 per cent extracts in conformity with the recommendations of the Subcommittee on Bio-assay of the Tenth Revision of the U. S. Pharmacopoeia. This, however, has undergone revision since the completion of these experiments, a 5 per cent extract having been substituted.

tained, which, immediately upon removal, was placed in a freezing mixture. The glands were brought in the frozen state to the laboratory, and the posterior lobes were carefully dissected out and minced finely with scissors. After mixing the whole mass of minced glands, two portions of 4.0 grams each were weighed out and two extracts were made according to the details of the technique of Burn and Dale. The extracts were ampuled and sterilized on three successive days for 20 minutes each in the Arnold sterilizer. These extracts, designated P 1 and P 2, respectively, were later assayed against each other, and their activity was found to be in a ratio of 3 : 4. In confirmatory assays of these extracts against infundibular powder E 2, as well as against one of our 5 per cent fresh gland extracts made from the same batch of material from which P 1 and P 2 were made, it was found that extract P 1 represented the activity of 55 mgs., and P 2 73 mgs., of fresh gland substance per cubic centimeter.

In the light of the work of Adams (11), to which reference will be made later, the possibility of sterilization affecting the activity of the above extracts P 1 and P 2 was considered, since their acidity is relatively low (about 0.07 per cent acetic acid).³ Another experiment was therefore carried out in which two parallel extracts were made from the same batch of minced material; to the one, acetic acid was added to make approximately 0.07 per cent, and to the other sufficient to make 0.25 per cent. The two extracts were sterilized by fractional sterilization in the Arnold sterilizer and assayed against infundibular powder E 2. The former extract was found to represent the activity of about 40 milligrams of fresh gland substance per cubic centimeter and the latter 60 milligrams. It is evident, therefore, that their low acidity, while a probable factor in reducing the potency of the extracts during fractional sterilization, does not entirely account for their relatively low activity.

This serves forcibly to emphasize the point which Burn and Dale (*loc. cit.*) stressed, viz, the great care that has to be exercised in the preparation of extracts from the fresh infundibular lobe of the pituitary gland and the importance of adhering to strict details in their preparation if they are to be made of uniform activity, the prime requisite of a standard. In view of the great difficulty of making such extracts of uniform activity, even with the best of technique and when conditions are most carefully controlled, it seems to us that a liquid "standard extract" is not an ideal standard for the bio-assay of commercial extracts.

The infundibular powders which we have found to possess a high degree of uniformity in activity, which yield upon simple extraction the activity of the whole gland, and which have suffered no deterio-

³ As recommended by the Subcommittee on Revision. This has also been recently changed to 0.3 per cent glacial acetic acid.

ration up to this time (a period of nearly eight months), were made in the following manner:

The carefully dissected fresh posterior lobes, obtained within 10 to 20 minutes of the killing of the animal, were dropped at once into a flask containing about 150 cubic centimeters of acetone.⁴ This rapidly dehydrates the gland and stops all enzymatic action. We generally get about 40 glands within a period of about three hours for a lot of the powder. The glands are then brought to the laboratory. At this time the glands are shrunken and present a tough, leathery consistency. They are now cut up into small bits with scissors, placed in a fresh portion of acetone, and put away in the ice box. By the following morning the glands are pretty well dehydrated, considerably defatted, and have lost over two-thirds of their original weight. They are now dried in a vacuum desiccator over calcium chloride at a temperature not exceeding 50° C. for about five hours. At this time their weight is a little less than one-fifth of their original weight. The material is then ground in an agate mortar to a fine powder to pass a No. 40 sieve. A small amount of residue remains that can not be ground to the fine powder, but generally does not constitute much more than about 5 per cent of the finished product. The powder is now placed in the vacuum desiccator. The following day the powder is extracted with acetone in a small Soxhlet apparatus for about three hours. During this operation the loss in weight in one instance in which this was determined was 15 per cent of the weight of the powder prior to extraction. The extracted powder is then dried *in vacuo* over night at a temperature of about 40° C., which brings it down to constant weight. The powder, after it is reduced to constant weight, represents approximately 16 per cent of the original weight of the fresh glands. The finished powders are kept in the laboratory out of the light in a vacuum desiccator over calcium chloride.

The residue remaining after the material is ground into a fine powder is largely inert. This was determined for desiccated preparations H 2 (Table I) and I 2. In the latter instance 85 milligrams of residue, or 6 per cent of the finished product, were obtained. An extract of the entire residue was made, and this was assayed against an extract of desiccated infundibular preparation E 2, which showed that the residue represented only about one-fourth of the activity of the powder. Likewise the entire residue of desiccated infundibular preparation H 2 was extracted and assayed against our "standard extract D," to which we shall refer later, and it was found to represent about one-fifth of the activity of the corresponding powder.

⁴ The fresh glands representing the powders described in Table I were weighed just before they were placed in the acetone.

At the beginning of the work it seemed desirable to have some definite, uniform standard for the determination of the activity of the infundibular powders which we are planning to make from time to time. For this purpose 100 cubic centimeters of a 5 per cent fresh gland extract was carefully prepared early in July, distributed into ampules and sterilized in the manner already described, and stored in the ice box. This we designated "standard extract D," and the activity of the six desiccated infundibular preparations made during the months of June to October (see Table I) was determined and expressed in terms of milligrams of fresh gland substance represented in extract D.

TABLE I.—Potency of desiccated and defatted infundibular preparations of the pituitary gland.

Preparation No.	Time of preparation (1922).	Experiment No.	Potency of 1 mg. of powdered preparation in milligrams of fresh gland.				Potency of preparation (average by assay over potency by actual weight).	Residue; per cent of powdered preparation.
			By assay.			By actual weight.		
			Milligrams.	Average.	Variation, per cent.			
A 2.....	June.....	1..... 2..... 3..... 4.....	7.0 7.0 7.5 7.1	7.2	{ +4 -1 }	16.0	120	(²)
C.....	June.....	1..... 2..... 3..... 4.....	6.8 7.5 6.9 7.5	7.2	{ +4 -5 }	(¹)	.....	.....
E 2.....	July.....	1..... 2..... 3..... 4..... 5.....	5.7 6.7 6.3 6.6 8.3	6.7	{ +23 -14 }	6.3	107	5
F 2.....	July.....	1..... 2..... 3..... 4..... 5.....	6.7 6.7 6.3 6.7 7.2	6.7	{ +8 -6 }	6.2	108	7
G 2.....	August.....	1..... 2..... 3..... 4..... 5.....	8.3 7.8 6.9 7.5 6.9	7.5	{ +10 -8 }	7.4	101	16
H 2.....	October.....	1..... 2..... 3..... 4.....	7.4 7.5 7.1 7.4	7.4	{ +2 -3 }	6.3	118	8

¹Approximately.

²Not determined.

The extracts of the desiccated and defatted infundibular preparations we make as follows: Exactly 10 mgs. of the powder are weighed out accurately and transferred to an agate mortar. Exactly 10 c. c. of one-fourth per cent acetic acid in distilled water are measured into a pyrex test tube of convenient size. The powder in the mortar is moistened with a drop or two of the solvent and is then thoroughly

trituated to an impalpable frothy consistence. The remainder of the solvent is now added gradually and thoroughly stirred for several minutes. This yields an opalescent solution, which is transferred back to the test tube, heated to boiling, and filtered. The filtrate thus represents the active principles of 1 mg. of powder per cubic centimeter of solvent.

The results of the assays, as well as some other pertinent facts concerning the six desiccated and defatted infundibular preparations made during the months of June, July, August, and October, are given in Table I. It will be remembered that the assays were made against 5 per cent fresh gland extract D.

It will appear upon examination of Table I that though the variation of an individual assay of a given powder may be over 20 per cent, the average value of activity of 1 mg. of the several powders is approximately equivalent to that of 7 mgs. of fresh gland substance, with a variation of less than 5 per cent from the average. It is of further interest to note that the activity of the powders by assay is somewhat higher than their value by actual weight. Thus 1 mg. of the desiccated and defatted powder represents a little over 6 mgs. of fresh gland substance by actual weight, while by assay against D it represents approximately 7 mgs. The relatively high figure for powder G 2 is due to the large amount of discarded residue which undoubtedly could have been reduced to the usual percentage by further grinding. The slight and constant disproportion of the value of the powders as obtained by assay and by actual weight gives them a value of a little over 100 per cent of the activity of the whole gland. This we believe is due to the more thorough and more complete extraction of the powder than is possible in the case of the fresh gland.

It is therefore evident from the figures given that fresh infundibular material, dehydrated, desiccated, and defatted as described, yields powdered preparations of remarkably uniform potency, representing the entire activity of the whole gland, at least in so far as concerns the oxytocic principle.

In order further to assure ourselves that our desiccated preparations represent the whole activity of the gland, we made several experiments to determine the activity of these preparations as regards the pressor principle. These experiments were carried out upon dogs under morphine and chloretone anesthesia. Atropine was injected intravenously to eliminate the cardiac vagus nerve endings. The extracts were injected into the femoral vein, and the effects on the blood pressure recorded. By giving small doses of the extracts sufficiently far apart, i. e., at 15 to 25 minute intervals, it was possible in our limited experience to get a series of consistent reactions over a sufficiently long period of time which give one a very fair idea of

the relative pressor activity of two or more preparations. The blood pressure method, we admit, does not detect differences in the pressor activity with as fine a sensitiveness as the isolated uterus is capable of detecting differences in the oxytocic activity. Our experiments, nevertheless, were sufficiently definite, and the results clearly indicate a pressor activity for our desiccated infundibular preparations quite consistent with their oxytocic activity as determined by the isolated uterus method.

As a further check upon the uniformity in activity of the infundibular powders, numerous assays of their extracts were made at different times against each other, the results showing equality in oxytocic activity of these preparations which we described in Table I, where they are all shown to be equivalent in activity when assayed against fresh gland extract D.

Since the completion of the work summarized in Table I, another desiccated and defatted infundibular powder was made in the same manner as that in which were made the others from glands gathered in December. This was designated I 2. This infundibular powder was then assayed against the earlier powders and found to be of equal activity. The seven infundibular powders made by us during the months of June to December are thus shown to be uniform in activity, to represent the entire oxytocic and pressor activity of the gland, to be free from seasonal variations in activity in so far as our observations have gone, and to suffer no deterioration within a period of at least six months.

Attention has been called by Burn and Dale (8) to the rapid deterioration in activity of fresh posterior lobes if kept for any length of time even at room temperature, and great stress is laid by them upon the minute details which must be practiced in the preparation of extracts from fresh posterior lobes, in order to eliminate deterioration in activity from this cause. We have made some experiments to determine the effects on their activity of exposure of unboiled extracts of our infundibular powders to room temperature and to incubator temperature. Extracts of the infundibular powders were prepared by our usual technique, but, without boiling, were left at room temperature for 2 hours, or in the incubator at 38° C. for 2 and 28 hours, respectively. The extracts were then boiled and filtered and assayed against similar extracts made in the usual manner without exposure. No appreciable difference in activity was observed. In our infundibular powders we thus have a preparation which requires no especially difficult technique for the extraction of its oxytocic active principle. The matter of acidity of the solvent may, of course, be a very important factor if the extract is to be

subjected to prolonged boiling, as in the process of sterilization. This has been pointed out by Adams (11), and we shall refer to it later.

THE RELATIVE OXYTOCIC ACTIVITY OF POSTERIOR LOBES OF THE PITUITARY FROM STEERS AND FROM COWS.

The material which we have obtained for our work at the local slaughter house has been of mixed stock, both steers and cows being represented. We understand that commercial extracts are generally made from glands of steers. Because of this consideration in particular, apart from the general physiologic interest thereof, an experiment was made to determine whether there is any difference in the oxytocic activity of pituitary glands from males and females. The whole pituitary glands from steers and from cows were placed, immediately following their removal, in a freezing mixture, and in this condition were brought to the laboratory. The posterior lobes of the respective batches were then carefully dissected out and immediately worked up into 5 per cent extracts and sterilized by the methods described earlier in the paper. We shall presently show that the oxytocic activity of fresh pituitary glands kept in a frozen condition for several hours is not altered from that of perfectly fresh glands. An assay carried out upon the two 5 per cent extracts against each other showed a difference of not more than 10 per cent. We conclude, therefore, that there is no appreciable difference between the oxytocic activity of pituitary glands of steers and cows.

THE EFFECT OF STERILIZATION ON THE OXYTOCIC ACTIVITY OF PITUITARY EXTRACTS.

There appears to be no definite agreement as to the method of sterilizing pituitary extracts, nor is there definite information concerning the effects of sterilization upon the active principle or principles of the infundibular lobe of the pituitary gland. There is also lack of agreement as to the degree of acidity of the solvent used in making the extracts, though most workers have used acetic acid in greater or less concentration. Thus, Fenger at one time used 0.5 per cent glacial acetic (3), while more recently he has used 0.25 per cent (12). Roth (13) used 0.005 per cent acetic acid in distilled water for his solvent, and the only significance he attaches to the acidity is convenience of filtration. Dale and Laidlaw, in 1912 (9), stated that they used acidulated water to make their extracts, which lost some activity in autoclaving. The degree of acidity is not stated. In their recent publication, however, Burn and Dale (8) specify 0.2 c. c. of half-normal acetic acid to be added to each 40 c. c. of

solvent. This is approximately equivalent to one-sixtieth per cent acetic acid in distilled water.

Adams, in 1917 (11), showed that extracts made from fresh glands with $\frac{N}{60}$ acetic (=0.1 per cent acetic acid), having approximately a pH of 5.0, deteriorated on prolonged heating at 100° C. The extracts, he states, were made thermostable by increasing the acidity of the solvent to a pH of 3.0. This we found is approximately equivalent to one-fourth per cent glacial acetic acid in distilled water, and we have therefore used this concentration of acid in the preparation of our extracts in order to eliminate possible deterioration by heating that might be caused by insufficient acidity.

We examined the effects of two methods of sterilization upon the activity of pituitary extracts made with one-fourth per cent glacial acetic acid in distilled water or physiological salt solution as a solvent, viz, fractional sterilization on three successive days for 20 minutes in the Arnold sterilizer, and autoclaving at 15 pounds pressure. The material was always put into ampules and sealed. It should be noted that we had been using the former method of sterilization in our routine work, and from our observations had no reason to suspect any change in activity of the extracts from it. It seemed desirable, however, to make some carefully controlled experiments to determine this point. The experiments have shown that fractional sterilization had no effect upon the oxytocic activity of our extracts, while autoclaving at 15 pounds pressure caused rapid deterioration of this principle, the rate of deterioration being in proportion to the length of time of the autoclaving.

THE ASSAY OF COMMERCIAL PITUITARY EXTRACTS, USING THE DESICCATED INFUNDIBULAR PREPARATIONS AS STANDARD.

Having found our infundibular preparations uniform in potency when assayed against each other as well as when assayed against fresh gland standard extract D, we next proceeded to examine commercial extracts, using the infundibular powders as standard. Nine commercial extracts purchased in the open market, eight of which were of American make and one of British manufacture, were examined during the months of October and November, 1922. All the ampules of each lot bore the same serial number, and we were later assured by the respective manufacturers that all ampules bearing the same serial number had been filled with material from a single extract. Each of the extracts was assayed against each of our six infundibular powders detailed in Table I. The results of this investigation are summarized in Table II.

TABLE II.—*Assay of commercial pituitary extracts against the desiccated and defatted infundibular preparations.*

Column 1: Fraction of c. c. of commercial extract=1 mg. of desiccated infundibular preparation.
 Column 2: One c. c. of commercial extract=mgs. fresh gland.

Infundibular preparation.	Commercial pituitary extracts.																	
	1		2		3		4		5		6		7		8		9	
	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.	C. c.	Mgs.
A 2.....	$\left\{ \begin{smallmatrix} 0.30 \\ 0.22 \end{smallmatrix} \right\}$	27.7	0.65	11.7	0.11	65.5	0.23	31.3	0.90	8.0	0.34	21.1	0.39	18.5	0.33	21.8	0.16	45.0
C.....	$\left\{ \begin{smallmatrix} 0.33 \\ 0.25 \end{smallmatrix} \right\}$	24.8	$\left\{ \begin{smallmatrix} 0.50 \\ 0.75 \end{smallmatrix} \right\}$	11.6	0.10	72.0	0.23	31.3	0.89	8.1	0.45	16.0	0.35	20.6	0.37	19.5	0.18	40.0
E 2.....	$\left\{ \begin{smallmatrix} 0.20 \\ 0.20 \end{smallmatrix} \right\}$	33.5	$\left\{ \begin{smallmatrix} 0.80 \\ 0.50 \end{smallmatrix} \right\}$	10.5	0.10	67.0	0.23	29.1	0.70	9.6	0.43	15.6	0.55	12.2	0.32	20.9	0.15	44.6
F 2.....	$\left\{ \begin{smallmatrix} 0.17 \\ 0.20 \end{smallmatrix} \right\}$	36.2	$\left\{ \begin{smallmatrix} 0.60 \\ 0.60 \end{smallmatrix} \right\}$	11.3	0.10	67.0	0.20	33.5	0.70	9.6	0.40	16.7	0.48	13.9	0.38	17.7	0.19	35.2
G 2.....	$\left\{ \begin{smallmatrix} 0.21 \\ 0.25 \end{smallmatrix} \right\}$	32.6	$\left\{ \begin{smallmatrix} 0.60 \\ 0.60 \end{smallmatrix} \right\}$	12.3	0.10	75.0	0.20	37.5	0.68	11.0	0.40	18.7	0.43	17.7	0.35	21.4	0.15	50.0
H 2.....	0.20	37.0	0.68	10.9	0.11	67.3	0.23	32.0	0.90	8.2	0.36	20.5	0.45	16.4	0.29	25.5	0.16	46.2
Average (mgs.).....	.....	31.9	.....	11.4	.....	68.9	.....	32.4	.....	9.1	.....	18.1	.....	16.6	.....	21.1	.....	43.5
Variation, per cent (mgs.)	.....	$\left\{ \begin{smallmatrix} +16 \\ -22 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +8 \\ -8 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +8 \\ -5 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +16 \\ -10 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +21 \\ -12 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +16 \\ -14 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +24 \\ -26 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +21 \\ -16 \end{smallmatrix} \right\}$	.....	$\left\{ \begin{smallmatrix} +15 \\ -19 \end{smallmatrix} \right\}$

The commercial extracts examined are numbered in the table from 1 to 9, the names of the manufacturers being omitted. In the first column under each number, the fraction of a cubic centimeter of the commercial extract equivalent in potency to 1 milligram of the respective infundibular powders is given; in the second column the value of 1 cubic centimeter of the extract is expressed in terms of milligrams of fresh gland substance. These figures are arrived at by simple calculation, bearing in mind that 1 milligram of the infundibular powder is very nearly equal in oxytocic activity to 7 milligrams of fresh infundibular substance. At the bottom of the second column under each number of commercial extract the average of the six or more assays in milligrams of fresh gland substance per cubic centimeter of extract is given, and also the percentage variations of the individual assays from the average are indicated.

It will be seen that there is a wide variation in the activity of the commercial extracts, ranging approximately from that of 9 milligrams of fresh infundibular substance per cubic centimeter to nearly 70 milligrams. It also appears that several of the extracts assayed at from 2 to 3 per cent of fresh infundibular substance, two at about 1 per cent, two at 4, and one at nearly 7 per cent, respectively.

The results summarized in Table II are plotted and presented graphically in Charts 1 and 2. The curves in these charts are formed by joining the points on the scale giving the value of each assay in

terms of milligrams of infundibular powder per cubic centimeter of extract, as shown in Chart 1, and in milligrams of fresh infundibular substance per cubic centimeter of extract, in Chart 2. The last point

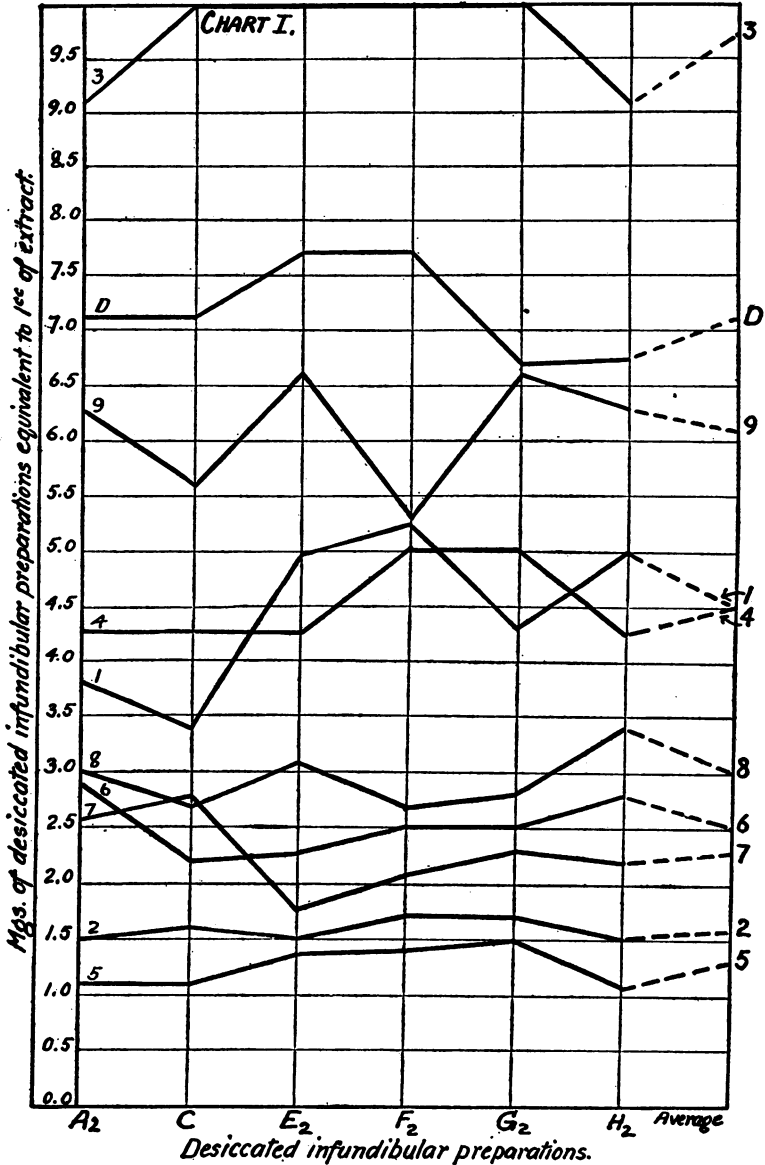


CHART I.—Potency of commercial pituitary extracts expressed in terms of mgs. of desiccated infundibular preparations equivalent to 1 c. c. of extract.

on the scale in each curve represents the average of the six or more assays. The curves are numbered to correspond to the numbers of commercial extracts in Table II. Curve D in Chart 1 represents the

value (individual assays and average) of our 5 per cent fresh gland extract D in terms of activity of milligrams of infundibular powder per cubic centimeter.

All the commercial extracts that were examined bore the inscription "physiologically standardized," which is obviously devoid of any meaning in the light of this work. Some of the preparations

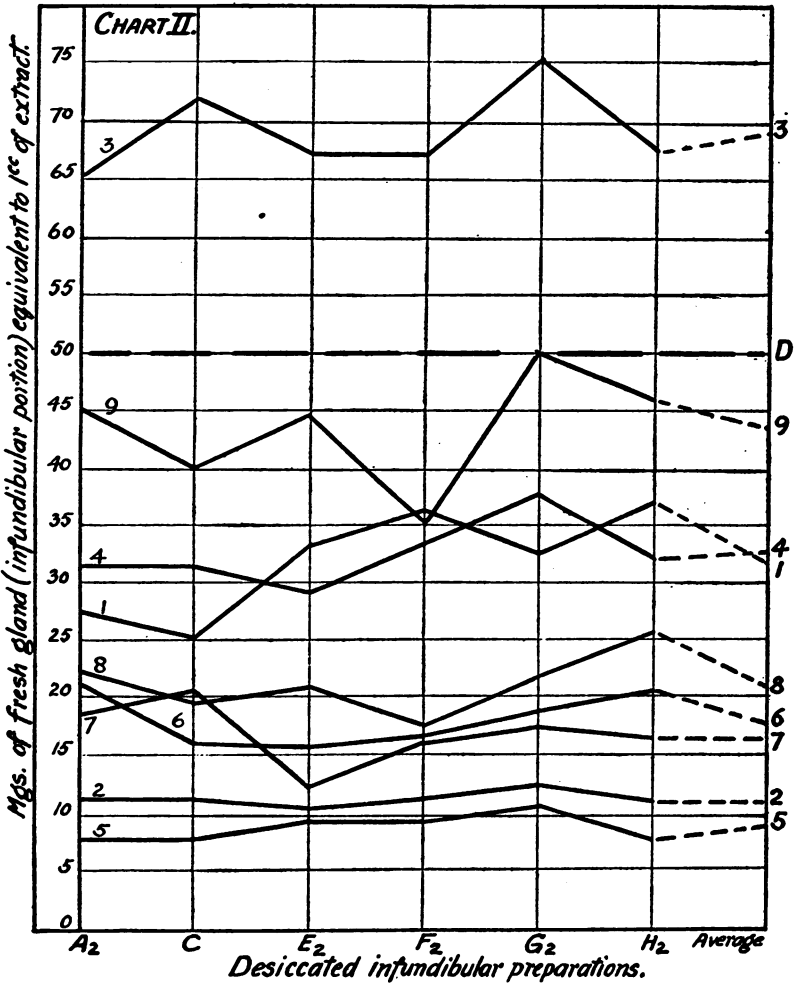


CHART II.—Activity of commercial pituitary extracts assayed against desiccated infundibular preparations, and potency expressed in terms of mgs. of fresh gland equivalent to 1 c. c. of extract.

also had the statement that the extract represented 20 and even 30 per cent of fresh posterior lobe material. From our experiments it appears that the strongest preparation represents only 7 per cent of fresh infundibular material, while most of the others are considerably below our 5 per cent fresh gland extract D. Obviously, the manufacturers either succeeded in getting out only part of the

activity of the gland, or lost much of it during the process of manufacture, or else the extracts suffered deterioration during the time intervening between the time of their manufacture and the time of reaching us.

We were not surprised to find the several commercial extracts vary in activity; indeed, we anticipated it, since each manufacturer appears to be using his own standard, and there is thus lack of uniformity. It is difficult for us to understand, however, the great discrepancy between the activity of the extracts as assayed by us and as is often indicated on the label. To illustrate, two extracts that, according to the manufacturers' statement, were supposed to represent 20 per cent of fresh gland material, assayed at only a little over 3 and 4 per cent, respectively. And one claiming to represent the activity of 30 grams of fresh infundibular substance per 100 cubic centimeter of solvent, assayed at less than 1 per cent. It did not appear to us that the time element, within reasonable limits, would be a factor in the deterioration of extracts. Our 5 per cent fresh gland extract D, which was made in July, has given us no evidence of deterioration at the time it was examined last, after a period of six months.

In the hope of getting some information that might lead to the elimination of what appears to be so much waste, letters of inquiry were sent out to the several manufacturers, requesting as much of the details of the manufacture of their products as they could conveniently disclose. From the replies we received we learned that with the exception of three manufacturers who make their extracts from desiccated material, all the others make their extracts from fresh frozen posterior lobes. The extracts were stated to represent anywhere from nearly 10 per cent to as high as 30 per cent of fresh infundibular substance. The age of the samples at the time of their assay varied from 3 to 13 months. Four contained no preservative, while five contained some preservative. All were stated to have been sterilized, but the method of sterilization was indicated only in three instances. One of these extracts was stated to have been sterilized by heating in boiling water for 30 minutes, the other under steam pressure at 220° F., and the third by Berkefeld filtration. All were stated to have been physiologically standardized, though neither the method nor the standard was given, with one or two unimportant exceptions.

None of the information which was given us rather generously was of any help in explaining the relatively low activity of the preparations as found by assay in comparison with their theoretical strength. Indeed, some of the weakest preparations which we have

found by our assays were stated to represent the highest percentage of infundibular substance.

Since most of the extracts showing greatest discrepancy in their theoretical potency as found by our assay were stated to have been made from frozen material, it seemed possible, though not probable, that freezing the glands might affect their activity. An experiment was made to determine this question. The whole pituitary glands were placed immediately upon removal in a freezing mixture and brought to the laboratory in the frozen state. They were then placed in the cold room at a temperature varying from 0° to -18° C. On the following day the posterior lobes were dissected out and worked up into a 5 per cent sterilized extract by the method previously described. The experiment indicated that freezing for several hours of the fresh pituitary gland does not affect its oxytocic activity. Freezing over a prolonged period of time might, of course, yield quite different results.

The reason for the poor yield of active principle in the commercial extracts is not altogether clear. However, simple as it is to make a watery or saline extract of the fresh posterior lobe of the pituitary, there are considerable difficulties in both the extraction and the purification if it is desired to get out the active principles quantitatively. We have already alluded to this point earlier in the paper, and the recent work of Burn and Dale (8) has also emphasized it. While we are not conversant with the problems incidental to the manufacture of commercial extracts from fresh frozen material on a large scale, nevertheless we can readily appreciate that the difficulties involved would be far greater than those attending the preparation of an extract on a small scale in a well-equipped laboratory and with the best of technique. On the other hand, the extraction of the active principles from a stable and active infundibular powder such as we have prepared can be very easily made quantitatively with the ordinary degree of skill and care possessed by the average laboratory worker. Nor do we believe that the preparation of such a powder on a large scale would be impracticable.

Now, the question remains to be answered, What shall be the strength of the pituitary extract that the manufacturers shall be required to make and bring up by prescribed methods of assay to the set standard in order to insure uniformity in potency? Shall the manufacturers be required to make an extract to correspond in potency to the weakest, such as Nos. 2 and 5, or the strongest, such as No. 3, of the nine specimens we examined? This can not be answered definitely until a large number of carefully conducted clinical observations have been made, using a definite laboratory unit of measuring potency as a basis. Theoretically, to prescribe one extreme may be as undesirable as to prescribe the other. The

preparation which we have found to be the weakest may be ineffective in an emergency, such as post-partum hemorrhage, when administered in the accustomed dose, while, on the other hand, the usual dose of the strongest preparation may be altogether excessive for the ordinary therapeutic uses. The strength of a preparation is certainly not an index to its value in clinical use. Theoretically, at least, it should be just as easy to make a very strong extract as it is to make a very weak one; and from our experience we feel certain that this is true practically. Without definite clinical information being available, it is not possible to state at this time which would be most desirable for average use.

We believe that until such information is made available, which, of necessity, will have to be based upon cooperative work between the clinician and the laboratory worker, it would seem best at present to recommend that manufacturers make an extract 1.0 c. c. to represent the entire activity of 30 mgs. of fresh infundibular substance, or approximately that of 4 mgs. of our desiccated infundibular powder. This does not appear to be a very high requirement, it should be easy to meet, and, we believe, it would be a reasonably sound basis from which to start. Should it prove, in time, to be too strong or too weak a preparation for practical therapeutic uses, the manufacturers could then be asked by general agreement to increase or decrease its potency. This would of necessity eliminate the tendency on the part of some manufacturers to claim superiority for their product on the ground of its high potency, which we believe is misleading and unjustifiable.

SUMMARY AND CONCLUSIONS.

The unsatisfactory status of the artificial standards that had been proposed for the physiological assay of pituitary extracts is discussed.

A method is described for the preparation of an infundibular powder of uniform potency, representing the whole oxytocic and pressor activity of the infundibular lobe of the pituitary gland. The powder has not shown any deterioration within the period of observation of nearly eight months. The active principle (or principles) is readily extracted quantitatively from the powder by simple manipulation.

The results of the physiological assay of nine commercial extracts by the isolated uterus method, using the above powder as a standard, are given. It is shown that there is great variation in the activity of commercial extracts, the strongest having been found eight times as strong as the weakest.

It is proposed that an infundibular powder such as is described herein be used as a standard for the assay of commercial extracts by the isolated uterus method, and the recommendation is made that

manufacturers be required to make and standardize their extracts to represent the activity of 4 mgs. of the standard powder, or its approximate equal, which is 30 mgs. of fresh gland substance per cubic centimeter of extract.

It is further suggested that the recommended strength of the commercial extract remain in force until properly conducted clinical observations with carefully standardized extracts make a change desirable.

The following conclusions may be drawn from the experiments described herein:

1. Infundibular lobes of the pituitary gland from cattle do not show seasonal variations in oxytocic activity.
2. There is no appreciable difference in oxytocic activity of infundibular lobes from steers and from cows.
3. Freezing freshly removed pituitary glands for several hours does not affect their oxytocic activity.
4. The oxytocic activity of properly acidulated extracts is not affected by fractional sterilization in steam at 100° C. Autoclaving at 15 pounds pressure, even for brief periods, causes deterioration in activity.

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USE OF LIQUID EGGS FOUND TO BE SOURCE OF BORIC ACID IN CAKE.

Dr. A. Middleton Hewat, D. P. H., Medical Officer of Health for the Metropolitan Borough of Fulham, reports in the "Medical Officer" (England), in the issue of February 24, 1923, upon the presence of very considerable quantities of boric acid (35.6 grains per pound) found in sponge cake which was being sold in a local bakery. The source of the boric acid was discovered to be due to the use of liquid eggs, which were shipped as liquid yolks and solid albumen from

China and reconstituted in England and then used in the manufacture of the sponge cake. The liquid-egg trade in England is stated to be £2,000,000 per annum. It has not been found feasible to prevent the use of liquid eggs under present conditions, but an agreement has been reached with wholesale dealers that such material shall not contain more than 1 per cent of boric acid and that instructions are to be given to bakers that this material should not be used in the manufacture of sponge fingers, sponge biscuits, or small sponge cakes, and, further, that bakers shall be instructed, when using yolks in reconstituting, to the effect that the reconstituted liquid egg must not contain more than 1 per cent of boric acid. Tentative regulation of the sale of liquid-egg material is outlined by Doctor Hewat as follows:

I have now received a communication from the trade, which has been confirmed by Doctor MacFadden, of the Ministry of Health, that the trade has decided to give the Ministry of Health the following bond:

"That all sales shall be made upon the express condition that liquid whole egg shall not be used by the purchaser or by any subpurchaser from him in the manufacture or production of sponge fingers, sponge biscuits, and 1d., 1½d., or 2d. plain sponge cakes, and we will on every invoice in respect of any such sale make it a definite condition that the eggs are sold on these terms."

It will of course take a few weeks to get this arrangement into working order, but it would seem that if this is carried out one would be quite justified in instituting proceedings against any baker who, after this warning, uses liquid eggs preserved with boric acid in the preparation of any of the above-named articles. Further, with the knowledge that only a maximum of 1 per cent of boric acid should be contained in the liquid egg, it would be possible by analysis to determine whether this percentage is being adhered to.

MORTALITY AND BIRTH RATES FIRST NINE MONTHS, 1922.

ANNOUNCEMENT OF PROVISIONAL FIGURES MADE BY THE BUREAU OF THE CENSUS.

Provisional Mortality Rates.

The Department of Commerce announces that provisional figures compiled by the Bureau of the Census for the first nine months of 1922 indicate slightly higher death rates than for the corresponding nine months of 1921. For the States compared the death rate for the nine months was 11.7 in 1922 against 11.6 for the first nine months of 1921. The highest mortality rate for the nine months is shown for Maine (14.3) and the lowest for Idaho (7.8).

Death rates (all causes, exclusive of stillbirths) per 1,000 population, for certain States.

[The 1922 figures are provisional.]

