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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 Pharmacopœia 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-iminazolylethylamine, 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.							
			Milligrams.	Average.	Variation, percent.					
A 2.....	June.....	1.....	7.0							
		2.....	7.0							
		3.....	7.5							
		4.....	7.1							
				7.2	{ +4 -1 }	16.0	1120	(*)		
C.....	June.....	1.....	6.8							
		2.....	7.5							
		3.....	6.9							
		4.....	7.5							
				7.2	{ +4 -5 }	(*)	-----	-----		
E 2.....	July.....	1.....	5.7							
		2.....	6.7							
		3.....	6.3							
		4.....	6.6							
		5.....	8.3							
				6.7	{ +23 -14 }	6.3	107	5		
F 2.....	July.....	1.....	6.7							
		2.....	6.7							
		3.....	6.3							
		4.....	6.7							
		5.....	7.2							
				6.7	{ +8 -6 }	6.2	108	7		
G 2.....	August.....	1.....	8.3							
		2.....	7.8							
		3.....	6.9							
		4.....	7.5							
		5.....	6.9							
				7.5	{ +10 -8 }	7.4	101	16		
H 2.....	October.....	1.....	7.4							
		2.....	7.5							
		3.....	7.1							
		4.....	7.4							
				7.4	{ +2 -3 }	6.3	118	8		

¹ Approximately.

² Not 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

triturated 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.....	{0.30 {0.22}	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.....	{0.33 {0.25}	24.8	{0.50 {0.75}	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.....	{0.20 {0.20}	33.5	{0.80 {0.50}	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.....	{0.17 {0.20}	36.2	{0.60 {0.60}	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.....	{0.21 {0.25}	32.6	{0.60 {0.60}	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.).....		{+16 {-22}		{+8 {-8}		{+8 {-5}		{+16 {-10}		{+21 {-12}		{+16 {-14}		{+24 {-26}		{+21 {-16}		{+15 {-19}

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

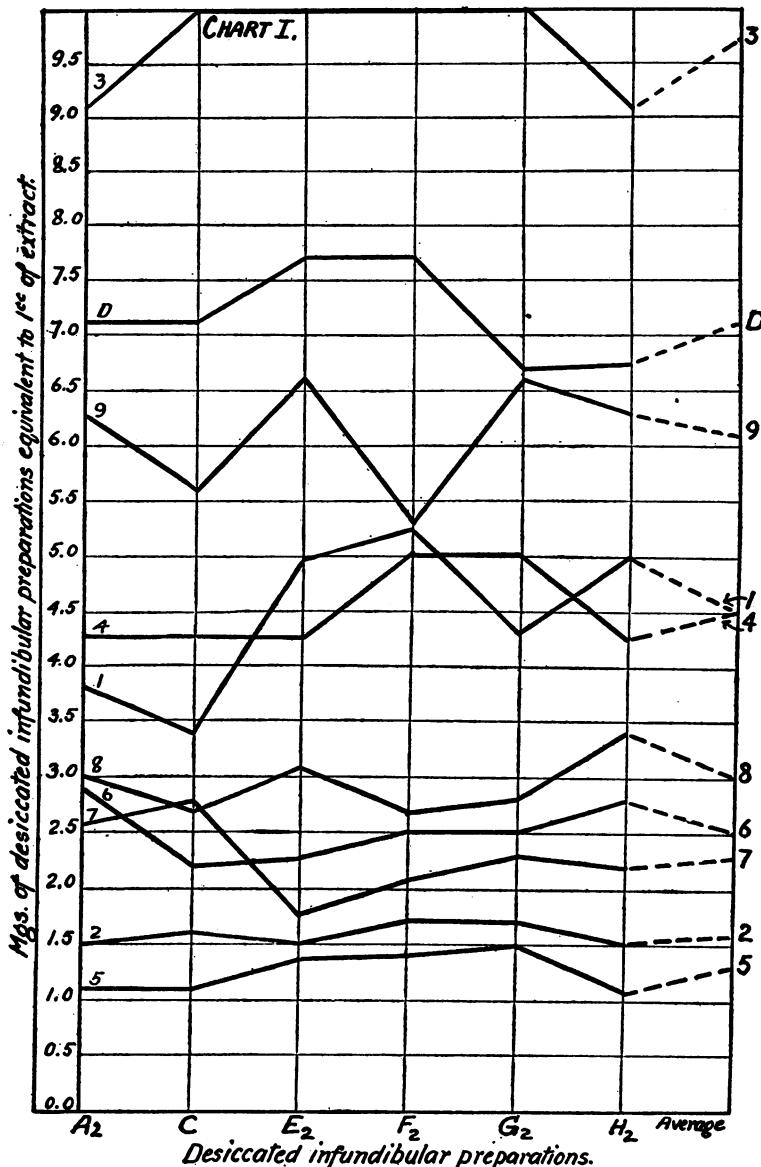


CHART I.—Potency of commercial pituitary extracts expressed in terms of mgs. of desiccated infundibular preparations equivalent to 1 c. c. of extract.

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

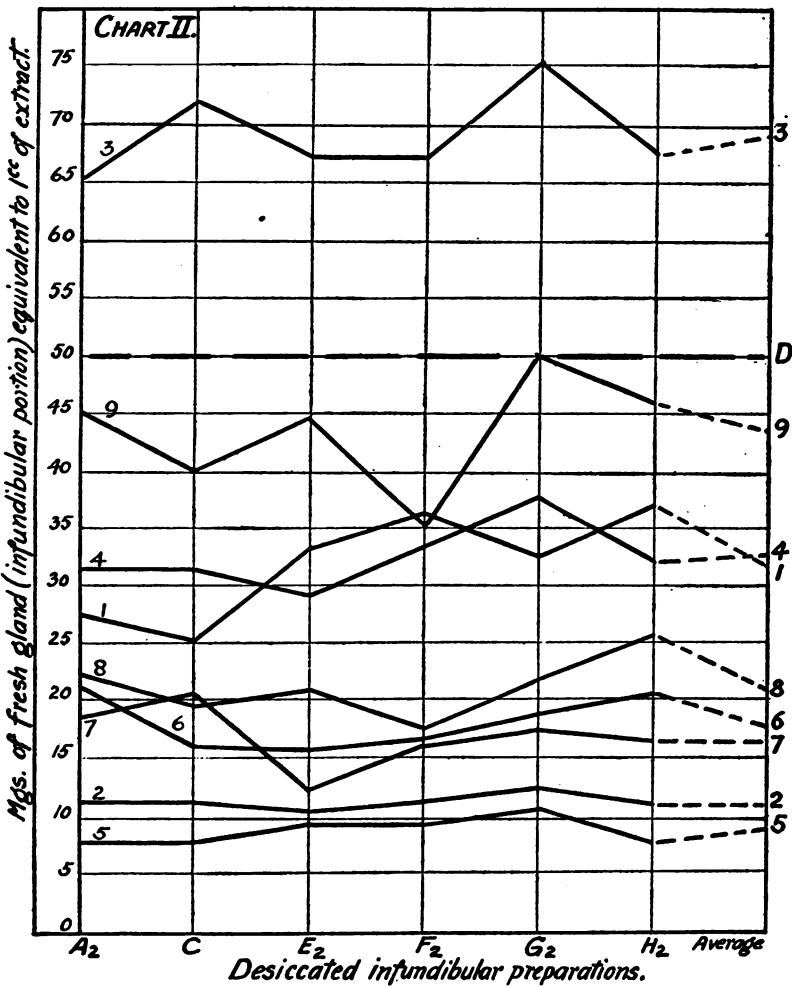


CHART II.—Activity of commercial pituitary extracts assayed against desiccated infundibular preparations, and potency expressed in terms of mgs. of fresh gland equivalent to 1 c. c. of extract.

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					The year.
	First 9 months.	Third quarter.	July.	August.	September.	First 9 months.	Third quarter.	July.	August.	September.	
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	(2)	(2)	(2)	(2)	(2)	(2)
Idaho.....	7.8	6.9	7.1	6.0	7.5	(2)	(2)	(2)	(2)	(2)	(2)
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	13.1	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	10.7	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.....	(2)	(2)	(2)	(2)	(2)	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.....	(2)	(2)	(2)	(2)	(2)	10.5	9.4	10.3	8.1	9.9	10.4
Vermont.....	(2)	(2)	(2)	(2)	(2)	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	(2)	(2)	(2)	(2)	(2)	(2)

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.	Sept.	First 9 months.	Third quarter.	July.	Aug.	Sept.	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	22.2	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	24.8	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	25.1	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	22.3	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	22.0	22.0	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.....	(*)	(*)	(*)	(*)	(*)	19.1	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	25.8
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	20.7	19.6	19.5	19.7	19.7	19.6
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	490
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	2,431
New York City.....	1,063	310	124	381
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	1,351
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, corre- sponding week 1922.	Deaths under 1 year.		Infant mor- tality. rate, week ended Mar. 3, 1923. ²
		Total deaths.	Death rate. ¹		Week ended Mar. 3, 1923.	Corre- sponding week 1922.	
Total.....	29,069,108	10,450	18.7	17.0	1,297	1,209	.....
Akron, Ohio.....	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	158
Boston, Mass.	770,400	326	22.1	22.0	55	51	97
Bridgeport, Conn.	143,555	41	14.9	15.3	7	9	155
Buffalo, N. Y.	536,718	175	17.0	14.7	37	29	178
Cambridge, Mass.	111,444	45	21.1	21.1	10	4	99
Camden, N. J.	124,157	38	16.0	15.0	6	5	102
Chicago, Ill.	2,886,121	934	16.9	15.7	129	129	105
Cincinnati, Ohio	406,312	153	19.6	19.8	16	11	107
Cleveland, Ohio	888,519	276	16.2	13.7	39	43	125
Columbus, Ohio	261,082	111	22.2	15.8	12	12	125
Dallas, Tex.	177,274	40	11.8	13.0	3	7	82
Dayton, Ohio	165,530	64	20.2	11.0	5	4	84
Denver, Colo.	272,031	88	16.9	18.7	8	10	102
Detroit, Mich.	995,668	284	14.9	16.6	42	72	68
Duluth, Minn.	106,289	26	12.8	—	3	—	102
Erie, Pa.	112,571	44	20.4	16.2	5	5	114
Fall River, Mass.	120,912	36	15.5	37.6	8	20	218
Flint, Mich.	117,968	41	18.1	—	11	—	63
Fort Worth, Tex.	143,821	30	10.9	9.5	5	1	121
Grand Rapids, Mich.	145,947	66	23.6	16.0	4	3	102
Houston, Tex.	154,970	32	10.8	13.2	6	2	108
Indianapolis, Ind.	340,882	134	20.5	18.3	14	14	108
Jacksonville, Fla.	100,046	42	21.9	19.2	4	3	137
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	104
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	—	105
Memphis, Tenn.	170,067	71	21.8	23.6	11	11	104
Milwaukee, Wis.	484,595	157	16.9	12.1	21	19	71
Minneapolis, Minn.	409,125	122	15.5	12.4	13	13	149
Nashville, Tenn.	121,128	38	16.4	23.8	5	6	91
New Bedford, Mass.	130,072	51	20.4	20.4	10	17	137
New Haven, Conn.	172,967	62	18.7	21.8	7	12	114
New Orleans, La.	404,575	207	26.7	19.1	11	13	125
New York, N. Y.	5,927,625	2,188	19.2	14.9	228	233	91
Bronx Borough	340,544	273	16.9	12.2	21	16	74
Brooklyn Borough	2,156,687	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
Peterson, N. J.	139,579	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	11	57
Richmond, Va.	181,044	73	21.0	20.8	13	9	159
Rochester, N. Y.	317,867	104	17.1	14.2	10	7	79
St. Louis, Mo.	803,853	283	18.4	19.1	18	15	83
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	125
San Antonio, Tex.	184,727	69	19.5	—	20	—	125
San Francisco, Calif.	539,058	181	17.5	25.0	12	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	86
Syracuse, N. Y.	184,511	53	15.0	19.0	10	5	130
Tacoma, Wash.	101,731	22	11.3	—	5	—	125
Toledo, Ohio	268,338	100	19.4	13.0	13	6	131
Trenton, N. J.	127,390	62	25.4	22.5	8	9	135
Washington, D. C.	347,571	168	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	18.8	11	8	124
Yonkers, N. Y.	107,520	39	18.9	12.9	1	5	22

* Enumerated population, Jan. 1, 1920.

PREVALENCE OF DISEASE.

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

UNITED STATES.

CURRENT STATE SUMMARIES.

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

Reports for Week Ended March 10, 1923.

ALABAMA.	Cases.	CALIFORNIA—continued.	Cases.
Chicken pox.....	35	Lethargic encephalitis:	
Diphtheria.....	13	Berkeley.....	2
Influenza.....	170	Sacramento.....	1
Malaria.....	25	Measles.....	338
Measles.....	143	Poliomyelitis:	
Mumps.....	3	Fresno.....	1
Pellagra.....	3	Scarlet fever.....	152
Pneumonia.....	135	Smallpox.....	17
Scarlet fever.....	8	Typhoid fever.....	6
Smallpox.....	7		
Tuberculosis.....	50		
Typhoid fever.....	21		
Whooping cough.....	54		
		COLORADO.	
		(Exclusive of Denver.)	
ARKANSAS.			
Cerebrospinal meningitis.....	1	Chicken pox.....	40
Chicken pox.....	23	Diphtheria.....	5
Diphtheria.....	8	Influenza.....	17
Influenza.....	480	Lethargic encephalitis.....	1
Malaria.....	22	Measles.....	7
Measles.....	113	Mumps.....	11
Mumps.....	3	Pneumonia.....	13
Pellagra.....	3	Scarlet fever.....	38
Scarlet fever.....	4	Septic sore throat.....	1
Smallpox.....	7	Smallpox.....	1
Trachoma.....	4	Tuberculosis.....	365
Tuberculosis.....	14	Typhoid fever.....	2
Typhoid fever.....	2	Whooping cough.....	34
Whooping cough.....	14		
		CONNECTICUT.	
CALIFORNIA.			
Cerebrospinal meningitis:		Cerebrospinal meningitis.....	1
Fresno.....	1	Chicken pox.....	37
San Francisco.....	2	Conjunctivitis.....	5
Diphtheria.....	105	Diphtheria.....	52
Influenza.....	428	Dysentery (amebic).....	1
Leprosy:		German measles.....	5
Fresno.....	1	Influenza.....	319
		Lethargic encephalitis.....	11
		Measles.....	312
		Mumps.....	21
		Pneumonia (lobar).....	63

CONNECTICUT—continued.

	Cases.
Poliomyelitis.....	1
Scarlet fever.....	92
Tuberculosis (all forms).....	42
Typhoid fever.....	1
Whooping cough.....	59

DISTRICT OF COLUMBIA.

Chicken pox.....	27
Diphtheria.....	8
Influenza.....	15
Lethargic encephalitis.....	1
Measles.....	108
Scarlet fever.....	33
Tuberculosis.....	29
Typhoid fever.....	2
Whooping cough.....	40

FLORIDA.

Dengue.....	1
Diphtheria.....	9
Influenza.....	25
Malaria.....	6
Pneumonia.....	8
Scarlet fever.....	2
Smallpox.....	6
Typhoid fever.....	8

GEORGIA.

Chicken pox.....	10
Diphtheria.....	7
Hookworm disease.....	21
Influenza.....	34
Malaria.....	3
Measles.....	7
Mumps.....	1
Paratyphoid fever.....	19
Pneumonia.....	2
Scarlet fever.....	1
Septic sore throat.....	1
Smallpox.....	5
Trachoma.....	2
Tuberculosis.....	5
Typhoid fever.....	2
Whooping cough.....	22

ILLINOIS.

Cerebrospinal meningitis:	
Cook County (including Chicago).....	4
Chicago.....	1
De Kalb County.....	1
La Salle County.....	1
Diphtheria:	
Cook County (including Chicago).....	155
Chicago.....	149
Kane County.....	17
Rock Island County.....	9
Scattering.....	82
Influenza:	
Chicago.....	153
Scattering.....	193
Pneumonia.....	725
Poliomyelitis:	
Cook County (including Chicago).....	2
Chicago.....	1
Fayette County.....	1

ILLINOIS—continued.

	Cases.
Scarlet fever:	
Cook County (including Chicago).....	116
Chicago.....	100
Kane County.....	8
Peoria County.....	11
Scattering.....	103
Smallpox.....	20
Typhoid fever.....	7
Whooping cough.....	328

INDIANA.

Diphtheria.....	79
Influenza.....	211
Measles.....	345
Pneumonia.....	22
Scarlet fever.....	61
Smallpox.....	59

IOWA.

