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## DRIED MILK POWDER IN INFANT FEEDING.

### SAFETY, USEFULNESS, AND COMPARATIVE VALUE—A PRELIMINARY REPORT.

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#### Introduction.

The appearance of dry milk powder as a common household commodity in the retail shops, and in possession of some city milk dealers, suggests inquiry regarding the safety and usefulness of remade milk from the human nutritive point of view. Normal growth and the development of children depend in large measure on the presence of milk in their diet. Fresh cows' milk is believed to be the best available substitute for mothers' milk. The convenience, in some respects, of whole milk powder invites some mothers to substitute it for natural milk. During periods of shortage certain milk dealers increase their stock by adding remade to natural milk. What influence these substitutions will have on the growth and vitality of children is a matter of considerable public-health importance. The United States Public Health Service, the Boston Baby Hygiene Association, the Boston Health Department, and several other agencies are cooperating to determine something of the nature of that influence.

The fat, sugar, protein, and salts contained in the various brands of dry milk powder can be easily determined in any laboratory equipped to make similar tests of natural milk. Determination of digestibility and the presence of vitamins is a different matter, and these are indispensable requisites in the diet of infants. Regarding the food value of dry milk powder, as indicated by its effect on animals, I am permitted to quote Prof. E. V. McCollum as follows:

"So far as I have been able to determine by experiments on animals, the milk powders which I have employed have essentially the same dietary properties as fresh milk. I hold the view that one can not draw conclusions from experiments on animals as to the value of milk products in infant feeding. The span of life of the rat is rarely longer than 36 months, and any animals with which we deal in the laboratory in our experiments correspond to children of 8 to 10 years or older. We can not possibly experiment with a rat before it is 35 or 40 days old. Furthermore, the bacteriological factor is an important one in nutrition, and it is not safe to conclude that different species will react in quite the same way. The third factor of great

importance in this connection is the now well-established principle that the human species requires an antiscorbutic substance, whereas the rat, so far as we can determine, and we have studied it very thoroughly, can not be made to develop scurvy, and apparently does not need this substance in its food supply."

The following brief review of the literature relating to certain phases of the dietary properties of dry milk powder is furnished by Milton V. Veldee, Acting Assistant Surgeon, United States Public Health Service:

"Infant feeding involves more than the simple introduction of measured amounts of carbohydrate, fat, and protein into the baby's alimentary tract. Mother's milk has been provided with certain accessory factors, generally termed 'vitamines,' which are absolutely essential to proper growth and development. When it becomes necessary to resort to artificial feeding the normal vitamine balance is thrown out. This phase of artificial feeding has been extensively investigated with regard to cow's milk, also with pasteurized milk, and must now be considered from a new angle.

"With the introduction of dried milk powder into the field of complete foods for infant feeding, the question of antiscorbutic and anti-neuritic vitamins is again revived. The value of whole fresh milk as an antiscorbutic is now well recognized as being very low. Pasteurization further decreases the antiscorbutic value. Hess (1)<sup>1</sup> concluded that 'the antiscorbutic value of pasteurized milk is inversely proportional to the time elapsed between pasteurization and consumption.' The time element applies also to raw milk, but to a much greater degree to dried milk powder. The same author concluded that babies fed on pasteurized milk should receive an antiscorbutic from the time they are a few weeks old, as there is no reason for allowing the negative balance of 'vitamine' to continue for a longer period.' Hess and Unger (2)<sup>1</sup> contend that the antiscorbutic value of dried milk depends largely upon the method of manufacture. They are not in agreement with Chick and Hume who, working at the Lyster Institute, found that dried milk is devoid of all antiscorbutic value. To substantiate their contention they selected a brand which, in the process of making, is heated to 116° C., for only a few seconds. Such a powder fed in 10 gram quantities (equivalent to 80 cc. of whole milk) caused guinea pigs who had previously developed scurvy to become well and gain weight. In another experiment (3)<sup>1</sup> they were able to cause distinct improvement in two babies, who had developed scurvy on a malt soup diet, by substituting a diet of dried milk. Chick, Hume, and Skelton (4)<sup>1</sup> present data, as the result of guinea pig experimentation, and conclude that raw milk contains the accessory food factor which protects from scurvy, but that this is present in small amounts and that it is further decreased by heating or drying. From this they conclude, as did Hess, that artificially fed babies should receive some additional antiscorbutic ration. In another article (5)<sup>1</sup> they find that dried milk is largely, if not entirely, lacking in antiscorbutic vitamins. This loss they think occurs either during the process of drying or during the storage period which necessarily follows before consumption. Hart,

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<sup>1</sup> Figure indicates reference at end of article.