State.	Annual death rate per 1,000 population for—										
	1922					1921					
	First 9 months.	Third quarter.	July.	August.	September.	First 9 months.	Third quarter.	July.	August.	September.	The year.
Total—States shown for both years ¹	11.7	10.0	10.2	9.9	10.0	11.6	10.7	11.0	10.7	10.6	11.6
California.....	14.2	12.1	12.3	12.0	12.1	13.1	11.9	11.9	12.0	12.0	13.2
Colorado.....	13.5	11.6	10.8	11.3	12.7	12.6	11.6	11.6	12.0	11.1	12.4
Connecticut.....	12.1	10.1	9.8	10.3	10.2	11.4	10.3	10.6	10.1	10.2	11.4
Delaware.....	13.1	11.5	11.9	11.6	11.1	13.7	13.0	14.7	13.1	11.3	13.1
Florida.....	11.3	11.6	11.3	11.6	11.9	11.7	10.7	10.5	10.9	10.7	11.8
Georgia.....	9.9	9.7	9.9	9.6	9.7	(*)	(*)	(*)	(*)	(*)	(*)
Idaho.....	7.8	6.9	7.1	6.0	7.5	(*)	(*)	(*)	(*)	(*)	(*)
Illinois.....	11.2	9.5	9.4	9.4	9.6	11.1	10.4	10.8	10.2	10.3	11.1
Indiana.....	12.0	10.2	10.3	10.0	10.4	11.9	11.4	11.7	11.2	11.3	11.9
Kansas.....	10.6	9.3	9.5	9.6	8.9	10.0	9.5	10.3	9.3	9.0	10.2
Kentucky.....	10.0	8.8	9.9	8.5	8.1	10.6	10.1	11.5	10.1	8.8	10.5
Louisiana.....	10.9	10.1	10.6	10.0	9.8	11.0	10.8	10.6	11.0	10.8	11.0
Maine.....	14.3	12.1	12.2	11.4	12.7	14.1	11.3	13.1	12.8	13.7	14.0
Maryland.....	13.7	12.4	12.9	12.1	12.5	13.8	12.8	14.0	12.3	12.1	13.6
Massachusetts.....	12.7	10.5	10.2	10.7	10.6	12.2	10.9	10.8	10.8	11.2	12.2
Michigan.....	11.1	9.5	9.7	9.3	9.7	11.8	11.3	10.9	11.4	11.7	11.6
Minnesota.....	9.4	8.2	8.1	8.2	8.3	9.5	8.4	8.5	8.3	8.4	9.4
Mississippi.....	10.3	10.0	10.7	10.2	9.0	11.2	11.2	11.6	10.7	11.4	11.1
Missouri.....	11.1	9.4	9.4	9.2	9.7	10.7	10.2	11.0	9.7	10.0	10.8
Montana.....	8.4	7.4	7.1	6.9	8.2	8.4	7.4	7.4	7.8	7.0	8.2
Nebraska.....	9.2	7.4	7.2	7.4	7.8	9.2	8.3	7.9	8.7	8.3	9.2
New Hampshire.....	14.0	12.4	12.5	12.6	12.2	13.7	12.8	11.8	13.1	13.6	13.7
New Jersey.....	12.1	10.2	10.2	10.5	10.0	11.8	10.5	10.4	10.8	10.4	11.7
New York.....	13.1	10.5	10.6	10.6	10.4	12.4	11.0	11.1	11.2	10.9	12.3
North Carolina.....	10.8	9.4	10.6	9.2	8.6	11.5	10.5	11.6	10.4	9.5	11.3
Ohio.....	11.3	9.6	9.6	9.4	9.8	11.4	10.8	11.1	11.1	10.2	11.3
Oregon.....	11.5	9.7	10.3	9.7	9.2	10.3	9.0	9.3	8.9	8.8	10.4
Pennsylvania.....	12.2	10.2	10.0	10.3	10.5	12.5	11.1	11.0	11.4	11.0	12.4
Rhode Island.....	(*)	(*)	(*)	(*)	(*)	12.9	11.9	11.0	12.6	12.3	12.6
South Carolina.....	11.4	11.3	11.9	10.7	11.6	12.1	11.9	11.6	11.6	12.8	11.9
Tennessee.....	10.4	9.4	10.4	9.5	8.4	10.6	10.2	11.4	9.8	9.4	10.7
Utah.....	(*)	(*)	(*)	(*)	(*)	10.5	9.4	10.3	8.1	9.9	10.4
Vermont.....	(*)	(*)	(*)	(*)	(*)	14.2	13.2	13.1	12.8	13.9	14.2
Virginia.....	11.9	10.7	11.8	10.5	9.9	12.3	11.4	12.4	11.0	10.9	12.2
Washington.....	10.2	8.5	8.3	8.5	8.7	9.4	8.6	8.7	8.5	8.6	9.5
Wisconsin.....	10.1	8.4	8.8	8.0	8.5	10.4	9.8	9.6	9.7	10.1	10.3
Wyoming.....	9.3	9.2	8.3	9.6	10.0	(*)	(*)	(*)	(*)	(*)	(*)

¹ Includes District of Columbia.

² Admitted to registration area for 1922.

³ Figures not shown if transcripts of deaths are not received for the quarter.

Provisional Birth Rates.

Provisional birth figures compiled by the Bureau of the Census for the first nine months of 1922 indicate lower birth rates than for the corresponding nine months of 1921. For the States compared, the birth rate for the first nine months was 22.8 in 1922, against 25 in 1921. The highest birth rate for the nine months is shown for North Carolina (30) and the lowest for Washington (18.3).

Birth rate, (exclusive of stillbirths) per 1,000 population for certain States.

(The 1922 figures are provisional.)

State.	Annual birth rate per 1,000 population for—										
	1922					1921					
	First 9 months.	Third quarter.	July.	Aug.	Septem-ber.	First 9 months.	Third quarter.	July.	Aug.	Septem-ber.	The year.
Total—States shown for both years ¹	22.8	22.5	23.1	23.2	21.5	25.0	24.9	24.7	24.9	23.2	24.7
California.....	20.0	20.1	20.1	20.1	20.2	20.2	20.5	20.4	20.3	21.0	20.2
Connecticut.....	21.9	22.3	22.0	22.7	22.4	24.5	24.5	24.1	25.0	24.6	24.0
Delaware.....	21.3	21.9	23.2	20.7	22.1	23.0	22.7	22.2	23.3	22.9	22.4
Indiana.....	21.7	22.6	22.4	23.1	22.5	23.4	23.3	22.6	23.4	24.0	23.0
Kansas.....	21.6	21.9	21.8	22.9	21.0	23.5	23.7	23.2	23.6	24.6	23.3
Kentucky.....	23.3	20.1	21.8	21.3	17.2	28.2	26.3	26.4	25.6	27.0	27.6
Maine.....	22.9	21.9	23.1	21.7	21.0	23.3	22.8	22.8	23.2	22.6	22.9
Maryland.....	23.7	24.2	23.4	24.8	24.7	25.4	25.4	25.2	25.6	25.8	25.1
Massachusetts.....	(*)	(*)	(*)	(*)	(*)	23.8	23.9	23.8	24.2	23.9	23.5
Michigan.....	23.1	22.9	24.7	24.3	19.7	26.0	25.5	26.2	25.2	25.4	25.3
Minnesota.....	23.6	23.7	24.3	23.9	23.2	24.1	23.9	23.9	24.3	23.7	23.6
Mississippi.....	23.5	24.4	22.5	25.1	25.8	26.0	26.1	24.1	26.7	27.5	25.8
Montana.....	18.7	17.8	18.8	17.1	17.6	(*)	(*)	(*)	(*)	(*)	(*)
Nebraska.....	23.0	23.1	23.2	22.9	23.2	24.6	24.3	25.0	24.4	23.6	24.5
New Hampshire.....	22.2	22.3	23.3	22.4	22.5	23.3	23.4	23.6	23.8	22.9	22.8
New Jersey.....	22.9	23.5	23.8	23.9	23.0	24.3	24.7	24.5	24.8	25.1	24.1
New York.....	21.4	20.1	22.5	21.9	16.0	23.0	23.0	23.0	23.1	23.0	22.7
North Carolina.....	30.0	29.2	28.7	29.3	29.9	34.3	34.2	32.6	33.8	36.6	33.8
Ohio.....	20.5	20.4	20.7	20.8	19.7	22.2	21.8	22.1	21.9	21.6	21.9
Oregon.....	(*)	(*)	(*)	(*)	(*)	19.6	18.9	19.1	19.3	18.4	19.3
Pennsylvania.....	24.3	24.3	24.3	24.5	24.2	26.2	26.1	26.2	26.2	26.2	25.3
Rhode Island.....	(*)	(*)	(*)	(*)	(*)	23.7	25.1	25.0	24.9	25.5	23.6
South Carolina.....	26.5	27.1	26.4	26.8	28.2	29.8	30.8	29.2	31.3	32.1	29.5
Utah.....	(*)	(*)	(*)	(*)	(*)	32.2	31.4	30.9	31.8	31.8	31.6
Vermont.....	(*)	(*)	(*)	(*)	(*)	23.1	23.7	24.8	22.9	23.7	22.5
Virginia.....	27.7	27.5	26.7	27.5	28.5	30.2	29.9	28.9	29.6	31.4	29.9
Washington.....	18.3	17.5	17.8	17.8	16.9	20.2	19.6	19.5	19.7	19.7	10.6
Wisconsin.....	21.5	22.0	22.2	22.5	21.3	23.6	22.9	22.8	23.4	22.7	23.0
Wyoming.....	26.1	25.9	24.6	26.2	26.9	(*)	(*)	(*)	(*)	(*)	(*)

¹ Includes District of Columbia.² Figures not shown if transcripts of births are not received for the quarter.³ Admitted to registration area for 1922.

INFLUENZA IN THE UNITED STATES.

CASES REPORTED BY STATES FOR WEEK ENDED MARCH 10, 1923.

The following table shows the number of cases of influenza reported by State health officers, by telegraph, for the week ended March 10, 1923, compared with similar reports for the corresponding week of 1922, 1921, and 1920.

Cases of influenza reported by State health officers for the week ended March 10, 1923, and corresponding week of the years 1922, 1921, and 1920.

Division and State.	Week ended—			
	Mar. 10, 1923.	Mar. 11, 1922.	Mar. 12, 1921.	Mar. 13, 1920.
New England division:				
Maine.....	1,558	352	3	1,105
Massachusetts.....	179	521	32	400
Vermont.....	6	15	1	470
Connecticut.....	319	486	6	229
Middle Atlantic division:				
New York (exclusive of New York City).....	1,300	1,973	38	2,434
New York City.....	1,063	310	124	351
New Jersey.....	260	221	105	365

Cases of influenza reported by State health officers for the week ended March 10, 1923, and corresponding week of the years 1922, 1921, and 1920—Continued.

Division and State	Week ended—			
	Mar. 10, 1923.	Mar. 11, 1922.	Mar. 12, 1921.	Mar. 13, 1920.
East North Central division:				
Indiana.....	211			1,184
Illinois.....	357	735	15	453
Wisconsin.....	1,033	321	28	554
West North Central division:				
Minnesota.....	24	209	1	406
Missouri.....	997	279	28	
Nebraska.....	94	119	6	834
Kansas.....	438	557	6	1,551
South Atlantic division:				
Delaware.....		2	10	33
Maryland.....	1,083	814	367	1,206
District of Columbia.....	15	9	8	6
West Virginia.....		178		
Georgia.....	34	149	44	3,087
Florida.....	25	72	12	413
East South Central division:				
Alabama.....	170	185	14	1,047
Mississippi.....	546			2,230
West South Central division:				
Arkansas.....	480	409	88	2,055
Louisiana.....	836	1,603		1,982
Texas.....	1,787	1,181	79	55
Mountain division:				
Montana.....		263		206
Colorado (exclusive of Denver).....	17	237		
New Mexico.....		209		97
Pacific division:				
Washington.....		81		271
Oregon.....	13	250		
California.....	428	4,627	149	496

DEATHS DURING WEEK ENDED MARCH 3, 1923.

Summary of information received by telegraph from industrial insurance companies for week ended March 3, 1923, and corresponding week of 1922. (From the Weekly Health Index, March 6, 1923, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Mar. 3, 1923.	Corresponding week, 1922.
Policies in force.....	51,649,621	49,109,724
Number of death claims.....	14,971	12,430
Death claims per 1,000 policies in force, annual rate.....	15.1	13.2

Deaths from all causes in certain large cities of the United States during the week ended March 3, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, March 6, 1923, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population July 1, 1923.	Week ended Mar. 3, 1923.		Annual death rate per 1,000, corresponding week 1922.	Deaths under 1 year.		Infant mortality rate, week ended Mar. 3, 1923. ²
		Total deaths.	Death rate. ¹		Week ended Mar. 3, 1923.	Corresponding week 1922.	
Total.....	29,069,108	10,450	13.7	17.0	1,297	1,269	.....
Akron, Ohio.....	² 208,435	45	11.3	9.8	10	6	119
Albany, N. Y.....	117,375	43	19.1	17.9	5	4	111
Atlanta, Ga.....	222,963	71	16.6	16.1	10	5	.....
Baltimore, Md.....	773,580	345	23.3	16.7	51	34	150

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.

³ Enumerated population, Jan. 1, 1920.

Deaths from all causes in certain large cities of the United States during the week ended March 3, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, March 6, 1923, issued by the Bureau of the Census, Department of Commerce)—Continued.

City.	Estimated population July 1, 1923.	Week ended Mar. 3, 1923.		Annual death rate per 1,000, corresponding week 1922.	Deaths under 1 year.		Infant mortality, rate, week ended Mar. 3, 1923.
		Total deaths.	Death rate.		Week ended Mar. 3, 1923.	Corresponding week 1922.	
Birmingham, Ala.....	195,901	52	13.8	12.0	6	3	.....
Boston, Mass.....	770,400	326	22.1	22.0	55	51	158
Bridgeport, Conn.....	143,555	41	14.9	15.3	7	9	97
Buffalo, N. Y.....	536,718	175	17.0	14.7	37	29	155
Cambridge, Mass.....	111,444	45	21.1	21.1	10	4	178
Camden, N. J.....	124,157	38	16.0	15.0	6	5	99
Chicago, Ill.....	2,886,121	934	16.9	15.7	129	129	.....
Cincinnati, Ohio.....	406,312	153	19.6	19.8	16	11	105
Cleveland, Ohio.....	888,519	276	16.2	13.7	39	43	107
Columbus, Ohio.....	261,082	111	22.2	15.8	12	12	125
Dallas, Tex.....	177,274	40	11.8	13.0	3	7	.....
Dayton, Ohio.....	165,530	64	20.2	11.0	5	4	82
Denver, Colo.....	272,031	88	16.9	18.7	8	10	.....
Detroit, Mich.....	995,668	284	14.9	16.6	42	72	84
Duluth, Minn.....	106,289	26	12.8	.....	3	.....	68
Erie, Pa.....	112,571	44	20.4	16.2	5	5	102
Fall River, Mass.....	120,912	36	15.5	37.6	8	20	114
Flint, Mich.....	117,968	41	18.1	.....	11	.....	218
Fort Worth, Tex.....	143,821	30	10.9	9.5	5	1	.....
Grand Rapids, Mich.....	145,947	66	23.6	16.0	4	3	63
Houston, Tex.....	154,970	32	10.8	13.2	6	2	.....
Indianapolis, Ind.....	340,882	134	20.5	18.3	14	14	108
Jacksonville, Fla.....	100,046	42	21.9	19.2	4	3	.....
Jersey City, N. J.....	309,034	129	21.8	16.0	18	13	121
Kansas City, Kans.....	115,781	66	29.7	20.2	6	7	137
Kansas City, Mo.....	351,819	155	23.0	22.9	16	21	.....
Los Angeles, Calif.....	666,853	240	18.8	25.1	16	24	60
Louisville, Ky.....	257,671	109	22.1	17.5	18	10	194
Lowell, Mass.....	115,089	47	21.3	20.5	5	4	87
Lynn, Mass.....	102,683	43	21.8	.....	4	.....	.....
Memphis, Tenn.....	170,067	71	21.8	23.6	11	11	104
Milwaukee, Wis.....	484,595	157	16.9	12.1	21	19	105
Minneapolis, Minn.....	409,125	122	15.5	12.4	13	13	71
Nashville, Tenn.....	121,128	38	16.4	23.8	5	6	.....
New Bedford, Mass.....	130,072	51	20.4	20.4	10	17	149
New Haven, Conn.....	172,967	62	18.7	21.8	7	12	91
New Orleans, La.....	404,575	207	26.7	19.1	11	13	.....
New York, N. Y.....	5,927,625	2,188	22.2	14.9	228	233	91
Bronx Borough.....	240,544	273	16.9	12.2	21	16	74
Brooklyn Borough.....	2,158,687	723	17.5	14.0	72	75	76
Manhattan Borough.....	2,267,001	962	22.1	17.3	113	121	110
Queens Borough.....	535,844	167	16.3	10.9	18	13	96
Richmond Borough.....	127,549	63	25.8	20.5	4	8	73
Newark, N. J.....	438,699	177	21.0	17.5	21	20	99
Norfolk, Va.....	159,089	39	12.8	14.2	4	4	71
Oakland, Calif.....	240,086	52	11.3	21.5	5	6	64
Omaha, Nebr.....	204,382	95	24.2	18.7	11	7	119
Paterson, N. J.....	139,379	39	14.6	14.3	6	6	96
Philadelphia, Pa.....	1,922,788	752	20.4	17.9	113	89	147
Pittsburgh, Pa.....	613,442	328	27.9	17.8	41	38	143
Portland, Oreg.....	273,621	77	14.7	21.5	4	5	40
Providence, R. I.....	242,378	94	20.2	27.3	7	7	57
Richmond, Va.....	181,044	73	21.0	20.8	13	9	159
Rochester, N. Y.....	317,867	104	17.1	14.1	10	7	79
St. Louis, Mo.....	803,853	283	18.4	19.2	18	15	.....
St. Paul, Minn.....	241,891	90	19.4	17.6	9	9	81
Salt Lake City, Utah.....	126,241	31	12.8	14.7	5	1	83
San Antonio, Tex.....	184,727	69	19.5	.....	12	.....	.....
San Francisco, Calif.....	539,058	181	17.5	25.0	20	15	72
Seattle, Wash.....	315,312	69	11.4	14.1	4	4	35
Spokane, Wash.....	104,573	23	11.5	20.0	5	4	109
Springfield, Mass.....	144,227	54	19.5	13.0	6	7	85
Syracuse, N. Y.....	184,511	53	15.0	19.0	10	5	130
Tacoma, Wash.....	101,731	22	11.3	.....	.....	.....	125
Toledo, Ohio.....	263,338	100	19.4	13.0	13	6	131
Trenton, N. J.....	127,390	62	25.4	22.5	8	9	135
Washington, D. C.....	437,571	166	19.8	16.8	24	24	137
Wilmington, Del.....	117,728	43	19.0	17.6	11	6	224
Worcester, Mass.....	191,927	68	18.5	18.3	11	8	124
Yonkers, N. Y.....	107,520	39	18.9	12.9	1	5	22

§ Enumerated population, Jan. 1, 1920.

CONNECTICUT—continued.		ILLINOIS—continued.	
	Cases.		Cases.
Poliomyelitis.....	1	Scarlet fever:	
Scarlet fever.....	92	Cook County (including Chicago).....	116
Tuberculosis (all forms).....	42	Chicago.....	100
Typhoid fever.....	1	Kane County.....	8
Whooping cough.....	59	Peoria County.....	11
		Scattering.....	103
DISTRICT OF COLUMBIA.		Smallpox.....	20
Chicken pox.....	27	Typhoid fever.....	7
Diphtheria.....	8	Whooping cough.....	328
Influenza.....	15		
Lethargic encephalitis.....	1	INDIANA.	
Measles.....	168	Diphtheria.....	79
Scarlet fever.....	33	Influenza.....	211
Tuberculosis.....	29	Measles.....	345
Typhoid fever.....	2	Pneumonia.....	22
Whooping cough.....	40	Scarlet fever.....	64
		Smallpox.....	50
FLORIDA.			
Dengue.....	1	IOWA.	
Diphtheria.....	9	Diphtheria.....	33
Influenza.....	25	Scarlet fever.....	129
Malaria.....	6	Smallpox.....	18
Pneumonia.....	8		
Scarlet fever.....	2	KANSAS.	
Smallpox.....	6	Chicken pox.....	69
Typhoid fever.....	8	Diphtheria.....	50
		German measles.....	1
		Hookworm disease.....	1
		Influenza.....	438
		Lethargic encephalitis.....	2
		Malaria.....	3
		Measles.....	201
		Mumps.....	41
		Pneumonia.....	134
		Scarlet fever.....	102
		Smallpox.....	3
		Tetanus.....	1
		Tuberculosis.....	38
		Typhoid fever.....	3
		Whooping cough.....	93
		LOUISIANA.	
		Diphtheria.....	31
		Influenza.....	836
		Scarlet fever.....	5
		Smallpox.....	37
		Typhoid fever.....	4
		Whooping cough.....	58
		MAINE.	
		Chicken pox.....	29
		Conjunctivitis.....	12
		Diphtheria.....	10
		German measles.....	26
		Influenza.....	1,553
		Measles.....	73
		Mumps.....	2
		Pneumonia.....	93
		Scarlet fever.....	27
		Tuberculosis.....	12
		Typhoid fever.....	1
		Whooping cough.....	42
		MARYLAND. ¹	
		Chicken pox.....	89
		Diphtheria.....	50
		Dysentery.....	1

¹ Week ended Friday.

MARYLAND—continued.

	Cases.
German measles.....	6
Influenza.....	1,083
Lethargic encephalitis.....	10
Measles.....	291
Mumps.....	76
Ophthalmia neonatorum.....	1
Pneumonia (all forms).....	300
Scarlet fever.....	77
Tuberculosis.....	33
Typhoid fever.....	7
Vincent's angina.....	1
Whooping cough.....	108

MASSACHUSETTS.

Cerebrospinal meningitis.....	2
Chicken pox.....	125
Diphtheria.....	139
German measles.....	12
Influenza.....	179
Lethargic encephalitis.....	9
Measles.....	900
Mumps.....	286
Ophthalmia neonatorum.....	30
Pneumonia (lobar).....	214
Poliomyelitis.....	1
Scarlet fever.....	340
Septic sore throat.....	1
Tetanus.....	1
Tuberculosis (all forms).....	119
Typhoid fever.....	8
Whooping cough.....	483

MICHIGAN.

Diphtheria.....	144
Measles.....	257
Pneumonia.....	226
Scarlet fever.....	432
Smallpox.....	37
Tuberculosis.....	76
Typhoid fever.....	24
Whooping cough.....	198

MINNESOTA.

Chicken pox.....	3
Diphtheria.....	41
Influenza.....	24
Lethargic encephalitis.....	8
Measles.....	286
Pneumonia.....	21
Scarlet fever.....	184
Smallpox.....	41
Tetanus.....	2
Trachoma.....	1
Tuberculosis.....	39
Typhoid fever.....	5
Whooping cough.....	12

MISSISSIPPI.

Diphtheria.....	8
Influenza.....	546
Scarlet fever.....	5
Smallpox.....	1
Typhoid fever.....	4

MISSOURI.

	Cases.
Chicken pox.....	89
Diphtheria.....	77
Epidemic sore throat.....	56
Influenza.....	997
Measles.....	611
Mumps.....	31
Pneumonia.....	50
Scarlet fever.....	90
Smallpox.....	16
Tetanus.....	1
Trachoma.....	11
Tuberculosis.....	58
Typhoid fever.....	2
Whooping cough.....	59

MONTANA.

Diphtheria.....	11
Scarlet fever.....	23
Smallpox.....	1
Typhoid fever.....	1

NEBRASKA.

Chicken pox.....	22
Diphtheria.....	16
German measles.....	2
Influenza.....	94
Measles.....	10
Mumps.....	15
Pneumonia.....	5
Scarlet fever.....	49
Smallpox.....	3
Tetanus.....	1
Tuberculosis.....	12
Typhoid fever.....	1
Whooping cough.....	29

NEW JERSEY.

Cerebrospinal meningitis.....	5
Chicken pox.....	140
Diphtheria.....	126
Influenza.....	260
Malaria.....	1
Measles.....	918
Pneumonia.....	284
Poliomyelitis.....	1
Scarlet fever.....	226
Smallpox.....	1
Typhoid fever.....	5
Whooping cough.....	133

NEW YORK.

(Exclusive of New York City.)

Cerebrospinal meningitis.....	2
Diphtheria.....	90
Influenza.....	1,309
Lethargic encephalitis.....	7
Measles.....	1,045
Pneumonia.....	709
Scarlet fever.....	339
Smallpox.....	2
Typhoid fever.....	16
Whooping cough.....	269

NORTH CAROLINA.

	Cases.
Chicken pox	148
Diphtheria	39
Measles	1,623
Poliomyelitis	1
Scarlet fever	37
Septic sore throat	2
Smallpox	124
Typhoid fever	7
Whooping cough	352

OREGON.

Chicken pox	4
Diphtheria	4
Influenza	13
Lethargic encephalitis:	
Portland	1
Umatilla County	1
Measles	3
Pneumonia	114
Scarlet fever	17
Smallpox:	
Portland	11
Scattering	8
Tuberculosis	13
Typhoid fever	1

SOUTH DAKOTA.

Chicken pox	6
Diphtheria	11
Influenza	21
Measles	4
Pneumonia	25
Scarlet fever	40
Smallpox	2
Tuberculosis	4
Whooping cough	1

TEXAS.

Chicken pox	49
Dengue	6
Diphtheria	25
Dysentery	1
Influenza	1,787
Lethargic encephalitis	4
Measles	198
Mumps	8
Pellagra	1
Pneumonia	128
Scarlet fever	32
Smallpox	77
Trachoma	15
Tuberculosis	67
Typhoid fever	2
Whooping cough	22

VERMONT.

Chicken pox	24
Diphtheria	4
German measles	1
Influenza	6
Measles	12
Mumps	29
Pneumonia	8
Scarlet fever	8
Smallpox	1
Whooping cough	21

WASHINGTON.

	Cases.
Actinomycosis	1
Cerebrospinal meningitis:	
Seattle	1
Chicken pox	44
Diphtheria	18
Lethargic encephalitis:	
Clarke County	2
Measles	3
Mumps	18
Pneumonia	8
Scarlet fever:	
Seattle	9
Scattering	34
Tuberculosis	42
Typhoid fever	3
Whooping cough	56

WEST VIRGINIA.

Diphtheria	12
Measles:	
Bluefield	22
Wellsburg	42
Wheeling	108
Scarlet fever	19
Typhoid fever	2

WISCONSIN.

Milwaukee:	
Chicken pox	19
Diphtheria	22
Influenza	6
Lethargic encephalitis	1
Measles	160
Pneumonia	11
Scarlet fever	266
Tuberculosis	19
Whooping cough	19
Scattering:	
Cerebrospinal meningitis	1
Chicken pox	76
Diphtheria	61
German measles	1
Influenza	1,027
Lethargic encephalitis	1
Measles	725
Ophthalmia neonatorum	1
Pneumonia	48
Poliomyelitis	1
Scarlet fever	155
Smallpox	32
Tuberculosis	20
Typhoid fever	3
Whooping cough	95

WYOMING.

Chicken pox	4
Diphtheria	1
German measles	2
Influenza	4
Measles	1
Mumps	1
Pneumonia	3
Whooping cough	1

¹ Deaths.

Report for Week Ended March 3, 1923.

NORTH DAKOTA.		NORTH DAKOTA—continued.	
	Cases.		Cases.
Chicken pox.....	12	Poliomyelitis.....	1
Diphtheria.....	20	Scarlet fever.....	18
Influenza.....	20	Smallpox.....	25
Lethargic encephalitis.....	1	Tuberculosis.....	2
Pneumonia.....	7	Whooping cough.....	10

CASES OF CERTAIN COMMUNICABLE DISEASES FOR THE MONTH OF DECEMBER, 1922, BY STATE HEALTH OFFICERS.

State.	Number of cases reported.								
	Chicken pox.	Diphtheria.	Measles.	Mumps.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Whooping cough.
Alabama.....	24	94	1	3	46	1	42	30	.....
Arizona ¹.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arkansas.....	140	67	10	5	24	4	71	91	55
California.....	432	784	101	57	581	39	559	52	210
Colorado.....	293	292	23	48	290	118	43	29	94
Connecticut.....	255	370	1,234	78	436	2	123	14	280
Delaware.....	91	9	167	3	82	.....	12	4	16
District of Columbia.....	115	87	51	.....	90	.....	95	10	133
Florida.....	14	107	3	2	4	17	116	31	7
Georgia ².....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	85	31	2	.....	23	17	2	9	1
Illinois.....	1,617	1,945	921	514	1,314	132	1,386	103	786
Indiana.....	.....	765	572	.....	464	.....	82	97	67
Iowa.....	.....	367	12	.....	421	10	.....	(³)	.....
Kansas.....	386	511	101	47	578	18	141	15	79
Kentucky ².....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	10	207	9	2	39	36	207	101	31
Maine.....	145	59	63	11	163	.....	11	14	177
Maryland.....	532	440	474	106	329	.....	138	49	338
Massachusetts.....	925	1,106	2,619	604	971	.....	486	39	1,258
Michigan.....	1,112	1,087	351	72	1,407	233	374	76	564
Minnesota.....	575	524	214	.....	1,046	182	242	19	101
Mississippi.....	321	237	917	106	70	95	213	69	618
Missouri ².....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montana.....	101	30	3	1	94	36	54	8	.....
Nebraska.....	173	188	10	27	295	39	3	14	13
Nevada ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Jersey.....	835	1,032	3,059	.....	733	.....	372	72	629
New Mexico.....	79	125	3	5	38	.....	72	20	.....
New York.....	2,502	1,870	1,817	1,346	2,042	15	1,675	158	1,435
North Carolina.....	454	397	318	.....	329	133	.....	29	361
North Dakota.....	70	102	38	3	201	68	13	13	11
Ohio.....	1,888	1,606	2,848	72	2,313	192	417	90	588
Oklahoma.....	43	60	2	.....	39	59	20	12	1
Oregon.....	129	117	16	12	73	50	91	18	4
Pennsylvania.....	2,949	2,154	15,005	408	2,063	18	323	182	1,065
Rhode Island.....	20	78	505	5	52	.....	46	6	26
South Carolina.....	11	203	9	2	17	60	22	6	3
South Dakota.....	46	66	10	.....	204	42	25	8	8
Tennessee ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas ².....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermont.....	282	12	51	16	106	3	10	4	245
Virginia.....	814	917	282	.....	485	15	190	39	.....
Washington.....	368	85	19	128	158	121	58	25	86
West Virginia.....	227	401	330	.....	272	10	40	54	76
Wisconsin.....	805	510	3,447	.....	568	171	101	23	445
Wyoming.....	24	1	.....	.....	11	4	1	.....	.....

¹ No report for month of December.

² Reports received weekly.

³ Not notifiable.

⁴ Reports received annually.

**REPORTED CASES PER 1,000 POPULATION (ANNUAL BASIS) FOR THE
MONTH OF DECEMBER, 1922.**

State.	Case rates per 1,000 population.								
	Chicken pox.	Diphtheria.	Measles.	Mumps.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Whooping cough.
Alabama.....	0.12	0.46	0.00	0.01	0.23	0.00	0.21	0.15	.....
Arizona ¹.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arkansas.....	.92	.44	.07	.03	.16	.03	.46	.60	.36
California.....	1.38	2.50	.32	.18	1.85	.12	1.78	.17	.67
Colorado.....	3.54	3.52	.28	.58	3.50	1.42	.52	.35	1.13
Connecticut.....	2.07	3.01	10.03	.63	3.54	.02	1.00	.11	2.28
Delaware.....	4.69	.46	8.61	.15	4.23	.....	.62	.21	.83
District of Columbia.....	2.91	2.20	1.29	.....	2.28	.....	2.41	.25	3.37
Florida.....	.16	1.23	.03	.....	.05	.20	1.33	.36	.08
Georgia ².....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	2.18	.79	.05	.....	.69	.44	.05	.23	.03
Illinois.....	2.84	3.42	1.62	.90	2.31	.23	2.43	.18	1.38
Indiana.....	.....	3.01	2.25	.....	1.83	.32	.38	.26	.....
Iowa.....	.....	1.72	.06	.....	2.02	.05	.....	(³)	.....
Kansas.....	2.54	3.36	.66	.31	3.80	.12	.93	.10	.52
Kentucky ¹.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	.06	1.33	.06	.01	.25	.23	1.33	.65	.20
Maine.....	2.20	.90	.96	.17	2.48	.....	.17	.21	2.69
Maryland.....	4.21	3.48	3.75	.84	2.60	.....	1.09	.39	2.67
Massachusetts.....	2.74	3.27	7.75	1.79	2.87	.....	1.44	.12	3.72
Michigan.....	3.37	3.29	1.06	.22	4.26	.71	1.13	.23	1.71
Minnesota.....	2.74	2.50	1.02	.....	4.99	.87	1.15	.09	.48
Mississippi.....	2.11	1.56	6.03	.70	.46	.62	1.40	.45	4.06
Missouri ³.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montana.....	2.00	.60	.06	.02	1.87	.71	1.07	.16	.....
Nebraska.....	1.58	1.67	.09	.24	2.62	.35	.03	.12	.12
Nevada ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Jersey.....	2.97	3.67	10.86	.....	2.60	.....	1.32	.26	2.23
New Mexico.....	2.52	3.99	.10	.16	1.21	.13	2.30	.64	.....
New York.....	2.75	2.06	2.00	1.48	2.24	.02	1.84	.17	1.58
North Carolina.....	2.02	1.76	1.41	.....	1.46	.59	.....	.13	1.60
North Dakota.....	1.24	1.81	.67	.05	3.56	1.20	.23	.23	.19
Ohio.....	3.70	3.14	5.57	.14	4.53	.38	.82	.18	1.15
Oklahoma.....	.24	.33	.01	.....	.22	.33	.11	.07	.01
Oregon.....	1.87	1.70	.23	.17	1.06	.73	1.32	.26	.06
Pennsylvania.....	3.86	2.82	19.65	.53	2.70	.02	.42	.24	1.39
Rhode Island.....	.38	1.48	9.59	.09	.99	.....	.87	.11	.49
South Carolina.....	.07	1.38	.06	.01	.12	.41	.15	.04	.02
South Dakota.....	.83	1.20	.18	.....	3.69	.76	.45	.14	.14
Tennessee ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas ¹.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermont.....	9.42	.40	1.70	.53	3.54	.10	.33	.13	8.19
Virginia.....	4.04	4.55	1.40	.....	2.41	.07	.94	.19	.....
Washington.....	3.07	.71	.16	1.07	1.32	1.01	.48	.21	.72
West Virginia.....	1.75	3.09	2.55	.....	2.10	.08	.31	.42	.59
Wisconsin.....	3.50	2.22	14.98	.....	3.77	.74	.44	.10	1.93
Wyoming.....	1.37	.06	.....	.....	.63	.23	.06	.....	.....

¹ No report for month of December.² Reports received weekly.³ Not notifiable.⁴ Reports received annually.

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Pollomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
<i>December, 1922.</i>										
Colorado		292	4		23	1	1	290	118	29
<i>January, 1923.</i>										
California	13	924	603	8	737			756	97	57
Colorado	1	347	4		30	4	3	269	47	12
Hawaii	1	19	32		362		2			13
Ohio	9	1,293	2,714		5,651		4	2,116	226	69
Oklahoma		28	1,473	94	21			50	97	5
Oregon		104	39		24			69	83	5
Pennsylvania	3	1,661			20,620		3	1,813	4	153
Wisconsin	9	499	568		5,715		4	1,348	226	23
<i>February, 1923.</i>										
Connecticut	9	191	1,365		1,575		1	362	10	5
District of Columbia		43	80		358			89	1	4
Florida		48	170	26	25	4		11	41	35
Massachusetts	13	662	1,162	1	3,874		9	1,804		22
Nebraska	1	94	532		45			170	7	4

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 24, 1923.		City.	Median for previous years.	Week ended Feb. 24, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				New York:			
Los Angeles	0	1		New York	6	6	2
Sacramento	0	1		Ohio:			
Georgia:				Cleveland	0	2	
Atlanta	0		1	Youngstown	0	1	
Illinois:				Pennsylvania:			
Chicago	1	1	1	Philadelphia	3	1	1
Kewanee	0	1	1	Pittsburgh	0	1	
Louisiana:				Rhode Island:			
New Orleans	0	2		Providence	0		1
Massachusetts:				Virginia:			
Lawrence	0	1	1	Norfolk	0	1	
Lynn	0		1	Washington:			
Michigan:				Seattle	0	1	
Muskegon	1	1		Wisconsin:			
Minnesota:				Eau Claire	0	1	1
Duluth	0		1	Milwaukee	1	2	2
Missouri:							
St. Louis	0	2					

DIPHTHERIA.

See p. 531; also Current State summaries, p. 518; and Monthly summaries by States, above.

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

INFLUENZA.