Diphtheria.....	33
Scarlet fever.....	129
Smallpox.....	18

KANSAS.

Chicken pox.....	60
Diphtheria.....	50
German measles.....	1
Hookworm disease.....	1
Influenza.....	433
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.....	90

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.

Chicken pox.....	89
Diphtheria.....	50
Dysentery.....	1

¹ Week ended Friday.

MARYLAND—continued.		Cases.	MISSOURI.		Cases.
			Chicken pox.	89	
German measles.	6	1,083	Diphtheria.	77	
Influenza.	10		Epidemic sore throat.	56	
Lethargic encephalitis.	291		Influenza.	997	
Measles.	76		Measles.	611	
Mumps.	1		Mumps.	31	
Ophthalmia neonatorum.	300		Pneumonia.	50	
Scarlet fever.	77		Scarlet fever.	90	
Tuberculosis.	33		Smallpox.	16	
Typhoid fever.	7		Tetanus.	1	
Vincent's angina.	1		Trachoma.	11	
Whooping cough.	108		Tuberculosis.	58	
MASSACHUSETTS.			Typhoid fever.	2	
Cerebrospinal meningitis.	2		Whooping cough.	59	
Chicken pox.	125		MONTANA.		
Diphtheria.	139		Diphtheria.	11	
German measles.	12		Scarlet fever.	23	
Influenza.	179		Smallpox.	1	
Lethargic encephalitis.	9		Typhoid fever.	1	
Measles.	900		NEBRASKA.		
Mumps.	286		Chicken pox.	22	
Ophthalmia neonatorum.	30		Diphtheria.	16	
Pneumonia (lobar).	214		German measles.	2	
Pohomyleitis.	1		Influenza.	94	
Scarlet fever.	340		Measles.	10	
Septic sore throat.	1		Mumps.	15	
Tetanus.	1		Pneumonia.	5	
Tuberculosis (all forms).	119		Scarlet fever.	49	
Typhoid fever.	8		Smallpox.	3	
Whooping cough.	483		Tetanus.	1	
MICHIGAN.			Tuberculosis.	12	
Diphtheria.	144		Typhoid fever.	1	
Measles.	257		Whooping cough.	29	
Pneumonia.	226		NEW JERSEY.		
Scarlet fever.	432		Cerebrospinal meningitis.	5	
Smallpox.	37		Chicken pox.	140	
Tuberculosis.	76		Diphtheria.	126	
Typhoid fever.	24		Influenza.	260	
Whooping cough.	198		Malaria.	1	
MINNESOTA.			Measles.	918	
Chicken pox.	3		Pneumonia.	284	
Diphtheria.	41		Poliomyelitis.	1	
Influenza.	24		Scarlet fever.	226	
Lethargic encephalitis.	8		Smallpox.	1	
Measles.	286		Typhoid fever.	5	
Pneumonia.	21		Whooping cough.	133	
Scarlet fever.	184		NEW YORK.		
Smallpox.	41		(Exclusive of New York City.)		
Tetanus.	2		Cerebrospinal meningitis.	2	
Trachoma.	1		Diphtheria.	90	
Tuberculosis.	39		Influenza.	1,309	
Typhoid fever.	5		Lethargic encephalitis.	7	
Whooping cough.	12		Measles.	1,045	
MISSISSIPPI.			Pneumonia.	700	
Diphtheria.	8		Scarlet fever.	339	
Influenza.	516		Smallpox.	2	
Scarlet fever.	5		Typhoid fever.	16	
Smallpox.	1		Whooping cough.	289	
Typhoid fever.	4				

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.....	14
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
Wellsville.....	42
Wheeling.....	108
Scarlet fever.....	19
Typhoid fever.....	2

WISCONSIN.

Milwaukee:	
Chicken pox.....	10
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
Scarlet fever.....	1
Smallpox.....	1
Tuberculosis.....	21
Typhoid fever.....	1
Whooping cough.....	1

¹ Deaths.

Report for Week Ended March 3, 1923.

NORTH DAKOTA.

	Cases.
Chicken pox.....	12
Diphtheria.....	20
Influenza.....	20
Lethargic encephalitis.....	1
Pneumonia.....	7

NORTH DAKOTA—continued.

Cases.
Poliomyelitis.....
Scarlet fever.....
Smallpox.....
Tuberculosis.....
Whooping cough.....

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.....									
Arkansas.....	765	572			464	82	97	67	.....
Iowa.....	357	12			421	10			
Kansas.....	386	511	101	47	578	18	141	15	79
Kentucky ³									
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	3,050		733		372	72	629
New Mexico.....	79	125	3	5	38	4	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		868	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.
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
California	1.38	2.50	.32	.18	1.85	.12	1.78	.17
Colorado	3.54	3.52	.28	.58	3.50	1.42	.52	.35
Connecticut	2.07	3.01	10.03	.63	3.54	.02	1.00	.11
Delaware	4.69	.46	8.61	.15	4.23		.62	.21
District of Columbia	2.91	2.20	1.29		2.28		2.41	.25
Florida	.16	1.23	.03	.02	.05	.20	1.33	.36
Georgia ²								
Idaho	2.18	.79	.05		.59	.44	.05	.23
Illinois	2.84	3.42	1.62	.90	2.31	.23	2.43	.18
Indiana		3.01	2.25		1.83	.32	.38	.26
Iowa		1.72	.06		2.02	.05		
Kansas	2.54	3.36	.66	.31	3.80	.12	.93	.10
Kentucky ³								
Louisiana	.06	1.33	.06	.01	.25	.23	1.33	.65
Maine	2.20	.90	.96	.17	2.48		.17	.21
Maryland	4.21	3.48	3.75	.84	2.60		1.09	.39
Massachusetts	2.74	3.27	7.75	1.79	2.87		1.44	.12
Michigan	3.37	3.29	1.06	.22	4.26	.71	1.13	.23
Minnesota	2.74	2.50	1.02		4.99	.87	1.15	.09
Mississippi	2.11	1.56	6.03	.70	.46	.62	1.40	.45
Missouri ⁴								
Montana	2.00	.60	.06	.02	1.87	.71	1.07	.16
Nebraska	1.58	1.67	.09	.24	2.62	.35	.03	.12
Nevada ⁴								
New Hampshire ⁴								
New Jersey	2.97	3.67	10.86		2.60		1.32	.26
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
North Carolina	2.02	1.76	1.41		1.46	.59		.13
North Dakota	1.24	1.81	.67	.05	3.56	1.20	.23	.23
Ohio	3.70	3.14	5.57	.14	4.53	.38	.82	.18
Oklahoma	.24	.33	.01		.22	.33	.11	.07
Oregon	1.87	1.70	.23	.17	1.08	.73	1.32	.26
Pennsylvania	3.86	2.82	19.65	.53	2.70	.02	.42	.24
Rhode Island	.38	1.48	9.59	.09	.99		.37	.11
South Carolina	.07	1.38	.06	.01	.12	.41	.15	.04
South Dakota	.83	1.20	.18		3.69	.76	.45	.14
Tennessee ⁴								
Texas ⁴								
Utah ⁴								
Vermont	9.42	.40	1.70	.53	3.54	.10	.33	.13
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
West Virginia	1.75	3.09	2.55		2.10	.08	.31	.42
Wisconsin	3.50	2.22	14.93		3.77	.74	.44	.10
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.	Poliomyelitis.	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	4	3	756	97	57
Colorado.....	1	347	4		30			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	583		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	25
Massachusetts.....	13	662	1,162	1	3,874		9	1,204		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			Brantree.....	26	24	
New Haven.....	9	18	8	Brookline.....	7		
New London.....		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:				Framingham.....	14	1	1
St. Petersburg.....		2		Haverhill.....	63	7	
Tampa.....	7	8	1	Holyoke.....	3	4	
Georgia:				Lawrence.....			
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		Walther.....	11	9	1
Rock Island.....	4			Webster.....	1		
Springfield.....	2	4	1	Westfield.....	1		
Indiana:				Worcester.....	73	3	
Elkhart.....	1			Michigan:			
Fort Wayne.....			1	Detroit.....	100	14	16
Indianapolis.....			5	Flint.....	2	16	4
La Fayette.....	12			Grand Rapids.....		9	2
Leopold.....		5		Highland Park.....	1		
Logansport.....			2	Jackson.....		1	1
Terre Haute.....			3	Kalamazoo.....	2		3
Iowa:				Pontiac.....	1	2	
Council Bluffs.....			1	Saginaw.....	2		
Sioux City.....							

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		9	Akron	11	2	
Minneapolis	6			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	9	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	71	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:			
Montclair	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				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
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: Akron.....	1.....		Wisconsin: Eau Claire.....	3.....	2
South Dakota: Sioux Falls.....		1			

MALARIA.

Alabama: Tuscaloosa.....	1.....		Louisiana: New Orleans.....	5.....	2
Florida: St. Petersburg.....	1.....		New York: 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: Mobile.....	1.....		Michigan: Flint.....	1.....	1
Georgia: Atlanta.....		1	Tennessee: Memphis.....		1
Louisiana: New Orleans.....	1.....				

PNEUMONIA (ALL FORMS).

Alabama: Birmingham.....	10.....	6	Illinois: Alton.....		2
Arkansas: Little Rock.....	5.....		Bloomington.....		1
California: Alameda.....		3	Blue Island.....	5	3
Eureka.....	2		Champaign.....	4	
Glendale.....	3		Chicago.....	565	189
Los Angeles.....	84	32	Cicero.....		4
Oakland.....	29	15	Decatur.....	11	3
Pasadena.....	4	2	Elgin.....	7	2
Richmond.....		2	Evanson.....	9	
Riverside.....	5	3	Freeport.....		3
Sacramento.....	2	1	Jacksonville.....	5	1
San Diego.....		7	Kewanee.....		2
Santa Ana.....	4		Le Salle.....	2	1
Santa Barbara.....	2		Mattoon.....		3
Santa Cruz.....		3	Oak Park.....	7	4
Colorado: Denver.....	30		Peoria.....		6
Pueblo.....	4		Quincy.....	7	4
Connecticut: Bridgeport.....	6	2	Rock Island.....	4	2
Bristol.....		4	Springfield.....	17	9
Derby.....		5	Indiana: Anderson.....		1
Hartford.....	7	2	Bloomington.....		2
Milford.....		1	Crawfordsville.....		1
New Haven.....	17		East Chicago.....		5
New London.....	2	1	Fort Wayne.....		8
District of Columbia: Washington.....		44	Frankfort.....		1
Florida: Key West.....		1	Gary.....		7
St. Petersburg.....		1	Indianapolis.....		33
Tampa.....	3		La Fayette.....		1
Georgia: Atlanta.....		11	Laporte.....		3
Rome.....	1		Michigan City.....		4
Savannah.....		3	Muncie.....		2
			South Bend.....		1
			Terre Haute.....		4
			Iowa: Burlington.....		2
			Council Bluffs.....		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	54	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
Chester		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			Garfield		1
Gardiner	3	2	Hackensack		5
Greenfield		2	Harrison	1	
Haverhill	13	6	Hoboken		
Holyoke		8	Jersey City	27	
Lawrence	5	3	Kearny	9	
Leominster	3	1	Long Branch	1	
Lowell		13	Montclair	2	1
Lynn		7	Morrisstown	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		
West Springfield		2	Hornell	16	2
Westfield		2	Hudson		1
Weymouth		1	Ithaca	4	3
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.....		
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:		
Nowark.....		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 pre- vious years.	Week ended Feb. 24, 1923.		City.	Median for pre- vious years.	Week ended Feb. 24, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:							
Birmingham.....	0	1	1				
Louisiana:							
New Orleans.....	0	1	.....			
Massachusetts:							
Lowell.....	0	1	1				
Lynn.....	0	1	.....			
New York:							
Hudson.....					0	.....	1
Pennsylvania:							
Pittsburgh.....					0	1	.....

RABIES IN ANIMALS.