Steenbock, and Smith (6)<sup>1</sup> working with Merrell-Soule powder found that guinea pigs could not eat enough of this powder in addition to hay and rolled oats to prevent scurvy. Barnes and Hume (7)<sup>1</sup> ran parallel series of guinea pigs and monkeys on fresh raw milk and fresh dried milk. The results were the same in both sets of animals. Dried milk powder could not protect the animals from contracting scurvy, even in quantities much greater than that required of fresh raw milk.

"This variation in the antiscorbutic value of dried milk powders, as found by the various investigators, is apparently dependent on two factors: (1) The freshness of the milk before drying and the method of drying; (2) the element of time between drying and consumption. We therefore must conclude from the evidence at hand that, as the result of drying and storing, milk loses some, if not all, of its already poor antiscorbutic property; and, further, that babies fed on this food should receive from the beginning additional antiscorbutic substance, preferably orange juice.

"From the work thus far reported it would seem that the antineuritic vitamins, fat soluble A and water soluble B, are comparatively thermostable. E. V. McCollum (8) (9) (10)<sup>1</sup> and his associates have conducted a great deal of such research on rats. They find that dried milk has lost none of its antineuritic vitamin. But they found that heating dried milk powder in a double boiler for four hours did cause a considerable decrease in its antineuritic value. Osborne and Mendel (11)<sup>1</sup> summarize their work on rats by saying: 'Indeed we have no reason to believe that the nutrition-promoting properties of milk are lost by brief periods of heating. Comparative trials made with approximately equivalent amounts of protein-free milk (a mixture of dried milk, starch, and lard) and fresh milk not incorporated with the food mixture, have shown substantially the same results.' Hopkins and Neville (12)<sup>1</sup> at an earlier date found similar results. It has been shown by several workers that the vitamin content of milk from various animals varies directly with the vitamin content of the food eaten. Consequently cow's milk will show variations from season to season. Gibson and Concepcion (13)<sup>1</sup> found no antineuritic deterioration in cow's milk through autoclaving for two hours at 125° C. They were working with fowl, dogs, and pigs. They believe that young are born with an excess supply of antineuritic vitamins, and that it is this surplus that carries the baby over until foods other than milk are given.

"Data pertaining to the nutrition-promoting property of dried milk on infants are still lacking. Accurate conclusions can not be drawn from rat, dog, fowl, or pig experimentation because of the differences in the duration of the nursing life of these animals as compared with babies."

#### The Present Study.

Difficulties beset attempts to demonstrate usefulness and comparative value of different foods with human subjects. and these difficulties are multiplied when infants are involved. Individual tolerance for different foods varies among infants; and their home surroundings, including economic status, medical and nursing super-

<sup>1</sup> Figure indicates reference at end of article.

vision, and the intelligence of their mothers, are also variable factors. To offset these variations the average of a large number of infants must be secured. To eliminate the influence of other foods in their diet, babies less than six months old and who are entirely artificially fed are required. To observe the development, if any, of scurvy, rickets, malnutrition, and predisposition to other diseases, tests extending over several years are desirable. In the case of remade milk, the quality of natural milk used in manufacture, the different processes of drying and remaking, and the length of time of storage before remaking, result in varying qualities in the remade product. To determine the safety and usefulness of all varieties of dry milk powder now on the market would require an exceedingly large number of infants.

The Boston Baby Hygiene Association encourages maternal nursing with such success that, although 6,000 infants less than 1 year old were under its supervision when this study was undertaken, only 196 babies were found to be less than 6 months old and entirely artificially fed. For various reasons, including infrequent attendance of babies at conference, feeble-minded mothers, noncooperative mothers, and refusal by mothers to permit their babies to participate in the study, the number of babies available for the study was further reduced at its beginning. Division of the small number finally available among several brands of dry milk powder would probably have so reduced the numbers included in each group as to preclude collection of valuable data regarding any brand; therefore, only one brand was used in this study, but both whole milk powder and skimmed milk powder were employed. The study has continued only three months, hence only general conclusions can be drawn. The desire to contribute such first-hand information as is available to the members of the International Association of Dairy and Milk Inspectors for their consideration when attempting regulation of the manufacture and sale of dry milk powder and remade milk actuates the reporting of these meager data at this time.