City.	Cases.		Deaths, week ended Feb. 24, 1923.	City.	Cases.		Deaths, week ended Feb. 24, 1923.
	Week ended Feb. 25, 1922.	Week ended Feb. 24, 1923.			Week ended Feb. 25, 1922.	Week ended Feb. 24, 1923.	
Alabama:				Kansas:			
Birmingham	3	7	2	Coffeyville		3	
Mobile		4	5	Hutchinson		3	
Tuscaloosa		35		Kansas City	5		
Arkansas:				Lawrence	11		1
Fort Smith	2	3		Parsons		32	
Little Rock	39	18		Salina	2	11	
North-Little Rock	3			Topeka		1	1
California:				Wichita	17		3
Alameda	117			Kentucky:			
Berkeley	671			Covington			6
Eureka	38			Henderson		1	1
Long Beach	57			Louisville	65	57	4
Los Angeles	3,651	168	6	Owensboro	10		
Oakland	242	40		Louisiana:			
Pasadena	308	10		Alexandria	4		
Riverside	23	1	1	Baton Rouge	75		
Sacramento	88			New Orleans	72	84	22
San Diego	236	10	1	Maine:			
San Francisco	987			Auburn	2		
Santa Ana	161	16		Bangor		20	
Santa Barbara	13			Bath	2	1	
Santa Cruz	96			Biddeford	9	5	1
Stockton	83			Lewiston			1
Vallejo	50			Portland	12	51	2
Colorado:				Sanford	32	16	
Denver			6	Maryland:			
Connecticut:				Baltimore	234	518	17
Bridgeport	58	1	1	Cumberland	22	55	1
Bristol	8	13		Frederick		18	
Greenwich		2		Massachusetts:			
Hartford	33	1	4	Arlington	6		
Manchester	1			Attleboro	27	26	
Meriden	48	1		Belmont	4	2	
Milford	2			Boston	353	19	5
New Britain	110			Braintree	28	24	
New Haven	9	18	8	Brookline	7		
New London	6	6		Cambridge	122	7	
Norwich	4			Chelsea	6		
Stonington	25			Clinton	3		
Waterbury	7			Easthampton	2		
District of Columbia:				Everett	96	17	
Washington	7	16	10	Fall River	61	1	1
Florida:				Frammingham	14	1	1
St. Petersburg		2		Haverhill	63	7	
Tampa	7	8	1	Holyoke	3	4	
Georgia:				Lawrence	1		
Atlanta	14	15	4	Leominster	4		1
Augusta	1			Lowell	44	9	1
Macon		50		Lynn	12	3	2
Savannah	3	7	1	Malden	5		
Illinois:				Medford		1	
Aurora	2			Melrose	3		
Champaign	3			Natick	2		
Chicago	707	366	42	Newburyport		1	1
Cicero	14	28		Newton	5		
Danville	3			Norwood	1		
Decatur	7	15		Peabody	1		
East St. Louis	30			Pittsfield		6	1
Evanston		3		Quincy	8		
Freeport	1	2		Saugus	41		
La Salle	2			Somerville	33		1
Mattoon			1	Southbridge	19		
Oak Park	10	1		Springfield	3	6	4
Peoria		1		Wakefield	1		
Quincy		7		Waltham	11	9	1
Rock Island	4			Webster	1		
Springfield	2	4	1	Westfield	1		
Indiana:				Worcester	73	3	
Elkhart	1		1	Michigan:			
Fort Wayne			1	Detroit	100	14	16
Indianapolis			5	Flint	2	16	4
La Fayette	12			Grand Rapids		9	2
Laporte		5		Highland Park	1		
Logansport			2	Jackson		1	1
Terre Haute			3	Kalamazoo	2		3
Iowa:				Pontiac	1	2	
Council Bluffs			1	Saginaw	2		
Sloux City		1					

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

INFLUENZA—Continued.

City.	Cases.		Deaths, week ended Feb. 24, 1923.	City.	Cases.		Deaths, week ended Feb. 24, 1923.
	Week ended Feb. 25, 1922.	Week ended Feb. 24, 1923.			Week ended Feb. 25, 1922.	Week ended Feb. 24, 1923.	
Minnesota:				Ohio:			
Duluth.....	9			Akron.....	11	2	
Minneapolis.....	6		9	Ashtabula.....	1	24	2
St. Paul.....	4			Barberton.....	1		
Missouri:				Cambridge.....	4		
Independence.....		73		Canton.....			2
Kansas City.....	21	23	15	Chillicothe.....	10	2	
St. Joseph.....	7		2	Cincinnati.....	21		16
St. Louis.....	49	1		Cleveland.....	141	79	19
Springfield.....			1	Cleveland Heights.....		2	
Montana:				Columbus.....			22
Great Falls.....	3			Dayton.....	1		
Missoula.....	166			East Cleveland.....	4		
Nebraska:				Hamilton.....	4		
Lincoln.....			1	Newark.....	3		1
Omaha.....		1	1	Piqua.....	1		
Nevada:				Springfield.....		1	2
Reno.....	26			Toledo.....	7	2	1
New Hampshire:				Youngstown.....	2		2
Manchester.....	3			Oklahoma:			
New Jersey:				Oklahoma.....			9
Asbury Park.....	1			Oregon:			
Bayonne.....	2	3		Portland.....	19	8	2
Belleville.....		3		Pennsylvania:			
Bloomfield.....	4			Philadelphia.....	77	19	16
Clifton.....		4		Rhode Island:			
East Orange.....	4	4	1	Cumberland.....		2	
Garfield.....	13		1	Providence.....	59		2
Harrison.....		26		South Carolina:			
Hoboken.....		1		Charleston.....	4		
Jersey City.....	6	7		South Dakota:			
Kearny.....	36	45		Sioux Falls.....		12	
Long Branch.....		1		Tennessee:			
Monclair.....	15	3		Memphis.....			4
Morristown.....	4			Nashville.....			1
Newark.....	427			Texas:			
Orange.....	5			Amarillo.....		4	1
Passaic.....	48	5		Beaumont.....	3		
Paterson.....	45	10		Corsicana.....		75	
Rahway.....			1	Dallas.....	27		7
Trenton.....	20	11	1	Fort Worth.....	1		
Union.....		1		Galveston.....		30	
West Orange.....	20	3		San Antonio.....		2	
New Mexico:				Waco.....			1
Albuquerque.....	115	2		Utah:			
New York:				Salt Lake City.....	8		1
Albany.....	138			Virginia:			
Amsterdam.....		14	1	Alexandria.....		2	
Auburn.....	1	13		Danville.....	14		
Binghamton.....	20			Norfolk.....	93		
Buffalo.....	10	18	5	Richmond.....		6	2
Cohoes.....	122	12		Roanoke.....	25		4
Cortland.....	3			Washington:			
Fulton.....	1			Walla Walla.....	12		
Hornell.....	2		1	West Virginia:			
Ithaca.....	5			Charleston.....	1	4	
Jamestown.....	43			Clarksburg.....	9		
Lockport.....		18		Fairmont.....	31		
Middletown.....	49	10		Huntington.....	1	5	
Mount Vernon.....	40	66	1	Morgantown.....		69	
New York.....	1,312	2,684	149	Parkersburg.....			2
Niagara Falls.....	1	2		Wisconsin:			
Olean.....		1	3	Beloit.....		2	1
Peekskill.....	67	10	1	Eau Claire.....		2	
Port Chester.....	2			Fond du Lac.....	5		
Poughkeepsie.....	7			Kenosha.....	1		
Rochester.....		7	4	Madison.....	5		
Saratoga Springs.....	11	59		Marinette.....		150	
Schenectady.....	24	2	4	Milwaukee.....	1	16	4
Syracuse.....	9	3		Wausau.....		2	
Troy.....			1	Wyoming:			
Watertown.....			1	Casper.....	20		
Yonkers.....			1	Cheyenne.....	4		
North Dakota:							
Grand Forks.....	16						

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Ohio:			Wisconsin:		
Akrón.....	1		Eau Claire.....	3	2
South Dakota:					
Sioux Falls.....		1			

MALARIA.

Alabama:			Louisiana:		
Tuscaloosa.....	1		New Orleans.....	5	2
Florida:			New York:		
St. Petersburg.....	1		New York.....		1
Kansas:					
Hutchinson.....	1				

MEASLES.

See p. 531; also Current State summaries, p. 518; and Monthly summaries by States, p. 524.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			Michigan:		
Mobile.....	1		Flint.....	1	1
Georgia:			Tennessee:		
Atlanta.....		1	Memphis.....		1
Louisiana:					
New Orleans.....	1				

PNEUMONIA (ALL FORMS).

Alabama:			Illinois:		
Birmingham.....	10	6	Alton.....		2
Arkansas:			Bloomington.....		1
Little Rock.....	5		Blue Island.....	5	3
California:			Champaign.....	4	
Alameda.....		3	Chicago.....	565	189
Eureka.....		2	Cicero.....		4
Glendale.....		3	Decatur.....	11	3
Los Angeles.....	84	32	Elgin.....	7	2
Oakland.....	29	15	Evanston.....	9	
Pasadena.....	4	2	Freeport.....		3
Richmond.....		2	Jacksonville.....	5	1
Riverside.....	5	3	Kewanee.....		2
Sacramento.....	2	1	La Salle.....	2	1
San Diego.....		7	Mattoon.....		3
Santa Ana.....	4		Oak Park.....	7	4
Santa Barbara.....		2	Peoria.....		6
Santa Cruz.....		3	Quincy.....	7	4
Colorado:			Rock Island.....	4	9
Denver.....		30	Springfield.....	17	2
Pueblo.....		4	Indiana:		
Connecticut:			Anderson.....		1
Bridgeport.....	6	2	Bloomington.....		2
Bristol.....		4	Crawfordsville.....		1
Derby.....		5	East Chicago.....		5
Hartford.....	7	2	Fort Wayne.....		8
Milford.....		1	Frankfort.....		1
New Haven.....		17	Gary.....		7
New London.....	2	1	Indianapolis.....		33
District of Columbia:			La Fayette.....		1
Washington.....		44	Laporte.....		3
Florida:			Michigan City.....		4
Key West.....		1	Muncie.....		2
St. Petersburg.....		1	South Bend.....		1
Tampa.....		3	Terre Haute.....		4
Georgia:			Iowa:		
Atlanta.....		11	Burlington.....		2
Rome.....	1		Council Bluffs.....		3
Savannah.....		3	Marshalltown.....	3	
			Muscatine.....		1

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Kansas:			Michigan:		
Atchison.....	2		Alpena.....	2	
Coffeyville.....	2		Ann Arbor.....	6	5
Fort Scott.....		2	Battle Creek.....	2	1
Hutchinson.....	3		Benton Harbor.....		6
Kansas City.....	8		Detroit.....	128	75
Lawrence.....		2	Flint.....	10	9
Leavenworth.....		1	Grand Rapids.....	37	9
Parsons.....		1	Hamtramck.....		2
Topeka.....		3	Highland Park.....	10	6
Wichita.....	21	17	Holland.....	4	
Kentucky:			Jackson.....	4	2
Covington.....		2	Kalamazoo.....	9	7
Henderson.....		1	Marquette.....	5	1
Lexington.....		3	Muskegon.....	5	4
Louisville.....	36	27	Pontiac.....	5	4
Louisiana:			Port Huron.....	3	1
New Orleans.....	32	23	Minnesota:		
Maine:			Duluth.....		6
Auburn.....		3	Faribault.....		1
Bangor.....	7	1	Hibbing.....		1
Bath.....	5	1	Minneapolis.....		23
Biddeford.....		3	Rochester.....	1	
Lewiston.....	4	3	Winona.....		1
Portland.....	26	19	Missouri:		
Sanford.....		3	Cape Girardeau.....		1
Maryland:			Independence.....	3	
Baltimore.....	152	76	Kansas City.....	64	28
Cumberland.....	3	2	St. Joseph.....		8
Frederick.....	1		Springfield.....		6
Massachusetts:			Montana:		
Adams.....		1	Great Falls.....		1
Amesbury.....		4	Missoula.....		2
Arlington.....		4	Nebraska:		
Attleboro.....		2	Lincoln.....		5
Belmont.....		3	Omaha.....		28
Beverly.....		4	New Hampshire:		
Boston.....		40	Concord.....		4
Braintree.....	1		Dover.....		3
Brookline.....		1	New Jersey:		
Cambridge.....		6	Atlantic City.....		6
Chelsea.....		7	Bayonne.....	2	
Chicopee.....		4	Belleville.....	2	
Clinton.....		1	Bloomfield.....	4	
Danvers.....		2	Clifton.....	1	
Everett.....	3		East Orange.....	14	6
Fall River.....		3	Elizabeth.....		11
Fitchburg.....		1	Englewood.....	5	2
Framingham.....		1	Garfield.....		1
Gardner.....	3	2	Hackensack.....		5
Greenfield.....		2	Harrison.....	1	
Haverhill.....	13	6	Hoboken.....		6
Holyoke.....		8	Jersey City.....	27	
Lawrence.....	5	3	Kearny.....	9	
Leominster.....	3	1	Long Branch.....	1	
Lowell.....	3	13	Montclair.....	2	1
Lynn.....		7	Morristown.....	2	1
Malden.....		6	Passaic.....	12	6
Medford.....		1	Paterson.....	6	
Melrose.....		3	Perth Amboy.....		2
Methuen.....		1	Phillipsburg.....		1
New Bedford.....		14	Plainfield.....	3	2
Newton.....		6	Rahway.....		1
North Adams.....	2		Summit.....	4	2
Northampton.....	2	1	Trenton.....	8	7
Peabody.....		1	Union.....	3	
Pittsfield.....		2	West Hoboken.....		1
Plymouth.....		2	West Orange.....	4	
Quincy.....	5		New Mexico:		
Salem.....		5	Albuquerque.....	2	
Somerville.....	6	4	New York:		
Southbridge.....		1	Amsterdam.....	2	1
Springfield.....	25	8	Auburn.....	5	1
Taunton.....		7	Buffalo.....	64	41
Wakefield.....		2	Cohoes.....		2
Watertown.....		1	Elmira.....	19	3
Webster.....		2	Geneva.....		2
West Springfield.....		2	Hornell.....	16	1
Westfield.....		2	Hudson.....		3
Weymouth.....		1	Ithaca.....	4	
Worcester.....		20	Lockport.....	1	

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
New York—Continued.			Oregon:		
Middletown.....	4	.....	Portland.....	.....	13
Mount Vernon.....	13	1	Pennsylvania:		
New York.....	1,076	464	Philadelphia.....	135	135
Newburgh.....	6	2	Rhode Island:		
Niagara Falls.....	14	4	Cranston.....	.....	2
Olean.....	3	1	Cumberland.....	.....	1
Peekskill.....	6	1	Newport.....	.....	2
Poughkeepsie.....	9	6	Providence.....	.....	13
Rochester.....	32	12	South Carolina:		
Saratoga Springs.....	10	2	Charleston.....	.....	4
Schenectady.....	16	4	Greenville.....	.....	1
Syracuse.....	26	11	South Dakota:		
Troy.....	30	11	Sioux Falls.....	.....	3
Watertown.....	7	.....	Tennessee:		
White Plains.....	6	1	Memphis.....	.....	19
Yonkers.....	16	5	Nashville.....	.....	11
North Carolina:			Texas:		
Raleigh.....	.....	1	Amarillo.....	2	.....
Rocky Mount.....	.....	3	Dallas.....	.....	8
Salisbury.....	.....	1	El Paso.....	.....	8
Winston-Salem.....	.....	5	Houston.....	.....	6
Ohio:			San Antonio.....	.....	9
Akron.....	13	.....	Waco.....	.....	4
Ashtabula.....	.....	1	Utah:		
Barberton.....	.....	2	Salt Lake City.....	.....	1
Bucyrus.....	3	1	Vermont:		
Cambridge.....	4	.....	Burlington.....	.....	5
Canton.....	.....	7	Rutland.....	.....	4
Chillicothe.....	.....	2	Virginia:		
Cincinnati.....	.....	20	Alexandria.....	.....	2
Cleveland.....	120	71	Charlottesville.....	1	.....
Cleveland Heights.....	2	.....	Danville.....	.....	1
Columbus.....	.....	16	Lynchburg.....	.....	1
Coshocton.....	1	.....	Norfolk.....	.....	10
Dayton.....	2	.....	Petersburg.....	.....	2
East Cleveland.....	2	.....	Portsmouth.....	.....	6
East Youngstown.....	.....	2	Richmond.....	.....	7
Findlay.....	5	1	Roanoke.....	.....	3
Fremont.....	1	.....	West Virginia:		
Hamilton.....	.....	2	Charleston.....	.....	8
Kenmore.....	6	.....	Clarksburg.....	.....	3
Lima.....	.....	4	Huntington.....	10	4
Lorain.....	.....	1	Morgantown.....	3	.....
Mansfield.....	5	2	Parkersburg.....	.....	1
Middletown.....	.....	3	Wheeling.....	.....	6
New Philadelphia.....	8	.....	Wisconsin:		
Newark.....	.....	3	Ashland.....	.....	1
Piqua.....	3	1	Beloit.....	9	3
Salem.....	.....	3	Eau Claire.....	3	.....
Sandusky.....	.....	3	Fond du Lac.....	.....	2
Springfield.....	.....	9	Janesville.....	.....	3
Steubenville.....	3	.....	Kenosha.....	.....	4
Tiffin.....	1	.....	Madison.....	9	2
Toledo.....	.....	18	Marinette.....	.....	3
Youngstown.....	.....	15	Milwaukee.....	.....	45
Zanesville.....	.....	6	Oshkosh.....	.....	8
Oklahoma:			Racine.....	.....	7
Oklahoma.....	.....	18	Sheboygan.....	.....	2
Tulsa.....	.....	1	Superior.....	.....	2

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 24, 1923.		City.	Median for previous years.	Week ended Feb. 24, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				New York:			
Birmingham.....	0	1	1	Hudson.....	0	.....	1
Louisiana:				Pennsylvania:			
New Orleans.....	0	1	.....	Pittsburgh.....	0	1	.....
Massachusetts:							
Lowell.....	0	1	1				
Lynn.....	0	1	.....			

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		New Jersey:	
Los Angeles.....	10	Summit.....	1
Georgia:		Tennessee:	
Savannah.....	1	Memphis.....	2
Massachusetts:		Texas:	
Arlington.....	3	Beaumont.....	1
Missouri:			
Kansas City.....	1		

SCARLET FEVER.

See p. 531; also Current State summaries, p. 518; and Monthly summaries by States, p. 524.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 24, 1923.		City.	Median for previous years.	Week ended Feb. 24, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Nebraska:			
Los Angeles.....	3	1	.....	Omaha.....	15	1	.....
Oakland.....	1	8	.....	New York:			
Colorado:				Niagara Falls.....	0	3	.....
Denver.....	9	4	.....	North Carolina:			
Georgia:				Winston-Salem.....	0	27	.....
Brunswick.....	0	1	.....	Ohio:			
Illinois:				Bucyrus.....	0	1	.....
Chicago.....	4	1	.....	Columbus.....	0	3	.....
Indiana:				Oklahoma:			
Fort Wayne.....	0	3	.....	Oklahoma.....	2	3	.....
Gary.....	0	5	.....	Oregon:			
Indianapolis.....	6	13	.....	Portland.....	6	10	.....
La Fayette.....	0	2	.....	Pennsylvania:			
Muncie.....	0	2	.....	Woodlawn.....	0	1	.....
Iowa:				Tennessee:			
Davenport.....	3	1	.....	Knoxville.....	1	4	.....
Kansas:				Texas:			
Coffeyville.....	0	1	.....	Waco.....	0	1	.....
Parsons.....	0	1	.....	Utah:			
Michigan:				Salt Lake City.....	4	3	1
Detroit.....	6	4	.....	Vermont:			
Flint.....	1	1	1	Burlington.....	0	1	.....
Grand Rapids.....	0	1	.....	Danville.....	0	.....	1
Pontiac.....	0	1	.....	Virginia:			
Minnesota:				Richmond.....	0	1	.....
Duluth.....	1	4	.....	Washington:			
Minneapolis.....	32	6	.....	Seattle.....	1	6	.....
St. Cloud.....	3	1	.....	Spokane.....	19	8	.....
Montana:				Wisconsin:			
Great Falls.....	1	4	.....	Eau Claire.....	0	2	.....
Missoula.....	0	3	1	Stevens Point.....	.....	1	.....
				Superior.....	1	16	.....

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

TUBERCULOSIS.

See p. 531; also Current State summaries, p. 518.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 24, 1923.		City.	Median for previous years.	Week ended Feb. 24, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Montana:			
Birmingham.....	1	1		Billings.....	0	1	1
Mobile.....	0	2		New Jersey:			
California:				Trenton.....	0	2	
Alameda.....	0	1		New York:			
Sacramento.....	0		1	Buffalo.....	1	1	
Colorado:				Geneva.....	0		1
Pueblo.....	0	1		New York.....	7	1	
Florida:				Niagara Falls.....	0	1	
Tampa.....	6	1		Troy.....	1	1	
Georgia:				Ohio:			
Macon.....	0	1		Akron.....	0	1	
Savannah.....	0	1	1	Cincinnati.....	0	1	
Illinois:				Oregon:			
Blue Island.....	0		1	Portland.....	0	1	
Chicago.....	2	1		Pennsylvania:			
Oak Park.....	0	1		Allentown.....	0	1	
Kentucky:				Connellsville.....	0	1	
Louisville.....	0	1		Philadelphia.....	6	2	1
Louisiana:				Virginia:			
New Orleans.....	0	4		Roanoke.....	0	1	
Maryland:				Washington:			
Cumberland.....	0	1		Spokane.....	0	1	
Michigan:				West Virginia:			
Detroit.....	2	3		Charleston.....	0	2	
Grand Rapids.....	0	3		Huntington.....	0		1
Missouri:				Wisconsin:			
St. Louis.....	2	3		Appleton.....	0	2	
Springfield.....	0		1	Racine.....	0		1

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Birmingham.....	178,806	48	2	1	6		3		12	5
Mobile.....	60,777	21					1		2	2
Montgomery.....	43,464	1	1		77		1			
Tuscaloosa.....	11,996		2		5				1	
Arkansas:										
Fort Smith.....	28,870						1		1	
Hot Springs.....	11,695	2	1							
Little Rock.....	65,142		3		18		1		2	
North Little Rock.....	14,048		1		7					
California:										
Alameda.....	28,806	9					4			
Eureka.....	12,923	13								
Glendale.....	13,536	16		1						3
Los Angeles.....	576,673	243	64	2	124		54		58	27
Oakland.....	216,261	66	15	1	33		6	1	4	4
Pasadena.....	45,354	18	5		6		4			1
Richmond.....	16,843	3	1							
Riverside.....	19,341	11	1		2				3	
Sacramento.....	65,908	19	1	1	1		3		2	3
San Bernardino.....	18,721	8	1				1			1
San Diego.....	74,683	36	8	1	105		12	1	3	3
Santa Ana.....	15,485	3	3		8					
Santa Barbara.....	19,441	4								
Santa Cruz.....	10,917	10			1					

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Colorado:										
Denver.....	256,491	113	24	2	2		22			14
Greeley.....	10,958	4								
Pueblo.....	43,050	14	5							1
Trinidad.....	10,906		3	1			1			
Connecticut:										
Bridgeport.....	143,555	35		1		2				4
Bristol.....	20,620	14		1			2			
Derby.....	11,238	5								
Fairfield (town).....	11,475	5			7		1			1
Greenwich (town).....	22,123				1		3			
Hartford.....	138,036	43	5		3		4		1	
Manchester (town).....	18,370	2								
Meriden (city).....	29,967	1							1	1
Milford (town).....	10,193	3			1		1			
New Haven.....	162,537	65	1		38		5		5	1
New London.....	25,688	6	1		14				1	
Stonington (town).....	10,236	4			2					
District of Columbia:										
Washington.....	437,571	183	7		100		31		26	9
Florida:										
Key West.....	18,749	13								2
St. Petersburg.....	14,237				2		1			
Tampa.....	51,608	19	2				1		5	2
Georgia:										
Atlanta.....	200,616	84	1	1			5		2	2
Brunswick.....	14,413	2								
Macon.....	52,995		1		200					
Rome.....	13,252		1		1					
Savannah.....	83,252	45	2						1	6
Idaho:										
Boise.....	21,393	2								
Pocatello.....	15,001	3								
Illinois:										
Alton.....	24,682	8	4							1
Bloomington.....	28,725	7	1		1		1		2	
Blue Island.....	11,424	7								
Centralia.....	12,491	4								
Champaign.....	15,873	5			25		1			
Chicago.....	2,701,705	986	139	8	356	4	82	3	152	58
Cicero.....	44,995	13	2		2		3		2	
Decatur.....	43,818	16	3	1			3		3	2
Elgin.....	27,454	9					1		3	
Evanston.....	37,234	5	1		16		8			
Freeport.....	19,669	15			3		1		1	1
Galesburg.....	23,534	14	2		2		2		1	
Jacksonville.....	15,713	10					4		1	
Kewanee.....	16,026	9	1				4			
La Salle.....	13,050	5			23					
Mattoon.....	13,552	6	3							1
Oak Park.....	39,858	16	2		6		1			1
Peoria.....	76,121	34			115		3			1
Quincy.....	35,978	12	5		1		2			
Rock Island.....	35,177	4	1				2		2	1
Springfield.....	59,183	31	3	1	139		1		2	3
Indiana:										
Anderson.....	29,767	8	1				2			2
Bloomington.....	11,595	3							1	1
Crawfordsville.....	10,139	5						2		
East Chicago.....	35,967	10	4		50					
Fort Wayne.....	86,549	36	3				1			
Frankfort.....	11,585	2	2							
Gary.....	55,378	23					5			3
Huntington.....	14,000	5								
Indianapolis.....	314,194	148	21		5		6		4	7
Kokomo.....	30,067	4	1		1		1			
La Fayette.....	22,486	13	1	1			1		1	1
Laporte.....	15,158	5			18					
Logansport.....	21,626	3			4	1				
Michigan City.....	19,457	7			12		3			
Mishawaka.....	15,195	5					1		2	
Muncie.....	36,524	10	1		1					3
South Bend.....	70,983	20			10		5			1
Terre Haute.....	60,083	28	3	1	11		4			

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Iowa:										
Burlington.....	24,057	8	1		2		2		2	
Council Bluffs.....	36,162	11	2	1		3				
Davenport.....	56,727				1		1			
Dubuque.....	39,141				161	1			2	
Iowa City.....	11,267		1							
Marshalltown.....	15,731				1		2			
Mason City.....	20,065	7					1			
Muscatine.....	16,068	4			11		2			
Ottumwa.....	23,003				2		1			
Sioux City.....	71,227		3		1		1			
Kansas:										
Coffeyville.....	13,452	4					1			
Fort Scott.....	10,663	4	1							
Hutchinson.....	23,286									
Kansas City.....	101,177		3		1		1		3	
Lawrence.....	12,456	7					1			
Parsons.....	16,028	6					2			
Salina.....	15,085	3	1				3			
Topeka.....	50,022	16			1		3			
Wichita.....	72,217	64	11				2	1		
Kentucky:										
Covington.....	57,121	23	1				5	1		2
Henderson.....	12,169	6			1					
Lexington.....	41,534	23	1							
Louisville.....	234,891	111	5		10		3		8	3
Paducah.....	24,735		1		9					
Louisiana:										
New Orleans.....	387,219	180	19		2		2		26	13
Maine:										
Auburn.....	16,985	11					4			1
Bangor.....	25,978		1							
Bath.....	14,731	9								
Biddeford.....	18,008	7								
Lewiston.....	31,791	20	2		1		4		1	2
Portland.....	69,272	45	2		20		3	1		
Sanford (town).....	10,691	5	1	1						
Maryland:										
Baltimore.....	733,826	339	39		116		42		19	29
Cumberland.....	29,837	21	1		32		1		1	2
Frederick.....	11,066	8								
Massachusetts:										
Adams (town).....	12,967	6			-2					
Amesbury (town).....	10,036	7			3		3		1	
Arlington (town).....	18,665	10	1		8		4			
Attleboro.....	19,731	6			9				2	
Belmont (town).....	10,749	5			1		1			
Beverly.....	22,561	8	1				1			
Boston.....	748,060	271	44	5	116	3	63	2	42	22
Braintree (town).....	10,580	2			30		2			1
Brookline.....	37,748	7	1		1		2	2		
Cambridge.....	109,694	31	7		51		6		2	1
Chelsea.....	43,184	16	1		7		3		1	1
Chicopee.....	36,214	12								
Clinton.....	12,979	7								
Danvers.....	11,108				1				1	
Dedham.....	10,792	4				1				
Everett.....	40,120	13	1		15		3			1
Fall River.....	120,485	46	5	1	29	2	12		9	2
Fitchburg.....	41,029	10					1		2	1
Frammingham.....	17,033	11			1		2			
Gardner.....	16,971	9	1							
Greenfield.....	15,462	7					1			
Haverhill.....	53,884	22	1		8		7		3	2
Holyoke.....	60,203	27	2		1		29		1	1
Lawrence.....	94,270	28	3		2		1			
Leominster.....	19,744	13					1		1	
Lowell.....	112,759	44	4		145		4			1
Lynn.....	99,148	44	5		90	1	13		3	
Malden.....	49,103	17	1	1	14		2		1	2
Medford.....	39,038	13			5		2			1
Melrose.....	18,204	12					1		1	
Methuen.....	15,189	2								1
New Bedford.....	121,217	50	5	1	127	2	1		5	4

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Massachusetts—Continued.										
Newburyport	15,618	6			3				1	
Newton	46,054	18	3		1		8			
North Adams	22,282	8					1			
Northampton	21,951	9					10			
Peabody	19,552	5	2				1			
Pittsfield	41,763	15	1	1			5	2		1
Plymouth	13,045	3								
Quincy	47,876	12					14	1	1	
Salem	42,529	21	3	1	2					1
Somerville	93,091	32	3		17	1	7		2	
Southbridge	14,245	4								
Springfield	129,614	51	5		1		11		2	1
Taunton	37,137	17	1		77	1	12			
Wakefield	13,025	5			4		2			
Waltham	30,915		1		1		5		1	
Watertown	21,457	3					2			
Webster	13,258	5					3		1	
West Springfield	13,443	4								
Westfield	18,604	7	2	1			1			
Weymouth	15,057	4								
Winthrop	15,455	4				8	1			
Worcester	179,754	69	2		19		11			3
Michigan.										
Alpena	11,101			1			1			
Ann Arbor	19,516	18	2		3		3			
Battle Creek	36,164	1	2		1		4			
Benton Harbor	12,233	11					1			
Detroit	993,678	347	63	7	35		139	5	43	15
Flint	91,599	39	8	2	6		14		6	2
Grand Rapids	137,634	58	5		4		8		1	
Hamtramck	48,615	18	2	2					1	
Highland Park	46,499	15	1				14		3	2
Holland	12,183						7			
Jackson	48,374	26	2				8			
Kalamazoo	48,487	32	4			1	5		4	3
Marquette	12,718	5								1
Muskegon	36,570	10		5						
Pontiac	34,273	16	4		2		4			
Port Huron	25,944	7					9			
Sault Ste. Marie	12,096	3							1	1
Minnesota.										
Duluth	98,917	25			171		2	1	3	2
Faribault	11,089	5					2			1
Hibbing	15,089	3			8		3			
Minneapolis	390,582	115	14	4	5		35		33	8
Rochester	13,722	17								1
St. Cloud	15,573		2				2			
Virginia	14,022		1				1			
Winona	19,143	10	1				1			+
Missouri.										
Cape Girardeau	10,252	2								
Independence	11,686		2							
Kansas City	324,410	151	7	1	32	1	12		11	8
St. Joseph	77,939	47								2
St. Louis	772,897	211	33	2	239		25		25	8
Springfield	39,631	20								2
Montana.										
Anaconda	11,668	2					1			
Billings	15,100	8								1
Great Falls	24,121	16	1							1
Missoula	12,668	9							1	
Nebraska.										
Lincoln	54,948	18					2		1	
Omaha	191,601	69	8		1		6			
Nevada.										
Reno	12,016	3								
New Hampshire.										
Berlin	16,104	1								
Concord	22,167	20					1			2
Dover	13,029	8								1
Keene	11,210	4	1							

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Jersey:										
Asbury Park.....	12,400	3			3		1			
Atlantic City.....	50,707	20	1		63		1		1	
Bayonne.....	76,754		1						2	
Belleville.....	15,660				2					
Bloomfield.....	22,019	4			11		6		1	
Clifton.....	25,470	4	2		26		8			
East Orange.....	50,710	18			24		5			2
Elizabeth.....	95,783		18		50	1	9			
Englewood.....	11,627	3			26					
Garfield.....	19,351	3	1		6				1	
Hackensack.....	17,667	14					4		1	
Harrison.....	15,721				3		4			
Hoboken.....	68,166	19	3		4		9		1	
Jersey City.....	298,103		7		8		9		21	
Kearny.....	26,724	3			2		1		1	
Long Branch.....	13,521	5					1			1
Montclair.....	28,810	11			6		6			
Morristown.....	12,548	13			1				1	1
Passaic.....	63,841	30	4		26		2		1	
Paterson.....	135,875		10		1		1		4	
Perth Amboy.....	41,707	13		1	1		2			2
Phillipsburg.....	16,923	3							1	
Plainfield.....	27,700	7			9		1			2
Rahway.....	11,042	5					1			
Summit.....	10,174	6								
Trenton.....	119,289	38	20	2	3		13		6	2
Union (town).....	20,651		3		3		2			
West Hoboken.....	40,074	6	1				1		1	
West New York.....	29,926	4	1				2			
West Orange.....	15,573	5	1		4		4			1
New Mexico:										
Albuquerque.....	15,157	7	3				4		2	3
New York:										
Amsterdam.....	33,524	6	2						1	1
Auburn.....	36,192	10							2	
Buffalo.....	506,775	193	16	4	236	2	33		21	7
Cohoes.....	22,987	6							1	
Elmira.....	45,393		1		4		1			
Geneva.....	14,648	8								1
Hornell.....	15,025	6								
Hudson.....	11,745	9	1		2					1
Ithaca.....	17,004	16					1		4	
Lockport.....	21,308	4			1					
Middletown.....	18,420			1	2					
Mount Vernon.....	42,726	13	4		9		2			
New York.....	5,620,048	2,141	181	26	267	2	278	6	248	120
Newburgh.....	30,366	7								
Niagara Falls.....	50,760	20	1	1			4		2	
North Tonawanda.....	15,482	5								2
Olean.....	20,506	10	1		31	1	11			
Peekskill.....	15,868	2			1		10		2	
Poughkeepsie.....	35,000	15					2			
Rochester.....	295,750	104	6	1	104	1	5			4
Saratoga Springs.....	13,181	3	1				1		2	
Schenectady.....	88,723	22			6		6		1	1
Syracuse.....	171,717	51	9	1	3		12	1	5	1
Troy.....	72,013	42	2				4		2	5
Watertown.....	31,285	19	1		1		1			
White Plains.....	21,031	4	1		1		11			
Yonkers.....	100,176	31	1		9	1	5	3		2
North Carolina:										
Greensboro.....	19,861	7								
Raleigh.....	24,418	19			31					1
Rocky Mount.....	12,742	5								
Salisbury.....	13,884	4								
Wilmington.....	33,372	5					1		1	2
Winston-Salem.....	48,396	20								1
North Dakota:										
Fargo.....	21,961	0					1			
Grand Forks.....	14,010				4		1			
Ohio:										
Akron.....	208,435	35	5		5		3		22	
Ashtabula.....	22,062	11	2		7					
Barberton.....	18,811	3	2				4			1
Bucyrus.....	10,425	3			24		1			