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

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

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.
Alabama:										
Birmingham.....	178,806	48	2	1	6		3		12	5
Mobile.....	60,777	21					1		2	2
Montgomery.....	43,464	1	1		77					
Tuscaloosa.....	11,996		2		5				1	
Arkansas:										
Fort Smith.....	28,870		1					1		1
Hot Springs.....	11,695	2								
Little Rock.....	65,142		3							
North Little Rock.....	14,048		1		18		1		2	
California:					7					
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								
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		1
San Diego.....	74,683	36	8	1	105		12	1	3	3
Santa Ana.....	15,485	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.	Population 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								1
Pueblo	43,050	14	5							
Trinidad	10,906		3	1			1			
Connecticut:										
Bridgeport	143,555	35		1		2	2			4
Bristol	20,620	14		1						
Derby	11,238	5								1
Fairfield (town)	11,475	5								
Greenwich (town)	22,123									
Hartford	138,036	43	5		3		4			
Manchester (town)	18,370	2								
Meriden (city)	29,867	1							1	1
Millford (town)	10,193	3								
New Haven	162,537	65	1		38		5		5	1
New London	25,688	6	1		14		2		1	
Stonington (town)	10,236	4								
District of Columbia:										
Washington	437,571	183	7		100		31		26	9
Florida:										
Key West	18,749	13								2
St. Petersburg	14,237	14				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	13,232		1		1					
Savannah	83,252	45	2						1	6
Idaho:										
Boise	21,393	2								
Pocatello	15,001	3								
Illinois:										
Alton	24,682	8	4							
Bloomington	25,725	7	1		1		1		2	1
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			
Evanston	37,234	5	1		16		8			
Freeport	19,669	15			3		1		1	1
Galesburg	23,334	14	2		2		2			
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	39,558	16	2		6		1			1
Peoria	76,121	34			115		3			
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	21,026	3			4	1				
Michigan City	19,457	7			12		3			
Mishawaka	15,195	5					1		2	
Muncie	36,524	10	1		1		5			3
South Bend	70,983	20			10					1
Terre Haute	60,083	23	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	10,693	4	1							
Hutchinson	23,298		1							
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								
Lexington	41,534	23	1				1			3
Louisville	234,891	111	5		10		3		8	6
Paducah	24,735		1		9					
Louisiana:										
New Orleans	387,219	180	19		2		2		26	18
Maine:										
Auburn	16,985	11					4			1
Bangor	25,978		1							
Bath	14,731	9								
Biddeford	18,008	7								
Lewiston	31,791	20	2		20		3	1		2
Portland	69,272	45	2							
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					
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	100,694	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
Framingham	17,033	11			1		2			
Gardiner	16,971	9	1							
Greenfield	15,462	7					1			
Haverhill	53,894	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			
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			
Methuen	15,180	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.	Population 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	1
Salem	42,529	21	3	1	2					
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		138	5	43	15
Flint	91,599	39	8	2	6		14		1	1
Grand Rapids	137,634	58	5		4		8		6	2
Hamtramck	48,615	18	2	2					1	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								1
Hibbing	15,089	3								
Minneapolis	380,582	115	14	4	5		35		33	8
Rochester	13,722	17								1
St. Cloud	15,873		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								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.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			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	26,470	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	19,381	3	1		6				1	
Hackensack	17,667	14					4		1	
Harrison	15,721				3					
Hoboken	68,166	19	3		4		4		1	
Jersey City	298,103		7		8		9		21	
Kearny	26,724	3			2		1		1	
Long Branch	13,521	5					1			
Montclair	24,810	11			6		6			1
Mornistown	12,548	13			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	
Auburn	36,192	10							2	1
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				2					
Mount Vernon	42,726	13	4	1	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	15,492	5								2
Olean	20,506	10	1		31	1	11			
Peekskill	15,868	2			1		10		2	
Poughkeepsie	35,000	15								
Rochester	295,750	104	6	1	104	1			5	
Saratoga Springs	13,181	3	1							
Schenectady	88,723	22			6		6			
Syracuse	171,717	51	9	1	3		12	1	2	1
Troy	72,013	42	2				4		2	5
Watertown	31,285	19	1		1					
White Plains	21,031	4	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								
Winston-Salem	48,395	20								1
North Dakota:										
Fargo	21,961	0								
Grand Forks	14,010									
Ohio:										
Akron	208,435	35	5		5		3		22	
Ashtabula	22,062	11	2		7					
Barberton	18,811	8	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.	Population 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				1					
Kenmore	12,683				1		1		1	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			
Martins Ferry	11,634	12			4		1			
Middletown	23,594	5	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					
Salem	10,305	4	2							1
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									
Farrell	15,586		2		2		4			
Harrisburg	75,917		3		324		6			
Hazleton	32,277				2		1			
Homestead	20,452				26					
Jeanette	10,627									
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					
Monesson	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				79					
Philadelphia.	1,823,779	651	1	6	329	10	58	1	56	47
Phoenixville.	10,484				2					
Pittsburgh.	558,343		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				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.	237,595	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.	158,978	48	4					2		2
El Paso.	77,580	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			
Norfolk.	115,777		2						2	4
Petersburg.	31,012	12	1					1	1	
Portsmouth.	54,387	23								3
Richmond.	171,667	54	3	1	3		3		11	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.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
West Virginia:										
Bluefield	15,282	6	1							
Charleston	39,608	21							6	2
Clarksburg	27,869	7	2							
Fairmont	17,851		3		1			1		
Huntington	50,177	18	3	5				3		
Martinsburg	12,515									
Morgantown	12,127				35			1		
Moundsville	10,669	4	2							
Parkersburg	20,050	12	2					1		
Wheeling	56,208	21	1		105			3		
Wisconsin:										
Appleton	19,561	4	2					1		
Ashland	11,324	5	1							
Beloit	21,284	7	2					6		
Eau Claire	20,906		1		1					
Fond du Lac	23,427	10								
Green Bay	31,017		3		3			7		
Janesville	18,293	7			17			2		
Kenosha	40,472	14	1		252	1				
La Crosse	20,421		1		30			2		
Madison	38,378	9	2		18			5		
Manitowoc	17,563		1					1		
Marinette	13,610	7								
Milwaukee	457,147	167	19	4	187			273	6	8
Oshkosh	33,162	37						1		10
Racine	58,593	22	2	1	121			8		3
Sheboygan	30,955	16	5	1	15			2		
Stevens Point	11,371							1		
Superior	39,671	13			2			2		
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
Kissimme		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	
California:				Russell County.....			
Alameda County.....			2	Total.....	2	1	1
Fresno County.....			1	Louisiana:			
Los Angeles County.....	2		3	De Soto Parish.....	1		
Modoc County.....			1	Orleans Parish.....	1	1	2
Riverside County.....			1	St. Mary Parish.....		1	
San Diego County.....	1			Webster Parish.....			1
San Francisco County.....	3		4	Total.....	2	1	4
San Luis Obispo County.....			1	Maine:			
Santa Barbara County.....	1			Aroostook County.....	1		
Stanislaus County.....			1	Franklin County.....		1	
Total.....	7		14	Penobscot County.....		1	
Colorado:				Total.....	1	1	1
La Plata County.....		1		Maryland:			
Weld County.....		1	1	Allegany County.....		1	
Total.....		2	1	Baltimore City.....	1	4	
Connecticut:				Howard County.....		1	
Fairfield County.....		2		Total.....	1	6	
Hartford County.....		1		Massachusetts:			
New Haven County.....		3	3	Berkshire County.....		1	
New London County.....	2			Bristol County.....	3	3	1
Tolland County.....		1		Essex County.....	1		1
Windham County.....			1	Hampden County.....		1	
Total.....	2	7	4	Middlesex County.....	2	1	2
District of Columbia:				Plymouth County.....		1	
Florida:				Suffolk County.....		7	
Pinellas County.....	1			Worcester County.....	1	1	1
Illinois:				Total.....	7	15	5
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	
Le Salle County.....	1			Total.....		2	3
Madison County.....			2	Mississippi:			
Marion County.....		1		Jones County.....		1	
Pulaski County.....		1		Panola County.....		1	
Sangamon County.....	1			Total.....		2	
Vermilion County.....	1			Montana:			
Williamson County.....			1	Fleished County.....		1	
Total.....	6	6	14	Hill County.....		1	
Indiana:				Missoula County.....	1	2	
Cass County.....	1			Silver Bow County.....		2	
Hancock County.....	1			Total.....	1	6	
Leporte County.....	1			Nebraska:			
Marion County.....	1			Douglas County.....		1	
Total.....	4			Seward County.....		1	
Iowa:				York County.....		1	1
Jasper County.....		1		Total.....		3	1
Van Buren County.....			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				
Passaic County.....	1	1					
Somerset County.....			1				
Sussex County.....			1				
Union County.....		2					
Total.....	6	10	7				
New York:							
Erie County.....	2	1	3				
Herkimer County.....		2	1				
Monroe County.....	1						
Niagara County.....	2						
Nassau County.....	2						
Rensselaer County.....	1						
St. Lawrence County.....	1						
Saratoga County.....		1					
Schenectady County.....		1					
Westchester County.....			1				
New York City.....	11	13	9				
Total.....	20	18	14				
North Carolina:							
Durham County.....		1					
Guildford County.....	1						
Halifax County.....		1					
Richmond County.....			1				
Rowan County.....	1						
Surry County.....	1						
Wake County.....	2		1				
Total.....	5	2	2				
North Dakota:							
Bowman County.....		1					
Grand Forks County.....	1						
Total.....	1	1					
Ohio:							
Ashtabula County.....	1						
Belmont County.....			1				
Cuyahoga County.....	2						
Defiance County.....		1	1				
Hamilton County.....	2	2	1				
Jefferson County.....		1					
Lake County.....		1					
Stark County.....			1				
Summit County.....	1	1					
Total.....	6	6	4				
Pennsylvania:							
Adams County.....		1					
Allegheny County.....			4				
Beaver County.....	1		1				
Berks County.....			1				
Blair County.....		1					
Chester County.....			1				
Delaware County.....	1						
Lehigh County.....	1	1					
Luzerne County.....		1					
Northampton County.....		1					
Philadelphia County.....	1						
Snyder County.....			1				
Total.....					15	3	7

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.....	100	119	9	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.....		1	
Dallas County.....	19	14		Orange County.....	2	3	1
Escambia County.....	3		1	Placer County.....	1		1
Franklin County.....			3	Plumas County.....			1
Geneva County.....				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	
Marengo County.....	1	4		San Diego County.....		2	
Marion County.....			90	San Francisco County.....	7	14	11
Montgomery County.....		2	10	San Joaquin County.....			1
Pike County.....	11			Santa Clara County.....	2	1	
Sumter County.....			89	Santa Cruz County.....	1	3	3
Talladega County.....	47		10	Shasta County.....		7	
Tuscaloosa County.....			3	Siskiyou County.....	7	9	6
Walker County.....			9	Solano County.....		4	
Washington County.....			6	Sonoma County.....			1
Wilcox County.....	1			Stanislaus County.....		1	
Total.....	180	281	494	Tehama County.....		2	2
				Ventura County.....	3		
				Yolo County.....			3
				Total.....	85	138	104
Arkansas:				Connecticut:			
Ashley County.....		2	5	Fairfield County.....		5	16
Benton County.....		1	3	Hartford County—			
Bradley County.....		9	14	New Britain.....	9	10	16
Calhoun County.....	1	3	5	Scattering.....	2	2	5
Clay County.....			2	Litchfield County—			
Cleveland County.....			1	Sharon.....			13
Crawford County.....	2			New Hartford.....		1	
Drew County.....	9		6	New Haven County.....		3	4
Faulkner County.....	8	2	7	New London County.....	2	3	3
Franklin County.....	1	1	6	Windham County.....		1	1
Greene County.....			2	Total.....	18	24	58
Hempstead County.....	2		4	Delaware:			
Hot Spring County.....		23	19	Kent County—			
Lee County.....		1		Dover.....	1	9	50
Logan County.....			14	Felton.....			4
Ouachita County.....	1			New Castle County—			
Perry County.....		4		Wilmington.....			12
Pike County.....		11	2	Scattering.....			10
Pulaski County.....	3		1	Sussex County.....		4	
St. Francis County.....	2	1	4	Total.....	1	13	76
Sebastian County.....			3	District of Columbia:	2	5	9
Scott County.....	2	8	9				
Sharp County.....			55				
Union County.....			1				
Van Buren County.....	4	6					
Washington County.....			4				
White County.....		3					
Total.....	35	76	167				
California:							
Alameda County.....	4	7	12	Florida:			
Butte County.....	1		2	Alachua County.....		1	2
Calaveras County.....			4	Bay County.....		48	37
Contra Costa County.....	1	1		Citrus County.....		2	
Fresno County.....			2	Clay County.....	1		
Glen County.....	2			Dade County.....			2
Humboldt County.....	1	2		Dixie County.....			
Imperial County.....			1	Duvan County—			
Kern County.....			1	Jacksonville.....	7	3	44
Kings County.....				Scattering.....	1	1	2
Lassen County.....	10	1		Escambia County.....			1
		12		Franklin County.....			2
				Gadsden County.....	2	8	2
				Hernando 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.
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	Indians:			
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
Osceola 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		
Fulton County		3		East Baton Rouge Parish	5		
Henry County			3	East Carroll Parish	1	10	.....
Jasper County		1		East Feliciana Parish	8		
Jersey County	2	1	1	Orleans County	10	4	.....
Johnson County		1	1	Pointe Coupee Parish		1	
Kane County		1		St. Landry Parish		2	.....
Kankakee County	1			St. Mary Parish	4		
Kendall County		1		Vernon Parish	1		
Lake County				Total	34	17	16
La Salle County	1	1		Maryland:			
Livingston County			2	Allegany County	6	2	4
Logan County		1	4	Anne Arundel County	1	2	2
McDonough County			3	Baltimore City	25	78	139
McHenry County		1		Baltimore County	1	3	10
McLean County		1		Calvert County	2		2
Macon County				Caroline County	1	6	18
Macoupin County		2		Carroll County	1		9
Madison County		4		Cecil County		1	4
Massie County			1	Charles County	4	8	16
Menard County	1	1	2	Dorchester County		5	11
Morgan County			1	Frederick County	2		
Peoria County		3	2	Garrett County	1		3
Piatt County				Harford County	3	2	6
Rock Island County			1	Howard County			6
Saint Clair County	1	1	2	Kent County			1
Saline County		1	1	Montgomery County	5	4	8
Sangamon County		1	4	Prince Georges County	7	3	.....
Shelby County		1					
Stark County	1						
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 Anne's County			3	Madison County				
St. Marys County	10	4		Marion County		8	48	
Somerset County		2	15	Marshall County	15	20	50	
Talbot County	2	3	11	Monroe County	35	251	40	
Washington County	2	2	1	Montgomery County			1,500	
Worcester County		2	1	Neshoba County			10	
				Newton County			50	
				Noxubee County			223	
Total.	73	127	270	Oktibbeha County	75	46	340	
Massachusetts:				Panola County		2	28	
Berkshire County		1		Pearl River County	40	4	12	
Bristol County		2	3	Perry County			12	
Essex County	16		23	Pike County	11	14	32	
Franklin County		1	1	Pontotoc County		8	20	
Hampden County	3		2	Prentiss County		12	276	
Middlesex County—				Quitman County	5	11	113	
Everett		1	26	Rankin County	4	10	22	
Scattering	10		21	Scott County		3	40	
Norfolk County	5		8	Sharkey County	3		38	
Suffolk County—				Simpson County	1		275	
Boston	13		43	Smith County			400	
Scattering	2		5	Stone County	8			
Worcester County		3	10	Sunflower County		2	137	
Total.	27	57	142	Tallahatchie County			363	
Minnesota:				Tate County	6	24	97	
Blue Earth County	1			Tippah County			1,673	
Cass County	1			Tishomingo County	25	65	1,464	
Freeborn County	1			Tunica County			75	
Grant County	1			Union County		13	181	
Jackson County	1			Walthall County	16	9	19	
Marshall County		1		Washington County	5	8	95	
Pennington County	1	2		Wayne County			210	
St. Louis County			1	Webster County		18		
Wabasha County	1			Wilkinson County	10	2	50	
Total.	7	3	1	Winston County			80	
Mississippi:				Yalobusha County	28	17	61	
Adams County			6	Yazoo County	2	4	36	
Alcorn County	43	17	129	Total.	649	1,392	12,976	
Amite County	20	13	15	Nebraska:				
Attala County			240	Antelope County			6	
Benton County		11	29	Fillmore County	1			
Bolivar County	8	8	468	Keyapaha County	2			
Calhoun County	10		250	Saline County		3		
Carroll County	1		41	Saunders County			77	
Chickasaw County	11	28	104	Valley County	2			
Choctaw County			361	Washington County		1		
Clay County	2	8	81	Total.	5	4	83	
Coahoma County	6	18	134	New Jersey:				
Copiah County	1	8	32	Atlantic County	4			
Covington County	15		141	Bergen County	2	3	9	
De Soto County		1	58	Burlington County			5	
Forrest County	2		82	Camden County		4		
George County			43	Cumberland County	1			
Grenada County	3		51	Essex County	20	46	80	
Hancock County	3			Hudson County	1	6	11	
Harrison County	2	5	15	Morcer County	7	1	4	
Holmes County	39	23	68	Middlesex County			1	
Humphreys County			29	Mommouth County	12	6	4	
Itawamba County	7	72		Passaic County	2	5	4	
Jasper County			10	Sussex County			2	
Jefferson Davis County	15		226	Total.	59	71	120	
Jones County	10	12	53	New Mexico:				
Kemper County			50	Colfax County		5	1	
Lafayette County	13	33	140	McKinley County	2			
Lamar County	10	35	206	San Miguel County	7			
Lauderdale County	51			Valencia County	4			
Lawrence County	12	12	160	Total.	18	1		
Leake County		7	114					
Lee County	50	484	1,141					
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:											
Albany County	7	5	10	Rhode Island:							
Broome County	5	16	4	Kent County	7		1				
Cattaraugus County		1		Providence County	1						
Cayuga County	1	1		Total	8		1				
Chautauque County		2	2								
Chenango County		1		South Carolina:							
Columbia County		3	3	Anderson County		5	376				
Delaware County			3	Barnwell County			229				
Dutchess County			8	Charleston County			46				
Erie County	2	4	2	Cherokee County		1	36				
Hamilton County— Long Lake Town- ship	13		1	Chester County	1	6	41				
Herkimer County		6		Chesterfield County		72	66				
Jefferson County	1		1	Clarendon County	2						
Monroe County			2	Colleton County							
Montgomery County	2	2	2	Darlington County		68					
Niagara County		1	2	Dillon County		200					
Oneida County	3		4	Greenville County			265				
Onondaga County		2	2	Greenwood County			334				
Ontario County	4			Kershaw County		125					
Orange County	3	2	13	Laurens County		22	55				
Otsego County			3	Lee County		6	9				
Rensselaer County	3	2	3	Lexington County	3	466	84				
Rockland County— Haverstraw Village			23	Orangeburg County	3	395	151				
Saratoga County	2		3	Pickens County			154				
Schenectady County		2		Richland County		22	439				
Steuben County	1		5	Spartanburg County		21	215				
Suffolk County— Islip Township		5	12	York County		136	513				
Northport Village			1	Total	17	1,545	3,013				
Tioga County	1										
Ulster County			10	South Dakota:							
Wayne County		1	1	Hutchinson County		2					
Westchester County	1	9	3	Jones County			1				
New York City	118	204	202	Minnehaha County			1				
Total	163	273	325	Spink County		3					
Ohio:				Total		5	2				
Ashtabula County	1										
Belmont County		4	1	Vermont:							
Brown County			1	Rutland County			1				
Butler County			3	Windham County			1				
Champaign County		1		Total			2				
Coshocton County			1								
Cuyahoga County	4	7	19	Virginia:							
Franklin County	1	2		Carroll County		11	76				
Hamilton County	2		20	Alleghany	3	6	163				
Jefferson County	1	1		Amelia County	3	9	38				
Knox County			1	Amherst County	2		5				
Lawrence County			46	Appomattox County			50				
Mahoning County			2	Augusta County	25	24	283				
Medina County	1		3	Bath County			26				
Monroe County			1	Bedford County	7	10	344				
Montgomery County			2	Bland County			417				
Muskingum County			1	Botetourt County			417				
Noble County	1			Brunswick County	4		71				
Ottawa County	3		2	Buchanan County		15	535				
Putnam County	1			Buckingham County			75				
Ross County			39	Campbell County	22	30	241				
Stark County			5	Caroline County	24	9	6				
Summit County	1		3	Carroll County		2	195				
Tuscarawas County	1			Charles City County			11				
Warren County			18	Charlotte County			75				
Wayne County	1	1	1	Chesterfield County		1					
Total	11	23	170	Clarke County		3	13				
Oklahoma:				Culpeper County	2	9	55				
Blinne County			20	Cumberland County	2	4	220				
Mayes County	4		4	Dickinson County	6	10	669				
Total	4		24	Dinwiddie County		57	89				
				Elizabeth City County			34				
				Essex County	1		50				
				Fauquier County	2	24	94				
				Floyd County	8	17	444				
				Fluvanna County			29				
				Franklin County	6		281				

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
Greenville 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	Total	682	1,355	16,393
James City County			14				
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	2	.....	Green County	1		.....
Mecklenburg County		21	250	Green Lake County	1	2	.....
Middlesex County	8	8	38	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		1
Pittsylvania County	10	27	452	Richland County			.....
Powhatan County	20	10	60	Rock County		2	.....
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	Villas County			3
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	Total	51	145	129
Shenandoah County	20	14	51				
Smyth County	6	41	99				

LEPROSY.