The following is abstracted from a statement by its manufacturers regarding the dry milk powder that was used in this study:

"Natural milk used in the manufacture of this dry milk powder conforms to the requirements for Grade B milk, New York City inspection. Last night's and this morning's milk is received at the factories and processed this morning. It is therefore much fresher than would be the same Grade B milk if delivered as natural milk in New York City. Its acidity is low and no neutralization is needed or practiced. Whole milk powder is prepared from natural milk which contains 3.5 per cent butter fat. Natural milk, whether whole or skimmed, is first pasteurized by the holding process, 145° for 30 minutes, then condensed by the vacuum-pan process, the whole milk to a ratio of about 3½ to 1; the skimmed milk to about 4½ to 1; then dried by the spray process, whereby the condensed milk is

injected in a fine spray into a chamber having a hot air blast of about 240° F.

"The process of evaporation not only reduces the temperature of the air current to 170° or 180° F., but by the rapidity and intensity of its action keeps the individual particles of milk in a cool condition until they are dried; and this assertion is borne out by the fact that the lact-albumen is not coagulated and the enzymes are not destroyed."

The milk powder employed in this study was received direct from the factory at monthly intervals and was therefore comparatively fresh when used. The chemical and bacteriological laboratories of the Boston Health Department made numerous examinations of these dry milk powders and their remade products both before the study began and during its progress. These examinations disclosed the following:

One hundred and sixty-four grams (1½ cupfuls of an ordinary 8-ounce tin measuring cup) of the whole milk powder combined with 1 quart of water produces a reconstituted milk which contains the following constituents: Fat, 4 per cent; sugar, 5.7 per cent; protein, 3.7 per cent. Four per cent fat was desired, and these proportions were employed with one group in the study.

Made in the above proportions, with tap water and clean but not sterilized utensils, this mixture contains between 2,000 and 12,000 bacteria per cc.

Unsalted butter and skimmed milk powder were emulsed by means of a well-known centrifugal apparatus and the resulting product was fed to another group of infants. This reconstructed milk contained the following constituents: Fat, 4 per cent; sugar, 5.1 per cent; protein, 3.1 per cent.

The bacterial count of this product ranged between 35,000 and 45,000 bacteria per cc.

The Boston Baby Hygiene Association gives special attention to the quality of the milk that is fed to babies under its supervision. Nearly all are fed what is known locally as "Grade A" milk. This is an unofficial grade, but special precautions are taken during its production, handling, and distribution. It is pasteurized by the holding process, 145° F. for 30 minutes, at the plant of a large city milk dealer. This milk contains the following constituents: Fat, 4 per cent; sugar, 4.8 per cent; protein, 3.18 per cent. The bacterial count of this milk ranges between 6,000 and 90,000, averaging 32,000 per c. c. Orange juice is usually advised in connection with this diet, but, on account of varying home conditions, little uniformity prevails regarding its introduction.

The following instructions were issued to the nurses of the Boston Baby Hygiene Association at the beginning of the study:

#### Regarding the Feeding Study.

To ascertain the human nutritive value of powdered milk is of considerable practical importance. Powdered milk is increasing as an article of commerce, it may become a common household commodity, and certain economic phases are connected

with it. There are indications that in nutritive value and digestibility, powdered milk compares favorably with natural milk, but that point has not been proved scientifically by feeding powdered milk and natural milk to different groups of individuals who are under observation of the same clinicians and comparing the results.

The United States Public Health Service, the Boston Baby Hygiene Association, the Boston Health Department, and several other agencies are cooperating to ascertain the value of powdered milk from the human nutritive point of view. The data resulting from this cooperation will assist Federal, State, and city food officials in framing and enforcing health regulations regarding manufacture and sale of powdered milk. The information obtained will also assist in controlling morbidity in infants.

Only infants less than six months old and who are entirely artificially fed will be included in the study. Babies on diet will not be included. Orange juice may be given, however, as it is given to babies on Grade A milk. The babies in the study will be divided into three groups, the divisions being made according to the kind of food used.

Group 1 will consist of babies whose modifications are prepared from Grade A milk. The constituents of this natural milk are: Fat, 4 per cent; sugar, 4.8 per cent; protein, 3.18 per cent.