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio—Continued.										
Cambridge.....	13, 104	6	2		6		1			
Canton.....	87, 091	25	6	1	18		2			
Chillicothe.....	15, 831	7	1							
Cincinnati.....	401, 247	113	9		10		10			3
Cleveland.....	196, 841	287	21	3	180		135	1	40	21
Cleveland Heights.....	15, 236				22		10			
Columbus.....	237, 031	111	8		79	1	7		15	6
Coshocton.....	10, 847				1					
Dayton.....	152, 559	56	2		1		7		1	
East Cleveland.....	27, 292	1			31		6		2	
East Youngstown.....	11, 237	3								
Findlay.....	17, 021	6	1		25					1
Fremont.....	12, 468	1			1					
Hamilton.....	39, 675	12	3	1	3		1		1	1
Kenmore.....	12, 683						1			
Lima.....	41, 326	14			2		2			1
Lorain.....	37, 295		1		66		2			
Mansfield.....	27, 824	10			38		2			
Marion.....	27, 891	1					2		1	
Martins Ferry.....	11, 634	12			4		1			
Middletown.....	23, 594	5	1				1		1	
New Philadelphia.....	10, 718		2				1			
Newark.....	26, 718	8		1	4					
Niles.....	13, 080	1								
Norwood.....	24, 966	1								
Piqua.....	15, 044	4	1		1					1
Salem.....	10, 305	4	2							
Sandusky.....	22, 897	9	1				1			
Springfield.....	60, 840	28			18	1	2			2
Steubenville.....	28, 508	19								
Tiffin.....	14, 375	8								
Toledo.....	243, 164	104	7	2	168	2	24		4	7
Youngstown.....	132, 353		6	1	3	1	9		1	3
Zanesville.....	29, 569	13			2		1			
Oklahoma:										
Oklahoma.....	91, 295	45	2				2			
Tulsa.....	72, 075		2		13		1			
Oregon:										
Portland.....	258, 288	76	4	1	1		4		6	5
Pennsylvania:										
Allentown.....	73, 502		4		145		5		2	
Altoona.....	60, 331		3		96		4		4	
Ambridge.....	12, 730				2					
Beaver Falls.....	12, 802		1		4					
Berwick.....	12, 181						1			
Bethlehem.....	50, 358		4		129		4			
Braddock.....	20, 879		2		3					
Bradford.....	15, 525				13		1			
Butler.....	23, 778				10		1			
Carbondale.....	18, 640		1							
Carlisle.....	10, 916		1		3					
Carnegie.....	11, 516		1		8					
Chambersburg.....	13, 171				21					
Charleroi.....	11, 516		1							
Chester.....	58, 030				33					
Coatsville.....	14, 515				1		1			
Connellsville.....	13, 804		1		2		4			
Dickson.....	11, 049				3					
Donora.....	14, 131				22					
Dubois.....	13, 681		2		7					
Duquesne.....	19, 011				11					
Easton.....	33, 813				43		3			
Erie.....	93, 372				12		7			
Farrell.....	15, 588		2		2		4			
Harrisburg.....	75, 917		3		324		6			
Hazleton.....	32, 277				2		1			
Homestead.....	20, 452				26					
Jeanette.....	10, 627				12					
Johnstown.....	67, 327		6		3		14		1	
Lancaster.....	53, 150		4		263		4			
Lebanon.....	24, 643		2		49		1			
McKees Rocks.....	16, 713				6					
McKeesport.....	46, 781		1		8				1	
Meadville.....	14, 568				2					
Monessen.....	18, 179		1							

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Pennsylvania—Continued.										
Nanticoke.....	22,614				7		1			
New Kensington.....	11,987		1		3					
Norristown.....	32,319		1		11					
North Braddock.....	14,928				8					
Oil City.....	21,274		1		79					
Philadelphia.....	1,823,779	651	82	6	329	10	58	1	56	47
Phoenixville.....	10,484				2					
Pittsburgh.....	588,343		20		476		26		7	
Pittston.....	18,497		1		11					
Plymouth.....	16,500		1				1			
Pottstown.....	17,431				124		1			
Pottsville.....	21,876				1		1			
Reading.....	107,784		7		107		2			
Scranton.....	137,783		2		16		2			
Shamokin.....	21,204		1		8					
Sharon.....	21,747		1		8		2			
Steelton.....	13,428				5					
Swissvale.....	10,906				4					
Tamaqua.....	12,363		1		5					
Uniontown.....	15,692		2		23		2			
Warren.....	14,272						2			
Washington.....	21,480				4		2			
West Chester.....	11,717				24					
Wilkes-Barre.....	73,833		4		5		3		1	
Wilkinsburg.....	24,403		2		35		1		1	
Williamsport.....	36,198		1		2		1			
Woodlawn.....	12,495				3					
York.....	47,512		4		36		4			
Rhode Island:										
Cranston.....	29,407		7				6			
Cumberland (town).....	10,077		2				5			
Newport.....	30,255		8		1		7	1		
Providence.....	237,585		73	14	1	212	7	1	4	7
South Carolina:										
Charleston.....	67,957		28							
Columbia.....	37,524		16	1					1	
Greenville.....	23,127		7							1
South Dakota:										
Sioux Falls.....	25,202		8	2		6		3		
Tennessee:										
Knoxville.....	77,818						1		3	3
Memphis.....	162,351		107	8	1	314		5		2
Nashville.....	118,342		42			38	1	3		5
Texas:										
Amarillo.....	15,494			1				2		
Beaumont.....	40,422		7	1		2				
Corsicana.....	11,356		6	1						1
Dallas.....	158,976		48	4				2		2
El Paso.....	77,560		27	2	1	158	1	3		2
Galveston.....	44,255		11	1						1
Houston.....	138,276		44					1		2
San Antonio.....	161,379		58	5				2		5
Waco.....	38,500		18	5		4		1		1
Utah:										
Salt Lake City.....	118,110		33	3	1	8			1	2
Vermont:										
Barre.....	10,008							1		
Burlington.....	22,779		16	1				1		
Rutland.....	14,954		11					1		
Virginia:										
Alexandria.....	18,060		12							
Charlottesville.....	10,688		0							
Danville.....	21,539		12						2	1
Lynchburg.....	30,070		9			97		2		1
Norfolk.....	115,777			2					2	4
Petersburg.....	31,012		12	1				1		
Portsmouth.....	54,387		23							
Richmond.....	171,667		54	3	1	3		3		8
Roanoke.....	50,842		20			5			1	
Washington:										
Everett.....	27,644					1				
Seattle.....	315,312			4		5		8		6
Spokane.....	96,965			3				5		
Tacoma.....	12,637			2				10		

CITY REPORTS FOR WEEK ENDED FEBRUARY 24, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
West Virginia:										
Bluefield.....	15,282	6	1							
Charleston.....	39,608	21						6	2	
Clarksburg.....	27,889	7	2				1			
Fairmont.....	17,851	7	3		1		3		1	
Huntington.....	50,177	18	3		5					2
Martinsburg.....	12,515						1			
Morgantown.....	12,127	4			35					
Moundsville.....	10,669	4	2							
Parkersburg.....	20,050	12	2				1			
Wheeling.....	56,208	21	1		105		3		1	
Wisconsin:										
Appleton.....	19,561	4	2				1			
Ashland.....	11,334	5	1							
Beloit.....	21,284	7	2				6			1
Eau Claire.....	20,906	1	1		1				1	
Fond du Lac.....	23,427	10							1	
Green Bay.....	31,017		3				7			
Janesville.....	18,293	7			3		2			
Kenosha.....	40,472	14	1		252	1				
La Crosse.....	30,421	1	1		30		2		1	
Madison.....	38,378	9	2		18		5		1	
Manitowoc.....	17,563		1				1		2	
Marinette.....	13,610	7					8			
Milwaukee.....	457,147	167	19	4	187		273	6	8	10
Oshkosh.....	33,162	37					1			3
Racine.....	58,593	22	2	1	121		8		2	
Sheboygan.....	30,955	16	5	1	15		2		2	
Stevens Point.....	11,371						1			
Superior.....	39,671	13			2		2			1
Wausau.....	18,661				12		1			
West Allis.....	13,745			1	1		7		2	
Wyoming:										
Cheyenne.....	13,829	4					1			

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922.

ANTHRAX.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
California:				New Jersey:			
Sutter County—				Camden County—			
Yuba City.....		1		Camden.....	1	1	
Yuba County—				New York:			
Marysville.....		1		Wayne County—			
Total.....		2		Clyde township.....		1	
Delaware:				Ohio:			
New Castle County—				Trumbull County—			
Wilmington.....			1	Mineral Ridge.....		1	
Florida:				Pennsylvania:			
Osceola County—				Philadelphia.....	2		2
Kissimmee.....		1		Wisconsin:			
Massachusetts:				Grant County—			
Essex County—				Potosi.....	1		
Peabody.....		1					

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

CEREBROSPINAL MENINGITIS (EPIDEMIC).

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Arkansas:				Kansas:			
Pulaski County.....		1		Barton County.....	1		
Union County.....		1		Ellis County.....	1		
Total		2		Harvey County.....		1	
				Russell County.....			
California:				Total	2	1	1
Alameda County.....			2				
Fresno County.....			1	Louisiana:			
Los Angeles County.....	2		3	De Soto Parish.....	1		
Modoc County.....			1	Orleans Parish.....	1	1	
Riverside County.....			1	St. Mary Parish.....			1
San Diego County.....	1			Webster Parish.....			1
San Francisco County.....	3		4	Total	2	1	4
Santa Barbara County.....	1		1				
Stanislaus County.....			1	Maine:			
Total	7		14	Aroostook County.....	1		
				Franklin County.....			1
Colorado:				Penobscot County.....		1	
La Plata County.....		1		Total	1	1	1
Weld County.....		1	1				
Total		2	1	Maryland:			
				Allegany County.....		1	
Connecticut:				Baltimore City.....	1	4	
Fairfield County.....		2		Howard County.....		1	
Hartford County.....		1		Total	1	6	
New Haven County.....		3	3				
New London County.....	2			Massachusetts:			
Tolland County.....		1		Berkshire County.....		1	
Windham County.....			1	Bristol County.....	3	3	1
Total	2	7	4	Essex County.....	1		1
				Hampden County.....		1	
District of Columbia:			1	Middlesex County.....	2	1	2
				Plymouth County.....		7	
Florida:				Suffolk County.....		7	
Pinellas County.....	1			Worcester County.....	1	1	1
				Total	7	15	5
Illinois:							
Cook County.....	4	4	4	Minnesota:			
Du Page County.....	1			Itasca County.....		1	
Henry County.....			2	Ramsey County.....			1
Jefferson County.....			1	St. Louis County.....		1	1
Knox County.....			2	Wright County.....			1
La Salle County.....	1			Total		2	3
Madison County.....			2				
Marion County.....			1	Mississippi:			
Pulaski County.....			1	Jones County.....		1	
Sangamon County.....		1		Panola County.....		1	
Vermilion County.....		1		Total		2	
Williamson County.....			1				
Total	6	6	14	Montana:			
				Flathead County.....		1	
Indiana:				Hill County.....		1	
Cass County.....	1			Missoula County.....	1	2	
Hancock County.....	1			Silver Bow County.....		2	
Laporte County.....	1			Total	1	6	
Marion County.....	1						
Total	4			Nebraska:			
				Douglas County.....		1	
Iowa:				Seward County.....		1	
Jasper County.....		1		York County.....		1	1
Van Buren County.....			1	Total		3	1
Total		1	1				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

CEREBROSPINAL MENINGITIS (EPIDEMIC)—Continued.

Place.	New cases reported			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
New Jersey:				Pennsylvania—Continued.			
Essex County.....	2	7	2	Venango County.....			1
Gloucester County.....			1	Washington County.....		1	
Hudson County.....	1			Westmoreland County.....	1		
Mercer County.....			1	Total.....	5	6	9
Morris County.....	2		1	Rhode Island:			
Passaic County.....	1	1		Providence County.....	1	2	2
Somerset County.....			1	South Carolina:			
Sussex County.....		2		Clarendon County.....		2	
Union County.....				South Dakota:			
Total.....	6	10	7	Campbell County.....	1		
New York:				Spink County.....		1	
Erie County.....	2	1	3	Total.....	1	1	
Herkimer County.....		2	1	Virginia:			
Monroe County.....	1			Allegheny County.....		2	
Niagara County.....	2			Amelia County.....			2
Nassau County.....	2			Augusta County.....			1
Rensselaer County.....	1			Buchanan County.....			2
St. Lawrence County.....	1			Grayson County.....	2		
Saratoga County.....		1		Greene County.....	1		
Schenectady County.....		1		Halifax County.....	1		3
Westchester County.....			1	Henry County.....			1
New York City.....	11	13	9	Lee County.....	2	1	
Total.....	20	18	14	Roanoke County.....			1
North Carolina:				Rockbridge County.....			1
Durham County.....		1		Scott County.....			1
Guilford County.....	1			Total.....	5	3	12
Halifax County.....		1		Washington:			
Richmond County.....			1	King County.....	1		4
Rowan County.....	1			West Virginia:			
Surry County.....	1			Boone County.....	1		1
Wake County.....	2		1	Brooke County.....	1	1	
Total.....	5	2	2	Clay County.....			1
North Dakota:				Kanawha County.....	1		
Bowman County.....		1		McDowell County.....		1	
Grand Forks County.....	1			Mercer County.....			1
Total.....	1	1		Mineral County.....	1	1	
Ohio:				Mingo County.....			1
Ashtabula County.....	1			Ohio County.....			1
Belmont County.....			1	Randolph County.....	1		
Cuyahoga County.....	2			Roane County.....		1	
Defiance County.....		1	1	Total.....	5	4	5
Hamilton County.....	2	2	1	Wisconsin:			
Jefferson County.....		1		Dane County.....			1
Lake County.....		1		Douglas County.....			1
Stark County.....			1	Green County.....	3		
Summit County.....	1	1		Iowa County.....	1		
Total.....	6	6	4	Jefferson County.....	1		
Pennsylvania:				Kenosha County.....	1		
Adams County.....		1		La Crosse County.....	1		
Allegheny County.....			4	Lafayette County.....	1		
Beaver County.....	1		1	Manitowoc County.....	1		
Berks County.....			1	Milwaukee County.....	2	3	3
Blair County.....		1		Polk County.....	2		
Chester County.....			1	Sawyer County.....	1		
Delaware County.....	1			Walworth County.....			1
Lehigh County.....	1	1		Washington County.....	1		
Luzerne County.....		1		Waupaca County.....			1
Northampton County.....		1		Total.....	15	3	7
Philadelphia County.....	1						
Snyder County.....			1				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

INFLUENZA.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Alabama:				California—Continued.			
Autauga County.....		34	6	Los Angeles County—			
Baldwin County.....		1	4	Los Angeles.....	15	33	25
Barbour County.....	1	100	119	Scattering.....	13	9	9
Butler County.....			9	Madera County.....	1		3
Calhoun County.....	4	1		Mendocino County.....	4		1
Choctaw County.....			11	Merced County.....	3	6	6
Colbert County.....		2	1	Modoc County.....	3	1	
Covington County.....			8	Nevada County.....	2	1	
Dallas County.....	19	14		Orange County.....		3	1
Escambia County.....	3			Placer County.....	1		1
Franklin County.....			1	Plumas County.....			1
Geneva County.....			3	Riverside County—			
Houston County.....	13	112		Blythe.....		14	
Jefferson County.....	78	6	107	Scattering.....			3
Lamar County.....			5	Sacramento County.....	1	2	5
Lauderdale County.....	2	3	3	San Bernardino County.....	3	1	
Lowndes County.....		2		San Diego County.....		2	
Marengo County.....	1	4		San Francisco County.....	7	14	11
Marion County.....			90	San Joaquin County.....			1
Montgomery County.....		2	10	Santa Clara County.....	2	1	
Pike County.....	11			Santa Cruz County.....	1	3	3
Sumter County.....			89	Shasta County.....		7	
Talladega County.....	47		10	Siskiyou County.....	7	9	6
Tuscaloosa County.....			3	Solano County.....		4	
Walker County.....			9	Sonoma County.....			1
Washington County.....			6	Stanislaus County.....		1	
Wilcox County.....	1			Tehama County.....		2	2
Total.....	180	281	494	Ventura County.....	3		
				Yolo County.....			3
Arkansas:				Total.....	85	133	104
Ashley County.....		2	5	Connecticut:			
Benton County.....		1	3	Fairfield County.....	5	4	16
Bradley County.....		9	14	Hartford County—			
Calhoun County.....	1	3	5	New Britain.....	9	10	16
Clay County.....			2	Scattering.....	2	2	5
Cleveland County.....			1	Litchfield County—			
Crawford County.....	2			Sharon.....			13
Drew County.....	9		6	New Hartford.....		1	
Faulkner County.....	8	2	7	New Haven County.....		3	4
Franklin County.....	1	1	6	New London County.....	2	3	3
Greene County.....		1	2	Windham County.....		1	1
Hempstead County.....	2		4	Total.....	18	24	58
Hot Spring County.....		23	10	Delaware:			
Lee County.....		1		Kent County—			
Logan County.....			14	Dover.....	1	9	50
Ouachita County.....	1			Felton.....			4
Perry County.....		4		New Castle County—			
Pike County.....		11	2	Wilmington.....			12
Pulaski County.....	3		1	Scattering.....			10
St. Francis County.....	2	1	4	Sussex County.....		4	
Sebastian County.....			3	Total.....	1	13	76
Scott County.....	2	8	9	District of Columbia.....	2	5	9
Sharp County.....			55	Florida:			
Union County.....			1	Alachua County.....		1	2
Van Buren County.....	4	6		Bay County.....		48	37
Washington County.....			4	Citrus County.....		2	
White County.....		3		Clay County.....	1		
Total.....	35	76	167	Dade County.....			2
				Dixie County.....			2
California:				Duval County—			
Alameda County.....	4	7	12	Jacksonville.....	7	3	44
Butte County.....	1		2	Scattering.....	1	1	2
Calaveras County.....			4	Escambia County.....			1
Contra Costa County.....	1	1		Franklin County.....			2
Fresno County.....		2	2	Gadsden County.....	2	8	2
Glenn County.....	2			Hernando County.....	4		
Humboldt County.....	1	2					
Imperial County.....			1				
Kern County.....			1				
Kings County.....		1					
Lassen County.....	10	12					

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

INFLUENZA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Florida—Continued				Illinois—Continued.			
Hillsborough County.....	7	3	3	Whiteside County.....		4	
Holmes County.....		1	1	Williamson County.....	1		2
Jackson County.....	1	1	2	Woodford County.....			2
Jefferson County.....		1	1	Total.....	53	81	144
Lee County.....			1	Indiana:			
Leon County.....	1			Fulton County.....			1
Levy County.....		3		Jackson County.....		1	
Madison County.....			2	Jennings County.....	1		
Manatee County.....		1		Knox County.....		2	
Marion County.....	2	4		Martin County.....	5	34	25
Orange County.....		2	1	Spencer County.....			1
Ossello County.....		1		Steuben County.....		3	
Palm Beach County.....	1			Wayne County.....	1		
Pasco County.....		7	9	Total.....	7	40	27
Pinellas County.....		4		Kansas:			
Polk County.....	1	6	1	Bourbon County.....			1
St. Johns County.....			1	Brown County.....			2
Santa Rosa County.....		1		Cherokee County.....			5
Suwanee County.....			1	Crawford County.....		3	1
Taylor County.....		2		Decatur County.....			1
Union County.....			16	Dickinson County.....	1		
Volusia County.....		1	1	Greenwood County.....	4	1	
Walton County.....		1		Harper County.....			1
Washington County.....		1		Linn County.....			8
Total.....	25	103	134	McPherson County.....			2
Illinois:				Neosho County.....			1
Adams County.....			3	Ness County.....		1	
Boone County.....	1			Ottawa County.....		1	
Cass County.....	1			Rawlins County.....			2
Champaign County.....	1	4	4	Reno County.....	1		
Christian County.....			1	Sedgwick County.....	1		
Clarke County.....		3		Sheridan County.....		2	6
Clinton County.....			1	Sumner County.....			2
Coles County.....		1	3	Thomas County.....			1
Cook County.....	38	48	76	Wyandotte County.....	1	4	
Cumberland County.....			1	Total.....	8	12	33
Du Page County.....		4		Louisiana:			
Ford County.....			1	Acadia Parish.....	2		
Franklin County.....			1	Assumption Parish.....	3		
Franklin County.....			1	East Baton Rouge Parish.....	5		
Fulton County.....			3	East Carroll Parish.....	1	10	
Henry County.....			3	East Feliciana Parish.....	8		
Jasper County.....		1		Orleans County.....	10	4	
Jersey County.....	2	1	1	Pointe Coupee Parish.....		1	
Johnson County.....		1	1	St. Landry Parish.....		2	
Kane County.....		1		St. Mary Parish.....	4		
Kankakee County.....	1			Vernon Parish.....	1		
Kendall County.....		1		Total.....	34	17	16
Lake County.....	1			Maryland:			
La Salle County.....	1	1		Allegany County.....	6	2	4
Livingston County.....			2	Anne Arundel County.....	1	2	2
Logan County.....		1	4	Baltimore City.....	25	78	139
McDonough County.....			3	Baltimore County.....	1	3	10
McHenry County.....		1		Calvert County.....	2		2
McLean County.....		1		Caroline County.....	1	6	18
Macon County.....			2	Carroll County.....	1		9
Macoupin County.....			4	Cecil County.....		1	4
Madison County.....			1	Charles County.....	4	8	16
Massac County.....	1			Dorchester County.....		5	11
Menard County.....		1	2	Frederick County.....	2		
Morgan County.....			1	Garrett County.....	1		3
Peoria County.....		3	2	Harford County.....	3	2	6
Piatt County.....			1	Howard County.....			6
Rock Island County.....			1	Kent County.....			1
Saint Clair County.....	1	1	2	Montgomery County.....	5	4	8
Saline County.....		1	1	Prince Georges County.....	7	3	
Sangamon County.....		1	4				
Shelby County.....		1					
Stark County.....							
Stephenson County.....	2		1				
Tazewell County.....		1					
Union County.....			9				
Vermilion County.....			1				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

INFLUENZA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Maryland—Continued.				Mississippi—Continued.			
Queen Annes County.....			3	Madison County.....			48
St. Marys County.....	10	4		Marion County.....		8	50
Somerset County.....		2	15	Marshall County.....	15	20	40
Talbot County.....	2	3	11	Monroe County.....	35	251	1,500
Washington County.....	2	2	1	Montgomery County.....			10
Worcester County.....		2	1	Neshoba County.....			50
Total.....	73	127	270	Newton County.....			223
Massachusetts:				Noxbee County.....			42
Berkshire County.....		1		Oktibbeha County.....	75	46	340
Bristol County.....			3	Panola County.....		2	28
Essex County.....		16	23	Pearl River County.....	40	4	12
Franklin County.....		1	1	Perry County.....			12
Hampden County.....		3	2	Pike County.....	11	14	32
Middlesex County—				Pontotoc County.....		8	20
Everett.....		1	26	Prentiss County.....		12	276
Scattering.....		10	21	Quitman County.....	5	11	113
Norfolk County.....		5	8	Rankin County.....	4	10	22
Suffolk County—				Scott County.....		3	40
Boston.....		13	43	Sharkey County.....	3		38
Scattering.....		2	5	Simpson County.....	1		275
Worcester County.....		3	10	Smith County.....			400
Total.....	27	57	142	Stone County.....	8		
Minnesota:				Sunflower County.....		2	137
Blue Earth County.....	1			Tallahatchie County.....			363
Cass County.....	1			Tate County.....	6	24	97
Freeborn County.....	1			Tippah County.....			1,673
Grant County.....	1			Tishomingo County.....	25	65	1,464
Jackson County.....	1			Tunica County.....			75
Marshall County.....		1		Union County.....		13	181
Pennington County.....	1	2		Walthall County.....	16	9	19
St. Louis County.....			1	Washington County.....	5	8	95
Wabasha County.....	1			Wayne County.....			210
Total.....	7	3	1	Webster County.....		18	
Mississippi:				Wilkinson County.....	10	2	50
Adams County.....			6	Winston County.....			80
Alcorn County.....	43	17	129	Yalobusha County.....	28	17	61
Amite County.....	20	13	15	Yazoo County.....	2	4	36
Attala County.....			240	Total.....	649	1,392	12,976
Benton County.....		11	29	Nebraska:			
Bolivar County.....	8	8	468	Antelope County.....			6
Calhoun County.....	10		250	Fillmore County.....	1		
Carroll County.....	1		41	Keyapaha County.....	2		
Chickasaw County.....	11	28	104	Saline County.....		3	
Choctaw County.....			361	Saunders County.....			77
Clay County.....	2	8	81	Valley County.....	2		
Coshoma County.....	6	18	134	Washington County.....		1	
Copiah County.....	1	8	32	Total.....	5	4	83
Covington County.....	15		141	New Jersey:			
De Sofo County.....		1	58	Atlantic County.....	4		9
Forrest County.....	2		82	Bergen County.....	2	3	5
George County.....			43	Burlington County.....			9
Grenada County.....		3	51	Camden County.....		4	
Hancock County.....		3		Cumberland County.....	1		
Harrison County.....	2	5	15	Essex County.....	30	46	80
Holmes County.....	39	23	68	Hudson County.....	1	6	11
Humphreys County.....			29	Mercer County.....	7	1	4
Itawamba County.....	7	72		Middlesex County.....			1
Jasper County.....		10		Mommoth County.....	12	6	4
Jefferson Davis County.....	15		226	Passaic County.....	2	5	4
Jones County.....	10	12	53	Sussex County.....			2
Kemper County.....			50	Total.....	59	71	120
Lafayette County.....	13	33	140	New Mexico:			
Lamar County.....	10	35	206	Colfax County.....		5	1
Lauderdale County.....	51			McKinley County.....		2	
Lawrence County.....	12	12	160	San Miguel County.....		7	
Leake County.....		7	114	Valencia County.....		4	
Lee County.....	50	484	1,141	Total.....		18	1
Leflore County.....	27	13	83				
Lincoln County.....			7				
Lowndes County.....	5	27	297				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

INFLUENZA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
New York:				Rhode Island:			
Albany County.....	7	5	10	Kent County.....	7		
Broome County.....	5	16	4	Providence County.....	1		1
Cattaraugus County.....		1		Total.....	8		1
Cayuga County.....	1	1		South Carolina:			
Chautauqua County.....		2	2	Anderson County.....		5	376
Chenango County.....		1		Barnwell County.....			229
Columbia County.....		3	3	Charleston County.....			46
Delaware County.....		3	3	Cherokee County.....		1	36
Dutchess County.....			8	Chester County.....	1	6	41
Eric County.....	2	4	2	Chesterfield County.....		72	66
Hamilton County—				Clarendon County.....	2		
Long Lake Town-				Colleton County.....		68	
ship.....	13			Darlington County.....		200	
Herkimer County.....		6	1	Dillon County.....	8		
Jefferson County.....	1		1	Greenville County.....			265
Monroe County.....			2	Greenwood County.....			334
Montgomery County.....	2	2	2	Kershaw County.....		125	
Niagara County.....		1	2	Laurens County.....		22	55
Oneida County.....	3		4	Lee County.....		6	9
Ontonago County.....		2	2	Lexington County.....	3	468	84
Ontario County.....		4		Orangeburg County.....	3	395	151
Orange County.....	3	2	13	Pickens County.....			154
Otsego County.....			3	Richland County.....		22	439
Rensselaer County.....	2	2	3	Spartanburg County.....		21	215
Rockland County—				York County.....		136	513
Haverstraw Village.....			23	Total.....	17	1,545	3,013
Saratoga County.....	2		3	South Dakota:			
Schenectady County.....		2		Hutchinson County.....		2	
Stauben County.....	1		5	Jones County.....			1
Suffolk County—				Minnehaha County.....			1
Islip Township.....		5	12	Spink County.....		3	
Northport Village.....			1	Total.....		5	2
Tioga County.....	1			Vermont:			
Ulster County.....			10	Rutland County.....			1
Wayne County.....		1	1	Windham County.....			1
Westchester County.....	1	9	3	Total.....			2
New York City.....	118	204	202	Virginia:			
Total.....	163	273	325	Accomac County.....	11	17	76
Ohio:				Alleghany.....	3	6	163
Ashtabula County.....	1			Amelia County.....	3	9	38
Belmont County.....		4	1	Amherst County.....	2		5
Brown County.....			1	Appomattox County.....			50
Butler County.....			3	Augusta County.....	25	24	283
Champaign County.....		1		Bath County.....			26
Coshocton County.....			1	Bedford County.....	7	10	344
Cuyahoga County.....	4	7	19	Bladensburg County.....			417
Franklin County.....	1	2		Botetourt County.....			417
Hamilton County.....	2		20	Brunswick County.....	4		71
Jefferson County.....	1	1		Buchanan County.....		15	535
Knox County.....			1	Buckingham County.....			75
Lawrence County.....			46	Campbell County.....	22	30	241
Mahoning County.....			3	Caroline County.....	24	9	6
Medina County.....	1		3	Carroll County.....		2	195
Monroe County.....			1	Charles City County.....			11
Montgomery County.....			2	Charlotte County.....			75
Muskingum County.....			1	Chesterfield County.....		1	
Noble County.....				Clarke County.....		3	13
Ottawa County.....		3	2	Culpeper County.....	2	9	55
Putnam County.....		1		Cumberland County.....	2	4	220
Ross County.....			39	Dickenson County.....	6	10	669
Stark County.....			5	Dinwiddie County.....		57	89
Summit County.....		1	3	Elizabeth City County.....			34
Tuscarawas County.....		1		Essex County.....	1		50
Warren County.....			18	Fauquier County.....	2	24	94
Wayne County.....	1	1	1	Floyd County.....	8	17	444
Total.....	11	23	170	Fluvanna County.....			29
Oklahoma:				Franklin County.....	6		281
Blaine County.....			20				
Mayes County.....	4		4				
Total.....	4		24				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922— Continued.

INFLUENZA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Virginia—Continued.				Virginia—Continued.			
Frederick County.....		1	9	Southampton County.....	21	41	120
Giles County.....	8	28	307	Spotsylvania County.....		1	2
Gloucester County.....			17	Stafford County.....		15	15
Goochland County.....	5	7	19	Surry County.....	3	5	14
Grayson County.....	8	41	310	Sussex County.....	10	5	10
Greene County.....		2		Tazewell County.....	40	118	1,176
Greensville County.....			78	Warren County.....			74
Halifax County.....	11	47	660	Warwick County.....	10	7	
Hanover County.....	20	32	155	Washington County.....	111	86	356
Henrico County.....	14	25	77	Westmoreland County.....	33	46	33
Henry County.....	10	17	364	Wise County.....	2	45	847
Highland County.....		2	33	Wythe County.....	17	21	1,105
Isle of Wight County.....	5	3	12				
James City County.....			14	Total.....	682	1,355	16,393
King and Queen County.....			31	Wisconsin:			
King George County.....	4		21	Burnett County.....	1	3	
King William County.....			150	Chippewa County.....	3	92	12
Lancaster County.....		15		Clark County.....		4	
Lee County.....	7	24	215	Columbia County.....	1		15
Loudoun County.....	20	27	44	Crawford County.....	4	2	2
Louisa County.....	2	5	80	Dane County.....		1	
Lunenburg County.....		18	169	Door County.....			9
Madison County.....	32	9	69	Eau Claire County.....	13	4	
Mathews County.....	3			Green County.....	1		
Mecklenburg County.....		21	250	Green Lake County.....	1	2	
Middlesex County.....	8	8	36	Iowa County.....	2		
Montgomery County.....	8	69	1,148	Iron County.....			4
Nansemond County.....		1		Jefferson County.....			12
Nelson County.....	6	4	90	Kenosha County.....	3		
Northampton County.....	2	13	29	La Crosse County.....	1	4	1
Northumberland County.....		2	6	Marathon County.....			3
Nottoway County.....	10	8	69	Manitowoc County.....		1	
Orange County.....	10	6	57	Monroe County.....	2		
Page County.....	1	25	37	Oconto County.....	2	2	
Patrick County.....			91	Pierce County.....	5		
Pittsylvania County.....	10	27	452	Richland County.....			1
Powhatan County.....	20	10	60	Rock County.....			
Prince Edward County.....		11	439	Rusk County.....		1	
Prince George County.....			135	Sauk County.....	1		13
Princess Anne County.....	6			Shawano County.....	2	2	8
Prince William County.....		7	22	Sheboygan County.....		4	5
Pulaski County.....	5	3	348	Taylor County.....	1		5
Rappahannock County.....		1	5	Trempealeau County.....			1
Richmond County.....			12	Vernon County.....	4	19	9
Roanoke County.....	5	10	471	Vilas County.....			8
Rockbridge County.....	16	3	81	Washington County.....			20
Rockingham County.....	17	33	42	Waukesha County.....		1	
Russell County.....	8	42	475	Waushara County.....	4	1	1
Scott County.....		54	296				
Shenandoah County.....	20	14	51	Total.....	51	145	129
Smyth County.....	6	41	99				

LEPROSY.

California:				Hawaii—Continued.			
Los Angeles.....			1	Kauai.....			1
San Francisco.....		1	1	Koloa.....			1
Total.....		1	2	Maui.....			
Connecticut:				Wailuku.....		2	
New Haven.....	1			Oahu.....			
District of Columbia:				Ewa and Waianae.....			1
Washington.....		2		Honolulu.....	2	4	1
Florida:				Koolaupoko.....		1	
Dade County—				Total.....	3	12	5
Buena Vista.....			1	Louisiana:			
Duval County—				New Orleans.....	1		
Jacksonville.....		1		Mississippi:			
Hawaii:				Harrison County—			
Hawaii—				Biloxi.....			1
North Hilo.....		2		Oregon:			
South Hilo.....	1	3	1	Portland.....		1	

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

MALARIA.