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

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

MALARIA.

Place.	New cases reported.			Place.	New cases reported.			
	Oct.	Nov.	Dec.		Oct.	Nov.	Dec.	
Alabama:								
Baldwin County	7	1		California—Continued.				
Barbour County	7	5		Glenn County	1			
Calhoun County		2		Kings County	1			
Choctaw County		1	1	Los Angeles County	4	2	1	
Colbert County	5	27	125	Nevada County	2			
Covington County			1	Orange County	1			
Cullman County	2			Sacramento County	2	3	1	
Dale County	3			San Francisco County	6	5	8	
Dallas County	24			San Joaquin County	1	2		
Geneva County	1	3		Santa Clara County	1			
Hale County	4	2		Shasta County	4	3		
Henry County	7	1		Sutter County	2			
Houston County	29	8						
Jefferson County	18	64	20					
Lauderdale County	9							
Lawrence County	9	3						
Madison County	1	1						
Marengo County	7	2	9					
Mobile County	5							
Montgomery County	3	1						
Pike County	1	3						
Sumter County	22	4	1					
Talladega County	3							
Tallapoosa County	2							
Tuscaloosa County		1						
Washington County	2							
Wilcox County	21	4						
	Total.	122	133	157				
Arkansas:								
Ashley County	5	3		Florida:				
Bradley County	28	14	11	Alachua County	3	1		
Calhoun County	13	5	1	Bay County				
Clay County	1			Brevard County	1	1		
Cleveland County	1	2	2	Calhoun County				
Drew County	34	13	14	Charlotte County	1			
Faulkner County	6		1	Citrus County	1	17	4	
Franklin County	6	2		Clay County				
Greene County	8	4		Columbia County	1			
Hempstead County	14	6	1	Dade County	1			
Hot Spring County	21	12		De Soto County				
Independence County	5	1		Duval County				
Izard County	2	15	3	Jacksonville	22	7	14	
Jackson County	9	4		Scattering	3	2	5	
Lafayette County	14	19		Escambia County	1	1		
Lawrence County	2			Franklin County				
Lee County		40		Gadsden County	20	9	4	
Logan County	2			Hardee County				
Miller County		12	8	Hernando County	1	6		
Mississippi County	18	5		Hillsborough County	13	23	1	
Monroe County	2	4		Holmes County	1	2		
Montgomery County			14	Jackson County		5	1	
Ouachita County	28	36	23	Jefferson County	2			
Phillips County	6			Lafayette County		1	3	
Pike County	25	22	9	Lake County	2		1	
Pointsett County	2			Leon County	2	2		
Pulaski County	4	1	2	Levy County	1	1	1	
St. Francis County	8	6	4	Liberty County				
Saline County	48	6		Madison County	4		6	
Scott County	5	1	2	Manatee County		3		
Sebastian County		7		Marion County	4		2	
Sharp County	14	12	4	Nassau County				
Union County	16	9	21	Orange County				
Van Buren County	8	5		Oscaloosa County				
White County	16	7	1	Palm Beach County				
	Total.	371	273	121	Pasco County	2	2	
California:				Pinellas County		4	1	
Alameda County	2			Polk County	7	3	11	
Butte County	1		1	Putnam County	3	3	1	
Colusa County		5		St. Johns County	1	2	2	
Fresno County	2			Santa Rosa County		1	1	
				Seminole County	1		1	
				Sumter County			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.
Florida—Continued.				Louisiana—Continued.			
Suwanee County.....			1	Tensas Parish.....		1	1
Taylor County.....	5	.....	4	Union Parish.....	4	.....	4
Volusia County.....	3	.....	3	Vernon Parish.....	2	.....	1
Washington County.....	3	.....		Vermilion Parish.....		16	1
Total.....	82	124	85	Washington Parish.....		1	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	.....	Clark County.....	124	80	33
Caddo Parish.....		3	5	Clay County.....	65	27	21
Calcasieu Parish.....		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
Iberia Parish.....	35	15	.....	Greene County.....	45	40	20
Iberville Parish.....		2	.....	Grenada County.....	71	17	.....
Jackson Parish.....		1	.....	Hancock County.....	40	40	31
Lafayette Parish.....		1	.....	Harrison County.....	21	8	4
La Salle Parish.....		1	.....	Hinds County.....	288	168	155
Morehouse Parish.....	1	.....	6	Holmes County.....	511	371	220
Natchitoches Parish.....		5	7	Humphreys County.....	203	156	81
Orleans Parish.....	5	10	5	Issaquena County.....	26	11	24
Ouschita Parish.....	2	.....	3	Itawamba County.....	43	16	.....
Pointe Coupee Parish.....	2	.....	1	Jackson County.....	42	25	16
Rapides Parish.....	2	3	9	Jasper County.....	38	45	23
Red River Parish.....	4	1	2	Jefferson County.....	79	35	25
Richland Parish.....		2	1	Jefferson Davis County.....	52	53	25
Sabine Parish.....		1	2	Jones County.....	64	45	55
St. Landry Parish.....	2	1	6	Kemper County.....	18	31	14
St. Tammany Parish.....		5	.....	Lafayette County.....	117	72	38

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:			
Laflore 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	126	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	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	—	4
Warren County.....	322	280	121	Gloucester County.....	—	—	—
Washington County.....	292	97	123	Goochland County.....	—	1	—
Wayne County.....	50	26	10	Grayson County.....	—	1	—
Webster County.....	52	38	—	Greenville County.....	36	15	12
Wilkinson County.....	70	32	10	Hanover County.....	12	5	4
Winston County.....	85	87	57	Henrico County.....	3	3	—
Yalobusha County.....	99	65	86	Isle of Wight County.....	40	8	15
Yazoo County.....	360	175	135	James City County.....	26	3	3
Total.....	10,001	6,194	3,827	King and Queen County.....	7	3	1
Nebraska:				King George County.....	3	6	30
Richardson County.....	—	1	—	King William County.....	1	1	3
New Jersey:				Lancaster County.....	1	—	—
Bergen County.....	—	—	1	Lee County.....	—	—	1
Essex County.....	—	3	—	Louisa County.....	—	1	—
Mercer County.....	—	2	—	Loudoun County.....	3	—	—
Middlesex County.....	1	—	—	Lunenburg County.....	2	—	1
Somerset County.....	1	—	1	Mecklenburg County.....	2	3	—
Total.....	2	5	2	Middlesex County.....	9	6	—
New Mexico:				Montgomery County.....	1	—	—
Eddy County.....	1	—	—	Nansemond County.....	18	21	5
Santa Fe County.....	1	—	—	New Kent County.....	—	3	2
Total.....	2	—	—	Northampton County.....	27	8	—
New York:				Northumberland County.....	5	4	4
Albany County.....	2	—	—	Nottoway County.....	—	2	1
Dutchess County— Poughkeepsie Township.	20	—	—	Pittsylvania County.....	9	1	—
Scattering.....	9	3	4	Powhatan County.....	6	10	9
Herkimer County.....	1	—	—	Prince Edward County.....	2	—	—
Montgomery 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.....		2	2
Poisoning—Brass.....		1	.....	Total.....	7	2	7

PELLAGRA.

Alabama:				Florida—Continued.			
Baldwin County.....		1	.....	Madison County.....	1	.....	1
Chambers County.....		1	.....	Manatee County.....			1
Escambia County.....		1	.....	Orange County.....	1	.....	1
Jackson County.....	2	2	.....	Oscaloosa County.....			1
Jefferson County.....	3	2	1	Palm Beach County.....			1
Lawrence County.....		1	.....	Pinellas County.....	3	.....	1
Marengo County.....	1	.....		Polk County.....			1
Montgomery County.....	1	.....		Putnam County.....			1
Sumter County.....	2	.....		St. Lucie County.....	1	.....	1
Talladega County.....	1	.....		Seminole County.....	1	.....	1
Wilcox County.....		6	.....	Suwanee 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	.....	Sedgwick 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.....			
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	.....		Maryland:			
Escambia County.....	1	.....		Baltimore City.....		1	.....
Franklin County.....	3	1	4	Wicomico County.....		1	1
Gadsden County.....				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	.....
Mississippi:				Tippah County.....	4	.....	.....
Adams County.....	1	1	3	Tishomingo County.....	1	2	1
Alcorn County.....	8	1	1	Tunica County.....	11	4	6
Amite County.....	1	.....	.....	Union County.....	4	.....	1
Bolivar County.....	34	18	22	Walthall County.....	.....	.....	2
Carroll County.....	2	.....	.....	Warren County.....	6	9	.....
Chickasaw County.....	6	3	2	Washington County.....	20	16	11
Clark County.....	1	3	.....	Wayne County.....	.....	1	.....
Clay County.....	4	2	.....	Webster County.....	3	.....	.....
Coahoma County.....	12	9	3	Wilkinson County.....	2	1	1
Copiah County.....	11	3	3	Yalobusha County.....	.....	1	7
Covington County.....	.....	1	2	Yazoo County.....	20	7	6
De Soto County.....	2	1	.....	Total.....	328	170	142
Forrest County.....	11	8	.....	Oklahoma:			
George County.....	3	3	2	Haskell County.....	1	.....	.....
Greene County.....	.....	1	1	McIntosh County.....	.....	.....	1
Grenada County.....	.....	1	.....	Total.....	1	.....	1
Harrison County.....	.....	1	.....	Pennsylvania:			
Hinds County.....	5	8	11	Philadelphia County.....	1	.....	.....
Holmes County.....	9	6	5	South Carolina:			
Humphreys County.....	9	2	.....	Anderson County.....	.....	.....	2
Itawamba County.....	2	.....	.....	Cherokee County.....	.....	2	.....
Jackson County.....	2	.....	.....	Chesterfield County.....	1	.....	.....
Jasper County.....	.....	1	3	Richland County.....	1	.....	.....
Jefferson County.....	2	3	2	Spartanburg County.....	.....	1	.....
Jefferson Davis County.....	2	1	1	York County.....	.....	.....	5
Jones County.....	7	4	5	Total.....	2	3	7
Kemper County.....	2	.....	.....	Virginia:			
Lafayette County.....	.....	2	.....	Bedford County.....	.....	.....	1
Lamar County.....	4	.....	.....	Brunswick County.....	.....	.....	1
Lauderdale County.....	7	.....	1	Charles City County.....	.....	.....	1
Lawrence County.....	4	.....	.....	Charlotte County.....	.....	.....	1
Leake County.....	2	2	.....	Dinwiddie County.....	.....	1	.....
Lee County.....	1	1	2	Floyd County.....	1	.....	.....
Leflore County.....	13	1	2	Gloucester County.....	.....	2	.....
Lincoln County.....	9	3	6	Grayson County.....	1	1	1
Lowndes County.....	.....	1	.....	Halifax County.....	.....	2	1
Madison County.....	1	.....	.....	Hanover County.....	1	.....	.....
Marshall County.....	2	1	.....	Henry County.....	1	.....	1
Monroe County.....	7	4	5	Middlesex County.....	1	1	1
Neshoba County.....	1	1	.....	Nansemond County.....	1	.....	1
Newton County.....	1	.....	.....	Nelson County.....	1	.....	1
Noxubee County.....	1	2	.....	Powhatan County.....	.....	1	.....
Oktibbeha County.....	2	1	.....	Smyth County.....	.....	1	.....
Panola County.....	4	1	.....	Total.....	6	10	8
Pearl River County.....	1	1	1				
Pike County.....	2	7	4				
Pontotoc County.....	.....	1	.....			
Prentiss County.....	1	.....	.....		
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	.....	.....
Arkansas:				Total.....	5	3	.....
Calhoun County.....	1	.....	.....	Colorado:			
Garland County.....	.....	1	.....	Denver County.....	3	.....	.....
Total.....	1	1	.....	Connecticut:			
				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.....	1		
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		Benton 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		
Lambette County.....		1		Hall County.....	1		
McPherson County.....			1	Hamilton County.....		1	
Reno County.....		1		Johnson County.....	1		
Total.....	1	1	1	Phelps County.....	1		
Louisiana:				Red Willow 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:											
Bergen County.....	2			Ohio:							
Burlington County.....	1			Cuyahoga.....	4	1					
Cumberland County.....			1	Franklin County.....			1				
Essex County.....	3	7		Hamilton County.....	1	1					
Hudson County.....	1		1	Hocking County.....			1				
Middlesex County.....	1			Licking County.....							
Monmouth County.....	2			Lorain County.....		1					
Morris County.....	1			Lucas County.....	2						
Ocean County.....	1			Ottawa County.....	1						
Passaic County.....		2	2	Pike County.....			1				
Sussex County.....			1	Putnam County.....			1				
Union County.....	2	1		Ross County.....		1					
Total.....	14	10	5	Summit County.....		1					
New York:											
Albany County.....	1	2		Trumbull County.....	1						
Allegany County.....	2			Warren County.....	1						
Cattaraugus County.....	1			Wayne County.....		1					
Cayuga County.....	4	2	2	Total.....	10	7	4				
Chautauqua County.....	1			Pennsylvania:							
Chenango County.....		1		Allegheny County.....	2	1					
Cortland County.....	5	2		Armstrong County.....			1				
Delaware County.....	2		1	Chester County.....	1						
Dutchess County.....	1	1		Delaware County.....	1						
Essex County.....		1		Elk County.....		1					
Genesee County.....		1		Eric County.....	1		1				
Herkimer County.....		1	1	Lancaster County.....	1						
Jefferson County.....	4	1		Luizerne County.....	1						
Monroe County.....	2	1		McKean County.....		1					
Montgomery County.....	2	1		Northampton County.....	1						
Nassau County.....	3	2	1	Philadelphia County.....	1						
Niagara County.....	1	2		Susquehanna County.....		1					
Oneida County.....	7	1		Westmoreland County.....		1					
Onondaga County.....	16	2	2	Total.....	9	4	3				
Ontario County.....	1	1		Rhode Island:							
Oswego County—				Providence County.....	1	1	1				
Oswego.....	14	3	2	South Carolina:							
Scattering.....	7		1	Anderson County.....			1				
Otsego County.....	1			South Dakota:							
Putnam County.....			1	Deuel County.....	1						
Rensselaer County.....		1		Faulk County.....	1						
St. Lawrence County.....	4	1		Lincoln County.....	1						
Seneca County.....	6	1		Pennington County.....	1						
Schuylerville.....			1	Total.....	4						
Steuben County.....	2			Vermont:							
Suffolk County.....	3	1		Caledonia County.....	8	1					
Tompkins County.....	3			Essex County.....	1	1					
Washington County.....		1		Washington County.....	1						
Wayne County.....	1			Windsor County.....	1	1					
Westchester County.....	8	5	2	Total.....	11	3					
Wyoming County.....		1		Virginia:							
New York City.....	57	30	19	Accomac County.....	1						
Total.....	159	66	33	Buckingham County.....	2	2					
North Carolina:				Henry County.....			1				
Forsyth County.....	1			Rockingham County.....							
Haywood County.....	1			Tazewell County.....	1						
Iredell County.....		2		Washington County.....	1	1					
New Hanover County.....	1		1	Total.....	5	4	1				
Polk County.....		1		Washington:							
Total.....	3	3	1	King County.....	1	1					
North Dakota:				Snohomish County.....	1						
Cass County.....		1		Total.....	2	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: Monongalia County		3		Wisconsin—Continued. Milwaukee County		1	
Wisconsin: Ashland County	1			Ozaukee County	1		
Dane County	12	1		Rock County	3		
Green County	1			Washburn County	1		
Green Lake County		1		Washington County		1	
Jefferson County	1			Waukesha County			2
Marathon County	2	1		Total	22	5	2