Group 2 will consist of babies whose modifications are prepared from whole milk powder which will be reconstituted in the homes. This powder will be kept on hand in the stations and dispensed by the nurses. The powder comes in 5-pound tins, and the nurse should know how long a tin should last. The paper wrapper must be removed and a label marked "Baby Milk Powder" pasted on the tin.

Group 3 will consist of babies whose modifications are prepared from milk which has been reconstructed from unsalted butter and skimmed-milk powder. This preparation will be delivered as is Grade A milk.

The conference physician will order all modifications, as usual.

#### METHOD OF PREPARING MILK.

*For Group 1:* Same as usual.

*For Group 2:* Add 164 grams (equivalent to  $1\frac{1}{2}$  cupfuls) of the whole milk powder to 1 quart of cooled boiled water. When measuring the powder, dip it from the tin with a large spoon. The powder is light and should not be packed down. Beat with a Dover egg beater until it is thoroughly mixed. The constituents of this mixture will be approximately as follows: Fat, 4 per cent; sugar, 5.7 per cent; protein, 3.71 per cent. The per cent of sugar will be about 1 higher than in Grade A milk. The conference physician, when ordering modifications that use this mixture as a basis, will take this fact into consideration when ordering the sugar.

*For Group 3:* The constituents of this reconstructed milk will be approximately as follows: Fat, 4 per cent; sugar, 5.1 per cent; protein, 3.1 per cent. The method of modification will be the same as if Grade A were used.

THE FOLLOWING DATA SHOULD BE RECORDED ON HISTORY CARDS:

- (1) Weight of baby at beginning and at least every two weeks thereafter.
- (2) Strength and amount of feeding, hours of feeding, amount taken in 24 hours, and changes made. (The conference physician may change the food, either to a different modification of the same food or to a different food, but the reason for such change should be recorded. It is hoped that a fair trial will be given each food before changes are made, but the welfare of the children comes first and changes should be made in their interest.)
- (3) Nature and extent of any illness, and treatment.
- (4) General condition of the baby with special reference to character and changes in stools, general development, activity, teething, and disposition.
- (5) Environment of the baby, with special reference to the mother's intelligence and cooperation.

The babies included in this study should be watched closely, and careful notes must be made after each visit.

This is an unusual opportunity for the baby hygiene association to contribute to the cause of baby welfare and of public health. The success of the study depends largely on the excellent work which the staff nurses can do. Accurate observations and recording are essential to success.

The results of the study will be compiled at the central office at the end of 3 months and in due time be made available to officials charged with regulation of milk supplies and to the medical profession.

#### **Progress of the study.**

The nurses at the various conference stations submitted the names of all artificially fed babies who were less than 6 months old to the central office of the association. The director of the association assigned the babies to the various groups, thus eliminating any partiality in the selections. Some delay occurred in beginning the study, with the result that a few of the babies were slightly more than 6 months old when the feeding was actually begun.

Babies were first fed remade milk on August 18, and the study was extended as rapidly as the nurses could visit the homes and demonstrate the preparation of the new foods. Other babies than those assigned at the beginning have been added to the groups, but the tabulations presented here include none of those who were added subsequent to September 24.

It was thought desirable at the beginning, but after the groups were formed, to classify all babies in subgroups such as "Well," "Slightly sick," "Sick," and "Very sick," according to their physical condition, and a fairly definite system for so doing was improvised. In the cases of individual babies some very interesting data developed from this subgrouping, but the numbers included in these subdivisions are so small that it is impractical to draw conclusions from them as subgroups. The subdivisions remain, but are not utilized in this report.

Some difficulty was experienced in obtaining a perfect emulsion of the unsalted butter and powdered skimmed milk. A thin float of fat appeared on the surface of the milk in the necks of the bottles and this difficulty was never entirely overcome. This loss of fat was compensated for, however, so that the remaining emulsion contained the required 4 per cent, and the float was removed and discarded. It is believed that the ingredients and the machine used in this study are capable of producing better results than we obtained, but it is doubtful if better results are likely to be obtained in commercial practice at the present time.

This study was conducted under such practical conditions as are likely to prevail if remade milk should be used for infant feeding in the home; it did not, therefore, afford opportunity for as close

observations and control as would have been possible with hospitalized babies.