Place.	Now cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Alabama:				California—Continued.			
Baldwin County	7	1		Glenn County	1		
Barbour County	7	5		Kings County	1		
Calhoun County		2		Los Angeles County	4	2	1
Choctaw County			1	Nevada County	2		
Colbert County	5	27	125	Orange County	1		
Covington County			1	Sacramento County	2	3	1
Cullman County	2			San Francisco County	6	5	8
Dale County	3			San Joaquin County	1	2	
Dallas County	24			Santa Clara County	1		
Geneva County	1	3		Shasta County	4	3	
Hale County	4	2		Sutter County	2		
Henry County	7	1		Total	30	20	11
Houston County	29	8		Connecticut:			
Jefferson County	18	64	20	Hartford County—			
Lauderdale County	9			Hartford	11	7	
Lawrence County	9	3.		Scattering	4	20	
Madison County	1	1		New Haven	1		
Marengo County	7	2	9	Windham County		1	
Mobile County	5			Total	16	28	
Montgomery County	3	1		Delaware:			
Pike County	1	3		Kent County		4	2
Sumter County	22	4	1	New Castle			1
Talladega County	3			Sussex County	9	1	
Talapoosa County	2			Total	9	5	3
Tuscaloosa County		1		Florida:			
Washington County	2			Alachua County		3	1
Wilcox County	21	4		Bay County			1
Total	192	133	157	Brevard County		1	1
Arkansas:				Broward County	1		
Ashley County	5	3		Calhoun County		1	
Bradley County	28	14	11	Charlotte County	1		
Calhoun County	13	5	1	Citrus County	1	17	4
Clay County	1			Clay County	1		
Cleveland County	1	2	2	Columbia County	1	1	4
Drew County	34	13	14	Dade County	1		
Faulkner County	6		1	De Soto County			1
Franklin County	6	2		Duval County—			
Greene County	8	4		Jacksonville	22	7	14
Hempstead County	14	6	1	Scattering	3	2	5
Hot Spring County	21	12		Escambia County	1	1	
Independence County	5	1		Franklin County		2	
Izard County	2	15	3	Gadsden County	20	9	4
Jackson County	9	4		Hardee County			1
Lafayette County	14	19		Hernando County		1	6
Lawrence County	2			Hillsborough County	13	23	1
Lee County		40		Holmes County	1	2	
Logan County	2			Jackson County		5	1
Miller County		12	8	Jefferson County	2		3
Mississippi County	18	5		Lafayette County		1	3
Monroe County	2	4		Lake County	2		1
Montgomery County			14	Leon County	2	2	
Ouachita County	28	36	23	Levy County	1	1	1
Phillips County	6			Liberty County		1	
Pike County	25	22	9	Madison County		4	6
Poinsett County	2			Manatee County		3	
Pulaski County	4	1	2	Marion County		4	2
St. Francis County	8	6	4	Nassau County		1	
Saline County	48	6		Nassau County		1	
Scott County	5	1	2	Orange County		1	
Sebastian County		7		Osceloa County		1	
Sharp County	14	12	4	Palm Beach County		2	
Union County	16	9	21	Pasco County		2	2
Van Buren County	8	5		Pinellas County		4	1
White County	16	7	1	Polk County	7	3	11
Total	371	273	121	Putnam County	3	3	1
California:				St. Johns County	1	2	2
Alameda County	2			Santa Rosa County		1	1
Butte County	1		1	Seminole County	1		1
Colusa County		5		Sumter County			1
Fresno County	2						

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

MALARIA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Florida—Continued.				Louisiana—Continued.			
Suwanee County.....			1	Tensas Parish.....		1	1
Taylor County.....		5		Union Parish.....	4		4
Vulusia County.....		3	4	Vernon Parish.....	2		
Washington County.....		3		Vermillion Parish.....			1
Total.....	82	124	85	Washington Parish.....		16	1
Illinois:				Webster Parish.....		1	2
Alexander County.....	1		1	West Carroll Parish.....		1	2
Christian County.....		1		Total.....	120	105	73
Clay County.....	1			Maryland:			
Cook County.....	2			Baltimore City.....	3	1	
Edwards County.....		1		Calvert County.....		2	
Franklin County.....			1	Carroll County.....		1	
Hancock County.....		1		Dorchester County.....	8	2	
Henderson County.....		1		Harford County.....	5		
Jackson County.....		1		Howard County.....		1	
Johnson County.....	3			Somerset County.....	1		
Kankakee County.....	1			Wicomico County—			
La Salle County.....	1			Salisbury.....	19	3	
Macon County.....	1			Scattering.....	25	4	
Madison County.....		3	1	Worcester County.....	2	1	
Mercer County.....			1	Total.....	63	15	
Morgan County.....			1	Massachusetts:			
Peoria County.....		1		Berkshire County.....	1		
Pope County.....			1	Bristol County.....	1		
Pulaski County.....		1		Middlesex County.....			1
Randolph County.....			1	Norfolk County.....		1	
St. Clair County.....		2		Suffolk County.....	3	1	
Saline County.....	1			Worcester County.....	1	1	
Shelby County.....		2	1	Total.....	6	3	1
Union county.....		2		Michigan:			
Vermilion County.....		1		Saginaw County.....	3		
Washington County.....		3	1	Mississippi:			
White County.....		2		Adams County.....	40	30	20
Total.....	11	22	9	Alcorn County.....	95	38	61
Kansas:				Amite County.....	73	36	39
Bourbon County.....		1		Attala County.....	71	76	16
Cowley County.....	1			Benton County.....	27	7	2
Total.....	1	1		Bolivar County.....	794	412	337
Louisiana:				Calhoun County.....	65	3	10
Acadia Parish.....	8	8	4	Carroll County.....	69	40	32
Avoyelles Parish.....	2			Chickasaw County.....	99	52	7
Beauregard Parish.....		1		Choctaw County.....	38	13	4
Bienville Parish.....		3	2	Claiborne County.....	57	64	31
Bossier Parish.....		4		Clarke County.....	124	80	33
Caddo Parish.....		3	5	Clay County.....	65	27	21
Calcasieu Parish.....	1	4		Coahoma County.....	369	225	176
Concordia Parish.....	1	1	3	Copiah County.....	161	112	41
De Soto Parish.....	10	3		Covington County.....	56	36	34
East Baton Rouge Parish.....			1	De Soto County.....	129	52	30
East Carroll Parish.....	30	12	2	Forrest County.....	63	61	5
East Feliciana Parish.....		1		Franklin County.....	81	33	23
Franklin Parish.....	8	1	1	George County.....	20	12	9
Grant Parish.....	35	15		Greene County.....	45	40	20
Iberia Parish.....			1	Grenada County.....	71	17	
Iberville Parish.....	2			Hancock County.....	40	40	31
Jackson Parish.....			1	Harrison County.....	21	8	4
Lafayette Parish.....		1		Hinds County.....	288	168	155
La Salle Parish.....		1		Holmes County.....	511	371	220
Morehouse Parish.....	1		6	Humphreys County.....	203	156	81
Natchitoches Parish.....		5	7	Issaquena County.....	26	11	24
Orleans Parish.....	5	10	5	Itawamba County.....	43	16	
Ouachita Parish.....	2		3	Jackson County.....	42	25	16
Pointe Coupee Parish.....	2		1	Jasper County.....	38	45	23
Rapides Parish.....	2	3	9	Jefferson County.....	79	35	25
Red River Parish.....	4	1	2	Jefferson Davis County.....	52	53	25
Richland Parish.....		2	1	Jones County.....	64	45	55
Sabine Parish.....		1	2	Kemper County.....	18	31	14
St. Landry Parish.....	2	1	6	Lafayette County.....	117	72	38
St. Tammany Parish.....		5					

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

MALARIA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Mississippi—Continued.				New York—Continued.			
Lamar County.....	40	10	20	Orange County.....	2		
Lauderdale County.....	95		32	Westchester County.....	3		
Lawrence County.....	86	46	40	New York City.....	14	3	
Leake County.....	67	55	18	Total.....	53	6	4
Lee County.....	137	68	88	Ohio:			
Leflore County.....	639	361	262	Summit County.....	30		
Lincoln County.....	56	34	32	Oklahoma:			
Lowndes County.....	132	70	24	McIntosh County.....			17
Madison County.....	63	43	1	Pennsylvania:			
Marion County.....		63		Allegheny County.....	1		
Marshall County.....	45		11	Columbia County.....	1		
Monroe County.....	299	128	68	Philadelphia County.....	1		
Montgomery County.....	102	65	30	Total.....	3		
Neshoba County.....	53	31	17	South Carolina:			
Newton County.....	30	25	21	Barnwell County.....			2
Noxubee County.....	72	34	36	Charleston County.....			3
Oktibbeha County.....	86	89	53	Chester County.....	2		
Panola County.....	133	54	29	Clarendon County.....	5		
Pearl River County.....	30	20	30	Darlington County.....	1		
Perry County.....	10	10	10	Dillon County.....	1		
Pike County.....	52	63	36	Lexington County.....	7	9	
Pontotoc County.....	68	61	25	Spartanburg County.....			2
Prentiss County.....	68	38	14	York County.....		2	4
Quitman County.....	233	114	119	Total.....	16	11	11
Rankin County.....	54	30	6	Virginia:			
Scott County.....	143	58	57	Accomac County.....	35	25	13
Sharkey County.....	170	48	77	Augusta County.....			1
Simpson County.....	122	30	6	Bath County.....	1		
Smith County.....	13	12	10	Botetourt County.....			12
Stone County.....		11	8	Brunswick County.....	8	5	2
Sunflower County.....	650	440	163	Buckingham County.....	4		
Tallahatchie County.....	172	81	28	Caroline County.....	22	7	1
Tate County.....	161	84	101	Charlotte County.....	12		
Tippah County.....	78	33	4	Chesterfield County.....		8	
Tishomingo County.....	71	75	44	Cumberland County.....		1	
Tunica County.....	209	450	85	Dinwiddie County.....	3	7	5
Union County.....	69	28	16	Elizabeth City County.....	3	1	5
Walthall County.....	9	2		Essex County.....	5		
Warren County.....	322	280	121	Gloucester County.....			4
Washington County.....	292	97	123	Goochland County.....		1	
Wayne County.....	50	26	10	Grayson County.....		1	
Webster County.....	52	38		Greensville County.....	36	15	12
Wilkinson County.....	70	32	10	Halifax County.....	12	5	4
Winston County.....	85	87	57	Hanover County.....	4	3	
Yalobusha County.....	99	65	86	Henrico County.....	3	3	
Yazoo County.....	360	175	135	Isle of Wight County.....	40	8	15
Total.....	10,001	6,194	3,827	James City County.....	26	3	3
Nebraska:				King and Queen County.....	7	3	1
Richardson County.....		1		King George County.....	3	6	30
New Jersey:				King William County.....	1	1	3
Bergen County.....			1	Lancaster County.....	1		
Essex County.....		3		Lee County.....			1
Mercer County.....		2		Louisiana County.....		1	
Middlesex County.....	1			Loudoun County.....	3		
Somerset County.....	1		1	Lunenburg County.....	2	1	
Total.....	2	5	2	Mecklenburg County.....	2	3	
New Mexico:				Middlesex County.....	9	6	
Eddy County.....	1			Montgomery County.....	1		5
Santa Fe County.....	1			Nansemond County.....	18	21	5
Total.....	2			New Kent County.....		3	2
New York:				Northampton County.....	27	8	
Albany County.....	2			Northumberland County.....	5	4	4
Dutchess County— Poughkeepsie Township.....	20			Nottoway County.....		2	1
Scattering.....	9	3	4	Pittsylvania County.....	9	1	
Herkimer County.....	1			Powhatan County.....	6	10	9
Montgomery County.....	2			Prince Edward County.....	2		
				Princess Anne County.....	9		1

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

MALARIA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Virginia—Continued.				Virginia—Continued.			
Richmond County.....			1	Sussex County.....	17	7	
Rockbridge County.....	2	1		Warwick County.....	15	9	
Russell County.....	3			Westmoreland County..	2	2	
Scott County.....		1		Wise County.....		1	1
Shenandoah County.....	1			York County.....		2	2
Southampton County.....	17	7	1	Total.....	405	202	143
Stafford County.....	3		3				
Surry County.....	26	9	1				

OCCUPATIONAL DISEASES AND DISABILITIES.

Massachusetts:				Massachusetts—Continued.			
Dermatitis.....	2		1	Poisoning—Continued.			
Eczema.....		1		Gas.....			4
Furunculosis.....	1			Lead.....	7	2	2
Poisoning—				Total.....	10	4	7
Brass.....		1					

PELLAGRA.

Alabama:				Florida—Continued.			
Baldwin County.....		1		Madison County.....	1		
Chambers County.....		1		Manatee County.....			1
Escambia County.....		1		Orange County.....		1	
Jackson County.....	2	2		Osceola County.....	1		
Jefferson County.....	3	2	1	Palm Beach County.....			1
Lawrence County.....		1		Pinellas County.....		1	
Marengo County.....	1			Polk County.....	3		
Montgomery County.....	1			Putnam County.....			1
Sumter County.....	2			St. Lucie County.....		1	
Talladega County.....	1			St. Lucie County.....	1		1
Wilcox County.....		6		Seminole County.....			1
Total.....	10	14	1	Total.....	15	11	13
Arkansas:				Illinois:			
Greene County.....	1			Peoria County.....			1
Logan County.....	1			Kansas:			
Miller County.....			1	Butler County.....		1	
Mississippi County.....	5	1		Sedgewick County.....		1	
Monroe County.....	2			Wyandotte County.....		1	
Ouachita County.....	12	15	12	Total.....		3	
Phillips County.....	1			Louisiana:			
Pulaski County.....	1		1	Allen Parish.....			1
St. Francis County.....		1		Bienville Parish.....			1
Union County.....	1			Caddo Parish.....	1	1	1
Van Buren County.....	1	3		Concordia Parish.....		1	
Washington County.....		1		De Soto Parish.....		2	
White County.....		1		East Baton Rouge Parish	1	1	
Total.....	25	22	14	East Carroll Parish.....	1		1
California:				Madison Parish.....			1
Alameda County.....			1	Morehouse Parish.....		1	
Los Angeles County.....		4	1	Natchitoches Parish.....		1	
San Diego County.....		1		Orleans Parish.....		1	1
Total.....		5	2	Ouachita Parish.....		1	2
Florida:				Rapides Parish.....		2	1
Alachua County.....			2	St. Mary Parish.....		1	
Brevard County.....			1	Tensas Parish.....		1	
Broward County.....	1			Vernon Parish.....	1		
Calhoun County.....	1			Total.....	4	13	8
Columbia County.....	1		1	Maryland:			
Escambia County.....	1			Baltimore City.....		1	
Franklin County.....		1		Wicomico County.....			1
Gadsden County.....	3		4	Total.....	1	1	1
Hillsborough County.....	2	6					
Leon County.....		1					

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

PELLAGRA—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Massachusetts:				Mississippi—Continued.			
Bristol County.....	1			Simpson County.....	3	1	1
Norfolk County.....	1			Sunflower County.....	32	13	6
Suffolk County.....	1	1		Tallahatchie County.....	3		4
Total.....	3	1		Tate County.....	1	1	
				Tippah County.....	4		
Mississippi:				Tishomingo County.....	1	2	1
Adams County.....	1	1	3	Tunica County.....	11	4	6
Alcorn County.....	8	1	1	Union County.....	4		1
Amite County.....	1			Walthall County.....	4		2
Bolivar County.....	34	18	22	Warren County.....	6	9	
Carroll County.....	2			Washington County.....	20	16	11
Chickasaw County.....	6	3	2	Wayne County.....	3	1	
Clarke County.....	1	3		Webster County.....	2		
Clay County.....	4	2		Wilkinson County.....	2	1	1
Cochaha County.....	12	9	3	Yalobusha County.....	20	7	6
Copiah County.....	11	3	3	Total.....	328	170	142
Covington County.....	2	1	2				
De Soto County.....	11	8		Oklahoma:			
Forrest County.....	3	3	2	Haskell County.....	1		
George County.....	3	1	1	McIntosh County.....			1
Grenada County.....	5	8	11	Total.....	1		1
Harrison County.....	9	6	5				
Hinds County.....	9	2		Pennsylvania:			
Holmes County.....	9	2		Philadelphia County.....	1		
Humphreys County.....	2						
Hawamba County.....	2			South Carolina:			
Jackson County.....	2			Anderson County.....			2
Jasper County.....		1	3	Cherokee County.....		2	
Jefferson County.....	2	3	2	Chesterfield County.....	1		
Jefferson Davis County.....	2	1	1	Richland County.....	1		
Jones County.....	7	4	5	Spartanburg County.....		1	
Kemper County.....		2		York County.....			5
Lafayette County.....			2	Total.....	2	3	7
Lamar County.....	4						
Lauderdale County.....	7		1	Virginia:			
Lawrence County.....	4			Bedford County.....			1
Leake County.....	2	2		Brunswick County.....			1
Lee County.....	1	1	2	Charles City County.....			1
Leflore County.....	13	1	2	Charlotte County.....			1
Lincoln County.....	9	3	6	Dinwiddie County.....		1	
Lowndes County.....		1		Floyd County.....	1		
Madison County.....	1			Gloucester County.....		2	
Marshall County.....	2	1		Grayson County.....	1	1	
Monroe County.....	7	4	5	Halifax County.....		2	1
Neshoba County.....	1	1		Hanover County.....	1		
Newton County.....	1			Henry County.....	1		1
Oktober County.....	1	2		Middlesex County.....	1	1	
Oktibbeha County.....	2	1		Nansemond County.....		1	
Panola County.....	4	1		Nelson County.....	1		1
Pearl River county.....	1		1	Powhatan County.....		1	
Pike County.....	2	7	4	Smyth County.....		1	
Pontotoc County.....		1		Total.....	6	10	8
Pretitt County.....	7						
Quitman County.....	7	3	3				
Rankin County.....		1					
Sharkey County.....	14	3	2				

POLIOMYELITIS (INFANTILE PARALYSIS).

Alabama:				California:			
Baldwin County.....		1		Fresno County.....	2	1	
Jefferson County.....		1	1	Los Angeles County.....	1	2	
Sumter County.....	1			San Diego County.....	1		
Total.....	1	2	1	Tehama County.....	1		
				Total.....	5	3	
Arkansas:				Colorado:			
Calhoun County.....	1			Denver County.....	3		
Garland County.....		1		Connecticut:			
Total.....	1	1		Fairfield County.....	2	1	1
				Middlesex County.....	2		

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Connecticut—Continued.				Louisiana—Continued.			
New Haven County.....	6	4	1	Washington Parish.....	3		
Windham County.....	1			West Feliciana Parish.....		1	
Total.....	11	5	2	Total.....	4	3	1
District of Columbia.....	3		1	Maine:			
Florida:				Androscoggin County.....			1
Hillsborough County.....		1		Knox County.....		1	
Madison County.....		1		Oxford County.....	2	1	1
Manatee County.....	1			Penobscot County.....	1	1	
Orange County.....			1	Somerset County.....	1		
Total.....	1	2	1	York County.....			1
Idaho:				Total.....	4	3	3
Bannock County.....	1			Maryland:			
Canyon County.....			1	Anne Arundel County.....		1	
Gooding County.....	1			Baltimore City.....	4	5	1
Total.....	2		1	Frederick County.....		1	
Illinois:				Garrett County.....			2
Clark County.....			1	Montgomery County.....	1		
Coles County.....	1			Washington County.....			
Cook County.....	14	6	3	Total.....	5	7	4
Crawford County.....		1		Massachusetts:			
Iroquois County.....	1			Barnstable County.....	5	1	
Johnson County.....			1	Bristol County.....	2		1
Kane County.....		2		Dukes County.....	1		
Lake County.....			1	Essex County.....	4	4	2
McLean County.....	1	1		Hampshire County.....	1	1	
Macon County.....		1		Middlesex County.....	3	5	
Macoupin County.....		1	1	Norfolk County.....	4		
Madison County.....	1			Suffolk County.....	6	10	2
Morgan County.....			1	Worcester County.....	3		
Rock Island County.....	1		1	Total.....	29	21	5
St. Clair County.....		1	1	Michigan:			
Saline County.....		1		Genesee County.....	1		
Sangamon County.....	1	1		Manistee County.....			3
Wabash County.....		1		Oakland County.....			1
Wayne County.....		1		Wayne County.....	1	1	
Total.....	20	17	10	Total.....	2	1	4
Indiana:				Minnesota:			
Lake County.....		1		Hennepin County.....			1
Noble County.....		1		Lac qui Parle County.....	1		
St. Joseph County.....			1	Le Sueur County.....		1	
Shelby County.....	1			McLeod County.....	1	6	2
Vigo County.....	1			Polk County.....	3		
Total.....	2	2	1	Todd County.....	1		
Iowa:				Total.....	6	7	3
Dubuque County.....			1	Mississippi:			
Howard County.....		1		Benlon County.....		1	
Ida County.....	1			Forrest County.....		5	
Marion County.....			1	Total.....		6	
Scott County.....		1		Montana:			
Webster County.....	1		1	Stillwater County.....	1		
Total.....	2	2	3	Nebraska:			
Kansas:				Cass County.....	1		
Labette County.....	1			Hall County.....	1		
McPherson County.....			1	Hamilton County.....		1	
Reno County.....		1		Johnson County.....	1		
Total.....	1	1	1	P Phelps County.....	1		
Louisiana:				Redwillow County.....	1		
Acadia Parish.....		1		Sarpy County.....	1		
Iberia Parish.....		1		Total.....	6	1	
Orleans Parish.....	1		1				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
New Jersey:				Ohio:			
Bergen County.....	2			Cuyahoga.....	4	1	
Burlington County.....	1			Franklin County.....			1
Cumberland County.....			1	Hamilton County.....	1	1	
Essex County.....	3	7		Hocking County.....		1	
Hudson County.....	1		1	Licking County.....			1
Middlesex County.....	1			Lorain County.....		1	
Monmouth County.....	2			Lucas County.....	2		
Morris County.....	1			Ottawa County.....	1		
Ocean County.....	1			Pike County.....			1
Passaic County.....		2	2	Putnam County.....			1
Sussex County.....			1	Ross County.....		1	
Union County.....	2	1		Summit County.....		1	
Total.....	14	10	5	Trumbull County.....	1		
				Warren County.....	1		
New York:				Wayne County.....		1	
Albany County.....	1	2		Total.....	10	7	4
Allegany County.....	2			Pennsylvania:			
Cattaraugus County.....	1			Allegheny County.....	2	1	
Cayuga County.....	4	2	2	Armstrong County.....			1
Chautauqua County.....	1			Chester County.....	1		
Chenango County.....		1		Delaware County.....	1		
Cortland County.....	5	2		Elk County.....		1	
Delaware County.....	2		1	Erie County.....	1		1
Dutchess County.....	1	1		Lancaster County.....	1		
Essex County.....	1			Luzerne County.....	1		
Genesee County.....		1		McKean County.....		1	
Herkimer County.....		1	1	Northampton County.....	1		
Jefferson County.....	4	1		Philadelphia County.....	1		
Monroe County.....	2	1		Susquehanna County.....		1	
Montgomery County.....	2	1		Westmoreland County.....			1
Nassau County.....	3	2	1	Total.....	9	4	3
Niagara County.....	1	2		Rhode Island:			
Oneida County.....	7	1		Providence County.....	1	1	1
Onondaga County.....	16	2	2	South Carolina:			
Ontario County.....	1	1		Anderson County.....			1
Oswego County.....	14	3	2	South Dakota:			
Oswego.....	7		1	Deuel County.....	1		
Scattering.....	1			Faulk County.....	1		
Otsego County.....				Lincoln County.....	1		
Putnam County.....			1	Pennington County.....	1		
Rensselaer County.....		1		Total.....	4		
St. Lawrence County.....	4	1		Vermont:			
Seneca County.....	6	1		Caledonia County.....	8	1	
Schuyler County.....			1	Essex County.....	1	1	
Steuben County.....	2			Washington County.....	1		
Suffolk County.....	3	1		Windsor County.....	1	1	
Tompkins County.....	3			Total.....	11	3	
Washington County.....		1		Virginia:			
Wayne County.....	1			Accomac County.....	1		
Westchester County.....	8	5	2	Buckingham County.....	2	2	
Wyoming County.....		1		Henry County.....			1
New York City.....	57	30	19	Rockingham County.....		1	
Total.....	159	66	33	Tazewell County.....	1		
				Washington County.....	1	1	
North Carolina:				Total.....	5	4	1
Forsyth County.....	1			Washington:			
Haywood County.....	1			King County.....	1	1	
Iredell County.....		2		Snohomish County.....	1		
New Hanover County.....	1		1	Total.....	2	1	
Folk County.....		1					
Total.....	3	3	1				
North Dakota:							
Cass County.....		1					
Divide County.....	1						
Eddy County.....	1						
Griggs County.....	2						
Stutsman County.....		2					
Total.....	4	3					

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
West Virginia:				Wisconsin—Continued.			
Monongalia County		3		Milwaukee County		1	
Wisconsin:				Ozaukee County	1		
Ashland County	1			Rock County	3		
Dane County	12	1		Washburn County	1	1	
Green County	1			Washington County			
Green Lake County		1		Waukesha County			2
Jefferson County	1			Total	22	5	2
Marathon County	2	1					

SMALLPOX.

Alabama:				Colorado—Continued.			
Covington County		1		Kit Carson County	4	5	
Jefferson County		2	1	Larimer County	4	15	2
Perry County		2		Las Animas County			5
Total		5	1	Lincoln County			3
Arkansas:				Logan County			1
Hempstead County		1		Otero County		2	
Miller County			1	Pueblo County	1	1	
Ouachita County			1	Rio Grande County			2
Phillips County		2		Routt County			2
Pulaski County		1		Summit County			3
Sebastian County			1	Washington County			3
Union County			1	Weld County	1	4	4
Total		4	4	Yuma County		3	7
California:				Total	175	147	118
Alameda County	6	9	6	Connecticut:			
Butte County	2		1	Fairfield County		3	2
Calaveras County	2	1	1	Florida:			
Colusa County			2	Duval County	2		8
Contra Costa County			1	Gadsden County			1
Fresno County			1	Hillsborough County	6		3
Glenn County			1	Pinellas County			5
Humboldt County			2	St. Johns County		1	
Inyo County	4	3	3	St. Lucie County	3		
Kings County		1		Suwanee County		2	
Los Angeles County	3	12	3	Total	11	3	17
Mendocino County		1		Idaho:			
Orange County		1	2	Ada County	1	1	
Riverside County			1	Bannock County	1	4	9
Sacramento County		1	1	Bear Lake County	1		
San Francisco County	1	8	1	Benewah County		1	2
San Joaquin County		3		Bonner County	1		
San Mateo County		1		Butte County	1		
Santa Barbara County		1		Canyon County	1		
Santa Clara County	2	2		Caribou County		1	
Shasta County	1	8	2	Kootenai County		2	5
Siskiyou County	2	3		Latah County		1	1
Stanislaus County			4	Oneida County		12	
Sutter County		1		Total	6	22	17
Tehama County		1		Illinois:			
Ventura County		9	7	Adams County			2
Total	23	66	39	Brown County		1	
Colorado:				Bureau County		6	6
Adams County		1		Carroll County		17	6
Arapahoe County	2	5		Champaign County			1
Boulder County		2	1	Clinton County			2
Clear Creek County		4		Cook County	16	1	5
Denver County	160	92	74	De Kalb County	1	20	17
Douglas County		3		De Witt County			1
Eagle County		4	1	Edgar County	2	1	
Elbert County		3		Effingham County		1	
El Paso County	1			Franklin County			3
Garfield County		1		Henry County		2	
Huerfano County	1	1	8	Jasper County			1
Jefferson County	1	1	2				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SMALLPOX—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Illinois—Continued.				Kansas—Continued.			
Jefferson County.....		4		Chase County.....			1
Knox County.....		1		Cloud County.....			1
La Salle County.....			1	Crawford County.....		1	1
Lee County.....		4	14	Doniphan County.....		4	1
McLean County.....			2	Elk County.....		1	
Madison County.....		3	2	Jewell County.....			1
Mason County.....	2			Kingman County.....	1	3	
Montgomery County.....	1	1		Labette County.....	1		5
Moultrie County.....			1	McPherson County.....		1	
Ogle County.....		2	1	Osage County.....	1		
Peoria County.....		1		Osborne County.....	1		
Piatt County.....			3	Pawnee County.....		2	
Richland County.....		1		Pratt County.....		2	
St. Clair County.....			2	Russell County.....			1
Saline County.....		1		Saline County.....	1		
Scott County.....			1	Sedgewick County.....		3	
Stephenson County.....	1	11	31	Shawnee County.....	1	1	
Tazewell County.....	1			Sherman County.....		1	
Union County.....		1		Sumner County.....			5
Vermilion County.....		1		Wallace County.....			1
Wayne County.....			1	Wyandotte County.....			1
Whiteside County.....	47	99	15				
Will County.....			13	Total.....	12	21	18
Williamson County.....	2		1				
Total.....	75	179	132	Louisiana:			
Indiana:				Assumption Parish.....		1	
Allen County.....	1	7	23	Beauregard Parish.....			1
Boone County.....		4		Bienville Parish.....		1	
Clay County.....	3		3	Caddo Parish.....	5	5	21
DeKalb County.....	10	20	15	Claiborne Parish.....	6	3	5
Elkhart County.....	1			De Soto Parish.....			2
Fayette County.....			1	East Baton Rouge Parish.....			1
Fountain County.....	2			Lévingston Parish.....			1
Fulton County.....			5	Natchitoches Parish.....			1
Grant County.....		1	2	Ouachita Parish.....	1	1	
Greene County.....			1	Sabine Parish.....	1		4
Howard County.....		1		St. Landry Parish.....	2		
Jay County.....		6	1	Vermillion Parish.....		1	
Johnson County.....			1	Winn Parish.....			1
Lake County.....	1	2	1	Total.....	14	21	36
Madison County.....	16	6	19	Maine:			
Marion County.....	4	2	6	Androscoggin County.....		1	
Noble County.....			1	Maryland:			
Owen County.....			1	St. Marys County.....	2		
Posey County.....			1	Massachusetts:			
Spencer County.....			1	Hampshire County.....		1	
Total.....	38	49	82	Michigan:			
Iowa:				Alger County.....		4	
Appanoose County.....		2		Barry County.....		1	1
Cerro Gordo County.....		2		Berrien County.....			1
Clayton County.....		1		Branch County.....	1		
Decatur County.....		1		Calhoun County.....	2		
Floyd County.....	1			Cheboygan County.....	3	4	
Jasper County.....			1	Clinton County.....	5	10	10
Jefferson County.....		1		Eaton County.....			1
Johnson County.....	1			Genesee County.....	1		3
Lee County.....	1			Gratiot County.....		3	
Linn County.....		1		Huron County.....	1	1	1
Mahaska County.....		1	1	Ingham County.....		4	6
Muscatine County.....		1	2	Ionia County.....	11	27	14
Polk County.....	2	1	2	Isco County.....			5
Scott County.....		1	1	Isabella County.....	1	1	
Webster County.....			3	Jackson County.....	5		
Winneshago County.....		1		Kalamazoo County.....		1	1
Total.....	5	13	10	Kent County.....			4
Kansas:				Lapeer County.....			1
Allen County.....		1		Lenawee County.....			1
Barber County.....	1			Manistee County.....			1
Barton County.....	1			Mecosta County.....	3		1
Bourbon County.....	4	1		Monroe County.....	1	28	88
				Montcalm County.....	1		5

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SMALLPOX—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Michigan—Continued.				Montana:			
Oakland County		2	2	Cascade County—			
Presque Isle County			1	Great Falls	2	8	25
St. Joseph County	1			Scattering		1	1
Van Buren County			1	Chouteau County	1		
Washtenaw County	1		7	Daniels County	1		
Wayne County	2	11	73	Missoula County		2	1
Total	39	97	233	Pondera County			9
				Powder River County	1		
Minnesota:				Roosevelt County	2		
Aitkin County		1		Sheridan County		1	
Anoka County		1		Silver Bow County	1	2	
Beltrami County	2	5	6	Sweet Grass County	10		
Brown County		1		Valley County		1	
Carlton County	2		7	Wheatland County—			
Cass County	1		3	Harlowton	12	1	
Chippewa County		5	7	Judith Gap	1		
Chisago County		9		Oka	11	2	
Clay County		1	1	Total	42	18	36
Crow Wing County	2	1	4				
Douglas County			2	Nebraska:			
Fillmore County			1	Buffalo County			13
Freeborn County		4	4	Butler County			1
Goodhue County		11		Cheyenne County			3
Hennepin County	6	19	24	Clay County	1	2	
Hubbard County		12		Custer County			1
Kandiyohi County		1	5	Douglas County		2	7
Koochiching County			1	Fillmore County	4		
Lyon County			1	Franklin County			
Meeker County		1		Gage County	1		8
Mille Lacs County		1	4	Garden County			1
Morrison County	1	6	5	Johnson County	1		
Norman County	1			Merrick County		1	
Olmsted County			3	Nemaha County	1		
Pipestone County	2			Nuckolls County			1
Polk County			1	Pawnee County			1
Pope County	2			Phelps County			1
Ramsey County	6	7	25	Saline County			1
Red Lake County		2		Seward County	1		
Renville County		2		Total	9	5	39
Roseau County			5				
St. Louis County	60	79	62	New Jersey:			
Sibley County	1	2		Essex County	1	1	
Stearns County		1					
Stevens County		1	3	New Mexico:			
Swift County	4			Bernalillo County			1
Todd County		1	4	Curry County			1
Wilkon County			1	Dona Ana County			1
Total	90	174	182	Luna County			1
				Total			4
Mississippi:				New York:			
Bolivar County		2	4	Chautauqua County	6		
Clay County			4	Erie County	5		
Do Soto County	1		2	Franklin County	3		12
Franklin County		11		Jefferson County	11	4	3
Harrison County		1	2	Lewis County	1	1	
Holmes County	1	6		Niagara County	1		1
Jackson County		1		Onondaga County	3		
Jefferson County	30	2	4	Oswego County			6
Jones County	2			St. Lawrence County	11		1
Lauderdale County	1		63	New York City	1		2
Lee County		1	1	Total	42	5	15
Leflore County			4				
Lincoln County	1			North Carolina:			
Marshall County		1	4	Alamance County	1		1
Pike County	1	1		Cabarrus County	3	1	7
Sharkey County			1	Carteret County			1
Union County		1	6	Davie County	7	1	20
Warren County	2			Edgecombe County			7
Wayne County	2			Forsyth County	2	11	20
Total	41	30	95	Franklin County	1	4	6

† 35 cases had their onsets in July, August, September, and October.

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SMALLPOX—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
North Carolina—Continued.				Ohio—Continued.			
Gaston County.....			1	Tuscarawas County.....	5	2	2
Granville County.....	1			Van Wert County.....	1		3
Greene County.....	2	4		Vinton County.....	4		
Guilford County.....	4	1	3	Williams County.....		1	
Johnston County.....	1	2	4	Total.....	80	137	192
Lenoir County.....		2	9	Oklahoma:			
Martin County.....		4	2	Custer County.....	3		
Mecklenburg County.....	1			Garfield County.....			1
Nash County.....	2	3		Garvin County.....			2
Pitt County.....		12	4	Grady County.....		1	20
Randolph County.....		3		Jackson County.....			2
Robeson County.....			1	Kingfisher County.....			1
Rowan County.....	2	1	7	Logan County.....			1
Stokes County.....	3	59	36	Mayes County.....			6
Union County.....			1	Pawnee County.....		3	
Wayne County.....			2	Payne County.....			5
Wilkes County.....			1	Pontotoc County.....		3	2
Total.....	30	108	133	Tillman County.....			19
North Dakota:				Total.....	3	7	59
Bottineau County.....		1	1	Oregon:			
Cass County.....	1	5		Clackamas County.....	1	3	
Eddy County.....	1			Clatsop County.....	20		
Emmons County.....	7	13	13	Columbia County.....			1
Grand Forks County.....	13	14	12	Crook County.....			1
Kidder County.....	1			Hood River County.....		1	
La Moure County.....	1			Lane County.....		12	6
McHenry County.....		1	1	Marion County.....	4	2	4
McIntosh County.....	1		1	Multnomah County—			
Mercer County.....	2			Portland.....	31	21	18
Ramsey County.....	13	5	15	Scattering.....	4	1	
Ransom County.....			4	Polk County.....			12
Richland County.....	1		1	Tillamook County.....			5
Stark County.....				Union County.....	1		
Stutsman County.....			12	Wallowa County.....			3
Williams County.....			8	Wasco County.....	1	3	
Total.....	42	39	68	Wheeler County.....	1		
Ohio:				Total.....	63	43	50
Auglaize County.....			18	Pennsylvania:			
Belmont County.....		1		Beaver County.....		1	
Butler County.....			2	Cambria County.....	1		
Clark County.....	1		2	Philadelphia County.....			18
Clinton County.....		1	1	Total.....	1	1	18
Columbiana County.....		1		South Carolina:			
Crawford County.....		1		Anderson County.....	1		
Cuyahoga County.....			1	Barnwell County.....			1
Darke County.....	26	28	37	Lexington County.....			2
Erle County.....	2	2		Oconee County.....	1		
Fairfield County.....		3	2	Orangeburg County.....			57
Fayette County.....			1	Spartanburg County.....		1	
Fulton County.....	10	5	6	Total.....	2	1	60
Geauga County.....		3		South Dakota:			
Greene County.....	1	8	5	Beadle County.....	1	2	
Henry County.....	5	26	50	Brown County.....	23	33	13
Highland County.....	1			Butte County.....		1	
Jackson County.....			1	Campbell County.....			1
Licking County.....			5	Clay County.....			1
Lucas County.....	4	7	18	Codington County.....			2
Mercer County.....			6	Day County.....	1	1	1
Miami County.....	17	19	1	Edmunds County.....			1
Montgomery County.....		8	16	Fall River County.....			8
Muskingum County.....		9		Grant County.....	1	1	
Ottawa County.....		1		Hughes County.....			9
Pickaway County.....			1	Lake County.....			1
Portage County.....		4		Lincoln County.....		1	1
Sandusky County.....	1	3	5				
Scioto County.....			1				
Seneca County.....	2		1				
Shelby County.....		2	5				
Summit County.....		1					

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922

Continued.

SMALLPOX—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
South Dakota—Continued.				West Virginia—Continued.			
Marshall County.....			1	Kanawha County.....	1		
Pennington County.....			1	Lewis County.....	1		
Potter County.....	2			McDowell County.....	7	6	1
Ziebach County.....			2	Marshall County.....	11	21	2
Total.....	28	39	42	Mercer County.....			1
Vermont:				Wyoming County.....			2
Grand Isle County.....			3	Total.....	20	28	10
Virginia:				Wisconsin:			
Alexandria City.....			1	Ashland County.....	7	17	11
Chester County.....		1		Bayfield County.....	4	31	1
Grayson County.....	2		3	Chippewa County.....	5		
Pittsylvania County.....		1		Clark County.....	2	29	16
Roanoke County.....			1	Dane County.....		12	
Rockingham County.....		1		Douglas County.....	46	90	104
Washington County.....	1			Eau Claire County.....			5
Wise County.....		10	10	Forest County.....	1		
Total.....	3	13	15	Green County.....			
Washington:				Jackson County.....			1
Chelan County.....	2	5	7	Lafayette County.....		1	
Clark County.....		3	12	Lincoln County.....		1	9
Columbia County.....		4	8	Marinette County.....			2
Douglas County.....			2	Milwaukee County.....	5	2	
Ferry County.....	3			Monroe County.....	5	2	
Grant County.....			4	Oneida County.....			3
Grays Harbor County.....	1		3	Outagamie County.....			1
King County—				Ozaukee County.....		1	
Seattle.....		1	16	Peplin County.....			1
Scattering.....	2	2	15	Price County.....	1		
Lewis County.....		1	1	Racine County.....		3	1
Lincoln County.....	1	1	1	Rusk County.....	3	7	2
Pend Oreille County.....		7		Sauk County.....			1
Pierce County.....	1		1	Sawyer County.....	23		3
Skagit County.....		1		Shawano County.....			5
Skamish County.....	3	16		Walworth County.....			1
Spokane County—				Washburn County.....	2	3	2
Spokane.....	3	17	37	Washington County.....	1	9	2
Scattering.....		2	9	Waukesha County.....	1		
Walla Walla County.....	2	2		Winnebago County.....		1	
Whatcom County.....		6	4	Wood County.....			1
Yakima County.....		2	1	Total.....	109	207	171
Total.....	18	70	121	Wyoming:			
West Virginia:				Carbon County.....		1	1
Cabell County.....			1	Hot Springs County.....	3		
Harrison County.....		1	3	Natrona County.....		1	3
				Sheridan County.....	1	1	
				Total.....	4	3	4

TYPHOID FEVER.