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
Colorado:				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			
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			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.							
Jefferson County		4		Kansas—Continued.			
Knox County		1		Chase County			1
La Salle County			1	Cloud County			1
Lee County		4	14	Crawford County			1
McLean County			2	Douglas County			4
Madison County		3	2	Elk County			1
Mason County	2			Jewell County			1
Montgomery County	1	1		Kingman County	1	3	
Moultrie County			1	Lafayette County	1		5
Ogle County		2	1	McPherson County			
Peoria County		1		Osage County	1		
Piatt County			3	Osborne County	1		
Richland County		1		Pawnee County		2	
St. Clair County			2	Pratt County		2	
Saline County		1		Russell County			1
Scott County			1	Saline County	1		
Stephenson County	1	11	31	Sedgwick County	1	3	
Tazewell County	1			Shawnee County		1	
Union County		1		Sherman County		1	
Vermilion County		1		Sumner County			5
Wayne County			1	Wallace County			1
Whiteside County	47	99	15	Wyandotte County			1
Will County	2		13	Total	12	21	18
Williamson County	2		1				
Total	75	179	132				
Indiana:							
Allen County		1	7	Assumption Parish			1
Boone County			4	Beauregard Parish			1
Clay County		3		Bienville Parish			1
Dekalb County		10	20	Caddo Parish	5	21	
Elkhart County		1		Claiborne Parish	5	9	
Fayette County				De Soto Parish	6	3	5
Fountain County		2		East Baton Rouge Parish			2
Fulton County				Livingston Parish			1
Grant County		1	2	Natchitoches Parish			1
Greene County				Ouachita Parish		1	
Howard County		1		Sabine Parish	1		4
Jay County			6	St. Landry Parish	2		
Johnson County				Vermilion Parish		1	
Lake County		1	2	Winn Parish			1
Madison County		16	6	Total	14	21	36
Marion County		4	2				
Noble County							
Owen County				Maine:			
Posey County				Androscoggin County		1	
Spencer County			1				
Total	38	49	82	Maryland:			
				St. Marys County	2		
Iowa:							
Appanoose County			2	Massachusetts:			
Cerro Gordo County			2	Hampshire County		1	
Clayton County		1					
Decatur County			1	Michigan:			
Floyd County	1			Alger County		4	
Jasper County				Barry County		1	1
Jefferson County			1	Berrien County			
Johnson County	1			Branch County	1		
Lee County	1			Calhoun County	2		
Linn County			1	Cheboygan County	3	4	
Mahaska County		1		Clinton County	5	10	10
Muscatine County		1	2	Eaton County			1
Polk County	2	1	2	Genesee County	1		3
Scott County		1	1	Gratiot County		3	
Webster County			3	Huron County	1	1	1
Winnebago County		1		Ingham County		4	6
Total	5	13	10	Ionia County	11	27	14
				Isabella County	1		5
Kansas:				Isco County			
Allen County			1	Jackson County		1	
Barber County		1		Kalamazoo County	5		1
Barton County		1		Kent County			4
Bourbon County	4	1		Leavenworth County			1
				Leavenee County			1
				Manistee County			1
				Mecosta County	3		1
				Monroe County	1	23	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
Minnesota:				Powder River County.....	1		
Aitkin County.....		1		Roosevelt County.....	2		
Anoka County.....		1		Sheridan County.....		1	
Beltrami County.....	2	5	6	Silver Bow County.....	1	2	
Brown County.....		1		Sweet Grass County.....	10		
Carlton County.....	2		7	Valley County.....		1	
Cass County.....	1		3	Wheatland County—			
Chippewa County.....		5	7	Harlowton.....	12	1	
Chisago County.....		9		Judith Gap.....	1		
Clay County.....	1		1	Oka.....	11	2	
Crow Wing County.....	2	1	4	Total.....	42	18	36
Douglas County.....		2		Nebraska:			
Fillemore 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.....			1
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.....			4	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	New Jersey:			
St. Louis County.....	60	79	62	Essex County.....	1	1	
Sibley County.....	1	2		New Mexico:			
Stearns County.....		1		Bernalillo County.....			1
Stevens County.....		1	3	Curry County.....			1
Swift County.....	4			Dona Ana County.....			1
Todd County.....		1	4	Luna County.....			1
Wilkin County.....			1	Total.....			4
Total.....	90	174	182	New York:			
Mississippi:				Chautauqua County.....	6		
Bolivar County.....		2	4	Erie County.....	5		
Clay County.....			4	Franklin County.....	3		12
Do Soto County.....	1		2	Jefferson County.....	11	4	3
Franklin County.....		11		Lewis County.....	1	1	
Harrison County.....		1	2	Niagara County.....	1		1
Holmes County.....	1	6		Onondaga County.....	3		
Jackson County.....		1		Oswego County.....			6
Jefferson County.....	30	2	4	St. Lawrence County.....	11	1	
Jones County.....	2			New York City.....	1		2
Lauderdale County.....	1		63	Total.....	42	5	15
Lee County.....		1	1	North Carolina:			
Leflore County.....			4	Alamance County.....	1		1
Lincoln County.....	1			Cabarrus County.....	3	1	7
Marshall County.....		1	4	Carteret County.....			1
Pike County.....	1	1		Davie County.....	7	1	20
Sharkey County.....			1	Edgecombe County.....			7
Union County.....		1	6	Forsyth County.....	2	11	20
Warren County.....	2			Franklin County.....	1	4	6
Wayne County.....	2						
Total.....	41	30	95				

*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	1		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.....				Kingfisher County.....			1	
Rowan County.....	2	1	7	Logan County.....			1	
Stokes County.....	3	59	36	Mayes County.....			6	
Union County.....				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		
Le Mire County.....	1			Lane County.....		12	6	
McHenry County.....	1	1	1	Marion County.....	4	2	4	
McIntosh County.....	1			Multnomah County—				
Mercer County.....	2			Portland.....	31	21	18	
Ramsey County.....	13	5	15	Scattering.....	4	1		
Ransom County.....				Poli County.....			12	
Richland County.....	1			Tillamook County.....			5	
Stark County.....			1	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	
Erie County.....	2	2		Oconee County.....	1			
Fairfield County.....		3	2	Orangeburg County.....			57	
Fayette County.....				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	
Lorain County.....		1	2	Codington County.....			2	
Lucas County.....	4	7	18	Day County.....	1	1	1	
Mercer County.....				Edmunds County.....			1	
Miami County.....	17	19		Fair River County.....			8	
Montgomery County.....		8	16	Grant County.....	1	1		
Muskingum County.....		9		Hughes County.....			9	
Ottawa County.....	1			Lake County.....			1	
Pickaway County.....			1	Lincoln County.....	1	1		
Portage County.....		4						
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
Ranoke 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.....			1
Washington:				Jackson County.....			1
Chelan County.....	2	5	7	Lafayette County.....		1	
Clarke 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	Pepin County.....			1
Scattering.....	2	2	15	Price County.....			
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.....			1
Snohomish County.....	3	16		Walworth County.....			5
Spokane County—				Washburn County.....	2	3	1
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		3
Harrison County.....		1	3	Natrona County.....		1	
				Sheridan County.....	1	1	
				Total.....	4	3	4

TYPHOID FEVER.