A considerable number of mothers refused the invitation to transfer their babies from natural milk to either form of remade milk. The psychology which prompted this refusal prevailed to some, though to a less, extent among the mothers who accepted the invitation. Without material reason for so doing, a number of mothers removed their babies from the remade milk within a few days after beginning its use. The appearance of the floating fat previously referred to was also a disturbing influence to some. A number of the mothers consulted private physicians who, on general principles, advised discontinuance of the remade milk. This was to be expected because the use of remade milk in infant feeding is comparatively new and not universally understood.

Such data as were obtained are contained in the following tables. The columns "Change made by" and "Approval of conference physician or nurse" are taken to be the significant ones of these tables. It is permissible to assume that the conference physicians and nurses would have removed the babies from the remade milk groups on the development of any untoward symptoms that might reasonably be attributed to the remade milk; and yet removal of babies by the conference physicians does not necessarily justify condemnation of remade milk for infant feeding, for the conference physicians took no chances but removed babies on the development of symptoms or for lack of progress which was only remotely attributable to the remade milk. Mothers and private physicians, on the other hand, actuated by the psychology previously referred to (i. e., prejudice against any new form of infant feeding), are likely to remove babies from studies of this kind without any material reason for so doing.

No attempt was made to transfer babies from Group 1 (natural milk) to either of the other groups; therefore, no table "Taken off" is presented for Group 1. In the weight table for Group 1, however, it will be noticed that 9 babies did not return to the conference stations to be weighed during the second period of the study. It is reasonable to conclude that had these babies been on a new and not universally understood diet a considerable proportion of them would have been removed from it.



GROUP 1.—Natural milk.

Number.	At beginning.				First period.				Second period.				Entire period.				Remarks.							
	Age.		Weight.		Time on.		Gain.		Loss.		Time on.		Gain.		Loss.			Time.		Gain.		Loss.		
	Mos.	Days.	Lbs.	Oz.	Mos.	Days.	Lbs.	Oz.	Lbs.	Oz.	Mos.	Days.	Lbs.	Oz.	Lbs.	Oz.		Mos.	Days.	Lbs.	Oz.	Lbs.	Oz.	
<i>Well.</i>																								
A-1.....	4	21	11	6	0	7	0	3	0	0	0	23	0	4	0	0	0	0	0	3	0	7	0	0
A-2.....	4	7	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	9	0	0
A-3.....	4	26	13	3	2	3	3	0	7	0	0	27	0	2	0	0	0	0	0	3	3	9	0	0
A-4.....	3	25	11	13	1	25	3	2	14	0	0	27	1	7	0	0	0	0	0	2	22	4	12	0
A-5.....	3	9	11	6	1	18	0	0	0	0	0	4	1	5	0	0	0	0	0	2	22	4	3	0
A-6.....	3	14	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A-7.....	5	2	11	13	4	16	2	5	0	0	0	0	0	0	0	0	0	0	0	2	15	0	5	0
A-8.....	3	16	10	8	1	29	2	8	0	0	0	0	0	0	0	0	0	0	0	1	25	2	8	0
A-9.....	3	13	13	8	1	5	1	7	0	0	0	0	0	0	0	0	0	0	0	1	22	1	7	0
A-10.....	3	25	13	2	1	4	1	6	0	0	0	0	0	0	0	0	0	0	0	1	5	1	6	0
A-11.....	4	6	14	10	1	25	4	2	10	0	0	0	0	0	0	0	0	0	0	1	23	2	10	0
A-12.....	3	27	12	8	1	5	1	3	0	0	0	1	3	1	14	0	0	0	0	1	23	3	5	0
A-13.....	4	2	11	11	2	5	1	13	0	0	0	20	6	11	0	0	0	0	0	2	25	2	8	0
A-14.....	5	0	13	13	0	20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	20	0	6	0
A-15.....	5	0	12	15	2	2	2	13	0	0	0	0	0	0	0	0	0	0	0	0	2	13	0	0
A-16.....	3	26	11	5	1	11	2	3	0	0	0	11	6	10	0	0	0	0	0	2	22	2	13	0
A-17.....	4	23	10	0	2	5	2	9	0	0	0	27	0	3	0	0	0	0	0	3	2	2	12	0
<i>Slightly sick.</i>																								
A-18.....	2	6	8	8	1	26	2	10	0	0	0	4	1	15	0	0	0	0	0	3	0	4	9	0
A-19.....	1	26	8	6	2	12	4	7	0	0	0	20	1	5	0	0	0	0	0	3	2	5	12	0
A-20.....	1	0	10	1	1	4	1	15	0	0	0	2	2	14	0	0	0	0	0	3	6	4	13	0
<i>Sick.</i>																								
A-20.....	3	0	5	13	2	2	0	12	0	0	0	20	0	10	0	0	0	0	0	2	22	1	6	0
A-21.....	3	17	10	10	1	19	2	2	0	0	0	4	0	12	0	0	0	0	0	2	23	2	14	0
A-22.....	5	1	11	1	2	0	0	0	0	0	0	22	0	5	0	0	0	0	0	2	22	2	0	0
A-23.....	1	7	6	6	0	28	1	1	6	0	0	0	0	9	0	0	0	0	0	0	0	5	0	0
A-24.....	1	7	6	0	0	28	1	1	0	0	0	( <sup>1</sup> )	0	0	0	0	0	0	0	0	28	1	1	0
A-24.....	5	16	10	15	1	19	1	1	0	0	0	27	2	5	0	0	0	0	0	2	16	3	6	0
<i>Very sick.</i>																								
A-27.....	3	0	7	15	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	2
A-28.....	5	0	13	4	1	4	1	4	0	0	0	0	0	0	0	0	0	0	0	1	4	1	4	0
Total (28 babies) <sup>2</sup> .....	103	4	304	13	40	2	47	12	.....	.....	.....	17	1	19	10	.....	.....	.....	60	3	70	15	.....	.....
Average.....	3	20.5	10	14.2	Average per capita gain per day of 20 babies=	1.635 oz.	Average per capita gain per day of 15 babies=	1.614 oz.	Average per capita gain per day of 27 babies=	0.620 oz.	Average per capita gain per day of 27 babies=	0.620 oz.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Died at Infants' Hospital.