Alabama:				Alabama—Continued.			
Barbour County.....	3			Macon County.....	1		
Bibb County.....		1		Madison County.....	2	14	
Bullock County.....		1		Marengo County.....	2	1	1
Butler County.....	1			Mobile County.....	3	3	
Calhoun County.....		2	1	Montgomery County.....	1		
Colbert County.....			1	Pickens County.....		2	
Cosa County.....	1			Pike County.....	5	2	3
Covington County.....	1	5	5	Randolph County.....		1	
Crenshaw County.....			2	Sumter County.....	1		1
Dallas County.....	1	1		Talladega County.....	3	3	1
Escambia County.....		1		Tallahassee County.....	1		
Henry County.....	4			Tuscaloosa County.....		9	
Houston County.....		1	4	Walker County.....	3	5	
Jackson County.....		2		Washington County.....	1		
Jefferson County.....	13	15	8	Winston County.....			1
Lauderdale County.....		5	2	Total.....	49	74	30
Lowndes County.....	1						

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Arkansas:				California—Continued.			
Benton County.....	5	3	1	Stanislaus County.....		1	1
Bradley County.....			20	Tehama County.....	1		
Calhoun County.....	7	1		Tulare County.....	3	2	
Cleveland County.....			1	Tuolumne County.....	1	1	
Cross County.....			1	Ventura County.....	1		
Desha County.....		1		Yuba County.....	1		
Drew County.....		2	6	Total.....	109	94	53
Faulkner County.....			2	Colorado:			
Franklin County.....	1	2		Adams County.....	2	2	
Garland County.....	1	1		Archuleta County.....	10	2	
Greene County.....	2	1	1	Bent County.....	1		2
Hempstead County.....	1	2		Boulder County.....	4	1	1
Hot Spring County.....	2		1	Chafee County.....	2		1
Izard County.....	2	7	7	Delta County.....	5		
Lafayette County.....		1		Denver County.....	21		1
Lawrence County.....		2		El Paso County.....		2	
Marion County.....	2			Fremont County.....	4	5	
Monroe County.....	1			Garfield County.....	1		
Montgomery County.....			3	Huerfano County.....	4	1	
Phillips County.....	1	1		Jefferson County.....	2		
Pike County.....	2	1	4	Kit Carson County.....	1		
Poinsett County.....	1			Lake County.....	1	1	
Pulaski County.....	3	8	1	La Plata County.....	6	1	
St. Francis County.....	4	3		Larimer County.....	1		5
Saline County.....		2		Las Animas County.....	15	1	2
Scott County.....	4	2	3	Logan County.....	4		
Sebastian County.....	1	6		Mesa County.....		4	
Sharp County.....	8	5	4	Monteruma County.....	3	5	
Union County.....	2	1	9	Montrose County.....	3	8	1
Van Buren County.....		4		Otero County.....	3	6	
Washington County.....		10	27	Prowers County.....	1		
White County.....		3		Pueblo County.....	19	5	5
Total.....	50	70	91	Rio Grande County.....			10
California:				Teller County.....	1		
Alameda County.....	5	3	1	Weld County.....	4	8	1
Butte County.....	1	2	1	Total.....	120	53	29
Colusa County.....	2	5	4	Connecticut:			
El Dorado County.....	1	1		Fairfield County.....	10	7	2
Fresno County.....	3	2	3	Hartford County.....	11	4	2
Humboldt County.....		2		Litchfield County.....		1	1
Imperial County.....		1	1	Middlesex County.....	3		
Kern County.....		2		New Haven County—			
Kings County.....	2		1	New Haven.....	13	2	3
Lake County.....	1	1	3	Scattering.....		1	3
Los Angeles County—				New London County.....	3	3	3
Los Angeles.....	17	15	9	Windham County.....	1		
Scattering.....	19	7	4	Total.....	41	18	14
Madera County.....	2		1	Delaware:			
Marin County.....				Kent County.....	4	2	2
Mendocino County.....	2			New Castle County.....	2	2	
Monterey County.....		3	1	Sussex County.....	3	5	2
Napa County.....	2	1		Total.....	9	9	4
Orange County.....	5	3	2	District of Columbia.....	20	9	10
Placer County.....		1		Florida:			
Plumas County.....		2		Alachua County.....	1		1
Riverside County.....	5	2		Baker County.....	5		
Sacramento County.....	2	5	3	Brevard County.....			1
San Benito County.....			1	Clay County.....	1	5	
San Bernardino County.....	5	3	2	Columbia County.....	1	2	3
San Diego County.....	4	1	2	Dade County.....	3	2	
San Francisco County.....	10	9	4	Dixie County.....	1		
San Joaquin County.....	4	5	2	Duval County.....	3	4	
San Luis Obispo County.....	1			Escambia County.....		2	2
San Mateo County.....	4			Gadsden County.....		3	1
Santa Barbara County.....				Hardee County.....	1		
Santa Clara County.....		2	1	Hernando County.....			1
Santa Cruz County.....	4	2	1				
Shasta County.....		2	1				
Siakiyon County.....	1	2					
Solano County.....			1				
Sonoma County.....			3				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Florida—Continued.				Illinois—Continued.			
Hillsborough County.....	2	6	2	Jo Daviess County.....	1		1
Jackson County.....		3	1	Johnson County.....			2
Lafayette County.....		1		Kane County.....	2		
Lee County.....	1	1	1	Kankakee County.....	1		1
Liberty County.....	1			Kendall County.....	3	1	
Madison County.....			3	Knox County.....	2	1	
Manatee County.....	1	1	1	Lake County.....	4		3
Monroe County.....			2	La Salle County.....	2	2	1
Okaloosa County.....		1		Lawrence County.....	10	1	
Orange County.....	1	1		Lee County.....			1
Palm Beach County.....	1	1		Livingston County.....		1	1
Pasco County.....		1		Logan County.....	2		1
Pinellas County.....			1	McDonough County.....		1	4
Polk County.....		5	3	McLean County.....	2	2	3
Putman County.....	3		1	Macon County.....	3	1	1
St. Johns County.....			1	Macoupin County.....	1	2	
Santa Rosa County.....	1		1	Madison County.....	11	2	2
Seminole County.....	2		1	Marion County.....	5	7	3
Suwanee County.....		1	3	Marshall County.....		3	1
Union County.....	2	1		Mason County.....	1		
Walton County.....			1	Massac County.....		1	1
Total.....	32	39	31	Menard County.....	1	1	
Idaho:				Mercer County.....	6	3	
Ada County.....	4		1	Monroe County.....	2		1
Bannock County.....	1			Montgomery County.....	5	3	
Bingham County.....		1	1	Morgan County.....	8	6	4
Canyon County.....	12	2	4	Moultrie County.....	1	1	
Cassia County.....	1	1		Ogle County.....	4		5
Clearwater County.....		1		Peoria County.....	3		1
Franklin County.....	2			Piatt County.....	1		
Gooding County.....	1			Pike County.....		1	1
Latah County.....	2	3		Pope County.....			1
Madison County.....			1	Putnam County.....		2	
Nez Perce County.....			1	Randolph County.....	6	1	2
Owyhee County.....			1	Richardson County.....	10	2	2
Twin Falls County.....	2	2		Rock Island County.....	2	3	
Total.....	25	11	9	St. Clair County.....	5	2	1
Illinois:				Saline County.....	3	6	
Adams County.....	2	5		Sangamon County.....	10	6	3
Alexander County.....	1	1		Shelby County.....	3	6	
Bond County.....	9	4	1	Tazewell County.....	1	2	1
Boone County.....	1		1	Union County.....	8	2	1
Bureau County.....	2			Vermilion County.....	3	5	1
Calhoun County.....			1	Wabash County.....	2	2	
Champaign County.....	5	1	1	Warren County.....		1	
Christian County.....	3	2		Washington County.....	2	1	
Clark County.....	2	1		Wayne County.....	3	3	
Clay County.....	7	4		White County.....	2		1
Clinton County.....	1	1		Whiteside County.....	1		
Coles County.....	2	2	1	Will County.....	4	3	
Cook County.....	27	17	7	Williamson County.....	9	3	2
Crawford County.....	1	2	1	Winnebago County.....		1	1
Cumberland County.....	1	1		Woodford County.....	1		
De Kalb County.....	2		1	Total.....	273	173	103
De Witt County.....	1		1	Indiana:			
Douglas County.....	10	4	1	Adams County.....			1
Du Page County.....		1		Allen County.....	8	3	41
Edgar County.....		2	2	Benton County.....	1		
Edwards County.....	1			Blackford County.....	1		
Effingham County.....	2	3		Cass County.....	2	1	
Fayette County.....	2	12	6	Clay County.....	3	2	1
Franklin County.....	11	11	5	Clinton County.....	2	1	
Gallatin County.....	3	4		Crawford County.....		1	
Greene County.....			2	Dearborn County.....	1		
Grundy County.....			1	Deleware County.....	6		
Hamilton County.....	4		1	Dubois County.....	1		
Hancock County.....	1	1	1	Elkhart County.....	6	5	
Hardin County.....	2			Fountain County.....			3
Iroquois County.....	1		1	Fulton County.....	2		
Jackson County.....	7	1	6	Grant County.....	2	1	
Jefferson County.....	5	2	8	Greene County.....			1
				Hamilton County.....	3		

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Indiana—Continued.				Kansas—Continued.			
Hancock County.....	5			Johnson County.....	3	1	
Harrison County.....	2			Kingman County.....	1	5	
Henry County.....	2			Lafayette County.....	1	2	3
Howard County.....	2			Linn County.....	1	1	
Huntington County.....	1	1		Lyons County.....	1	4	
Jay County.....			1	Marion County.....	3	1	
Jefferson County.....		3		Marshall County.....	1	2	
Kosciusko County.....	4			Meade County.....	1	1	
Lake County.....	2	1	3	Miami County.....	3	1	
Laporte County.....	4	1		Montgomery County.....	4	3	1
Lawrence County.....	1	2	1	Morris County.....	1		
Madison County.....	1	1	1	Neosho County.....			1
Marion County.....	4	2	2	Republic County.....			1
Marshall County.....		1		Russell County.....	1	1	
Marion County.....		3	1	Sedgwick County.....	3	5	
Monroe County.....	2			Shawnee County.....	2	3	
Morgan County.....	4			Stafford County.....	2		
Montgomery County.....			2	Sumner County.....	1		
Ohio County.....			1	Thomas County.....	1		
Orange County.....	2		1	Wabunsee County.....		1	
Owen County.....	1	1		Washington County.....	4	1	
Parks County.....	1	2		Wilson County.....	1		
Pike County.....	1		2	Wyandotte County.....	2	3	
Putnam County.....	1	2		Total	74	48	15
Randolph County.....			1	Louisiana:			
Ripley County.....	1	1	1	Acadia Parish.....		2	
Rush County.....			1	Allen Parish.....	1		
St. Joseph County.....	1	1		Ascension Parish.....			1
Shelby County.....	1	1		Assumption Parish.....	1	1	1
Steuben County.....	2	1		Avoyelles Parish.....	2		
Switzerland County.....	1	1		Beauregard Parish.....	3		3
Tippecanoe County.....	5	3		Bienville Parish.....	2	4	2
Tipson County.....	4	2		Caddo Parish.....	1	6	2
Union County.....	4	1		Calcasieu Parish.....	1	6	1
Vigo County.....	6	2	2	Caldwell Parish.....			
Wabash County.....	2	1		Catahoula Parish.....		2	
White County.....	1	2		Claiborne Parish.....	2		2
Total	100	49	67	De Soto Parish.....			3
Iowa:				East Baton Rouge Parish.....		1	2
Blackhawk County.....	1			East Carroll Parish.....	1		
Buena Vista County.....		1		Franklin Parish.....		3	
Cerro Gordo County.....		1		Iberia Parish.....		1	1
Davis County.....		1		Iberville Parish.....	2	2	2
Ida County.....	1	1		Jefferson Parish.....	2		7
Mahaska County.....		4	1	Jefferson Davis Parish.....	1		
Poweshiek County.....		1		Lafourche Parish.....	5	8	
Total	2	9	1	La Salle Parish.....	1		
Kansas:				Lincoln Parish.....			1
Allen County.....	3	2		Morehouse Parish.....			2
Anderson County.....	2			Natchitoches Parish.....	1	4	
Atchison County.....		1	1	Orleans Parish.....	11	13	24
Barber County.....	1			Ouachita Parish.....		2	1
Barton County.....		2		Pointe Coupee Parish.....			2
Bourbon County.....	2			Rapides Parish.....	1	6	5
Butler County.....		1	2	Richland Parish.....	2		
Chase County.....	1			Sabine Parish.....			2
Cherokee County.....	1	1		St. James Parish.....	1		
Clay County.....				St. John the Baptist Parish.....	2		1
Coffey County.....	2	1		St. Landry Parish.....	1		3
Cowley County.....	2		1	St. Martin Parish.....	1		
Crawford County.....	11	2	1	Tangipahoa Parish.....		2	17
Douglas County.....	1			Tensas Parish.....		1	4
Edwards County.....	1			Terrebonne Parish.....			1
Elk County.....	1			Union Parish.....	3		3
Finney County.....	5			Vermillion Parish.....		2	1
Ford County.....	3			Vernon Parish.....	2		2
Franklin County.....	1			Washington Parish.....	15	4	2
Gove County.....	1	1	1	Webster Parish.....			2
Greenwood County.....	1	2	2	West Carroll Parish.....	1		
Jefferson County.....			1	Total	65	70	101
Jewell County.....	2						

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Maine:				Michigan—Continued.			
Androscoggin County.....	2	1	1	Chippewa County.....	2	1	.....
Aroostook County.....	15	5	4	Clare County.....	.....	1	.....
Cumberland County.....	4	3	2	Dickinson County.....	.....	.....	1
Franklin County.....	1	.....	1	Eaton County.....	.....	.....	3
Kennebec County.....	2	2	1	Genesee County.....	3	8	4
Lincoln County.....	1	3	.....	Gogebic County.....	3	2	3
Oxford County.....	.....	.....	2	Grand Traverse County	1	1	.....
Penobscot County.....	5	2	1	Gratiot County.....	2	6	3
Piscataquis County.....	.....	2	.....	Hillsdale County.....	3	3	.....
Somerset County.....	1	.....	1	Houghton County.....	2	.....	1
Washington County.....	1	.....	.....	Huron County.....	4	.....	1
York County.....	.....	.....	1	Ingham County.....	3	8	5
Total.....	32	18	14	Ionia County.....	.....	1	3
Maryland:				Isabella County.....	2	1	.....
Allegany County.....	10	10	2	Jackson County.....	5	4	6
Anne Arundel County.....	5	2	1	Kalamazoo County.....	9	2	.....
Baltimore City.....	28	17	16	Kalkaska County.....	.....	1	3
Baltimore County.....	10	6	5	Kent County.....	2	1	1
Calvert County.....	3	1	.....	Lapeer County.....	2	1	.....
Caroline County.....	11	4	4	Lenawee County.....	5	9	1
Carroll County.....	.....	3	1	Livingston County.....	.....	1	.....
Cecil County—				Macomb County.....	2	5	.....
North East.....	11	3	.....	Manistee County.....	2	.....	1
Scattering.....	12	4	.....	Marquette County.....	1	.....	1
Charles County.....	4	2	.....	Mason County.....	.....	1	.....
Dorchester County.....	11	13	2	Mecosta County.....	.....	4	4
Frederick County.....	6	1	.....	Monroe County.....	3	.....	1
Garrett County.....	6	9	4	Montcalm County.....	.....	2	1
Harford County.....	2	3	.....	Montmorency County.....	.....	1	.....
Howard County.....	1	.....	.....	Muskegon County.....	14	1	1
Kent County.....	6	4	.....	Newaygo County.....	.....	.....	1
Montgomery County.....	3	3	.....	Oakland County.....	4	2	.....
Prince Georges County.....	9	4	1	Ogemaw County.....	.....	1	.....
Queen Annes County.....	12	3	2	Ontonagon County.....	.....	1	.....
St. Marys County.....	3	2	1	Otsego County.....	.....	1	.....
Somerset County.....	7	13	3	Ottawa County.....	3	.....	1
Talbot County.....	10	5	2	Presque Isle County.....	2	.....	.....
Washington County—				Saginaw County.....	5	4	3
Hagerstown.....	11	.....	.....	St. Clair County.....	2	.....	1
Scattering.....	10	4	.....	St. Joseph County.....	.....	.....	4
Wicomico County.....	7	7	1	Sanilac County.....	.....	.....	1
Worcester County.....	4	2	2	Shiawassee County.....	3	1	.....
State institutions.....	6	.....	2	Tuscola County.....	4	2	1
Total.....	217	125	49	Van Buren County.....	3	.....	.....
Massachusetts:				Washtenaw County.....	8	1	1
Berkshire County.....	5	4	3	Wayne County.....	42	21	19
Bristol County.....	7	14	3	Wexford County.....	2	.....	.....
Essex County.....	5	12	4	Total.....	173	117	76
Hampden County.....	2	2	.....	Minnesota:			
Hampshire County.....	.....	3	1	Aitkin County.....	.....	1	.....
Middlesex County.....	23	11	6	Becker County.....	.....	2	.....
Norfolk County.....	4	5	8	Beltrami County.....	16	1	3
Plymouth County.....	7	5	1	Big Stone County.....	2	.....	.....
Suffolk County—				Brown County.....	.....	1	.....
Boston.....	16	7	5	Carlton County.....	.....	.....	1
Scattering.....	3	1	3	Chippewa County.....	1	.....	.....
Worcester County.....	8	11	5	Chisago County.....	.....	1	.....
Total.....	80	75	39	Clay County.....	1	.....	.....
Michigan:				Clearwater County.....	1	.....	.....
Alcona County.....	4	.....	.....	Freeborn County.....	2	1	.....
Allegan County.....	.....	1	.....	Goodhue County.....	1	1	.....
Antrim County.....	.....	1	.....	Hennepin County.....	5	2	5
Baraga County.....	1	.....	.....	Hubbard County.....	.....	2	1
Barry County.....	1	2	.....	Isanti County.....	1	.....	.....
Bay County.....	11	9	2	Itasca County.....	.....	1	.....
Berrien County.....	4	2	.....	Koochiching County.....	3	2	.....
Calhoun County.....	2	2	2	Lincoln County.....	.....	1	.....
Cass County.....	2	.....	.....	Lyon County.....	1	.....	.....
Cheboygan County.....	.....	1	.....	McLeod County.....	1	.....	.....
				Martin County.....	.....	1	.....
				Mower County.....	1	.....	.....
				Olmsted County.....	.....	2	2
				Ottertail County.....	3	4	1

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Minnesota—Continued.				Mississippi—Continued.			
Pennington County.....		2		Tate County.....	3		4
Pipestone County.....	6			Tippah County.....	4	2	2
Polk County.....	1	1		Tishomingo County.....	4	3	
Pope County.....	1		1	Tunica County.....	4	1	
Ramsey County.....	7	1	1	Union County.....	3	3	
Red Lake County.....			2	Walthall County.....			1
Rice County.....	3	1		Warren County.....	5	2	1
Rock County.....	2			Washington County.....	1	4	2
St. Louis County.....	4	1	1	Wayne County.....			1
Sherburne County.....	1			Webster County.....	1		
Stearns County.....	1	1		Wilkinson County.....	1		
Stevens County.....	2	3		Yalobusha County.....	3		5
Traverse County.....	2			Yazoo County.....	1	2	1
Wabasha County.....	13			Total.....	164	101	69
Wilkin County.....	3						
Winona County.....	3		1	Montana:			
Total.....	89	33	19	Big Horn County.....		2	1
Mississippi:				Blaine County.....		1	1
Adams County.....	2		1	Carbon County.....			1
Alcorn County.....	5			Cascade County.....			2
Amite County.....	1		2	Fergus County.....		1	
Attala County.....	1	1		Flathead County.....	1	1	
Benton County.....	2	2		Hill County.....		2	
Bolivar County.....	14	15	5	Meagher County.....	2		
Calhoun County.....	2	2		Missoula County.....	4	1	
Chickasaw County.....	4	3		Ravalli County.....		1	
Choctaw County.....	2	4		Rosebud County.....	1		
Clay County.....		4		Sanders County.....	1		1
Coahoma County.....	1		3	Silver Bow County.....	1		
Copiah County.....	8		1	Treasure County.....	1		
Covington County.....	1	1		Wheatland County.....	1		
De Soto County.....	4			Yellowstone County.....	3	3	2
Forrest County.....	5	2		Total.....	15	12	8
Franklin County.....			3				
Greene County.....	1		1	Nebraska:			
Hancock County.....	1			Cedar County.....	2		
Harrison County.....			9	Clay County.....		2	
Hinds County.....	3	2	1	Cuming County.....	1		
Holmes County.....	2		2	Dodge County.....			2
Humphreys County.....	2			Douglas County.....		1	4
Issaquena County.....	2			Furnas County.....		2	
Itawamba County.....		1		Gage County.....	2		
Jackson County.....		1	1	Garden County.....			1
Jefferson Davis County.....	1		1	Greeley County.....		1	
Jones County.....	4			Hall County.....			3
Lafayette County.....		4	2	Harlan County.....	1		
Lamar County.....		1		Howard County.....			1
Lauderdale County.....	5			Jefferson County.....	1	2	
Lawrence County.....			1	Kimball County.....			3
Loake County.....	2	1		Lancaster County.....	7	2	
Lee County.....	1		1	Merrick County.....	1		
Leflore County.....	4	6	2	Nemaha County.....	1		
Lincoln County.....	2			Otoe County.....	1		
Lowndes County.....	6	2		Perkins County.....	4		
Marion County.....	1	1		Phelps County.....	2		
Marshall County.....	1	1		Platte County.....	2	1	
Monroe County.....	1	2		Polk County.....	1		
Montgomery County.....	5	1	3	Redwillow County.....	1		
Neshoba County.....		1		Richardson County.....	1		
Newton County.....	2			Thayer County.....		2	
Noxubee County.....		1		Total.....	23	13	14
Oktibbeha County.....	1						
Panola County.....	3	4	3	New Jersey:			
Pearl River County.....	2	1		Atlantic County.....	2	1	
Pike County.....	2	1	2	Bergen County.....	3		
Prentiss County.....	1	1		Burlington County.....	6	1	1
Quitman County.....	1	1	1	Camden County.....	12	8	
Rankin County.....	4	1		Cumberland County.....	3		1
Scott County.....	3	7	1	Essex County.....	46	20	17
Sharkey County.....	7	4	1	Gloucester County.....	3		1
Simpson County.....	3			Hudson County.....		2	5
Sunflower County.....	8	2	1	Mercer County.....	4	2	4
Tallahatchie County.....	3	2	3				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
New Jersey—Continued.				New York—Continued.			
Middlesex County.....	3			St. Lawrence County.....	7	1	
Monmouth County.....	12	9	5	Saratoga County.....	3	3	
Morris County.....		2	2	Schoharie County.....	1		
Passaic County.....	5	1	2	Seneca County.....		1	1
Salem County.....	1	2		Steuben County.....	2	3	2
Sussex County.....	1	82	33	Suffolk County.....	1	3	2
Union County.....	2	1	1	Sullivan County.....	2		1
Warren County.....	1			Tioga County.....	3		1
Total.....	104	131	72	Tompkins County.....	8	3	2
New Mexico:				Ulster County.....	6	2	2
Bernalillo County.....	23	5	3	Warren County.....	1	1	
Chaves County.....	2		1	Washington County.....	1	1	
Colfax County.....	12	16	4	Wayne County.....	3	3	7
Curry County.....	1	1		Westchester County.....	2	3	
Dona Ana County.....	3			Wyoming County.....	1		5
Eddy County.....	1		1	Yates County.....	1		2
Grant County.....	1			Yonkers County.....		3	
Luna County.....		1	1	New York City.....	104	91	49
McKinley County.....	4			Total.....	302	225	158
Mora County.....	6			North Carolina:			
Otero County.....	2	2		Alamance County.....		2	
Quay County.....	1			Ashe County.....	2		1
Rio Arriba County.....	17	1	4	Avery County.....			1
Sandoval County.....	1	1		Beaufort County.....			3
San Miguel County.....	13	5	1	Bertie County.....	2		
Santa Fe County.....	3	6	3	Buncombe County.....	6	2	
Socorro County.....	1	3		Cabarrus County.....	1	1	
Taos County.....	2	2	2	Caldwell County.....	8		
Torrance County.....	1			Camden County.....	1		
Total.....	94	43	20	Carteret County.....	2	2	1
New York:				Catawba County.....	1		1
Albany County.....	9	6	1	Chatham County.....	1		
Allegany County.....	3	3	1	Cherokee County.....		1	
Broome County.....	1		1	Cleveland County.....	1	1	
Cattaraugus County.....	11	7	4	Columbus County.....		1	
Cayuga County.....	2	1	3	Craven County.....			4
Chautauqua County.....	7	5	1	Cumberland County.....		1	
Chemung County.....	2	1		Davidson County.....	6	1	2
Chenango County.....	1	1		Duplin County.....	2		1
Clinton County.....	2	7	4	Durham County.....	5		
Columbia County.....	4	7		Edgecombe County.....	3	2	
Cortland County.....	1	1	1	Forsyth County.....	2	1	1
Dutchess County.....	5	2		Franklin County.....	6		
Erie County—				Gaston County.....	7	2	
Buffalo.....	11	8	5	Granville County.....	1		
Scattering.....	5	5	5	Guilford County.....	6	4	1
Essex County.....		5	3	Halifax County.....	2		
Franklin County.....	10	7	3	Harnett County.....	2	1	
Fulton County.....	1	1		Haywood County.....	1		
Genesee County.....	1			Iredell County.....	5	1	
Greene County.....	1	1	2	Jackson County.....	1		
Hamilton County.....			1	Johnston County.....	3	3	1
Herkimer County.....	6		1	Lee County.....	2		
Jefferson County.....	11	1	1	Lenoir County.....		3	2
Lewis County.....		1		Lincoln County.....	3	1	
Livingston County.....			2	McDowell County.....	1	1	
Madison County.....	3			Mecklenburg County.....	3	1	
Monroe County.....	12	4	13	Mitchell County.....			1
Montgomery County.....		1		Montgomery County.....	3	1	
Nassau County.....	3	2	1	Nash County.....	1		
Niagara County.....	6	2	5	New Hanover County.....	4	3	1
Oneida County.....	1	4	5	Orange County.....	3		
Onondaga County.....	8	4	5	Pasquotank County.....	3	1	1
Ontario County.....	2	1	6	Pender County.....		1	
Oranget County.....	8	7	3	Perquimans County.....	1		2
Orleans County.....	4	3	1	Person County.....		1	
Oswego County.....	4	5	1	Pitt County.....	3		1
Otsego County.....	2	3	2	Randolph County.....	2	1	
Putnam County.....	4			Richmond County.....	1		
Rensselaer County.....	4	8	3	Robeson County.....		3	1
Rockland County.....	1			Rockingham County.....		1	1
				Rowan County.....	1	4	
				Rutherford County.....	2	1	

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
North Carolina—Continued.				Ohio—Continued.			
Sampson County.....	4			Hardin County.....	4	1	
Stanly County.....			1	Harrison County.....		3	
Stokes County.....	2			Henry County.....	3	1	1
Surry County.....	1	1		Hocking County.....	1		
Union County.....	1			Holmes County.....		2	2
Wake County.....	3	1		Jefferson County.....	3	1	1
Warren County.....	1			Knox County.....	1	1	
Watauga County.....	1			Lake County.....	1		
Wayne County.....	5	4		Lawrence County.....		1	
Wilkes County.....	2	1	1	Licking County.....	11	2	
Yancey County.....	1			Logan County.....	1		
Total.....	131	56	29	Lorain County.....	5	4	
North Dakota:				Lucas County.....	8	10	4
Adams County.....	3			Madison County.....		1	
Bowman County.....	1			Mahoning County.....	11	2	
Burke County.....		2		Marion County.....	2	1	
Burleigh County.....	2	1	1	Medina County.....		1	
Cass County.....	2	1		Meigs County.....	3	1	
Cavalier County.....	4			Mercer County.....	3	3	2
Dunn County.....			6	Miami County.....	10	16	7
Emmons County.....		1		Monroe County.....		3	
Grand Forks County.....	1			Montgomery County.....	5	7	2
Griggs County.....	4		1	Morgan County.....	1	1	
La Moure County.....	3			Morrow County.....	1	1	
McHenry County.....	2	1		Muskingum County.....	16	1	
Morton County.....		1		Noble County.....	3		2
Nelson County.....	1	2		Paulding County.....	2		
Pembina County.....		1		Perry County.....	10	4	1
Ramsey County.....		2	1	Pickaway County.....	4	2	
Ransom County.....		2		Pike County.....	1		
Renville County.....		1		Portage County.....	5	2	1
Richland County.....	4			Putnam County.....	6	1	
Rolette County.....	1		1	Richland County.....	1		
Sheridan County.....		1	1	Ross County.....	7	3	2
Stark County.....	1		1	Sandusky County.....	2	5	
Stutsman County.....		7		Scioto County.....	10	3	2
Towner County.....		2		Seneca County.....	5	4	1
Walsh County.....	2			Shelby County.....			
Ward County.....		2		Stark County.....	13	2	2
Total.....	31	26	13	Summit County.....	8	3	4
Ohio:				Trumbull County.....	7	4	2
Adams County.....	4			Tuscarawas County.....	2	2	1
Allen County.....	3	2		Union County.....	2	1	
Ashland County.....	5	3	1	Van Wert County.....	7	2	7
Ashtabula County.....	7	1	6	Warren County.....	1	2	
Athens County.....	7	2	2	Washington County.....	2		
Auglaize County.....	7	3	2	Wayne County.....	4		
Baldmont County.....	2	1	1	Williams County.....	1	3	2
Brown County.....	7	1		Wood County.....	6	1	
Butler County.....	6	1		Wyandot County.....	1		
Carrroll County.....	1			Total.....	330	163	90
Champaign County.....	1	1	1	Oklahoma:			
Clark County.....	2	3		Blaine County.....	1		
Clermont County.....	1			Canadian County.....	2		
Clinton County.....	4			Cimarron County.....	2		
Columbiana County.....	7	6	3	Custer County.....	7	3	
Coshocton County.....	5	2	1	Garvin County.....			3
Crawford County.....	1		9	Grady County.....	2		
Cuyahoga County.....	27	9	8	Jackson County.....		1	
Darke County.....	6	3		Mayes County.....	4	3	
Delaware County.....	3	2		McIntosh County.....			1
Erie County.....	4	1	5	Ottawa County.....	4		
Fayette County.....	2			Pontotoc County.....		3	1
Franklin County.....	7	4		Pottawatomie County.....	4		1
Fulton County.....	2	1		Seminole County.....			6
Gallia County.....	2			Tillman County.....		7	
Greene County.....	1			Total.....	26	17	12
Guernsey County.....	6	3	1	Oregon:			
Hamilton County.....	7	6	4	Benton County.....	2		
Hancock County.....	1	1		Clackamas County.....	1	1	
				Coos County.....	1		3

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Oregon—Continued.				Rhode Island:			
Jackson County.....	1			Bristol County.....	1		
Lane County.....	2	1	1	Newport County.....			1
Linn County.....	4	4		Providence County.....	4	10	3
Multnomah County—				Washington County.....	1	1	2
Portland.....	23	9	1	Total.....	6	11	6
Scattering.....	2			South Carolina:			
Umatilla County.....	2	7	10	Anderson County.....	3		
Union County.....	1	2		Barnwell County.....			2
Wallowa County.....	4	1	3	Charleston County.....		1	
Wasco County.....	1			Cherokee County.....		1	1
Total.....	44	25	18	Chester County.....			
Pennsylvania:				Chesterfield County.....			1
Adams County.....	2	1	3	Clarendon County.....	1		
Allegheny County.....	40	11	7	Darlington County.....	2		
Armstrong County.....	11	16	12	Greenville County.....		2	
Beaver County.....	8	3	3	Greenwood County.....	7	7	1
Bedford County.....	3	3	1	Laurens County.....	1		
Berks County.....	6	1	5	Nowberry County.....	2		
Blair County.....	6	3		Oconee County.....	1		
Bradford County.....	1	1	2	Orangeburg County.....		1	1
Bucks County.....	6	1	1	Richland County.....	4	2	
Butler County.....	7	3	2	Spartanburg County.....	4		
Cambria County.....	7	3	7	York County.....		3	
Center County.....	1		3	Total.....	25	17	6
Chester County.....	16	10	3	South Dakota:			
Clarion County.....	1	1	1	Bon Homme County.....	1		
Clearfield County.....	5	8	24	Butte County.....	1		
Clinton County.....	1	1		Codington County.....	1	1	
Columbia County.....	4	1	1	Davison County.....	1		
Crawford County.....	1	3		Day County.....	2	2	
Cumberland County.....	3	6	2	Hughes County.....	1		
Dauphin County.....	4	4	3	Jackson County.....	1	1	
Delaware County.....	6	5	3	Jerauld County.....		1	
Elk County.....	1	2		Lake County.....	1		2
Erie County.....	23	6	3	Meade County.....	2		
Fayette County.....	32	14	1	Minnehaha County.....	3	1	
Forest County.....	1		1	Roberts County.....	8		
Franklin County.....	6	1	3	Spink County.....	3	7	
Fulton County.....	2	4		Tripp County.....		1	
Greene County.....	5		1	Walworth County.....		1	
Huntingdon County.....	9	18		Yankton County.....	2	1	
Indiana County.....	12		10	Ziebach County.....	2		6
Jefferson County.....	4	2	2	Total.....	29	16	8
Junata County.....	5	1	1	Vermont:			
Lackawanna County.....		3	2	Chittenden County.....		1	
Lancaster County.....	14	6	6	Franklin County.....	2		
Lawrence County.....	14	2	1	Orleans County.....	1		
Lebanon County.....	11	37	5	Washington County.....		1	
Lehigh County.....	7	8		Windham County.....	1	2	
Luzerne County.....	6	5		Windsor County.....	2	1	4
Lycoming County.....	15	4	1	Total.....	6	5	4
McKean County.....	4	1		Virginia:			
Mercer County.....	4	2	2	Accomac County.....	3	3	2
Millin County.....	4			Albemarle County.....	1		1
Monroe County.....		1	1	Alleghany County.....		4	2
Montgomery County.....	6	4		Amherst County.....	1		
Northampton County.....	4	6	3	Appomattox County.....	1		
Northumberland County.....				Augusta County.....	16		
County.....	3	5	2	Bath County.....		5	1
Perry County.....	2	3		Bedford County.....	1		
Philadelphia County.....	49	30	17	Botetourt County.....	2	1	
Schuykill County.....	2	4	3	Brunswick County.....	2		
Snyder County.....	3	3		Buchanan County.....	3	4	4
Somerset County.....	18	7	4	Buckingham County.....	3		
Susquehanna County.....		1		Campbell County.....		1	
Tioga County.....	2			Caroline County.....	6	1	1
Union County.....	1		1	Charles City County.....			1
Venango County.....	1		2	Chesterfield County.....	1		
Warren County.....	1	3		Clarke County.....	4		
Washington County.....	37	19	4				
Wayne County.....	1		1				
Westmoreland County.....	17	13	14				
York County.....	10	14	6				
Total.....	473	313	182				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Virginia—Continued.				Washington—Continued.			
Culpeper County.....	5	1	1	Whitman County—			
Dickenson County.....	2	2	1	Pullman.....	60		
Elizabeth City County.....			1	Scattering.....		4	
Essex County.....	4			Yakima County.....	22	7	3
Fairfax County.....	1			Total.....	156	52	25
Fauquier County.....	2	1		West Virginia:			
Floyd County.....	2			Barbour County.....	1		1
Frederick County.....	1			Berkeley County.....	4	1	
Giles County.....		2		Boone County.....	4	2	
Gloucester County.....	2			Braxton County.....		2	1
Grayson County.....			1	Brooke County.....		1	4
Greene County.....	2			Cabell County.....	9	5	3
Greensville County.....	1	1	1	Clay County.....			1
Halifax County.....			1	Grant County.....	3	1	
Hanover County.....	5	2	4	Hampshire County.....	3		
Henrico County.....	13	3		Hancock County.....		1	1
Henry County.....	3	1	1	Hardy County.....	1		
Highland County.....	1	1		Harrison County.....			2
Isle of Wight County.....	5		1	Jackson County.....	1	1	
King and Queen County.....	4		1	Jefferson County.....		1	
King William County.....	1	1	1	Kanawha County.....	9	5	7
Lee County.....	1	1	2	Lewis County.....	2	1	
Loudoun County.....		1		Lincoln County.....	6	1	
Ladison County.....	5	2		Legan County.....	11	3	
Mathews County.....	3	1		McDowell County.....	2		1
Mecklenburg County.....	3	5		Marion County.....	10	11	11
Middlesex County.....	3			Marshall County.....	3	1	
Montgomery County.....	2	2		Mason County.....	1		
Nelson County.....	2	1		Mercer County.....	14	7	2
Norfolk County.....	8			Mineral County.....	6		
Northampton County.....			1	Mingo County.....	7	11	2
Northway County.....	5			Monongalia County.....	12	1	
Powhatan County.....		1		Monroe County.....	5		
Prince Edward County.....		1		Nicholas County.....	11	1	3
Prince William County.....			2	Ohio County.....	2	1	6
Pulaski County.....	3	4		Pendleton County.....	1		3
Richmond County.....	5			Preston County.....	3	8	
Rockbridge County.....	1		2	Raleigh County.....	15	3	
Rockingham County.....			2	Randolph County.....	3	3	2
Russell County.....	23	12	1	Ritchie County.....		1	1
Scott County.....	1	3		Roane County.....	3	5	1
Shenandoah County.....	1	2	1	Summers County.....	2		
Southampton County.....	4	1		Taylor County.....	1		
Surry County.....	2			Tucker County.....	1		
Tazewell County.....	6			Upshur County.....	3	4	
Warren County.....	2			Webster County.....	1	1	1
Washington County.....	5	2		Wood County.....	1	1	1
Wise County.....	2	3		Wyoming County.....	2		
Wythe County.....	2	1	2	Total.....	168	84	54
Total.....	184	77	39	Wisconsin:			
Washington:				Ashland County.....	1	1	
Asotin County.....	3			Bayfield County.....	1	1	
Chelan County.....	11	12	1	Brown County.....	3	1	1
Clarke County.....	4		2	Calumet County.....	1	1	
Columbia County.....	2	2		Chippewau County.....		2	
Cowlitz County.....	1			Crawford County.....	2		
Douglas County.....	10			Dane County.....			2
Franklin County.....			1	Door County.....		1	
Garfield County.....	2	1		Douglas County.....	3	1	1
Grays Harbor County.....	2			Forest County.....		1	
King County.....	15	11	6	Green County.....		1	
Kitsap County.....			1	Iowa County.....	1		
Klickitat County.....	3	1	1	Iron County.....	3	3	3
Lewis County.....			1	Jackson County.....	1		
Lincoln County.....	1	1	1	Jefferson County.....		2	
Okanogan County.....	2		1	Kenosha County.....	3	1	
Pacific County.....	1	2	2	La Crosse County.....		3	2
Pierce County.....			2	Lanade County.....		5	
Skagit County.....	1	2	1	Lincoln County.....	1	1	
Snohomish County.....	1	5	4	Manitowoc County.....		5	3
Spokane County.....	4	5	4	Marathon County.....	1	1	1
Stevens County.....	2			Marquette County.....	2	4	2
Thurston County.....	1	1					
Walla Walla County.....	8	1	1				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

TYPHOID FEVER—Continued.