Alabama:	3	1	1	Alabama—Continued.	1	14	1
Barbour County.....				Macon County.....	2	14	
Bibb County.....		1		Madison County.....	2	1	1
Bullock County.....		1		Marengo County.....	2	3	
Butler County.....	1			Mobile County.....	3	3	
Calhoun County.....	1	2	1	Montgomery County.....	1		
Colbert County.....				Pickens County.....		2	
Coosa 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		Tallapoosa 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		
Deshs County.....	1			Yuba County.....	1		
Drew County.....		2	6	Total.....	109	94	52
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	
Hot Spring County.....	2		1	Chaffee County.....	2		1
Izard County.....	2	7	7	Delta County.....	5		
Lafayette County.....		1		Delta County.....	21		1
Lawrence County.....		2		Denver County.....		2	
Marien County.....	2			El Paso County.....		4	
Monroe County.....	1			Fremont County.....	4	5	
Montgomery County.....			3	Garfield County.....	1		
Phillips County.....	1	1		Huerfano County.....	4	1	
Pike County.....	2	1	4	Jefferson County.....	2		
Poinsett County.....	1			Kit Carson County.....	1		
Pulaski County.....	3	8	1	Lake County.....	1	1	
St. Francis County.....	4	3		La Plata County.....	1	1	
Saline County.....		3		Larimer County.....	6	1	5
Scott County.....	4	2	3	Las Animas County.....	15	1	2
Sebastian County.....	1	6		Logan County.....	4		
Sharp County.....	8	5	4	Mesa County.....		4	
Union County.....	2	1	9	Montezuma County.....	3	5	
Van Buren County.....		4		Montrose County.....	5	8	1
Washington County.....	10		27	Otero County.....	3	6	
White County.....	3			Prowers County.....	1		
Total.....	50	70	91	Pueblo County.....	19	5	5
California:				Rio Grande County.....			10
Alameda County.....	5	3	1	Teller County.....	1		
Butte County.....	1	2	1	Weld County.....	4	8	1
Colusa County.....	2	5	4	Total.....	120	53	29
El Dorado County.....	1	1		Connecticut:			
Fresno County.....	3	2	3	Fairfield County.....	10	7	2
Humboldt County.....		2		Hartford County.....	11	4	2
Imperial County.....	1	1		Litchfield County.....		1	1
Kern County.....		2		Middlesex County.....	3		
Kings County.....	2		1	New Haven County—			
Lake County.....	1	1	3	New Haven.....	13	2	3
Los Angeles County—				Scattering.....		1	3
Los Angeles.....	17	15	9	New London County.....	3	3	3
Scattering.....	19	7	4	Windham County.....	1		
Madera County.....	2			Total.....	41	18	14
Marin County.....			1	Delaware:			
Mendocino County.....	2			Kent County.....	4	2	2
Monterey County.....		3	1	New Castle County.....	2	2	
Napa County.....	2	1		Sussex County.....	3	5	2
Orange County.....	5	3	2	Total.....	9	9	4
Placer County.....		1		District of Columbia:			
Plumas County.....	2			District of Columbia.....	20	9	10
Riverside County.....	5	2		Florida:			
Sacramento County.....	2	5	3	Alachua County.....	1		1
San Benito County.....			1	Baker County.....	5		
San Bernardino County.....	5	3	2	Brevard County.....			
San Diego County.....	4	1	2	Clay County.....	1	5	
San Francisco County.....	10	9	4	Columbia County.....	2		3
San Joaquin County.....	4	5	2	Dade County.....	3	2	
San Luis Obispo County.....	1			Dixie County.....	1		
San Mateo County.....	4			Duval County.....	3	4	
Santa Barbara County.....		3		Escambia County.....		2	2
Santa Clara County.....	4	2	1	Gadsden County.....		3	1
Santa Cruz County.....		2	1	Hardee County.....	1		
Shasta County.....		5		Hernando County.....			1
Siskiyou 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	1	1	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	Pulaski County	2		
Nez Perce County			1	Putnam County		2	
Owyhee County		1	1	Randolph County	6	1	2
Twin Falls County	2	2		Richland County	10	2	2
Total	25	11	9	Rock Island County	2	3	
Illinois:				St. Clair County	5	2	1
Adams County	2	5		Saline County	3	6	
Alexander County		1		Sangamon County	10	6	3
Bond County	9	4	1	Shelby County	3	6	
Boone County	1		1	Tazewell County	1	2	1
Bureau County	2			Union County	8	2	1
Calhoun County			1	Vermilion County	3	5	1
Champaign County	5	1	1	Wabash County	2	2	
Christian County	3	2		Warren County		1	
Clark County	2	1		Washington County	2	1	
Clay County	7	4		Wayne County	3	3	
Clinton County	1	1		White County	2		1
Coles County	2	2	1	Whiteside County	1		
Cook County	27	17	7	Will County	4	3	
Crawford County	1	2	1	Williamson County	9	3	2
Cumberland County	1	1		Winnebago County		1	1
De Kalb County	2		1	Woodford County	1		
De Witt County	1		1	Total	273	173	103
Douglas County	10	4	1	Indiana:			
Du Page County		1		Adams County			1
Edgar County		2	2	Allen County	8	3	41
Edwards County	1			Benton County	1		
Effingham County	2	3		Blackford County	1		
Fayette County	2	12	6	Cass County	2	1	
Franklin County	11	11	5	Clay County	3	2	1
Gallatin County	3	4		Clinton County	2	1	
Greene County			2	Crawford County		1	
Grundy County			1	Dearborn County	1		
Hamilton County	4		1	Delaware County	6		
Hancock County	1	1	1	Dubois County	1		
Hardin County	2			Elkhart County	6	5	
Iroquois County	1		1	Fountain County			3
Jackson County	7	1	6	Fulton County	2		
Jefferson County	5	2	8	Grant 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.
Indiana—Continued.				Kansas—Continued.			
Hancock County.....	5			Johnson County.....	3	1	
Harrison County.....	2			Kingman County.....	1	5	
Henry County.....	1			Labette County.....	2		3
Howard County.....	2			Linn County.....	1	1	
Huntington County.....	1	1		Lyon County.....	1	4	
Jay County.....		1	1	Marion County.....	3	1	
Jefferson County.....		3		Marshall County.....	1	2	
Kosciusko County.....	4			Meade County.....		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	
Martin County.....		3	1	Sedgwick County.....	3	5	
McMonroe 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	Wabaunsee County.....		1	
Owen County.....	1	1		Washington County.....	4	1	
Parke County.....		2		Wilson County.....	1		
Pike County.....	1		2	Wyandotte County.....	2	3	
Putnam County.....		2		Total.....	74	48	15
Randolph County.....			1	Louisiana:			
Ripley County.....	1	1		Acadia Parish.....		2	
Rush County.....			1	Allen Parish.....	1		
St. Joseph County.....	1	1		Ascension Parish.....			1
Shelby County.....	1			Assumption Parish.....	1	1	1
Steuben County.....	2	1		Avoyelles Parish.....	2		1
Switzerland County.....	1	1		Beauregard Parish.....	3		3
Tippecanoe County.....	5	3		Bienvenue Parish.....	2	4	2
Tipton County.....		2		Caddo Parish.....		6	2
Union County.....	4	1		Caldcasien Parish.....	1	6	1
Vigo County.....	6	2	2	Catahoula Parish.....		2	
Wabash County.....	2	1		Claiborne Parish.....			2
White County.....	1	2		De Soto Parish.....			3
Total.....	100	49	67	East Baton Rouge Parish.....		1	2
Iowa:				East Carroll Parish.....	1		
Blackhawk County.....	1			Franklin Parish.....		3	
Buena Vista County.....		1		Iberia Parish.....		1	1
Cerro Gordo County.....		1		Iberville Parish.....	2	2	
Davis County.....		1		Jefferson Parish.....	2		7
Ida County.....	1	1		Jefferson Davis Parish.....	1		
Mahaska County.....		4	1	Lafourche Parish.....	5	8	
Poweshiek County.....		1		La Salle Parish.....	1		
Total.....	2	9	1	Lincoln Parish.....			1
Kansas:				Morgan Parish.....			2
Allen County.....	3	2		Natchitoches Parish.....	1	4	
Anderson County.....	2			Orleans Parish.....	11	13	24
Atchison County.....		1	1	Ouachita Parish.....		2	1
Barber County.....	1			Pointe Coupee Parish.....			2
Barton County.....		2		Rapides Parish.....	1	6	5
Bourbon County.....	2			Richland Parish.....	2		
Butler County.....		1	2	Sabine Parish.....			2
Chase County.....	1			St. James Parish.....	1		
Cherokee County.....		1		St. John the Baptist Parish.....	2		1
Clay County.....	1			St. Landry Parish.....	1		3
Coffey County.....		1		St. Martin Parish.....	1		
Cowley County.....	2		1	Tangipahoa Parish.....		2	17
Crawford County.....	11	2	1	Tensas Parish.....		1	4
Douglas County.....	1			Terrebonne Parish.....			1
Edwards County.....	1			Union Parish.....	3		1
Elk County.....	1			Vermilion Parish.....		2	3
Finney County.....	5			Vernon Parish.....	2		1
Ford County.....	3			Washington Parish.....	15	4	2
Franklin County.....	1			Webster Parish.....	1		2
Gove County.....	1	1	1	West Carroll Parish.....			
Greenwood County.....	1	2	2	Total.....	65	70	101
Jefferson County.....			1				
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.
2							
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	2	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
	=====	=====	=====	Isabella County.....	2		.....
Maryland:				Jackson County.....	5	4	6
Allegany County.....	10	10	2	Kalamazoo County.....	9	2	.....
Anne Arundel County.....	5	2	1	Kalkaska County.....		1	3
Baltimore City.....	28	17	16	Kent County.....	2	1	1
Baltimore County.....	10	6	5	Lapeer County.....	2	1	.....
Calvert County.....	3	1	.....	Lenawee County.....	5	9	1
Caroline County.....	11	4	4	Livingston County.....		1	.....
Carroll County.....		3	1	Macomb County.....	2	5	.....
Cecil County—				Manistee County.....	2		1
North East.....	11	3	.....	Marquette County.....	1		1
Scattering.....	12	4	.....	Mason County.....		1	.....
Charles County.....	4	2	.....	Mecosta County.....		4	.....
Dorchester County.....	11	13	2	Monroe County.....	3		1
Frederick County.....	6	1	.....	Montgomery County.....		2	1
Garrett County.....	6	9	4	Montgomery County.....		1	.....
Harford County.....	2	3	.....	Muskegon County.....	14	1	1
Howard County.....	1		.....	Newaygo County.....			1
Kent County.....	6	4	.....	Oakland County.....	4	2	.....
Montgomery County.....	3	3	.....	Ogemaw County.....		1	.....
Prince Georges County.....	9	4	1	Ontonagon County.....		1	.....
Queen Anne's County.....	12	3	2	Otsego County.....		1	.....
St. Marys County.....	3	2	1	Ottawa County.....	3		1
Somerset County.....	7	13	3	Presque Isle County.....	2		.....
Talbot County.....	10	5	2	Saginaw County.....	5	4	3
Washington County—				St. Clair County.....	2		1
Hagerstown.....	11		.....	St. Joseph County.....			4
Scattering.....	10	4	.....	Sanilac County.....			1
Wicomico County.....	7	7	1	Shiawassee County.....	3	1	.....
Worcester County.....	4	2	2	Tuscola County.....	4	2	1
State institutions.....	6		2	Van Buren County.....	3		.....
Total.....	217	125	49	Washtenaw County.....	8	1	1
	=====	=====	=====	Wayne County.....	42	21	19
Massachusetts:				Wexford County.....	2		.....
Berkshire County.....	5	4	3	Total.....	173	117	76
Bristol County.....	7	14	3				
Essex County.....	5	12	4	Minnesota:			
Hampden County.....	2	2	.....	Aitkin County.....		1	.....
Hampshire County.....		3	1	Becker County.....	1	2	.....
Middlesex County.....	23	11	6	Beltrami County.....	16	1	3
Norfolk County.....	4	5	8	Big Stone County.....	2		.....
Plymouth County.....	7	5	1	Brown County.....		1	.....
Suffolk County—				Carlton County.....			1
Boston.....	16	7	5	Chippewa County.....	1		.....
Scattering.....	3	1	3	Chisago County.....		1	.....
Worcester County.....	8	11	5	Clay County.....			1
Total.....	80	75	39	Clearwater County.....		1	.....
	=====	=====	=====	Freeborn County.....	2	1	.....
Michigan:				Goodhue County.....	1	1	.....
Alcona County.....	4		.....	Hennepin County.....	5	2	5
Allegan County.....		1	.....	Hubbard County.....		2	1
Antrim County.....		1	.....	Isanti County.....	1		.....
Baraga County.....	1		.....	Itasca County.....		1	.....
Barry County.....	1	2	.....	Koochiching County.....	3	2	.....
Bay County.....	11	9	2	Lincoln County.....		1	.....
Berrien County.....	4	2	.....	Lyon County.....		1	.....
Calhoun County.....	2	2	2	McLeod County.....	1		.....
Cass County.....	2		.....	Martin County.....		1	.....
Cheboygan County.....		1	.....	Mower 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.				
Minnesota—Continued.											
Pennington County		2		Mississippi—Continued.							
Pipestone County	6			Tate County	3		4				
Polk County	1	1		Tippah County	4	2	2				
Pope County	1		1	Tishomingo County	4	3					
Ramsey County	7	1	1	Tunica County	4	1					
Red Lake County			2	Union County	3	3					
Rice County	3	1		Walthall County			1				
Rock County	2			Warren County	5	2	1				
St. Louis County	4	1	1	Washington County	1	4	2				
Sherburne County	1			Wayne County			1				
Stearns County	1	1		Webster County	1						
Stevens County	2	3		Wilkinson County	1						
Traverse County	2			Yalobusha County	3		5				
Wabasha County	13			Yazoo County	1	2	1				
Wilkin County	3		1								
Winona County				Total	164	101	69				
Total	89	33	19								
Mississippi:											
Adams County	2		1	Montana:							
Alcorn County	5			Big Horn County		2	1				
Amite County	1		2	Blaine County		1	1				
Attala County	1	1		Carbon County							
Benton County	2	2		Cascade County			2				
Bolivar County	14	15	5	Fergus County		1					
Calhoun County	2	2		Flathead County		1					
Chickasaw County	4	3		Hill County		2					
Choctaw County	2	4		Meagher County		2					
Clay County		4		Missoula County		4					
Coahoma County	1		3	Ravalli County		1					
Copiah County	8		1	Rosebud County							
Covington County	1	1		Sanders County		1					
De Soto County	4			Silver Bow County							
Forrest County	5	2		Treasure County		1					
Franklin County			3	Wheatland County		1					
Greene County	1		1	Yellowstone County		3	2				
Hancock County	1										
Harrison County			9	Total	15	12	8				
Hinds County	3	2	1								
Holmes County	2		2	Nebraska:							
Humphreys County	2			Cedar County		2					
Issaquena County	2			Clay County		2					
Itawamba County		1		Cuming County		1					
Jackson County		1	1	Dodge County			2				
Jefferson Davis County	1			Douglas County		1	4				
Jones County	4			Furnas County		2					
Lafayette County		4	2	Gage County							
Lamar County		1		Garden County			1				
Lauderdale County	5			Greeley County							
Lawrence County			1	Hall County			3				
Leake County	2	1		Harlan County		1					
Lee County	1		1	Howard County			1				
Leflore County	4	6	2	Jefferson County		1	2				
Lincoln County	2			Kimball County			3				
Lowndes County	6	2		Lancaster County		7	2				
Marion County	1	1		Merrick County		1					
Marshall County			1	Nemaha County		1					
Monroe County	1	2		Otoe County		1					
Montgomery County	5	1	3	Perkins County		4					
Neshoba County		1		Phelps County		2					
Newton County	2			Platte County		2	1				
Noxubee County		1		Polk County		1					
Oktibbeha County		1		Redwillow County		1					
Pandora County	3	4	3	Richardson County		1					
Pearl River County	2	1		Thayer County			2				
Pike County	2	1	2								
Prentiss County	1			Total	28	13	14				
Quitman County	1	1	1								
Rankin County	4	1	1	New Jersey:							
Scott County	3	7	1	Atlantic County		2	1				
Sharkey County	7	4	1	Bergen County		3					
Simpson County	3			Burlington County		6	1				
Sunflower County	8	2	1	Camden County		12	8				
Tallahatchie County	3	2	3	Cumberland 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.
New Jersey—Continued.							
Middlesex County	3		5				
Monmouth County	12	9	2				
Morris County		2	2				
Passaic County	5	1	2				
Salem County	1	2					
Sussex County	1	82	33				
Union County	2	1	1				
Warren County	1						
Total.	104	131	72				
New Mexico:							
Bernalillo County	23	5	3				
Chaves County	2		1				
Colfax County	12	16	4				
Curry County	1	1					
Dona Ana County	3						
Eddy County	1		1				
Grant County	1						
Luna County		1	1				
McKinley County	4						
Mora County	6						
Otero County	2	2					
Quay County	1						
Rio Arriba County	17	1	4				
Sandoval County	1	1					
San Miguel County	13	5	1				
Santa Fe County	3	6	3				
Socorro County	1	3					
Taos County	2	2	2				
Torrance County	1						
Total.	94	43	20				
New York:							
Albany County	9	6	1				
Allegany County	3	3	1				
Broome County	1						
Cattaraugus County	11	7	4				
Cayuga County	2	1	3				
Chautauqua County	7	5	1				
Chemung County	2	1					
Chenango County	1	1					
Clinton County	2	7	4				
Columbia County	4						
Cortland County	1	1	1				
Dutchess County	5	2					
Erie County—							
Buffalo	11	8	5				
Scattering	5	5	3				
Essex County		5					
Franklin County	10	7	3				
Fulton County	1	1					
Genesee County	1						
Greene County	1	1	2				
Hamilton County			1				
Herkimer County	6		1				
Jefferson County	11	1	1				
Lewis County		1					
Livingston County			2				
Madison County	3						
Monroe County	12	4	13				
Montgomery County		1					
Nassau County	3	2	1				
Niagara County	6	2	5				
Oneida County	1	4	5				
Onondaga County	8	4	5				
Ontario County	2	1	6				
Orange County	8	7	3				
Orleans County	4	3	1				
Oswego County	4		1				
Otsego County	2	3	2				
Putnam County	4						
Rensselaer County	4	8	3				
Rockland County	1						
New York—Continued.							
St. Lawrence County	7	1					
Saratoga County	3	3					
Schoharie County	1						
Seneca County		1					
Steuben County	2	3	2				
Suffolk County	1	3	2				
Sullivan County	2		1				
Tioga County	3		1				
Tompkins County	8	3	2				
Ulster County	6	2	2				
Warren County	1	1					
Washington County	1	1					
Wayne County	3	3	7				
Westchester County	2	3					
Wyoming County	1		5				
Yates County	1		2				
Yonkers County		3					
New York City	104	91	49				
Total.	302	225	158				
North Carolina:							
Alamance County		2					
Ashe County	2		1				
Avery County			1				
Beaufort County		2					
Buncombe County	6	2					
Cabarrus County	1	1					
Caldwell County	8						
Camden County	1						
Carteret County	2	2	1				
Catawba County	1		1				
Chatham County							
Cherokee County			1				
Cleveland County	1	1					
Columbus County		1					
Graveen County			4				
Cumberland County			1				
Davidson County	6	1	2				
Duplin County	2		1				
Durham County	5						
Edgecombe County	3	2					
Forsyth County	2	1	1				
Franklin County	6						
Gaston County	7	2					
Granville County	1						
Guildford County	6	4	1				
Halifax County	2						
Harnett County	2	1					
Haywood County							
Iredell County	5	1					
Jackson County							
Johnston County	3	3	1				
Lee County	2						
Lenoir County		3	2				
Lincoln County	3	1					
McDowell County	1	1					
Mecklenburg County	3	1					
Mitchell County							
Montgomery County	3	1					
Nash County	1						
New Hanover County	4	3	1				
Orange County	3						
Pasquotank County	3	1					
Pender County							
Perquimans County	1		2				
Person County			1				
Pitt County	3		1				
Randolph County	2	1					
Richmond County	1						
Robeson County		3					
Rockingham County		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		1	Hardin County.....	4	1	
Stanly County.....	2			Harrison County.....		3	
Stokes County.....	1	1		Henry County.....	3	1	1
Surry County.....	1			Hocking County.....	1		
Union County.....	1			Holmes County.....		1	2
Wake County.....	3	1		Jefferson County.....	3	2	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	Ross County.....	7	3	2
Stark County.....	1		1	Sandusky County.....	2	5	
Steele County.....			1	Scioto County.....	10	3	2
Stutsman County.....		7		Seneca County.....	5	4	1
Towner County.....		2		Shelby County.....	1		
Walsh County.....	2			Stark County.....	13	2	2
Ward County.....		2		Summit County.....	8	3	4
Total.....	31	26	13	Trumbull County.....	7	4	2
Ohio:				Tuscarawas County.....	2	2	1
Adams County.....	4			Union County.....	2	1	
Allen County.....	3	2		Van Wert County.....	7	2	7
Ashland County.....	5	3	1	Warren County.....	1		
Ashutabula County.....	7	1	6	Washington County.....	2		
Athens County.....	7			Wayne County.....	4		
Auglaize County.....		2	2	Williams County.....	1	3	2
Belmont County.....	7	3	2	Wood County.....	6	1	
Brown County.....	2	1	1	Wyandot County.....	1		
Butler County.....	6	1		Total.....	330	163	90
Carroll County.....	1			Oklahoma:			
Champaign County.....	1	1	1	Blaine County.....	1		
Clark County.....	2	3		Canadian County.....	2		
Clermont County.....	1			Cimarron County.....	2		
Clinton County.....	4			Custer County.....	7	3	3
Columbiana County.....	7	6	3	Garvin County.....			
Coshocton County.....	3	2	1	Grady County.....	2		
Crawford County.....	1		9	Jackson County.....		1	
Cuyahoga County.....	27	9	8	Mayes County.....	4	3	
Darke County.....	6	3		McIntosh County.....			1
Delaware County.....	3	2		Ottawa County.....	4		
Erie County.....	4	1	5	Pontotoc County.....		3	1
Fayette County.....	2			Pottawatomie County.....	4		1
Franklin County.....	7	4		Seminole County.....			6
Fulton County.....	2	1		Tillman County.....		7	
Gallia County.....	2			Total.....	26	17	12
Greene County.....	1			Oregon:			
Guernsey County.....	6	3	1	Benton County.....	2		
Hamilton County.....	7	6	4	Clackamas County.....	1	1	
Hancock 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						
Umatilla County.....	2	7	10	South Carolina:			
Union County.....	1	2		Anderson County.....	3		
Wallowa County.....	4	1	3	Barnwell County.....		1	2
Wasco County.....	1			Charleston County.....		1	
Total.....	44	25	18	Cherokee County.....		1	
Pennsylvania:				Chester County.....			1
Adams County.....	2	1	3	Chesterfield County.....			1
Allegheny County.....	40	11	7	Clarendon County.....	1		
Armstrong County.....	11	16	12	Darlington County.....	2		
Beaver County.....	8	3	3	Greenville County.....		2	
Bedford County.....	3	3	1	Greenwood County.....	7	7	1
Berks County.....	6	1	5	Laurens County.....	1		
Blair County.....	6	3		Nowberry County.....	2		
Bradford County.....	1	1	2	Oconee County.....	1		
Bucks County.....	6		1	Orangeburg County.....		1	1
Butler County.....	7	3	2	Richland County.....	4	2	
Cambria County.....	7	3	7	Spartanburg County.....	4		
Center County.....	1		3	York County.....		3	
Chester County.....	16	10	3	Total.....	25	17	6
Clarion County.....		1	1				
Clearfield County.....	5	8	24	South Dakota:			
Clinton County.....	1	1		Bon Homme County.....	1		
Columbia County.....	4	1	1	Butte County.....	1		
Crawford County.....	1	3		Codington County.....	1	1	
Cumberland County.....	3	6	2	Davison County.....	1		
Dauphin County.....	4	4	3	Day County.....	2	2	
Delaware County.....	6	5	3	Hughes County.....	1		
Elk County.....	1	2		Jackson County.....	1	1	
Erie County.....	23	6	3	Jerauld County.....	1		
Fayette County.....	32	14	1	Lake County.....	1		2
Forest County.....			1	Meade County.....	2		
Franklin County.....	6	1	3	Minnehaha County.....	3	1	
Fulton County.....	2	4		Roberts County.....	8		
Greene County.....	5		1	Spink County.....	3	7	
Huntingdon County.....	9	18		Tripp County.....		1	
Indiana County.....	12		10	Walworth County.....	2	1	
Jefferson County.....	4	2	2	Yankton County.....			
Juniata County.....	5	1	1	Ziebach County.....	2		6
Lackawanna County.....		3	2	Total.....	29	16	8
Lancaster County.....	14	6	6				
Lawrence County.....	14	2	1	Vermont:			
Lebanon County.....	11	37	5	Chittenden County.....		1	
Lehigh County.....	7	8		Franklin County.....	2		
Luzerne County.....	6	5		Orleans County.....	1		
Lycoming County.....	15	4	1	Washington County.....		1	
McKean County.....	4	1		Windham County.....	1	2	
Mercer County.....	4	2	2	Windsor County.....	2	1	4
Mifflin County.....	4			Total.....	6	5	4
Monroe County.....		1	1				
Montgomery County.....	6	4	2	Virginia:			
Northampton County.....	4	6	3	Accomac County.....	3	3	2
Northumberland County.....	3	5	2	Albermarle County.....	1		1
Perry County.....	2	3		Alleghany County.....		4	2
Philadelphia County.....	49	30	17	Amherst County.....	1		
Schuylkill County.....	2	4	3	Appomattox County.....	1		
Snyder County.....	3	3		Augusta County.....	16		
Somerset County.....	18	7	4	Bath County.....		5	1
Susquehanna County.....		1		Bedford County.....	1		
Tioga County.....	2			Botetourt County.....	2	1	
Union County.....	1		1	Brunswick County.....	2		
Venango County.....	1		2	Buchanan County.....	3	4	4
Warren County.....	1	3		Buckingham County.....	3		
Washington County.....	37	19	4	Campbell County.....			
Wayne County.....	1		1	Caroline County.....	6	1	1
Westmoreland County.....	17	13	14	Charles City County.....			
York County.....	10	14	6	Chesterfield County.....	1		
Total.....	473	313	182	Clarke County.....	4		