<sup>2</sup> Figures in "gain" columns represent net gain.

Now in hospital.

"Indigestion."

GROUP 2.—Stayed on whole milk powder.

Number.	At beginning.				First period.				Second period.				Entire period.												
	Age.		Weight.		Time on.		Gain.		Time on.		Gain.		Time on.		Gain.		Loss.								
	Mos.	Days.	Lbs.	Oz.	Mos.	Days.	Lbs.	Oz.	Mos.	Days.	Lbs.	Oz.	Mos.	Days.	Lbs.	Oz.	Mos.	Days.	Lbs.	Oz.					
<i>Well.</i>																									
B-1	6	10	13	14	2	4	4	7	0	21	1	6	0	0	0	0	25	25	5	13	0				
B-2	1	27	8	8	2	2	5	0	0	22	0	12	0	0	0	0	24	24	5	12	0				
B-3	4	1	14	11	1	28	3	6	0	0	3	0	0	0	0	0	2	26	4	9	0				
B-4	3	20	12	12	1	4	3	5	0	21	0	7	0	0	0	0	2	25	3	12	0				
B-5	5	10	12	12	1	4	1	7	1	18	2	2	0	0	0	0	2	22	3	9	0				
B-6	4	4	11	4	1	4	2	10	1	18	2	9	0	0	0	0	2	22	5	3	0				
B-7	4	4	11	5	1	12	1	4	0	21	0	6	0	0	0	0	2	22	3	1	0				
B-8	2	22	8	14	2	2	3	10	0	21	1	1	0	0	0	0	2	23	4	11	0				
B-9	4	27	12	0	1	3	2	6	1	4	1	5	0	0	0	0	2	7	3	11	0				
B-10	3	6	11	14	1	18	2	9	1	4	2	4	0	0	0	0	2	22	4	13	0				
B-11	5	3	14	14	1	19	2	4	0	21	1	9	0	0	0	0	2	10	3	13	0				
B-12	4	17	12	10	1	11	2	12	0	29	0	10	0	0	0	0	2	10	3	6	0				
<i>Slightly sick.</i>																									
B-13	4	6	10	8	0	20	1	7	1	4	2	6	0	0	0	0	1	24	3	13	0				
B-14	0	28	8	2	1	14	1	5	1	3	1	9	0	0	0	0	2	17	2	14	0				
B-15	3	11	12	4	1	14	2	12	0	18	1	4	0	0	0	0	2	2	4	0	0				
B-16	2	26	10	0	1	11	1	7	0	10	0	0	0	0	0	0	1	17	1	5	0				
B-17	4	27	10	0	1	11	1	7	0	26	1	8	0	0	0	0	2	1	3	15	0				
B-18	3	27	11	7	1	11	2	11	1	1	15	0	0	0	0	0	2	1	4	10	0				
B-19	5	13	13	9	1	11	2	9	0	26	1	4	0	0	0	0	2	7	3	13	0				
B-20	5	14	11	11	1	15	4	2	0	24	0	11	0	0	0	0	2	9	4	13	0				
B-21	2	15	5	15	2	4	3	8	0	20	1	2	0	0	0	0	2	24	4	10	0				
<i>Sick.</i>																									
B-22	3	16	6	7	2	2	4	5	0	13	1	3	0	0	0	0	2	15	5	8	0				
B-23	4	20	8	8	2	2	3	8	0	20	1	2	0	0	0	0	2	22	4	10	0				
B-24	1	28	6	1	1	12	1	2	0	28	1	0	0	0	0	0	2	10	2	2	0				
B-25	3	0	7	13	0	19	0	9	1	0	0	15	0	0	0	0	1	19	1	8	0				
B-26	4	1	9	0	0	20	1	1	0	21	1	9	0	0	0	0	1	11	2	10	0				
B-27	4	1	9	0	0	20	1	1	0	21	1	1	6	0	0	0	2	6	2	2	0				
B-28	3	5	8	14	1	5	0	12	1	1	1	6	0	0	0	0	2	6	2	2	0				
B-29	3	3	7	13	1	26	2	3	0	27	1	0	0	0	0	0	2	23	3	3	0				
B-30	1	0	7	0	2	0	7	2	0	13	0	7	0	0	0	0	2	13	7	15	0				
B-31	2	1	10	1	1	13	1	15	1	1	5	5	0	0	0	0	2	14	7	6	0				
Total (30 babies) <sup>1</sup> .....																		71	4	120	7	.....			
Average.....																		Average per capita gain per day of 29 babies=0.844 ounce.				Average per capita gain per day of 30 babies=0.908 ounce.			