Place.	New cases reported.			Place.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Wisconsin—Continued.				Wyoming:			
Milwaukee County.....	6		3	Albany County.....	1		
Monroe County.....	1			Campbell County.....		2	
Oneida County.....	3	3		Carbon County.....	1		
Outagamie County.....	2			Hot Springs County.....	4	1	
Portage County.....	1			Johnson County.....	1	1	
Racine County.....	1	2	1	Laramie County.....	1		
Rock County.....	1			Lincoln County.....	1		
Rusk County.....	1		1	Park County.....	3	1	
Sauk County.....	1			Sheridan County.....	1	1	
Sawyer County.....			1	Sweetwater County.....		1	
Sheboygan County.....	5		2	Uinta County.....	1		
Trempealeau County.....		1					
Vernon County.....	1	2		Total.....	14	7	
Washington County.....	1						
Winnebago County.....	1						
Total.....	48	43	23				

SUMMARY OF DISEASES.

State and disease.	New cases reported.			State and disease.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Alabama:				Arkansas—Continued.			
Cancer.....	1	6	1	Tuberculosis (all forms)..	55	101	71
Chicken pox.....	5	40	24	Typhoid fever.....	50	70	91
Dengue.....	323	126	17	Whooping cough.....	19	29	55
Diphtheria.....	174	200	94	California:			
Dysentery.....	1	2		Anthrax.....		2	
German measles.....	1	2		Botulism.....			4
Hookworm disease.....		274	62	Cerebrospinal meningitis (epidemic).....	7		14
Influenza.....	180	281	494	Chicken pox.....	164	482	432
Malaria.....	192	133	157	Dengue.....	1	1	1
Measles.....	5	3	1	Diphtheria.....	785	1,189	784
Mumps.....	2	1	3	Dysentery.....	9	7	12
Ophthalmia neonatorum.....	1	1	3	Erysipelas.....	33	43	47
Paratyphoid fever.....		1		German measles.....	15	11	13
Pellagra.....	10	14	1	Hookworm disease.....	2		
Pneumonia (all forms)...	16	57	43	Influenza.....	85	138	104
Poliomyelitis.....	1	2	1	Jaundice.....	5		
Scabies.....		42		Leprosy.....		1	2
Scarlet fever.....	71	43	46	Lethargic encephalitis.....	6	6	10
Smallpox.....		5	1	Malaria.....	30	20	11
Trachoma.....	2	3		Measles.....	64	79	101
Tuberculosis (all forms)...	68	63	42	Mumps.....	116	103	57
Typhoid fever.....	49	74	30	Ophthalmia neonatorum.....	3	3	
Whooping cough.....		10		Paratyphoid fever.....	1	3	1
Arkansas:				Pellagra.....		5	2
Cancer.....			2	Pneumonia (all forms)...	207	440	495
Cerebrospinal meningitis (epidemic).....		2		Poliomyelitis.....	5	3	
Chicken pox.....	15	114	140	Rabies in man.....	1		
Dengue.....	462	35	5	Scarlet fever.....	477	891	581
Diphtheria.....	126	125	67	Smallpox.....	23	66	39
Hookworm disease.....	7	2	1	Tetanus.....	4		4
Influenza.....	35	76	167	Trachoma.....	25	39	10
Malaria.....	371	273	121	Tuberculosis (all forms)...	573	628	559
Measles.....	1	5	10	Typhoid fever.....	109	94	52
Mumps.....		8	5	Typhus fever.....	3	2	1
Ophthalmia neonatorum.....		3		Whooping cough.....	197	257	210
Paratyphoid fever.....			4	Colorado:			
Pellagra.....	25	22	14	Cancer.....	2		1
Pneumonia (all forms)...		1	2	Cerebrospinal meningitis (epidemic).....		2	1
Poliomyelitis.....	1	1		Chicken pox.....	72	85	293
Scarlet fever.....	31	52	24	Diphtheria.....	454	133	292
Smallpox.....		4	4	Erysipelas.....	4	6	8
Trachoma.....	2	10	27				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SUMMARY OF DISEASES—Continued.

State and disease.	New cases reported.			State and disease.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Colorado—Continued.				District of Columbia—Con.			
Impetigo contagiosa.....	3	4	5	Poliomyelitis.....	3	.....	1
Influenza.....	.....	4	4	Scarlet fever.....	56	50	90
Jaundice (infectious).....	.....	.....	2	Tuberculosis (all forms).....	85	107	95
Lethargic encephalitis.....	1	.....	.....	Typhoid fever.....	20	9	10
Measles.....	8	10	23	Whooping cough.....	45	56	133
Mumps.....	20	26	48	Florida:			
Paratyphoid fever.....	6	2	.....	Anthrax.....	.....	1	.....
Pellagra.....	.....	.....	1	Cancer.....	28	56	63
Pneumonia.....	12	22	44	Cerebrospinal meningi- tis (epidemic).....	1	.....	.....
Poliomyelitis.....	3	.....	1	Chicken pox.....	.....	.....	14
Scarlet fever.....	218	166	290	Dengue.....	1,209	227	46
Septic sore throat.....	.....	.....	.....	Diphtheria.....	86	122	107
Smallpox.....	175	147	118	Dysentery.....	12	6	8
Tuberculosis.....	239	124	43	Hookworm disease.....	49	77	75
Vincent's angina.....	2	.....	1	Influenza.....	25	103	134
Typhoid fever.....	120	53	20	Leprosy.....	.....	1	1
Whooping cough.....	32	8	94	Malaria.....	82	124	85
Connecticut:				Measles.....	.....	3	3
Botulism.....	.....	1	.....	Mumps.....	1	1	2
Cerebrospinal meningi- tis (epidemic).....	2	7	4	Ophthalmia neonatorum	2	.....	1
Chicken pox.....	131	238	255	Paratyphoid fever.....	.....	3	.....
Conjunctivitis (infec- tious).....	1	1	2	Pellagra.....	15	11	13
Diphtheria.....	351	391	370	Pneumonia (all forms).....	31	58	91
Dysentery (amebic).....	.....	2	1	Poliomyelitis.....	1	2	1
Dysentery (bacillary).....	3	1	.....	Scarlet fever.....	3	6	4
German measles.....	2	6	8	Smallpox.....	11	3	17
Hookworm disease.....	18	24	58	Tetanus.....	.....	8	8
Influenza.....	1	.....	.....	Trachoma.....	12	4	.....
Leprosy.....	1	.....	.....	Trichinosis.....	.....	1	5
Lethargic encephalitis.....	16	28	.....	Tuberculosis (all forms).....	79	131	116
Malaria.....	214	645	1,234	Typhoid fever.....	32	39	31
Measles.....	73	75	78	Whooping cough.....	4	4	7
Mumps.....	1	.....	.....	Hawaii:			
Occupational dermatitis	2	1	.....	Cerebrospinal meningi- tis (epidemic).....	2	2	1
Paratyphoid fever.....	71	109	164	Chicken pox.....	5	8	9
Pneumonia (lobar).....	11	5	2	Conjunctivitis (follicu- lar).....	.....	.....	15
Poliomyelitis.....	4	1	3	Diphtheria.....	9	22	23
Septic sore throat.....	10	376	436	Dysentery (amebic).....	.....	1	1
Scarlet fever.....	2	3	2	Hookworm disease.....	.....	1	.....
Smallpox.....	2	3	.....	Influenza.....	11	109	136
Tetanus.....	2	.....	.....	Leprosy.....	3	12	5
Trachoma.....	2	.....	1	Measles.....	169	248	528
Trichinosis.....	1	.....	.....	Plague.....	3	.....	.....
Tuberculosis (pulmo- nary).....	130	147	116	Scarlet fever.....	3	1	3
Tuberculosis (other forms).....	8	12	7	Tetanus.....	1	2	1
Typhoid fever.....	41	18	14	Trachoma.....	37	36	6
Whooping cough.....	221	246	280	Tuberculosis (all forms).....	79	82	59
Delaware:				Typhoid fever.....	10	12	8
Anthrax.....	.....	.....	1	Whooping cough.....	30	14	34
Chicken pox.....	17	31	91	Idaho:			
Diphtheria.....	46	19	9	Chicken pox.....	15	52	85
Erysipelas.....	1	13	76	Conjunctivitis (infec- tious).....	17	.....	.....
Influenza.....	9	5	3	Diphtheria.....	31	32	31
Malaria.....	13	25	167	Lethargic encephalitis.....	.....	.....	3
Measles.....	5	11	22	Measles.....	4	.....	2
Mumps.....	65	67	82	Poliomyelitis.....	2	.....	1
Pneumonia (all forms).....	19	16	12	Scarlet fever.....	12	20	23
Scabies.....	9	9	4	Septic sore throat.....	2	.....	.....
Scarlet fever.....	4	10	16	Smallpox.....	6	22	17
Tuberculosis (all forms).....	.....	.....	.....	Tuberculosis (all forms).....	1	.....	2
Typhoid fever.....	.....	.....	.....	Typhoid fever.....	25	11	9
Whooping cough.....	.....	.....	.....	Whooping cough.....	8	1	1
District of Columbia:				Illinois:			
Cerebrospinal meningi- tis (epidemic).....	.....	.....	1	Actinomycosis.....	.....	1	.....
Chicken pox.....	14	42	115	Cerebrospinal meningi- tis (epidemic).....	6	6	14
Diphtheria.....	76	114	87	Chicken pox.....	546	1,362	1,617
Influenza.....	2	5	9	Diphtheria.....	1,844	2,297	1,945
Leprosy.....	2	2	.....	Dysentery.....	99	115	122
Lethargic encephalitis.....	.....	.....	5	Erysipelas.....	46	46	100
Measles.....	2	8	51	German measles.....	22	38	26
				Influenza.....	53	81	144

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922— Continued.

SUMMARY OF DISEASES—Continued.

State and disease.	New cases reported.			State and disease.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Illinois—Continued.				Louisiana—Continued.			
Lead poisoning.....	7	10	27	Hookworm disease.....	111	90	3
Lethargic encephalitis.....	6	7	7	Influenza.....	34	17	16
Malaria.....	11	22	9	Leprosy.....	1	.....	.....
Measles.....	205	606	921	Lethargic encephalitis.....	2	.....	.....
Mumps.....	114	315	514	Malaria.....	120	105	73
Ophthalmia neonatorum.....	29	41	32	Measles.....	2	2	9
Paratyphoid fever.....	3	5	1	Mumps.....	4	1	2
Pellagra.....	.....	.....	1	Ophthalmia neonatorum.....	.....	1	.....
Pneumonia (all forms).....	736	969	1,659	Pellagra.....	4	13	8
Poliomyelitis.....	20	17	10	Pneumonia (all forms).....	54	87	143
Puerperal septicemia.....	3	2	5	Poliomyelitis.....	4	3	1
Scarlet fever.....	1,143	1,419	1,314	Scarlet fever.....	21	41	39
Septic sore throat.....	13	9	19	Septic sore throat.....	.....	.....	1
Smallpox.....	75	179	132	Smallpox.....	14	21	360
Tetanus.....	3	2	4	Tuberculosis (all forms).....	106	178	207
Trachoma.....	11	4	11	Typhoid fever.....	65	70	101
Tuberculosis (all forms).....	1,429	1,634	1,386	Whooping cough.....	45	28	31
Typhoid fever.....	273	173	103				
Whooping cough.....	563	621	786	Maine:			
Indiana:				Cerebrospinal meningitis (epidemic).....	1	1	1
Cerebrospinal meningitis (epidemic).....	4	.....	.....	Chicken pox.....	22	89	145
Diphtheria.....	776	934	765	Diphtheria.....	49	120	59
Influenza.....	7	40	27	German measles.....	2	.....	.....
Measles.....	55	206	572	Influenza.....	4	8	29
Pneumonia (all forms).....	17	23	56	Measles.....	9	52	63
Poliomyelitis.....	2	2	1	Mumps.....	14	.....	11
Scarlet fever.....	429	481	464	Pneumonia (all forms).....	13	43	86
Smallpox.....	38	49	82	Poliomyelitis.....	4	3	3
Tuberculosis (all forms).....	60	89	97	Scarlet fever.....	91	134	163
Typhoid fever.....	100	49	67	Septic sore throat.....	1	.....	1
				Smallpox.....	.....	1	.....
Iowa:				Tetanus.....	2	.....	.....
Cerebrospinal meningitis (epidemic).....	.....	1	1	Tuberculosis (all forms).....	27	46	11
Diphtheria.....	494	539	357	Typhoid fever.....	32	18	14
Measles.....	3	5	12	Whooping cough.....	54	144	177
Poliomyelitis.....	2	2	3				
Scarlet fever.....	322	448	421	Maryland:			
Smallpox.....	5	13	10	Cerebrospinal meningitis (epidemic).....	1	6	.....
Typhoid fever.....	2	9	1	Chicken pox.....	63	222	532
Kansas:				Dengue.....	1	.....	1
Cancer.....	22	23	24	Diarrhea.....	19	.....	1
Cerebrospinal meningitis (epidemic).....	2	1	1	Diphtheria.....	383	466	440
Chicken pox.....	109	290	386	Dysentery.....	27	7	6
Diphtheria.....	683	686	511	Erysipelas.....	11	9	15
Erysipelas.....	12	5	7	German measles.....	6	15	43
German measles.....	6	2	6	Impetigo contagiosa.....	11	2	.....
Influenza.....	8	12	33	Influenza.....	73	127	270
Lead poisoning.....	1	.....	.....	Lethargic encephalitis.....	5	3	2
Lethargic encephalitis.....	1	.....	.....	Malaria.....	63	15	.....
Malaria.....	1	1	.....	Malta fever.....	.....	1	.....
Measles.....	52	47	101	Measles.....	83	404	474
Mumps.....	25	27	47	Mumps.....	51	129	106
Pellagra.....	.....	3	.....	Ophthalmia neonatorum.....	2	4	6
Pneumonia (all forms).....	54	83	187	Paratyphoid fever.....	6	5	2
Poliomyelitis.....	1	1	1	Pellagra.....	1	1	1
Scarlet fever.....	587	630	578	Pneumonia (all forms).....	175	256	490
Septic sore throat.....	1	.....	.....	Poliomyelitis.....	5	7	4
Smallpox.....	12	21	18	Rat bite fever.....	.....	.....	1
Tetanus.....	.....	1	1	Scabies.....	.....	1	.....
Trachoma.....	1	1	2	Scarlet fever.....	205	307	329
Tuberculosis (all forms).....	137	206	141	Septic sore throat.....	3	9	14
Typhoid fever.....	74	48	15	Smallpox.....	2	.....	.....
Whooping cough.....	49	65	79	Tetanus.....	.....	1	.....
				Trachoma.....	.....	1	.....
Louisiana:				Tuberculosis (all forms).....	188	171	138
Cerebrospinal meningitis (epidemic).....	2	1	4	Typhoid fever.....	217	125	49
Chicken pox.....	.....	5	10	Vincent's angina.....	.....	1	3
Dengue.....	4,252	799	184	Whooping cough.....	158	.....	338
Diphtheria.....	109	182	207				
Dysentery.....	2	2	3	Massachusetts:			
				Anthrax.....	.....	1	.....
				Cerebrospinal meningitis (epidemic).....	7	15	5
				Chicken pox.....	199	661	925
				Conjunctivitis (suppurative).....	31	.....	22

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SUMMARY OF DISEASES—Continued.

State and disease.	New cases reported.			State and disease.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Massachusetts—Continued.				Mississippi—Continued.			
Diphtheria.....	1,026	1,263	1,106	Pneumonia (all forms)...	369	650	1,281
Dysentery.....	1			Poliomyelitis.....		6	
German measles.....	14	14	42	Puerperal septicemia....	48	40	35
Hookworm disease.....	2	14	2	Scarlet fever.....	88	58	70
Influenza.....	27	57	142	Smallpox.....	41	30	95
Lethargic encephalitis...	8	10	4	Trachoma.....	13	16	6
Malaria.....	6	3	1	Tuberculosis (all forms)..	233	184	213
Measles.....	686	1,164	2,619	Typhoid fever.....	164	101	69
Mumps.....	190	449	604	Whooping cough.....	474	587	618
Ophthalmia neonatorum...	50	99	76	Montana:			
Pellagra.....	3	1		Actinomycosis.....			1
Pneumonia (lobar).....	237	445	616	Cancer.....	7	5	1
Poliomyelitis.....	29	21	5	Cerebrospinal meningitis (epidemic).....	1	6	
Rabies.....		2		Chicken pox.....	62	152	101
Scarlet fever.....	554	809	971	Diphtheria.....	25	54	30
Septic sore throat.....	12	7	24	Erysipelas.....	3	1	3
Smallpox.....		1		German measles.....	1		
Tetanus.....	7	2	2	Influenza.....	1	4	2
Trachoma.....	6	13	8	Lethargic encephalitis...		1	
Trichinosis.....	4	1	3	Measles.....	1	7	3
Tuberculosis (all forms)..	533	538	486	Mumps.....		1	1
Typhoid fever.....	80	75	39	Pneumonia (all forms)..	1	10	14
Whooping cough.....	634	1,059	1,258	Poliomyelitis.....	1		
Michigan:				Scabies.....		3	
Chicken pox.....	227	876	1,112	Scarlet fever.....	50	93	94
Diphtheria.....	1,122	1,315	1,087	Septic sore throat.....		2	3
Erysipelas.....	17	26	49	Smallpox.....	42	18	36
Influenza.....		11		Tuberculosis (all forms)..	12	18	54
Malaria.....	3			Typhoid fever.....	15	12	8
Measles.....	59	109	351	Vincent's angina.....		1	1
Mumps.....	36	79	72	Whooping cough.....	8	6	
Pneumonia (all forms)..	306	412	693	Nebraska:			
Poliomyelitis.....	2	1	4	Cerebrospinal meningitis (epidemic).....		3	1
Scarlet fever.....	1,081	1,173	1,407	Chicken pox.....	51	130	178
Septic sore throat.....	20	32	32	Diphtheria.....	290	219	188
Smallpox.....	39	97	233	German measles.....	2		2
Tuberculosis (all forms)..	388	419	374	Influenza.....	5	4	83
Typhoid fever.....	173	117	76	Lethargic encephalitis...		1	3
Whooping cough.....	353	457	564	Malaria.....		1	
Minnesota:				Measles.....	2	11	10
Cerebrospinal meningitis (epidemic).....		2	3	Mumps.....	20	9	27
Chicken pox.....	189	431	575	Pneumonia (all forms)..	2	3	13
Diphtheria.....	633	858	524	Poliomyelitis.....	6	1	
Encephalitis.....	1	3	1	Septic sore throat.....	2		12
Erysipelas.....	6	11	10	Scarlet fever.....	249	322	295
Influenza.....	7	3	1	Smallpox.....	9	5	39
Measles.....	17	26	214	Tetanus.....	3		1
Pneumonia (all forms)..	28	24	18	Tuberculosis (all forms)..	7	23	3
Poliomyelitis.....	6	7	3	Typhoid fever.....	28	13	14
Scarlet fever.....	843	982	1,046	Whooping cough.....	14	9	13
Smallpox.....	90	174	182	New Jersey:			
Trachoma.....		37	72	Anthrax.....	1	1	
Tuberculosis (all forms)..	281	240	242	Cerebrospinal meningitis (epidemic).....	6	10	7
Typhoid fever.....	89	33	19	Chicken pox.....	165	565	835
Whooping cough.....	80	79	101	Diphtheria.....	939	1,117	1,082
Mississippi:				Dysentery.....	1		
Cancer.....	129	124	111	Epilepsy.....	3	2	2
Cerebrospinal meningitis (epidemic).....		2		German measles.....	19	32	45
Chicken pox.....	150	297	321	Influenza.....	59	71	120
Dengue.....	1,923		549	Lead poisoning.....	2	1	3
Diphtheria.....	511	330	237	Malaria.....	2	5	2
Dysentery (amebic).....	46	33	14	Measles.....	400	1,280	3,050
Dysentery (bacillary)...	299	221	144	Ophthalmia neonatorum	11	2	5
Hookworm disease.....	564	429	288	Paratyphoid fever.....	1		
Influenza.....	649	1,392	12,976	Phosphorus poisoning.....			1
Leprosy.....			1	Pneumonia (all forms)..	239	522	705
Malaria.....	10,001	6,194	3,827	Poliomyelitis.....	14	10	5
Measles.....	163	510	917	Scarlet fever.....	337	605	733
Mumps.....	57	78	106	Smallpox.....	1	1	
Ophthalmia neonatorum	22	7	13	Trachoma.....	4	3	4
Pellagra.....	328	170	142	Trichinosis.....			2

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SUMMARY OF DISEASES—Continued.

State and disease.	New cases reported.			State and disease.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
New Jersey—Continued.							
Tuberculosis (all forms).....	463	382	372				
Typhoid fever.....	104	131	72				
Whooping cough.....	486	551	629				
New Mexico:							
Cancer.....		1					
Chicken pox.....	19	125	79				
Conjunctivitis (acute).....	4	2	5				
Dengue.....		1					
Diphtheria.....	117	123	125				
Dysentery.....		2					
German measles.....		1	1				
Hookworm disease.....			1				
Influenza.....		18	1				
Lethargic encephalitis.....			2				
Malaria.....	2						
Measles.....	2	3	3				
Mumps.....	4	2	5				
Pneumonia (all forms).....	13	16	41				
Puerperal septicemia.....	2	3					
Rocky Mountain spotted fever.....			1				
Scarlet fever.....	35	32	38				
Septic sore throat.....	2						
Smallpox.....			4				
Tetanus.....	1	1					
Trachoma.....	3	1	1				
Tuberculosis (all forms).....	108	109	72				
Typhoid fever.....	94	43	20				
Whooping cough.....	12	1					
New York:							
Anthrax.....		1					
Botulism.....	1						
Cerebrospinal meningitis (epidemic).....	20	18	14				
Chicken pox.....	685	1,810	2,502				
Diphtheria.....	1,488	1,935	1,870				
Dysentery.....	11	3	1				
German measles.....	34	45	67				
Influenza.....	163	273	325				
Lethargic encephalitis.....	43	16	33				
Malaria.....	53	6	4				
Measles.....	463	762	1,817				
Mumps.....	323	900	1,346				
Ophthalmia neonatorum.....	7	13	4				
Paratyphoid fever.....							
Pneumonia (all forms).....	1,199	1,916	2,622				
Poliomyelitis.....	159	66	33				
Puerperal septicemia.....	19	17	12				
Scarlet fever.....	1,126	1,735	2,042				
Septic sore throat.....	19	12	13				
Smallpox.....	42	5	15				
Tetanus.....	16	7	10				
Trachoma.....	5	0	1				
Tuberculosis (all forms).....	1,930	1,771	1,675				
Typhoid fever.....	302	225	158				
Vicent's angina.....	10	14	12				
Whooping cough.....	1,217	1,383	1,435				
North Carolina:							
Cerebrospinal meningitis (epidemic).....	5	2	2				
Chicken pox.....	111	377	454				
Diphtheria.....	1,988	1,254	397				
German measles.....	21	26	14				
Lethargic encephalitis.....							
Measles.....	214	201	318				
Ophthalmia neonatorum.....	3	3					
Poliomyelitis.....			1				
Scarlet fever.....	645	533	320				
Septic sore throat.....	41	33	16				
Smallpox.....	30	108	133				
Trachoma.....			2				
Typhoid fever.....	131	58	29				
Whooping cough.....	363	434	361				
North Dakota:							
Cerebrospinal meningitis (epidemic).....	1	1					
Chicken pox.....	57	22	70				
Diphtheria.....	90	38	102				
Impetigo contagiosa.....	9	12					
Measles.....	3	16	38				
Mumps.....		1	3				
Pneumonia (all forms).....	8	25	34				
Poliomyelitis.....	4	3					
Scarlet fever.....	87	144	201				
Smallpox.....	42	39	68				
Trachoma.....	3		3				
Tuberculosis (all forms).....	12	70	13				
Typhoid fever.....	31	26	13				
Whooping cough.....	24	14	11				
Ohio:							
Anemia.....		1					
Anthrax.....	1						
Benzene poisoning.....		1					
Brass poisoning.....			1				
Cerebrospinal meningitis (epidemic).....	6	6	4				
Chicken pox.....	589	1,424	1,888				
Diarrhea.....	8	12	6				
Diphtheria.....	2,162	2,213	1,603				
Dysentery.....		2					
Erysipelas.....	20	36	53				
German measles.....	9	14	52				
Influenza.....	11	23	170				
Lead poisoning.....	9	11	9				
Lethargic encephalitis.....	2	1	5				
Malaria.....	30						
Measles.....	516	1,060	2,845				
Mumps.....	58	57	72				
Ophthalmia neonatorum.....	153	161	175				
Pneumonia (all forms).....	168	255	525				
Poliomyelitis.....	10	7	4				
Scarlet fever.....	1,434	1,878	2,313				
Smallpox.....	80	137	192				
Trachoma.....	13	11	15				
Tuberculosis (all forms).....	660	468	417				
Typhoid fever.....	330	163	90				
Whooping cough.....	372	328	588				
Oklahoma:							
Chicken pox.....	1	11	43				
Dengue.....			3				
Diphtheria.....	67	74	60				
Dysentery.....			2				
Influenza.....	4		24				
Malaria.....			17				
Measles.....	6		2				
Pellagra.....	1		1				
Pneumonia (all forms).....	10	29	47				
Puerperal septicemia.....	1	7	3				
Scarlet fever.....	32	48	39				
Smallpox.....	3	7	50				
Trachoma.....	10		1				
Tuberculosis (all forms).....	31	14	20				
Typhoid fever.....	26	17	12				
Whooping cough.....		12	1				
Oregon:							
Chicken pox.....	27	84	120				
Diphtheria.....	41	67	117				
Erysipelas.....	6		7				
Influenza.....	7	2	11				
Leprosy.....		1					
Lethargic encephalitis.....			2				
Measles.....	10	6	16				
Mumps.....	6	6	12				
Pneumonia.....	5	3	2				
Scarlet fever.....	44	55	73				
Septic sore throat.....		1					
Smallpox.....	63	43	50				

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SUMMARY OF DISEASES—Continued.

State and disease.	New cases reported.			State and disease.	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
Oregon—Continued.				South Dakota—Continued.			
Tuberculosis.....	38	44	91	Chicken pox.....	13	37	46
Typhoid fever.....	44	25	18	Diphtheria.....	116	92	66
Whooping cough.....	23	6	4	Dysentery.....			1
Pennsylvania:				Erysipelas.....	3	10	2
Anthrax.....	2		2	Influenza.....		5	2
Cerebrospinal meningitis (epidemic).....	5	6	9	Measles.....	8	15	10
Chicken pox.....	926	2,739	2,949	Pneumonia (all forms).....	17	28	35
Diphtheria.....	2,160	2,419	2,154	Poliomyelitis.....	4		
Encephalitis.....		5	3	Scarlet fever.....	207	194	204
Erysipelas.....	40	57	86	Smallpox.....	28	39	42
German measles.....	20	45	118	Tetanus.....		1	
Impetigo contagiosa.....	180	164	75	Trachoma.....	2	19	5
Malaria.....	3			Tuberculosis (all forms).....	20	70	25
Measles.....	2,553	10,082	15,005	Typhoid fever.....	29	16	8
Mumps.....	160	301	408	Whooping cough.....	15	6	8
Ophthalmia neonatorum.....	17	15	4	Vermont:			
Pellagra.....	1			Chicken pox.....	87	195	282
Pneumonia lobar.....	260	545	605	Diphtheria.....	62	44	12
Poliomyelitis.....	9	4	3	German measles.....		7	19
Puerperal septicemia.....	1	6	7	Influenza.....			2
Rabies.....	1			Measles.....	5	14	51
Scabies.....	37	69	37	Mumps.....	1		16
Scarlet fever.....	1,419	1,866	2,063	Pneumonia (all forms).....		15	17
Smallpox.....	1	1	18	Poliomyelitis.....	11	3	
Tetanus.....	7	4	1	Scarlet fever.....	74	113	106
Trachoma.....	1	3	1	Smallpox.....			3
Tuberculosis (all forms).....	501	460	323	Trachoma.....	1		
Typhoid fever.....	473	313	182	Tuberculosis (all forms).....	20	12	10
Whooping cough.....	790	931	1,065	Typhoid fever.....	6	5	4
Rhode Island:				Whooping cough.....	110	221	245
Cerebrospinal meningitis (epidemic).....	1	2	2	Virginia:			
Chicken pox.....	5	14	20	Cerebrospinal meningitis (epidemic).....	5	3	12
Diphtheria.....	89	159	78	Chicken pox.....	194	462	814
German measles.....		1	2	Diarrhea.....	269	163	136
Influenza.....	8		1	Diphtheria.....	1,448	1,411	917
Lethargic encephalitis.....			1	Hookworm disease.....	18	21	14
Measles.....	231	527	505	Influenza.....	682	1,355	16,393
Mumps.....	4		5	Malaria.....	405	202	143
Ophthalmia neonatorum.....	3	1	2	Measles.....	92	163	282
Pneumonia (all forms).....	5	1	8	Pellagra.....	6	10	8
Poliomyelitis.....	1	1	1	Poliomyelitis.....	5	4	1
Scarlet fever.....	23	45	52	Scarlet fever.....	559	631	485
Septic sore throat.....	6	4	5	Smallpox.....	3	13	15
Tuberculosis (all forms).....	43	23	46	Tuberculosis (all forms).....	232	212	190
Typhoid fever.....	6	11	6	Typhoid fever.....	184	77	39
Whooping cough.....	44	42	26	Washington:			
South Carolina:				Cerebrospinal meningitis (epidemic).....	1		4
Cancer.....		1		Chicken pox.....	148	509	368
Cerebrospinal meningitis (epidemic).....		2		Diphtheria.....	112	91	85
Chicken pox.....		33	11	Erysipelas.....			1
Dengue.....	214	10		German measles.....	6	5	4
Diphtheria.....	549	400	203	Lethargic encephalitis.....			1
Dysentery.....	7			Measles.....	18	20	19
Hookworm disease.....	4	10	19	Mumps.....	42	86	126
Influenza.....	17	1,545	3,013	Paratyphoid fever.....	2	1	2
Malaria.....	16	11	11	Pneumonia (all forms).....	10	17	33
Measles.....	6		9	Poliomyelitis.....	2	1	
Mumps.....	2		2	Scarlet fever.....	120	177	158
Paratyphoid fever.....		2		Septic sore throat.....			
Pellagra.....	2	3	7	Smallpox.....	18	70	121
Pneumonia (all forms).....	4	29	114	Trachoma.....		1	
Poliomyelitis.....			1	Tuberculosis (all forms).....	66	65	58
Rabies.....				Typhoid fever.....	156	52	25
Scarlet fever.....	47	47	17	Whooping cough.....	95	77	86
Septic sore throat.....		2	27	West Virginia:			
Smallpox.....	2	1	60	Cerebrospinal meningitis (epidemic).....	5	4	5
Tuberculosis (all forms).....	6	13	22	Chicken pox.....	64	124	227
Typhoid fever.....	25	17	6	Diphtheria.....	477	535	401
Whooping cough.....	1		3	German measles.....		2	2
South Dakota:				Influenza.....	19	48	1,730
Actinomycosis.....			1	Measles.....	37	66	330
Cerebrospinal meningitis (epidemic).....	1	1		Ophthalmia neonatorum.....	2	1	

STATE REPORTS FOR OCTOBER, NOVEMBER, AND DECEMBER, 1922—
Continued.

SUMMARY OF DISEASES—Continued

State and disease.	New cases reported.			State and disease	New cases reported.		
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.
West Virginia—Continued.				Wisconsin—Continued.			
Poliomyelitis.....		3		Scarlet fever.....	712	619	868
Scarlet fever.....	344	315	272	Smallpox.....	109	207	171
Smallpox.....	20	28	10	Trachoma.....	2	4	5
Tuberculosis (all forms).....	28	54	40	Tuberculosis (all forms).....	213	209	101
Typhoid fever.....	168	84	54	Typhoid fever.....	48	43	23
Whooping cough.....	30	35	76	Whooping cough.....	375	461	445
Wisconsin:				Wyoming:			
Anthrax.....	1			Chicken pox.....		89	24
Cerebrospinal meningitis (epidemic).....	15	3	7	Diphtheria.....	18	22	1
Chicken pox.....	324	633	805	Impetigo.....		6	
Diphtheria.....	404	491	510	Measles.....	5	3	
Erysipelas.....	8	19	20	Paratyphoid fever.....		1	
German measles.....	7	9	10	Pneumonia (all forms).....	6	16	6
Influenza.....	51	145	129	Scarlet fever.....	13	17	11
Measles.....	1,194	2,692	3,447	Smallpox.....	4	3	4
Ophthalmia neonatorum.....	1	2	3	Tuberculosis (all forms).....	5		1
Pneumonia (all forms).....	40	49	86	Typhoid fever.....	14	7	
Poliomyelitis.....	22	5	2	Whooping cough.....		5	

WYOMING REPORT FOR SEPTEMBER, 1922 (DELAYED).¹

	New cases reported.		New cases reported.
Diphtheria.....	5	Typhoid fever:	
Enterocolitis.....	32	Albany County.....	1
Impetigo contagiosa.....	6	Big Horn County.....	1
Influenza:		Campbell County.....	5
Niobrara County.....	4	Converse County.....	1
Measles.....	1	Hot Springs County.....	3
Paratyphoid fever.....	2	Johnson County.....	1
Pneumonia (all forms).....	6	Natrona County.....	1
Scarlet fever.....	16	Washakie County.....	2
Smallpox:		Tuberculosis (all forms).....	7
Sheridan County.....	2		

¹ Report received too late to be included in the State reports for July, August, and September, 1922, published in the Public Health Reports, Dec. 1, 1922.