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	4	
Elizabeth City County			1	Scattering	22	7	3
Essex County	4			Yakima County			
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
Greenville 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
Highland County	3	1	1	Hardy County	1		
Isle of Wight County	5		1	Harrison County	5		2
King and Queen County	4			Jackson County	1	1	
King William County	1	1	1	Jefferson County			
Lee County	1	1	2	Kanawha County	9	5	7
Loudoun County		1		Lewis County	2	1	
Madison County	5	2		Lincoln County	6	1	
Mathews County	3			Logan County	11	3	
Mecklenburg County		3	5	McDowell County	2		1
Middlesex County	3			Marion County	10	11	11
Montgomery County	2	2		Marshall County	3	1	
Nelson County		1		Mason County	1		
Norfolk County	8			Mercer County	14	7	2
Northampton County			1	Mineral County	6		
Nottaway County	5			Mingo County	7	11	2
Powhatan County		1		Monongalia County	12	1	
Prince Edward County		1		Monroe County	5		
Prince William County			2	Nicholas County	11	1	3
Pulaski County	3	4		Ohio County	2	1	6
Richmond County	5			Pendleton County	1		3
Rockbridge County			2	Preston County	3	8	
Rockingham County	1			Raleigh County	15	3	2
Russell County	23	12	1	Randolph County	3	3	2
Scott County		3		Ritchie County		1	1
Shenandoah County	1	2	1	Roane County	3	5	1
Southampton County	4	1		Summers County	2		
Surry County	2			Taylor County	1		
Tazewell County	6			Tucker County	1		
Warren County	2			Upshur County	3	4	
Washington County	5	2		Webster County	1	1	1
Wise County	2	3		Wood County	1	1	
Wythe County	2	1	2	Wyoming County	2		
Total	184	77	39	Total	168	84	54
Washington:				Wisconsin:			
Asotin County	3			Ashland County	1	1	
Chelan County	11	12	1	Bayfield County	1	1	
Clarke County	4		2	Brown County	3	1	1
Columbia County	2	2		Calumet County	1	1	
Cowlitz County	1			Chippewa County	2		
Douglas County	10			Crawford County	2		2
Franklin County			1	Dane County			
Garfield County	2	1		Door County		1	
Grays Harbor County	2			Douglas County	3	1	1
King County	15	11	6	Forest County		1	
Kitsap County			1	Green County			
Klickitat County	3	1		Iowa County	1		
Lewis County			1	Iron County	3	3	3
Lincoln County	1	1	1	Jackson County	1		
Okanogan County	2		1	Jefferson County			
Pacific County	1			Kenosha County	3	2	
Pierce County		2	2	La Crosse County		3	
Skagit County	1	2		Langlede County		5	
Snohomish County	1	2	1	Lincoln County	1		
Spokane County	4	5	4	Manitowoc County		5	3
Stevens County	2			Marathon County	1	1	1
Thurston County	1	1		Marinette County	2	4	2
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.							
Milwaukee County	6		3				
Monroe County	1				1		
Oneida County	3	3			1		
Outagamie County	2				4	1	
Portage County	1				1		
Racine County	1	2	1		1		
Rock County	1				1		
Rusk County	1		1		1		
Sauk County	1				3	1	
Sawyer County					1	1	
Sheboygan County	5		2			1	
Trempealeau County		1					
Vernon County	1	2					
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—Continued.							
Cancer	1	6	1				
Chicken pox	5	40	24				
Dengue	323	126	17				
Diphtheria	174	200	94				
Dysentery	1	2					
German measles	1	2					
Hookworm disease	274		62				
Influenza	180	281	494				
Malaria	192	133	157				
Measles	5	3	1				
Mumps	2	1	3				
Ophthalmia neonatorum	1	1	3				
Paratyphoid fever		1					
Pellagra	10	14	1				
Pneumonia (all forms)	16	57	43				
Poliomyelitis	1	2	1				
Scabies		42					
Scarlet fever	71	43	46				
Smallpox		5	1				
Trachoma	2	3					
Tuberculosis (all forms)	68	63	42				
Typhoid fever	49	74	30				
Whooping cough		10					
Arkansas—Continued.							
Cancer			2				
Cerebrospinal meningitis (epidemic)		2					
Chicken pox	15	114	140				
Dengue	462	35	5				
Diphtheria	126	125	67				
Hookworm disease	7	2	1				
Influenza	35	76	167				
Malaria	371	273	121				
Measles	1	5	10				
Mumps		8	5				
Ophthalmia neonatorum		3					
Paratyphoid fever		4					
Pellagra	25	22	14				
Pneumonia (all forms)		1	2				
Poliomyelitis	1	1					
Scarlet fever	31	52	24				
Smallpox		4	4				
Trachoma	2	10	27				
Colorado:							
Cancer			2				1
Cerebrospinal meningitis (epidemic)					2		1
Chicken pox					72	85	293
Diphtheria	1				454	133	292
Erysipelas					4	6	8

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.	
					Oct.	Nov.	Dec.	
Colorado—Continued.				District of Columbia—Con.				
Impetigo contagiosa.....	3	4	5	Poliomyleitis.....	3	.....	1
Influenza.....	.....	4	4	Scarlet fever.....	56	50	90
Jaundice (infectious).....	.....	.....	2	Tuberculosis (all forms).....	85	107	95
Lethargic encephalitis.....	1	.....	23	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 meningitis (epidemic).....	1	.....	.....
Poliomyelitis.....	3	.....	1	Chicken pox.....	2	.....	14
Scarlet fever.....	218	166	290	Dengue.....	1,209	227	46	
Septic sore throat.....	1	.....	.....	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	29	Leprosy.....	.....	1	1
Whooping cough.....	32	8	94	Malaria.....	82	124	85	
Connecticut:				Measles.....	3	.....	3
Botulism.....	.....	1	.....	Mumps.....	1	1	2
Cerebrospinal meningitis (epidemic).....	2	7	4	Ophthalmia neonatorum.....	2	.....	1
Chicken pox.....	131	238	255	Paratyphoid fever.....	.....	3	.....
Conjunctivitis (infectious).....	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.....	.....	.....	1	Tetanus.....	8	8	8
Influenza.....	18	24	58	Trachoma.....	12	4	.....
Leprosy.....	1	.....	.....	Trichinosis.....	.....	1	5
Lethargic encephalitis.....	.....	1	2	Tuberculosis (all forms).....	79	131	116
Malaria.....	16	28	.....	Typhoid fever.....	32	39	31
Measles.....	214	645	1,234	Whooping cough.....	4	4	7	
Mumps.....	73	75	78	Hawaii:				
Occupational dermatitis.....	1	.....	.....	Cerebrospinal meningitis (epidemic).....	2	2	1
Paratyphoid fever.....	2	1	.....	Chicken pox.....	5	8	9
Pneumonia (lobar).....	71	109	164	Conjunctivitis (follicular).....	.....	.....	15
Poliomyelitis.....	11	5	2	Diphtheria.....	9	22	23	
Septic sore throat.....	4	1	3	Dysentery (amebic).....	.....	1	1
Scarlet fever.....	10	376	436	Hookworm disease.....	.....	1	.....
Smallpox.....	.....	3	2	Influenza.....	11	109	136
Tetanus.....	2	3	.....	Leprosy.....	3	12	5
Trachoma.....	2	.....	1	Measles.....	169	248	528
Trichinosis.....	1	.....	.....	Plague.....	3	.....	.....
Tuberculosis (pulmonary).....	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	38	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	.....	Conjunctivitis (infectious).....	17	.....	.....
Influenza.....	1	13	76	Diphtheria.....	31	32	31	
Malaria.....	9	5	3	Lethargic encephalitis.....	.....	.....	3
Measles.....	13	25	167	Measles.....	4	.....	2
Mumps.....	.....	3	.....	Poliomyelitis.....	2	.....	1
Pneumonia (all forms).....	5	11	22	Scarlet fever.....	12	20	23	
Scabies.....	.....	5	.....	Septic sore throat.....	2	.....	.....
Scarlet fever.....	65	67	82	Smallpox.....	6	22	17	
Tuberculosis (all forms).....	19	16	12	Tuberculosis (all forms).....	1	.....	2
Typhoid fever.....	9	9	4	Typhoid fever.....	23	11	9	
Whooping cough.....	4	10	16	Whooping cough.....	8	1	1	
District of Columbia:				Illinois:				
Cerebrospinal meningitis (epidemic).....	.....	1	.....	Actinomycosis.....	.....	1	.....
Chicken pox.....	14	42	115	Cerebrospinal meningitis (epidemic).....	6	6	14	
Diphtheria.....	76	114	87	Chicken pox.....	546	1,362	1,617	
Influenza.....	2	5	9	Diphtheria.....	1,344	2,297	1,945	
Leprosy.....	.....	2	.....	Dysentery.....	99	115	122
Lethargic encephalitis.....	.....	.....	Erysipelas.....	46	.....	100	
Measles.....	2	8	51	German measles.....	22	38	26	

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 encophasitis.....	2	.....	.....
Mumps.....	114	315	544	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	Maine:			
Whooping cough.....	563	621	786	Cerebrospinal meningitis (epidemic).....	1	1	1
Indiana:				Chicken pox.....	22	89	145
Cerebrospinal meningitis (epidemic).....	4	.....	.....	Diphtheria.....	49	120	59
Diphtheria.....	776	934	765	German measles.....	2	.....	.....
Influenza.....	7	40	27	Influenza.....	4	8	20
Measles.....	55	206	572	Measles.....	9	52	63
Pneumonia (all forms).....	17	23	56	Mumps.....	14	.....	11
Poliomyelitis.....	2	2	1	Pneumonia (all forms).....	13	43	86
Scarlet fever.....	429	481	404	Poliomyelitis.....	4	3	3
Smallpox.....	38	49	82	Scarlet fever.....	91	134	163
Tuberculosis (all forms).....	60	89	97	Septic sore throat.....	1	.....	1
Typhoid fever.....	100	49	67	Smallpox.....	1	.....	.....
Iowa:				Tetanus.....	2	.....	.....
Cerebrospinal meningitis (epidemic).....	1	1	.....	Tuberculosis (all forms).....	27	46	11
Diphtheria.....	484	539	357	Typhoid fever.....	32	18	14
Measles.....	3	5	12	Whooping cough.....	54	144	177
Poliomyelitis.....	2	2	3	Maryland:			
Scarlet fever.....	322	448	421	Cerebrospinal meningitis (epidemic).....	1	6	.....
Smallpox.....	5	13	10	Chicken pox.....	63	222	532
Typhoid fever.....	2	9	1	Dengue.....	1	.....	.....
Kansas:				Diarrhea.....	19	.....	1
Cancer.....	22	23	24	Diphtheria.....	388	466	440
Cerebrospinal meningitis (epidemic).....	2	1	1	Dysentery.....	27	7	6
Chicken pox.....	109	290	386	Erysipelas.....	11	9	15
Diphtheria.....	683	686	511	German measles.....	6	15	43
Erysipelas.....	12	5	7	Impetigo contagiosa.....	11	2	.....
German measles.....	6	2	6	Influenza.....	73	127	270
Influenza.....	8	12	33	Lethargic encophasitis.....	5	3	2
Lead poisoning.....	1	.....	.....	Malaria.....	63	15	.....
Lethargic encephalitis.....	1	.....	.....	Malta fever.....	1	.....	.....
Malaria.....	1	1	.....	Measles.....	83	404	474
Measles.....	52	47	101	Mumps.....	51	129	106
Mumps.....	25	27	47	Ophthalmia neonatorum.....	2	4	6
Pellagra.....	3	.....	.....	Paratyphoid fever.....	6	5	2
Pneumonia (all forms).....	54	83	187	Pellagra.....	1	1	1
Poliomyelitis.....	1	1	1	Pneumonia (all forms).....	175	256	400
Scarlet fever.....	587	630	578	Poliomyelitis.....	5	7	4
Septic sore throat.....	1	.....	.....	Rat bite fever.....	1	.....	1
Smallpox.....	12	21	18	Scabies.....	1	.....	.....
Tetanus.....	.....	1	.....	Scarlet fever.....	205	307	329
Trachoma.....	1	1	2	Septic sore throat.....	3	9	14
Tuberculosis (all forms).....	137	206	141	Smallpox.....	2	.....	.....
Typhoid fever.....	74	48	15	Tetanus.....	1	.....	.....
Whooping cough.....	49	65	79	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	Massachusetts:			
Dysentery.....	2	2	3	Anthrax.....	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.
Massachusetts—Continued.				Mississippi—Continued.			
Diphtheria.....	1,026	1,263	1,106	Pneumonia (all forms)...	369	650	1,281
Dysentery.....	1	1		Poliomyelitis.....	6	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:			
Pollagra.....	3	1		Actinomycosis.....	1	1	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	4	2
Tetanus.....	7	2	2	Influenza.....	1	1	1
Trachoma.....	6	13	8	Measles.....	1	7	3
Trichinosis.....	4	1	3	Mumps.....	1	1	1
Tuberculosis (all forms).....	533	538	486	Pneumonia (all forms).....	1	10	14
Typhoid fever.....	80	75	39	Poliomyelitis.....	1	1	...
Whooping cough.....	634	1,059	1,258	Scabies.....		3	...
Michigan:				Scarlet fever.....	50	93	94
Chicken pox.....	227	876	1,112	Septic sore throat.....	2	2	3
Diphtheria.....	1,122	1,315	1,087	Smallpox.....	42	18	36
Erysipelas.....	17	26	49	Tuberculosis (all forms).....	12	18	54
Influenza.....		11	...	Typhoid fever.....	15	12	8
Malaria.....	3	1		Vincent's angina.....		1	1
Measles.....	59	109	351	Whooping cough.....	8	6	...
Mumps.....	36	79	72	Nebraska:			
Pneumonia (all forms).....	306	412	693	Cerebrospinal meningitis (epidemic).....		3	1
Poliomyelitis.....	2	1	4	Chicken pox.....	51	130	178
Scarlet fever.....	1,081	1,173	1,407	Diphtheria.....	290	219	188
Septic sore throat.....	20	32	32	German measles.....	2	4	2
Smallpox.....	39	97	233	Influenza.....	5	4	83
Tuberculosis (all forms).....	388	419	374	Lethargic encephalitis.....		1	3
Typhoid fever.....	173	117	76	Malaria.....		1	...
Whooping cough.....	353	457	564	Measles.....	2	11	10
Minnesota:				Mumps.....	20	9	27
Cerebrospinal meningitis (epidemic).....		2	3	Pneumonia (all forms).....	2	3	13
Chicken pox.....	180	431	575	Poliomyelitis.....	6	1	...
Diphtheria.....	633	858	524	Septic sore throat.....	2	1	12
Encephalitis.....	1	3	1	Smallpox.....	249	322	295
Erysipelas.....	6	11	10	Tetanus.....	9	5	39
Influenza.....	7	3	1	Tuberculosis (all forms).....	7	23	3
Measles.....	17	26	214	Typhoid fever.....	28	13	14
Pneumonia (all forms).....	28	24	18	Whooping cough.....	14	9	13
Poliomyelitis.....	6	7	3	New Jersey:			
Scarlet fever.....	843	982	1,046	Anthrax.....	1	1	...
Smallpox.....	90	174	182	Cerebrospinal meningitis (epidemic).....	6	10	7
Trachoma.....		37	72	Chicken pox.....	165	565	835
Tuberculosis (all forms).....	281	240	242	Diphtheria.....	930	1,117	1,032
Typhoid fever.....	80	33	19	Dysentery.....	1	1	...
Whooping cough.....	80	79	101	Epilepsy.....	3	2	2
Mississippi:				German measles.....	19	32	45
Cancer.....		129	124	Influenza.....	58	71	120
Cerebrospinal meningitis (epidemic).....		2		Lead poisoning.....	2	1	3
Chicken pox.....	150	297	321	Malaria.....	2	5	2
Dengue.....	1,923	549	549	Measles.....	400	1,280	3,050
Diphtheria.....	511	330	237	Ophthalmia neonatorum.....	11	2	5
Dysentery (amebic).....	46	33	14	Paratyphoid fever.....	1	1	1
Dysentery (bacillary).....	299	221	144	Phosphorus poisoning.....			...
Hookworm disease.....	564	429	288	Pneumonia (all forms).....	239	522	705
Influenza.....	649	1,392	12,976	Poliomyelitis.....	14	10	5
Leprosy.....		1		Scarlet fever.....	337	605	733
Malaria.....	10,001	6,194	3,827	Smallpox.....	1	1	...
Measles.....	163	510	917	Trachoma.....	4	3	4
Mumps.....	57	78	106	Trichinosis.....		2	2
Ophthalmia neonatorum.....	22	7	13				
Pellagra.....	328	170	142				