<sup>1</sup> Figures in "gain" columns represent net gain.

GROUP 2.—Taken off whole milk powder. Data while on.

Number.	At beginning.				First period.					
	Age.		Weight.		Time on.		Gain.		Loss.	
	Months.	Days.	Pounds.	Ounces.	Months.	Days.	Pounds.	Ounces.	Pounds.	Ounces.
	<i>Well.</i>									
B-32	5	6	14	14	0	21	0	0	0	0
B-33	5	2	13	2	0	3	0	5	0	0
	<i>Slightly sick.</i>									
B-34	2	21	8	1	1	4	1	0	0	0
B-35	5	26	15	0	0	20	1	0	0	0
	<i>Very sick.</i>									
B-36	1	5	7	8	0	9	0	0	0	0
B-37	2	15	12	2	0	21	1	0	0	0
Total (6 babies) <sup>1</sup>	22	15	70	11	3	18	2	14	.....	.....
Average	3	22.5	11	12.5	Average net gain per capita per day of 6 babies=0.426 ounce.					

<sup>1</sup> Figures in "gain" columns represent net gain.



GROUP 2.—Taken off whole milk powder.

Number.	At beginning.				On powder.		Weight.		Condition.	Change made by—	Approval of conference physician or nurse?	Remarks.
	Age.		Weighed.		Mos.	Days.	Lbs.	Oz.				
	Mos.	Days.	Lbs.	Oz.								
B-38	1	5	7	8	0	9	7	5	Better.....	Private physician.....	No.	
B-38	4	13	9	14	0	1	(1)	0	No change.....	Mother.....	No.	
B-39	1	21	7	9	0	2	(1)	0	No change.....	do.....	No.	
B-39	5	6	14	14	(3)	0	(1)	10	No change.....	Nurse.....	Yes.	Nurse did not believe baby was getting powder.
B-41	5	15	(1)	2	0	9	(1)	0	do.....	Mother.....	No.	Back on powder again.
B-42	2	19	9	8	0	26	(1)	0	do.....	do.....	No.	
B-43	2	26	12	8	(3)	0	(1)	0	do.....	do.....	No.	
B-44	2	12	12	4	(3)	0	(1)	0	do.....	do.....	No.	
B-45	1	4	9	8	0	5	(1)	0	Sick (overfeeding)...	Private physician.....	No.	Error due to mother's misstatement.
B-46	4	15	10	1	0	5	(1)	0	No change.....	do.....	No.	Related to B-45, same physician.
B-47	4	15	14	2	0	5	(1)	0	do.....	do.....	No.	Friend of B-45, same physician.
B-34	7	21	8	1	1	4	(1)	1	do.....	Mother.....	No.	
B-48	5	8	6	6	(3)	20	16	0	do.....	Private physician.....	No.	
B-35	5	26	15	8	0	20	16	0	do.....	Conference physician.....	Yes.	
B-37	2	15	12	2	0	21	13	2	Better.....	Mother.....	No.	To a fat-free formula.
B-49	2	11	10	10	(3)	0	(1)	0	No change.....	do.....	No.	
B-50	2	20	10	10	(3)	1	(1)	0	do.....	do.....	No.	
B-33	5	2	13	2	0	3	13	7	do.....	Private physician.....	No.	