FOREIGN AND INSULAR.

CANADA.

Communicable Diseases—Ontario—February, 1923 (Comparative).

Communicable diseases were reported during the month of February, 1923, in the Province of Ontario, Canada, as follows:

Disease.	February, 1923.		February, 1922.	
	Cases.	Deaths.	Cases.	Deaths.
Cerebrospinal meningitis.....	11	9	6	6
Chancroid.....	1	.....	3	.....
Diphtheria.....	156	21	405	38
Gonorrhoea.....	84	.....	138	.....
Influenza.....	.....	335	.....	.....
Measles.....	703	7	541	1
Pneumonia, primary.....	.....	756	.....	289
Pneumonia, influenzal.....	.....	83	.....	41
Poliomyelitis (infantile paralysis).....	2	2	.....	.....
Scarlet fever.....	309	13	610	17
Smallpox.....	23	.....	185	.....
Syphilis.....	100	.....	181	.....
Typhoid fever.....	65	4	31	5
Tuberculosis.....	173	137	171	117
Whooping cough.....	402	30	158	5

Population, estimated, 2,523,200.

Lethargic Encephalitis—Vancouver—Winnipeg.

During the period January 21 to February 17, 1923, 12 cases of lethargic encephalitis were reported at Vancouver, British Columbia, Canada.

During the week ended January 13, 1923, one case of lethargic encephalitis was notified at Winnipeg, Manitoba, Canada. During the following week 3 cases with 2 deaths were reported. The occurrence during the week ended January 27 was 13 cases. From January 28 to February 18, 1923, 60 cases with 12 deaths were reported, making a total from January 7 to February 17, 1923, of 77 cases with 14 deaths. The disease was stated to be different in type from that prevalent at Winnipeg during the preceding year, the type reported during the winter of 1922-23 being characterized at the onset by pains in the back and neck and sleeplessness, later followed by drowsiness.

CUBA.

Communicable Diseases—Habana—Provinces.

Communicable diseases have been notified in Cuba as follows:

Habana.

Disease.	Feb. 22-28, 1923.		Remain- ing under treat- ment Feb. 28, 1923.
	New cases.	Deaths.	
Chicken pox.....	3	.....	1
Diphtheria.....	4	1	4
Leprosy.....	.....	.....	10
Malaria.....	8	.....	19
Measles.....	.....	.....	1
Scarlet fever.....	.....	.....	1
Typhoid fever.....	2	.....	22

- 1 One case sent to leper asylum at Rincon.
 2 From the interior, 15.
 3 From the interior, 11.

Provinces.

NEW CASES REPORTED JANUARY 11-20, 1923.

Province.	Chicken pox.	Diph- theria.	Malaria.	Measles.	Para- typhoid fever.	Scarlet fever.	Small- pox.	Typhoid fever.
Camaguey.....	3	.....	22	.....	.....	.....	.....	.....
Habana.....	9	9	32	5	5	1	.....	17
Matanzas.....	1	.....	8	.....	2	.....	.....	1
Oriente.....	4	.....	83	.....	.....	.....	3	6
Pinar del Rio.....	.....	1	1	.....	.....	.....	.....	.....
Santa Clara.....	.....	1	6	.....	1	.....	.....	2
Total.....	17	11	152	5	8	1	3	26

NEW CASES REPORTED JANUARY 21-31, 1923.

Camaguey.....	4	.....	24	.....	1	.....	.....	2
Habana.....	9	3	30	4	3	4	.....	23
Matanzas.....	1	.....	.....	.....	.....	.....	1	3
Oriente.....	13	.....	79	.....	.....	.....	4	8
Pinar del Rio.....	1	1	1	.....	.....	.....	.....	3
Santa Clara.....	3	.....	10	.....	1	.....	.....	6
Total.....	31	4	144	4	6	4	5	45

CZECHOSLOVAKIA.

Communicable Diseases—December, 1922.

Communicable diseases were reported in Czechoslovakia during the month of December, 1922, as follows:

Disease.	Cases.	Deaths.	Provinces reporting greatest number of cases and deaths.
Cerebrospinal meningitis.....	13	7	Bohemia, 8 cases, 3 deaths.
Diphtheria.....	279	37	Bohemia, 148 cases, 15 deaths.
Scarlet fever.....	1,066	132	Slovakia, 411 cases, 73 deaths.
Trachoma.....	217	.....	Moravia, 90 cases.
Typhoid fever.....	359	37	Slovakia, 133 cases, 9 deaths.
Typhus fever.....	26	.....	Ruthenia, 24 cases.

Dysentery—Rabies.

During the same period there were reported 44 cases of dysentery with 4 deaths, of which 24 cases with 3 deaths occurred in the Province of Bohemia, and 1 fatal case of rabies occurring in the Province of Slovakia.

ESTHONIA.**Communicable Diseases—December, 1922.**

Communicable diseases were reported in the Republic of Esthonia during the month of December, 1922, as follows:

Disease.	New cases.	Remarks.
Diphtheria.....	62	
Measles.....	72	
Scarlet fever.....	93	
Smallpox.....	19	
Tuberculosis.....	94	
Typhoid fever.....	50	
Typhus fever.....	5	
Typhus fever, recurrent.....	3	Paratyphus, cases, 12.

GREECE.**Typhus Fever—Piræus—Corfu.**

Under date of February 8, 1923, typhus fever was stated to be increasing at Piræus and to be present on the Island of Corfu, Greece.

HAWAII.**Plague-Infected Rats—Honokaa.**

Three plague-infected rats were reported found, February 8 and 9, 1923, in the vicinity of Honokaa, Hawaii.

JAVA.**Plague—December, 1922.**

During the month of December, 1922, 990 fatal cases of plague were reported in the Island of Java, occurring in the East Java section. Of these cases, the occurrence in ports was as follows: Pekalongan, 56 cases; Samarang, 202 cases; Soerabaya, 20 cases.

SPAIN.**Plague—Malaga.**

Under date of February 27, 1923, three cases of plague, with 17 suspected cases, were reported at Malaga, Spain.

TURKEY.**Typhus Fever—Constantinople.**

Typhus fever was reported present at Constantinople, Turkey, March 6, 1923.

UNION OF SOUTH AFRICA.

Smallpox—Typhus Fever—December, 1922.

During the month of December, 1922, 35 cases of smallpox, with 1 death, were reported in the colored population of the Union of South Africa. During the same period 1,111 cases of typhus fever, with 114 deaths, were reported among the colored population, and 4 cases among the white population. For distribution of occurrence according to States, see pages 578-579.

Epidemic Influenza—Lethargic Encephalitis—Beira.

Epidemic influenza was reported at Beira, Southern Rhodesia, during the month of December, 1922, with 100 cases among Europeans and 220 cases among the native population. One case of lethargic encephalitis, occurring in a native, was reported during the same period.

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

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

Reports Received During Week Ended March 16, 1923.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India.....				Nov. 19-Dec. 9, 1922: Cases, 3,500; deaths, 2,392.
Madras.....	Jan. 21-27.....	1		
Siam: Bangkok.....	Dec. 31-Jan. 6....	1		

PLAGUE.

Brazil: Fernambuco.....	Jan. 14-20.....	3	2	Plague rats, 10. Jan. 1-Feb. 1, 1923: Cases, 6; deaths, 4.
Ceylon: Colombo.....	Jan. 14-27.....	8	4	
Egypt: City— Port Said.....	Jan. 26.....	1		Pneumonic, 3 cases, 3 deaths.
Province— Assiout.....	Jan. 26-Feb. 1....	4	3	
Hawaii: Honokaa.....				Feb. 8-9, 1923: 3 plague rats found.
India: Bombay.....	Dec. 31-Jan. 6....	1	2	Dec. 1-31, 1922: Deaths, 990.
Madras Presidency.....	Jan. 21-27.....	722	501	
Madras.....	do.....	1	1	
Java: East Java.....				Dec. 1-31, 1922: Deaths, 990.
Pekalongan.....	Dec. 1-31.....	56		
Samarang.....	do.....	202		
Soerabaya.....	do.....	20		
Portuguese West Africa: Angola— Loanda.....	Dec. 24-30.....		1	
Siam: Bangkok.....	Dec. 31-Jan. 13....	3	3	
Spain: Malaga.....	Feb. 27.....	3		17 suspected cases.
Union of South Africa: Transvaal.....				December, 1922: Cases, 2; deaths, 1 (colored).

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 March 16, 1923—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	Jan. 1-31.....	1		
Canada:				
New Brunswick— Northumberland County.....	Feb. 11-17.....	1		
Ontario.....				Feb. 1-28, 1923: Cases, 23.
China:				
Amoy.....	Jan. 23-Feb. 3.....		3	
Canton.....	Jan. 21-27.....			Present.
Chungking.....	Jan. 7-13.....			Do.
Foochow.....	Jan. 14-27.....			Present. One case, foreign.
Manchuria— Harbin.....	Jan. 15-21.....	1		
Shanghai.....	Jan. 22-28.....	1		Foreign.
Cuba:				
Province— Matanzas.....	Jan. 21-31.....	1		
Oriente.....	Jan. 11-31.....	7		
Esthonia.....				Dec. 1-31, 1922: Cases, 19.
Greece:				
Saloniki.....	Jan. 15-28.....	3		
India:				
Bombay.....	Dec. 31-Jan. 6.....	4	4	
Madras.....	Jan. 21-27.....	24	10	
Mexico:				
Gundalajara.....	Jan. 1-30.....	15		
Mexico City.....	Jan. 21-Feb. 3.....	36		
Palestine.....				Jan. 30-Feb. 5, 1923: Cases, 5 Northern section.
Switzerland:				
Lucerne.....	Jan. 1-31.....	6		
Syria:				
Aleppo.....	Jan. 28-Feb. 3.....			Present.
Tunis:				
Tunis.....	Jan. 29-Feb. 4.....	1		
Union of South Africa				
Cape Province.....				Dec. 1-31, 1922: Cases, 35; deaths, 1 (colored).
East London.....	Jan. 7-13.....	2		Dec. 1-31, 1922: Cases, 27; deaths, 1 (colored).
Natal.....				Dec. 1-31, 1922: Cases, 6 (colored).
Orange Free State.....				Dec. 1-31, 1922: Cases, 2 (colored).
Transvaal.....	Jan. 7-13.....			Outbreaks.

TYPHUS FEVER.

China:				
Manchuria— Harbin.....	Jan. 15-28.....	2		
Czechoslovakia:				
Ruthenia.....	Dec. 1-31.....	24		Dec. 1-31, 1922: Cases, 26. Province.
Esthonia.....				Dec. 1-31, 1922: Cases, 5. Re- current typhus, cases, 3.
Great Britain:				
Glasgow.....	Feb. 11-17.....		1	
Greece:				
Corfu Island.....	Feb. 8.....			Present.
Piræus.....	do.....			Do.
Mexico:				
Mexico City.....	Jan. 21-Feb. 3.....	36		
Turkey:				
Constantinople.....	Mar. 6.....			Do.
Union of South Africa				
Cape Province.....				Dec. 1-31, 1922: Cases, 1,111; deaths, 114 (colored). White population, cases, 4.
Do.....				Dec. 1-31, 1922: Cases, 1,000; deaths, 104 (colored). White, 3 cases.
Natal.....	Jan. 7-13.....			Outbreaks. Dec. 1-31, 1922: Cases, 36; deaths, 5 (colored).

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

Reports Received During Week Ended March 16, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa—Contd. Orange Free State.....				
Do.....	Jan. 7-13.....			Dec. 1-31, 1922: Cases, 33; deaths, 2 (colored). White, 1 case. Outbreaks.
Transvaal.....				Dec. 1-31, 1922: Cases, 42; deaths, 3 (colored).

Reports Received from December 30, 1922, to March 9, 1923.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Liutaoku.....	Sept. 22.....	60	20	
Chosen (Korea):				
Yalu River Region.....				Sept. 22, 1922: 30 deaths reported.
India.....				Sept. 21-Nov. 18, 1922: Cases 7,390; deaths 5,316.
Bombay.....	Oct. 27-Dec. 23.....	2	1	
Calcutta.....	Nov. 12-Dec. 30.....	102	60	
Do.....	Dec. 31-Jan. 20.....	51	33	
Madras.....	Nov. 19-Dec. 16.....	4	2	
Rangoon.....	Nov. 12-Dec. 23.....	17	10	
Do.....	Dec. 31-Jan. 6.....	1		
Philippine Islands:				
Province—				
Laguna.....	Oct. 12-13.....	1		
Russia.....				
Archangel (Government).....	Oct. 1-7.....	7		Jan. 1-Oct. 7, 1922: Cases, 83,367.
Tashkent.....	do.....	27		Turkestan Republic: 3 cases reported on waterways.
Ukraine.....				Sept. 1-30, 1922: Cases, 119.
Donetz (Government).....	Sept. 1-30.....	29		
Tchernigov (Government).....	do.....	36		
Siam:				
Bangkok.....	Oct. 29-Dec. 23.....	4	1	

PLAGUE.

Azores:				
Fayal Island—				
Castelo Branco.....	Dec. 2-31.....		3	Vicinity of Horta. Dec. 30, 1922: Several cases.
Pico Island—				
Lages.....	Nov. 27-Dec. 15.....		8	1 case present Dec. 15, 1922.
St. Michaels Island.....				Nov. 12-Dec. 30, 1922: Cases, 100; deaths, 35. At localities 3-9 miles from Ponta Delgada.
Ponta Delgada.....	Nov. 26-Dec. 9.....	3		
Brazil:				
Bahia.....	Oct. 29-Dec. 30.....	5	5	
Porto Alegre.....	Nov. 19-25.....	1		
British East Africa:				
Kenya Colony—				
Tanganyika Territory.....	Oct. 15-Dec. 16.....	12	7	
Ceylon:				
Colombo.....	Nov. 12-Dec. 30.....	46	38	Plague rodents, 16.
Do.....	Dec. 31-Jan. 13.....	17	15	Plague rodents, 2.
China:				
Hongkong.....	Nov. 5-Dec. 23.....	14	12	
Ecuador:				
Guayaquil.....	Nov. 1-Dec. 31.....	9	3	Rats examined, 16,600; found infected, 72.
Do.....	Jan. 1-31.....	4	1	Rats examined, 9,300; found infected, 26.
Egypt.....				Jan. 1-Dec. 28, 1922: Cases, 485; deaths, 228. Jan. 1, 1922-Jan. 4, 1923: Cases, 487; deaths, 228.
City—				Jan. 1-11, 1923: Cases, 1; deaths, 1.
Alexandria.....	Nov. 19-25.....	2		
Do.....	Jan. 8-10.....	1	1	
Port Said.....	Nov. 19-27.....	4	2	
Suez.....	Nov. 18-Dec. 5.....	3	4	

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

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt—Continued.				
Province—				
Assiout.....	Nov. 19-Dec. 29.....	4	1	Septicemic: 1 case, 1 death.
Dakahlieh.....	Dec. 3.....	1	1	Pneumonic.
Minieh.....	Nov. 18-27.....	2	1	
India.....				
Bombay.....	Oct. 27-Dec. 30.....	41	32	Oct. 1-Dec. 30, 1922: Cases, 25,007; deaths, 18,803. (Report for Nov. 19-25, 1922, not received.)
Karachi.....	Dec. 10-16.....	1	1	
Do.....	Dec. 31-Jan. 13.....	3	2	Dec. 31, 1922-Jan. 6, 1923: Cases, 4,001; deaths, 3,105.
Madras Presidency.....	Nov. 19-Dec. 30.....	2,260	1,448	
Do.....	Dec. 31-Jan. 20.....	667	427	
Madras.....	Nov. 19-25.....	1	1	
Rangoon.....	Nov. 12-Dec. 30.....	52	49	
Do.....	Dec. 31-Jan. 6.....	5	5	
Japan:				
Osaka.....				July 1-Nov. 30, 1922: Cases, 70.
Java.....				
East Java—				
Soerabaya.....	Oct. 22-Dec. 23.....	14	14	Oct. 1-Nov. 30, 1922: Cases, 900; deaths, 763.
Toeloeng-Agoeng.....	Oct. 29-Dec. 16.....	18	13	
Soerakarta—				
Klaten.....	Nov. 4.....			Present in epidemic form.
Madagascar.....				
Province—				
Moramanga.....				To Nov. 12, 1922: Cases, 24; deaths, 21. Cases reported to Oct. 30, pneumonic.
Amparafara region.....	Sept. 18-Nov. 5.....	21		Bubonic, 18; septicemic, 3 (doubtful, 2).
Moramanga.....	Dec. 6-9.....	3		Bubonic.
Tamatave.....	Feb. 10-Sept. 12.....	10		Do.
Miarinarivo.....				Dec. 14, 1922-Jan. 2, 1923: 1 case (European).
Tananarivo.....				
				Jan. 1-Dec. 10, 1922: Cases, 73 (bubonic, 37; pneumonic, 8; septicemic, 28).
Ambohimangakeley.....	Nov. 19-Dec. 9.....	9		Bubonic, 3; pneumonic, 3; septicemic, 3.
Anketrina.....	Mar. 27-May 9.....	11		Bubonic, 4; pneumonic, 2 septicemic 5 (3 doubtful).
Fenoarivo region.....	Oct. 7-Nov. 28.....	16		Bubonic, 3; pneumonic, 8; septicemic, 5.
Tananarive.....	Oct. 23-Dec. 10.....		5	1 septicemic.
Do.....	Dec. 14-Jan. 1.....	11		
Mesopotamia:				
Bagdad.....	Oct. 1-Nov. 30.....	16		
Palestine:				
Jaffa.....	Nov. 27-Dec. 4.....	1		
Peru.....				
Localities—				
Canete.....	Nov. 16-Dec. 15.....	22	9	Nov. 1-Dec. 15, 1922: Cases, 120; deaths, 51.
Chepen.....	Nov. 1-15.....			
Chiclayo (city and country).....	Nov. 16-Dec. 15.....	17	7	Present..
do.....	do.....	4		
Guadaloupe.....	Nov. 1-Dec. 15.....	15	6	
Huacho.....	Nov. 16-Dec. 15.....	4	1	
Huaral.....	Nov. 16-30.....	1		
Huarmey.....	Dec. 1-15.....	1	1	
Jayanca.....	Nov. 16-Dec. 15.....	4	2	
Lambayeque.....	Nov. 16-30.....	5	3	
Lima (city).....	Nov. 1-Dec. 15.....	8	6	
Lima (country).....	do.....	9	1	
Lurin.....	Dec. 1-15.....	1		
Magdalena del Mar.....	Nov. 16-30.....	1		
Mala.....	Dec. 1-15.....	1		
Mosche.....	Nov. 16-30.....	2	1	
Piura.....	do.....	8	5	
Pueblo Nuevo.....	Dec. 1-15.....	4	2	
San Pedro.....	Nov. 1-Dec. 15.....	6	3	
Sullana.....	Nov. 16-30.....	3	3	
Trujillo.....	Nov. 1-Dec. 15.....	1	1	
Tuman.....	Nov. 16-30.....	3		
Portugal:				
Lisbon.....	Nov. 10-29.....	4	2	
Oporto.....	Jan. 21-27.....		1	

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portuguese West Africa:				
Angola— Loanda.....	Oct. 1-Dec. 2.....		44	Fatal cases among white population.
Siam:				
Bangkok.....	Nov. 12-Dec. 23....	5	5	
Spain:				
Barcelona.....	Nov. 15-Dec. 18....	1		Sept. 24-Nov. 14, 1922: Cases, 23; deaths, 9.
Straits Settlements:				
Singapore.....	Dec. 17-23.....	2	2	
Syria:				
Beirut.....	Nov. 6-30.....	4	3	
Turkey:				
Constantinople.....	Nov. 22-28.....	2		
Union of South Africa:				
Transvaal— Klipfontein.....	Dec. 24-30.....			Outbreak.
On vessels:				
S. S. Helcion.....	Dec. 1.....	1		At Thursday Island Quarantine, Australia, from Singapore, Straits Settlements. In Chinese fireman.
S. S. —.....	Dec. 30.....			At Port of London; plague-infected rats and cats found in grain cargo on vessel from South America.

SMALLPOX.

Algeria:				
Algiers.....	Dec. 1-10.....	1		
Arabia:				
Aden.....	Nov. 19-Dec. 23....	7	3	
Do.....	Jan. 7-27.....	1	1	
Brazil:				
Bahia.....	Nov. 5-11.....	1		
Rio de Janeiro.....	Nov. 25-Dec. 30....	40	15	
Do.....	Dec. 31-Jan. 27....	28	8	
Sao Paulo.....	Oct. 16-22.....	1	1	
British East Africa:				
Kenya Colony— Tanganyika Territory..	Oct. 8-Dec. 15....	179	9	
Uganda.....	Sept. 1-30.....	1	1	
Canada:				
Manitoba—				
Winnipeg.....	Dec. 10-30.....	14		
Do.....	Jan. 21-27.....	1		
New Brunswick—				
Northumberland County.....	do.....	7		
Ontario.....				
Hamilton.....	Dec. 31-Feb. 24....	7		
Niagara Falls.....	Dec. 3-30.....	10		
Do.....	Dec. 31-Jan. 12....	12		
Ottawa.....	Dec. 10-23.....	6		
Do.....	Jan. 7-20.....	10		
Toronto.....	Dec. 10-30.....	2		
Do.....	Feb. 4-10.....	1		
Quebec—				
Quebec.....	Jan. 14-20.....	3		
Saskatchewan—				
Regina.....	Dec. 3-23.....	2		
Ceylon:				
Colombo.....	Nov. 12-Dec. 24....	9	4	1 case; 1 death outside city.
Chile:				
Concepcion.....	Oct. 30-Dec. 25....		7	
Valparaiso.....	Oct. 2-Dec. 26....	4	51	In hospital, 83 cases.
Do.....	Jan. 9-15.....		9	Dec. 31, 1922-Jan. 27, 1923: Deaths, 65.

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

SMALLPOX—Continued.

Place.	Date	Cases.	Deaths.	Remarks.
China:				
Amoy.....	Nov. 5-Dec. 23.....		3	Nov. 26-Dec. 16, 1922: Present.
Do.....	Jan. 7-27.....		2	
Antung.....	Nov. 13-Dec. 10.....	2		
Canton.....	Oct. 1-Nov. 30.....			Prevalent.
Chungking.....	Nov. 5-Dec. 30.....			Present.
Do.....	Dec. 31-Jan. 6.....			Do.
Foochow.....	Nov. 12-Dec. 30.....			Do.
Do.....	Dec. 31-Jan. 6.....			Do.
Hankow.....	Dec. 31-Jan. 20.....	4	1	
Hongkong.....	Nov. 5-11.....		1	
Do.....	Dec. 31-Jan. 6.....	2	1	
Manchuria—				
Harbin.....	Nov. 20-Dec. 31.....	13		
Do.....	Jan. 8-14.....	5		
Mukden.....	Nov. 19-Dec. 16.....			Do.
Do.....	Jan. 7-13.....			Do.
Nanking.....	Nov. 5-Dec. 23.....			Do.
Do.....	Jan. 7-20.....			Do.
Shanghai.....	Jan. 15-Feb. 4.....	2		Foreign.
Chosen (Korea):				
Chemulpo.....	Oct. 1-Dec. 31.....	135	84	
Fusan.....	Nov. 1-Dec. 31.....	4		
Gensan.....	Dec. 1-31.....	6	2	
Seoul.....	Oct. 1-Dec. 31.....	19	1	
Colombia:				
Buenaventura.....	Jan. 25-Feb. 9.....	40		Estimated, 50 cases present; type mild; among colored population.
Cuba:				
Province—				
Camaguey.....	Nov. 11-Dec. 31.....	20		
Matanzas.....	Jan. 1-10.....	1		
Oriente.....	Nov. 21-Dec. 31.....	22		
Do.....	Jan. 1-10.....	2		
Santa Clara.....	Dec. 21-31.....	1		
Czechoslovakia:				
Province—				
Bohemia.....	Oct. 1-31.....	1		Oct. 1-31, 1922: Cases, 3.
Moravia.....	do.....	1		
Slovakia.....	Oct. 1-Nov. 30.....	2		
Dominican Republic:				
Puerto Plata.....	Dec. 14-30.....	2		Present.
Santo Domingo.....	Dec. 3-16.....			
San Pedro de Macoris.....	Jan. 13-19.....	2		
Ecuador:				
Guayaquil.....	Dec. 1-31.....	10		
Do.....	Jan. 1-31.....	9		
Egypt:				
Port Said.....	Jan. 21-27.....	1		
Esthonia ¹	Oct. 1-Nov. 30.....	42		
France:				
Paris.....	Dec. 1-10.....	1		
Germany:				
Bremen.....	Dec. 3-9.....	1		
Great Britain:				
Liverpool.....	Dec. 11-17.....	1		From vessel.
London.....	Nov. 26-Dec. 23.....	3		
Nottingham.....	Nov. 19-Dec. 13.....	4		
Do.....	Jan. 7-27.....	5		
Greece:				
Saloniki.....	Nov. 6-Dec. 31.....	6	5	Epidemic, Jan. 17.
Zante.....				
Do.....	Jan. 7-14.....	13		
India:				
Bombay.....	Nov. 5-Dec. 30.....	18	6	Nov. 5-18, 1922: Cases, 1,390; deaths, 276.
Calcutta.....	Nov. 12-Dec. 30.....	46	23	
Do.....	Dec. 31-Jan. 20.....	34	18	
Karachi.....	Nov. 26-Dec. 30.....	6		
Do.....	Dec. 31-Jan. 14.....	10	6	
Madras.....	Nov. 12-Dec. 30.....	71	23	
Do.....	Dec. 31-Jan. 20.....	52	17	
Rangoon.....	Nov. 5-Dec. 30.....	27	6	

¹ Previously reported under Russia.

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Kobe.....	Jan. 13-Feb. 2.....	2	2	
Yokohama.....	Jan. 22-28.....	1		
Java:				
East Java— Soerabaya.....	Nov. 5-11.....	4		
West Java— Batavia.....	Nov. 11-Dec. 22.....	25	1	City and Province.
Latvia.....	Oct. 1-Nov. 30.....	6		
Mesopotamia:				
Bagdad.....	Oct. 1-Nov. 30.....	568	361	
Mexico:				
Chihuahua.....	Dec. 4-17.....		4	
Do.....	Jan. 1-28.....	19	11	
Guadalajara.....	Dec. 1-31.....	4		
Mexico City.....	Nov. 12-Dec. 23.....	43		Including municipalities in Federal District.
Do.....	Dec. 31-Jan. 20.....	33		Do.
Nogales.....	Dec. 10-19.....		1	
Do.....	Dec. 31-Feb. 10.....		2	
Saltillo.....	Jan. 28-Feb. 3.....		1	
San Luis Potosi.....	Jan. 14-20.....		1	
Sonora, State.....				Nov. 1-30, 1922: Present in northern section.
Empalme.....	Nov. 1-30.....	4	1	
Torreon.....	Dec. 1-31.....		1	
Palestine.....				Jan. 23-29, 1923: One case in northern district.
Peru:				
Callao.....	Nov. 1-15.....	2		
Lima (city).....	Dec. 1-15.....	3	1	
Lima (country).....	Nov. 1-15.....	2		
Poland.....				Oct. 1-Dec. 2, 1922: Cases, 103; deaths, 24.
Portugal:				
Lisbon.....	Nov. 19-Dec. 30.....	143	34	
Do.....	Dec. 31-Jan. 27.....	57	41	Dec. 25-31, 1922: Deaths, 12.
Oporto.....	Oct. 15-Dec. 30.....	24	12	
Do.....	Dec. 31-Jan. 27.....	8	7	Jan. 5-20, 1923: Cases, 22; deaths, 6.
Portuguese West Africa:				
Angola— Loanda.....	Oct. 27-Nov. 11.....		10	
Russia:				
Province— Ukraine.....				Jan.-Sept., 1922: Cases, 8,744.
Spain:				
Corunna.....	Nov. 26-Dec. 2.....		1	
Huelva.....	Nov. 24-Dec. 31.....		4	
Madrid.....	Dec. 1-31.....		1	
Seville.....	Nov. 27-Dec. 31.....		32	
Do.....	Jan. 1-28.....		8	
Valencia.....	Nov. 25-Dec. 23.....	3		
Do.....	Dec. 31-Feb. 3.....	6	1	
Switzerland:				
Berne.....	Nov. 19-Dec. 30.....	85		
Do.....	Dec. 31-Jan. 27.....	77		
Zurich.....	Nov. 19-Dec. 30.....	19		
Do.....	Jan. 14-27.....	14		
Syria:				
Aleppo.....	Nov. 19-Dec. 23.....	38	20	Dec. 3-30, 1922: Present.
Do.....	Dec. 31-Jan. 27.....	16	5	
Beirut.....	Dec. 11-20.....	1		
Damascus.....	Nov. 1-Dec. 31.....	97	16	
Tunis:				
Tunis.....	Dec. 1-22.....	2	1	
Do.....	Jan. 22-28.....		1	
Turkey:				
Constantinople.....	Nov. 19-Dec. 16.....	122	34	
Do.....	Dec. 31-Jan. 27.....	215	85	
Union of South Africa:				
Cape Province.....				Oct. 1-Nov. 30, 1922: Cases—Colored, 29; white 4.
Do.....				Oct. 1-Nov. 30, 1922: Cases—Colored, 21; white, 4.
Do.....	Oct. 29-Dec. 30.....			Outbreaks.
Do.....	Dec. 31-Jan. 6.....			Outbreaks.

¹ Previously reported under Russia.

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa—Contd.				
Natal	Dec. 3-30			Outbreaks.
Orange Free State	Dec. 10-16			Do.
Southern Rhodesia	Nov. 9-15	3		
Transvaal				Oct. 1-31, 1922: Cases, 8.
Do.	Oct. 29-Nov. 4			Outbreaks
Do.	Dec. 31-Jan. 6			Do.
Johannesburg	Nov. 1-30		1	
Yugoslavia				Aug. 1-31, 1922: Cases, 30; deaths, 12.
Serbia				Aug. 1-31, 1922: Cases, 26.
Belgrade	Nov. 12-Dec. 31	10	4	
On vessel:				
S. S. Huntress	Nov. 11	1		At Fremantle, Australia; from Cape Town, South Africa.
S. S. Junin	Jan. 13	1		At Antofagasta, Chile. Vessel proceeded to Arica, Chile, with patient on board.
S. S. —	Dec. 17-23	1		At Liverpool.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 11-Dec. 31	2	1	
Oran	Jan. 11-20	1	1	
Brazil:				
Pernambuco	Dec. 3-9	2	2	
Porto Alegre	Nov. 19-Dec. 16	3		
Chile:				
Antofagasta	Nov. 12-Dec. 30	24	5	Nov. 11-Dec. 5, 1922: Cases, 10; deaths, 2.
Do.	Dec. 31-Jan. 6	2	1	
Concepcion	Oct. 17-Dec. 18		9	
Do.	Dec. 26-Jan. 15		7	
Iquique	Jan. 14-20		1	
Talcahuano	Nov. 12-Dec. 23	10	6	
Do.	Jan. 7-13	2	1	
Valparaiso	Dec. 3-30		9	
Do.	Dec. 31-Jan. 27		13	
China:				
Antung	Nov. 13-Dec. 10	7		
Manchuria—				
Harbin	Nov. 20-26	7		
Do.	Jan. 1-14	2		
Cuba:				
Matanzas	Dec. 25-31	1	1	
Czechoslovakia:				
City—				
Prague	Nov. 19-25	1		
Province—				
Bohemia	Nov. 1-30	1		
Ruthenia	Oct. 1-31	1		
Slovakia	Nov. 1-30	2		
Danzig (Free City)	Jan. 7-13	1		
Egypt:				
Alexandria	Nov. 19-Dec. 31	2	1	
Do.	Dec. 22-28	1		
Cairo	Oct. 1-Dec. 2	13	7	
Estonia ¹				Oct. 1-Nov. 30, 1922: 1 Case. Recurrent typhus: Cases, 7.
Libau	Dec. 24-30	1		
Germany:				
Berlin	Nov. 26-Dec. 2		1	
Coblentz	Dec. 10-16	1		
Dresden	do.	1		
Great Britain:				
Glasgow	Jan. 7-Feb. 3	4		
Greece:				
Leucadia	Jan. 17			Present.
Patras	Nov. 19-25		1	
Do.	Jan. 1-7	3	1	
Prevesa	do.			Do.
Saloniki	Dec. 18-24	3		Among refugees.
Do.	Jan. 7-14	3	1	Refugees.
Zante	Jan. 17			Present.

¹ Previously reported under Russia

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Hungary:				
Budapest.....	Jan. 14-20.....	3		
Ireland:				
Belmullet.....	June 15-Dec. 14...	20		In county Mayo.
Latvia ¹	Oct. 1-Nov. 30.....	45		Recurrent typhus: Cases, 9.
Mexico:				
Mexico City.....	Nov. 12-Dec. 23...	78		Including municipalities in Federal District.
Do.....	Dec. 31-Jan. 20.....	33		Do.
San Luis Potosi.....	Jan. 28-Feb. 10.....		2	
Palestine:				
Jaffa.....	Dec. 12-18.....	2		
Do.....	Jan. 16-22.....	2		
Jerusalem.....	Dec. 26-Jan. 1.....	1		
Persia:				
Teheran.....	Sept. 24-Oct. 24...		1	
Poland:				
.....				Oct. 1-Dec. 2, 1922: Cases, 1,415; deaths, 101. Recurrent typhus: Cases, 1,583; deaths, 45.
Portugal:				
Oporto.....	Oct. 15-Dec. 2.....	1	1	
Rumania:				
Bucharest.....				To Jan. 31, 1923: Cases, 96; deaths, 13.
Russia:				
Chisinau.....	Nov. 1-30.....	5		July 30-Sept. 23, 1922; Cases, 23,803.
Ukraine.....	Jan.-Sept.....	307,329		
Ukraine, Tartar Republic, and Siberia.....	June 1-30.....	35,926		Provisional figures.
Do.....	July 1-31.....	17,262		Do.
Do.....	Aug. 1-31.....	6,864		Do.
Do.....	Sept. 1-30.....	2,388		Do.
Spain:				
Barcelona.....	Nov. 30-Dec. 27.....		3	
Do.....	Jan. 11-17.....		1	
Madrid.....	Dec. 1-31.....		1	
Syria:				
Aleppo.....	Dec. 10-16.....	1	1	
Do.....	Jan. 7-27.....	17	5	
Beirut.....	Oct. 1-22.....	1		
Turkey:				
Constantinople.....	Nov. 27-Dec. 2.....	3		
Do.....	Dec. 31-Jan. 27.....	17	3	
Union of South Africa:				
Cape Province.....				Oct. 1-Nov. 30, 1922: Colored—cases, 1,986; deaths, 184; white—cases, 7; deaths, 2.
Do.....				Oct. 1-Nov. 30, 1922: Colored—cases, 1,799; deaths, 146; white—cases, 3; deaths, 1.
Do.....	Oct. 29-Dec. 16.....			Outbreaks.
Do.....	Dec. 31-Jan. 6.....			Do.
Natal.....				Oct. 1-Nov. 30, 1922: Colored—cases, 107; deaths, 27; white—cases, 2.
Do.....	Dec. 3-9.....			Outbreaks.
Orange Free State.....				Oct. 1-Nov. 30, 1922: Colored—cases, 58; deaths, 6; white—cases, 2; deaths, 1.
Do.....	Nov. 12-Dec. 30.....			Outbreaks.
Transvaal.....				Oct. 1-Nov. 30, 1922: Colored—cases, 22; deaths, 5.
Do.....	Oct. 29-Nov. 25.....			Outbreaks.
Johannesburg.....	Nov. 1-30.....	3	6	
Venezuela:				
Maracaibo.....	Jan. 21-27.....		1	
Yugoslavia:				
Bo-mia-Herzegovina.....	Aug. 1-31.....	1		
Serbia.....				Aug. 1-31, 1922: Recurrent typhus fever, cases, 4.

¹ Previously reported under Russia.

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

Reports Received from December 30, 1922, to March 9, 1923—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Dec. 31-Jan. 6.....	1	1	
Mexico:				
Ciudad Victoria.....	Dec. 17-23.....	1		
West Africa:				
Gold Coast—				
Saltpond.....				Reported present Dec. 21, 1922.
Nigeria—				
Warrai.....				Do.