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	North Dakota:							
Typhoid fever	104	131	72	Cerebrospinal meningitis (epidemic)	1	1					
Whooping cough	486	551	629	Chicken pox	57	22	70				
New Mexico:				Diphtheria	90	38	102				
Cancer	1			Impetigo contagiosa	12						
Chicken pox	19	125	70	Measles	3	16	38				
Conjunctivitis (acute)	4	2	5	Mumps		1	3				
Dengue	1			Pneumonia (all forms)	8	25	34				
Diphtheria	117	123	125	Poliomyelitis	4	3					
Dysentery	2			Scarlet fever	87	144	201				
German measles	1	1		Smallpox	42	39	63				
Hookworm disease		1		Trachoma	3		3				
Influenza	18	1		Tuberculosis (all forms)	12	70	13				
Lethargic encephalitis		2		Typhoid fever	31	26	13				
Malaria	2			Whooping cough	24	14	11				
Measles	2	3	3	Ohio:							
Mumps	4	2	5	Anemia		1					
Pneumonia (all forms)	13	16	41	Anthrax	1						
Puerperal septicemia	2	3		Benzine poisoning	1						
Rocky Mountain spotted fever			1	Brass poisoning			1				
Scarlet fever	35	32	38	Cerebrospinal meningitis (epidemic)	6	6	4				
Septic sore throat	2		4	Chicken pox	559	1,424	1,888				
Smallpox				Diarrhea	8	12	6				
Tetanus	1	1		Diphtheria	2,162	2,213	1,603				
Trachoma	3	1	1	Dysentery	2						
Tuberculosis (all forms)	108	109	72	Erysipelas	20	36	53				
Typhoid fever	94	43	20	German measles	9	14	52				
Whooping cough	12	1		Influenza	11	23	170				
New York:				Lead poisoning	9	11	9				
Anthrax		1		Lethargic encephalitis	2	1	5				
Botulism	1			Malaria	30						
Cerebrospinal meningitis (epidemic)	20	18	14	Measles	516	1,060	2,843				
Chicken pox	685	1,810	2,502	Mumps	58	57	72				
Diphtheria	1,488	1,935	1,870	Ophthalmia neonatorum	153	161	175				
Dysentery	11	3	1	Pneumonia (all forms)	168	255	525				
German measles	34	45	67	Poliomyelitis	10	7	4				
Influenza	163	273	325	Scarlet fever	1,434	1,878	2,313				
Lethargic encephalitis	43	16	33	Smallpox	80	137	192				
Malaria	53	6	4	Trachoma	13	11	15				
Measles	463	762	1,817	Tuberculosis (all forms)	660	468	417				
Mumps	323	900	1,346	Typhoid fever	330	163	90				
Ophthalmia neonatorum		8		Whooping cough	372	328	588				
Paratyphoid fever	7	13	4	Oklahoma:							
Pneumonia (all forms)	1,190	1,916	2,622	Chicken pox	1	11	43				
Poliomyelitis	159	66	33	Dengue			3				
Puerperal septicemia	19	17	12	Diphtheria	67	74	60				
Scarlet fever	1,126	1,735	2,042	Dysentery			2				
Septic sore throat	19	12	13	Influenza	4		24				
Smallpox	42	5	15	Malaria			17				
Tetanus	16	7	10	Measles	6		2				
Trachoma	5	9	1	Pellagra	1		1				
Tuberculosis (all forms)	1,930	1,771	1,675	Pneumonia (all forms)	10	29	47				
Typhoid fever	302	225	158	Puerperal septicemia	1	7	3				
Vincent's angina	10	14	12	Scarlet fever	32	43	39				
Whooping cough	1,217	1,383	1,435	Smallpox	3	7	59				
North Carolina:				Trachoma	10		1				
Cerebrospinal meningitis (epidemic)	5	2	2	Tuberculosis (all forms)	31	14	20				
Chicken pox	111	377	454	Typhoid fever	26	17	12				
Diphtheria	1,988	1,254	397	Whooping cough		12	1				
German measles	21	26	14	Oregon:							
Lethargic encephalitis	1			Chicken pox	27	84	129				
Measles	214	201	318	Diphtheria	41	67	117				
Ophthalmia neonatorum		3		Erysipelas	6		7				
Poliomyelitis	3	3	1	Influenza	7	2	11				
Scarlet fever	645	533	329	Leprosy		1					
Septic sore throat	41	33	16	Lethargic encephalitis			2				
Smallpox	30	108	133	Measles	10	6	16				
Trachoma		2		Mumps	6	6	12				
Typhoid fever	131	56	29	Pneumonia	5	3	2				
Whooping cough	363	434	361	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.....	3	10	2
Pennsylvania:				Erysipelas.....	—	—	—
Anthrax.....	2	—	2	Influenza.....	—	5	2
Cerebrospinal meningitis (epidemic).....	5	6	9	Measles.....	8	15	10
Chicken pox.....	926	2,739	2,049	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	60	37	Mumps.....	1	—	16
Scarlet fever.....	1,419	1,866	2,063	Pneumonia (all forms).....	—	15	17
Smallpox.....	1	—	—	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	Polio-myelitis.....	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.....	4	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	128
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.....	2	—	—
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.....	—	1	—	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.							
Poliomyelitis.....	344	315	272	Wisconsin—Continued.			
Scarlet fever.....	20	28	10	Scarlet fever.....	712	619	868
Smallpox.....	28	54	40	Smallpox.....	109	207	171
Tuberculosis (all forms).....	168	84	54	Trachoma.....	2	4	5
Typhoid fever.....	30	35	76	Tuberculosis (all forms).....	213	209	101
Whooping cough.....				Typhoid fever.....	48	43	23
Wisconsin:				Whooping cough.....	375	461	445
Anthrax.....	1			Wyoming:			
Cerebrospinal meningitis (epidemic).....	15	3	7	Chicken pox.....		89	24
Chicken pox.....	324	633	805	Diphtheria.....	18	22	1
Diphtheria.....	404	491	510	Impetigo.....		6	.....
Erysipelas.....	8	19	20	Measles.....	5	3	.....
German measles.....	7	9	10	Paratyphoid fever.....		1	.....
Influenza.....	51	145	129	Pneumonia (all forms).....	6	16	6
Measles.....	1,194	2,692	3,447	Scarlet fever.....	13	17	11
Ophthalmia neonatorum.....	1	2	3	Smallpox.....	4	3	4
Pneumonia (all forms).....	40	49	86	Tuberculosis (all forms).....	5		1
Poliomyelitis.....	22	5	2	Typhoid fever.....	14	7	.....
				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
Gonorrhea.....	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.		Remaining under treatment 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.	Diphtheria.	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	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	.....	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 Estonia 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.....		

PLAQUE.

Brazil: Pernambuco.....	Jan. 14-20.....	3.....	2.....	
Ceylon: Colombo.....	Jan. 14-27.....	8.....	4.....	Plague rats, 10. Jan. 1-Feb. 1, 1923: Cases, 6; deaths, 4.
Egypt.....				
City— Port Said.....	Jan. 26.....	1.....		
Province— Assiout.....	Jan. 26-Feb. 1.....	4.....	3.....	Pneumonic, 3 cases, 3 deaths.
Hawaii: Honokaa.....				Feb. 8-9, 1923: 3 plague rats found.
India: Bombay.....	Dec. 31-Jan. 6.....	1.....	2.....	
Madras Presidency.....	Jan. 21-27.....	722.....	501.....	
Madras.....	do.....	1.....	1.....	
Java: East Java.....	Dec. 1-31.....	56.....		Dec. 1-31, 1922: Deaths, 990.
Pekalongan.....	do.....	202.....		
Samarang.....	do.....	20.....		
Soerabaya.....	do.....			
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: Guanajuato.....	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.....				Dec. 1-31, 1922: Cases, 35; deaths, 1 (colored).
Cape Province.....				Dec. 1-31, 1922: Cases, 27; deaths, 1 (colored).
East London.....	Jan. 7-13.....	2.....		
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.....		Dec. 1-31, 1922: Cases, 26.
Czechoslovakia: Ruthenia.....	Dec. 1-31.....	24.....		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.
Piraeus.....	do.....			Do.
Mexico: Mexico City.....	Jan. 21-Feb. 3.....	36.....		
Turkey: Constantinople.....	Mar. 6.....			
Union of South Africa.....				Do.
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.....				Dec. 1-31, 1922: Cases, 33; deaths, 2 (colored). White, 1 case.
Do.....	Jan. 7-13.....			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. 24-Nov. 18, 1922: Cases 7,899; 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. 12-18.....	1	.....
Russia.....				
Archangel (Government).....	Oct. 1-7.....	7	.....	Jan. 1-Oct. 7, 1922: Cases, 83,367.
Tashkent.....	do.....	27	.....
Ukraine.....				Turkestan Republic: 3 cases reported on waterways.
Donetz (Government).....	Sept. 1-30.....	29	.....	Sept. 1-30, 1922: Cases, 119.
Tchernigov (Government).....	do.....	36	.....
Siam:				
Bangkok.....	Oct. 29-Dec. 23.....	4	1	

PLAQUE.

Azores:				
Fayal Island—				
Castelo Branco.....	Dec. 2-31.....	3	.....	Vicinity of Horta. Dec. 30, 1922: Several cases.
Pico Island—				1 case present Dec. 15, 1922.
Lages.....	Nov. 27-Dec. 15.....	8	.....	Nov. 12-Dec. 30, 1922: Cases, 100; deaths, 35. At localities 3-9 miles from Ponta Delgada.
St. Michaels Island.....				
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:				
City—				
Alexandria.....	Nov. 19-25.....	2	.....	Jan. 1-Dec. 28, 1922: Cases, 485; deaths, 228. Jan. 1, 1922-Jan. 4, 1923: Cases, 487; deaths, 228.
Do.....	Jan. 8-10.....	1	1	Jan. 1-11, 1923: Cases, 1; deaths, 1.
Port Said.....	Nov. 19-27.....	4	.....
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.

PLAQUE—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. 19-27.....	2	1	
India.....				Oct. 1-Dec. 30, 1922: Cases, 25,007; deaths, 18,803. (Report for Nov. 19-25, 1922, not received.)
Bombay.....	Oct. 27-Dec. 30.....	41	32	
Karachi.....	Dec. 10-16.....	1	1	
Do.....	Dec. 31-Jan. 13.....	3	2	
Madras, Presidency.....	Nov. 19-Dec. 30.....	2,269	1,448	Dec. 31, 1922-Jan. 6, 1923: Cases, 4,001; deaths, 3,105.
Do.....	Dec. 31-Jan. 20.....	607	427	
Madras.....	Nov. 19-25.....	1	1	
Rangoon.....	Nov. 12-Dec. 30.....	52	49	
Do.....	Dec. 31-Jan. 6.....	5	5	
Japan:.....				July 1-Nov. 30, 1922: Cases, 70. Oct. 1-Nov. 30, 1922: Cases, 900; deaths, 763.
Osaka.....				
Java.....				Not a seaport.
East Java—				
Soerabaya.....	Oct. 22-Dec. 23.....	14	14	Present in epidemic form.
Toeloeng-Agoeng.....	Oct. 29-Dec. 16.....	18	18	Jan. 1-Dec. 10, 1922: Cases, 143.
Soerakarta—				
Klaten.....	Nov. 4.....			
Madagascar.....				To Nov. 12, 1922: Cases, 24; deaths, 21. Cases reported to Oct. 30, pneumonic.
Province—				Bubonic, 18; septicemic, 3 (doubtful, 2).
Moramanga.....				Bubonic.
Amparafara region.....	Sept. 18-Nov. 5.....	21	.....	Do.
Moramanga.....	Dec. 6-9.....	3	.....	Dec. 14, 1922-Jan. 2, 1923: 1 case (European).
Tamatave.....	Feb. 10-Sept. 12.....	10	.....	Jan. 1-Dec. 10, 1922: Cases, 73 (bubonic, 37; pneumonic, 8; septicemic, 28).
Miarinario.....				Bubonic, 3; pneumonic, 3; septicemic, 3.
Tananarivo.....				Bubonic, 4; pneumonic, 2 septicemic 5 (3 doubtful).
Ambohimangakeley.....	Nov. 19-Dec. 9.....	9	.....	Bubonic, 3; pneumonic, 8; septicemic, 5.
Anketrina.....	Mar. 27-May 9.....	11	.....	1 septicemic.
Fenoarivo region.....	Oct. 7-Nov. 28.....	16	.....
Tananarive.....	Oct. 23-Dec. 10.....	.....	5	
Do.....	Dec. 14-Jan. 1.....	11	.....
Mesopotamia:.....				
Bagdad.....	Oct. 1-Nov. 30.....	16	.....
Palestine:.....				
Jaffa.....	Nov. 27-Dec. 4.....	1	.....	Nov. 1-Dec. 15, 1922: Cases, 120; deaths, 51.
Peru.....				Present..
Localities—				
Canete.....	Nov. 16-Dec. 15.....	22	9	
Chepen.....	Nov. 1-15.....	.....	
Chidayo (city and country). .	Nov. 16-Dec. 15.....	17	7	
Eten.....	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.

PLAQUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portuguese West Africa:				
Angola— Lcanda.....	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.....			
On vessels:				
S. S. Helcior.....	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		Dec. 1-31, 1922: Cases, 51; deaths, 1.
Niagara Falls.....	Dec. 3-30.....	10		Jan. 1-31, 1923: Cases, 43.
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	63	Dec. 31, 1922-Jan. 27, 1923: Deaths, 63.

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	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—				
Camaraguey.....	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:				Oct. 1-31, 1922: Cases, 3.
Province—				
Bohemia.....	Oct. 1-31.....	1	.....
Moravia.....	do.....	1	.....
Slovakia.....	Oct. 1-Nov. 30.....	2	.....
Dominican Republic:				
Puerto Plata.....	Dec. 14-30.....	2	.....
Santo Domingo.....	Dec. 3-16.....	.....	.....	Present.
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	.....
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	
Zante.....	Jan. 7-14.....	13	.....	Epidemic, Jan. 17.
Do.....	.....	.....	.....
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—				
Socrabaya.....	Nov. 5–11.....	4	.....
West Java—				
Batavia.....	Nov. 11–Dec. 22.....	25	1	
Latvia ¹	Oct. 1–Nov. 30.....	6	.....	City and Province.
Mesopotamia:				
Bagdad.....	Oct. 1–Nov. 30.....	568	301	
Mexico:				
Chihuahua.....	Dec. 4–17.....	19	4	
Do.....	Jan. 1–28.....	19	11	
Guadalajara.....	Dec. 1–31.....	4	.....
Mexico City.....	Nov. 12–Dec. 23.....	43	.....
Do.....	Dec. 31–Jan. 20.....	33	.....
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—				
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	1	
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	Oct. 1–Nov. 30, 1922: Cases—Colored, 29; white, 4.
Do.....	Dec. 31–Jan. 27.....	215	85	Oct. 1–Nov. 30, 1922: Cases—Colored, 21; white, 4.
Union of South Africa:				
Cape Province.....				Outbreaks.
Do.....	Oct. 29–Dec. 30.....	.....		Outbreaks.
Do.....	Dec. 31–Jan. 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.
Union of South Africa—Contd.				
Natal	Dec. 3-30			Outbreaks.
Orange Free State	Dec. 10-16			Do.
Southern Rhodesia	Nov. 9-15	3		Oct. 1-31, 1922: Cases, 8.
Transvaal				Outbreaks
Do.	Oct. 29-Nov. 4			Do.
Do.	Dec. 31-Jan. 6			Aug. 1-31, 1922: Cases, 30; deaths, 12.
Johannesburg	Nov. 1-30		1	Aug. 1-31, 1922: Cases, 26.
Yugoslavia				
Serbia				
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		
Provins				
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	
Coblenz	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	Do.
Prevesa	do			Among refugees.
Saloniki	Dec. 18-24	3		Refugees.
Do.	Jan. 7-14	3	1	Present.
Zante	Jan. 17			

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.
Latvia¹	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	Dec. 5-25, 1922: Cases, 3; in northern section.
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.
Chisinau.....	Nov. 1-30.....	5.....		July 30-Sept. 23, 1922; Cases, 23,803.
Russia				Provisional figures.
Ukraine.....	Jan.-Sept.....	307,329.....		
Ukraine, Tartar Republic, and Siberia.....	June 1-30.....	35,926.....		
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				Oct. 1-Nov. 30, 1922: Colored—cases, 1,986; deaths, 184; white—cases, 7; deaths, 2.
Cape Province.....				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, 5; 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: Bosnia-Herzegovina.....	Aug. 1-31.....	1.....		Aug. 1-31, 1922: Recurrent typhus fever, cases, 4.
Serbia.....				

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.