\* Few days. † Died following operation for congenital defect. ‡ Not weighed.

GROUP 3.—Taken off emulsed milk (unsalted butter and skimmed milk powder).

Number.	At beginning.				On emulsed.		Condition.	Change made by—	Ap- proval of conference physi- cian or nurse?	Remarks.		
	Age.		Weighed.		Mos.	Days.					Lbs.	Oz.
	Mos.	Days.	Lbs.	Oz.								
C-19.....	6	21	16	4	0	15	16	9	Mother.....	No.....		
C-24.....	5	25	13	9	(1)	0	0	0	do.....	No.....		
C-20.....	2	10	11	1	0	3	10	10	Conference physician.....	Yes.....		
C-15.....	2	20	12	2	1	15	13	3	do.....	Yes.....		
C-17.....	5	9	12	0	1	15	13	2	do.....	Yes.....		
C-16.....	1	14	7	10	0	19	8	6	do.....	No.....		
C-18.....	6	3	11	14	2	0	13	5	Mother.....	No.....		
C-21.....	2	0	7	2	0	13	7	5	Conference physician.....	Yes.....		
C-25.....	1	21	8	10	1	0	9	6	do.....	Yes.....		
C-26.....	3	25	12	12	0	0	0	0	do.....	Yes.....		
C-27.....	1	15	7	10	0	0	0	8	Family moved.....	No.....	Baby lost track of.	
C-22.....	2	17	10	12	0	14	10	8	do.....	No.....	Do.	
C-23.....	6	2	10	8	0	21	11	8	Mother.....	Yes.....		
C-28.....					0	2			Conference physician.....	No.....		

<sup>1</sup>Few days.

<sup>2</sup>Not weighed.

GROUP 3.—Taken off reconstructed milk (sweet butter and powdered skimmed).—Data while on.

Number.	At beginning.				First period.					
	Age.		Weight.		Time on.		Gain.		Loss.	
	Months.	Days.	Pounds.	Ounces.	Months.	Days.	Pounds.	Ounces.	Pounds.	Ounces.
C-15.....	2	20	12	2	1	15	1	1	0	0
<i>Well.</i>										
C-16.....	1	14	7	10	0	19	0	12	0	0
<i>Slightly sick.</i>										
C-17.....	5	9	12	0	1	15	1	2	0	0
C-18.....	6	3	11	14	2	0	1	7	0	0
C-19.....	6	21	16	4	0	15	0	5	0	0
<i>Sick.</i>										
C-20.....	2	10	11	1	0	3	0	0	0	7
C-21.....	2	0	7	2	0	13	0	3	0	0
C-22.....	2	17	10	12	0	14	0	0	0	4
C-23.....	6	2	10	8	1	21	1	0	0	0
Total (9 babies).....	35	6	99	5	8	25	5	3	.....	.....
Average.....	3	27	11	5	Average net gain per capita per day of 9 babies, 0.313 ounce.					

<sup>1</sup> Figures in "gain" column represent net gain.

Summary.

	Group 1.			Group 2.			Group 3.		
	Stayed on.	Taken off.	Total.	Stayed on.	Taken off.	Total.	Stayed on.	Taken off.	Total.
<b>At beginning:</b>									
Total age.....	29 babies.	6 babies.	36 babies.	30 babies.	22 mos. 13 days.	132 mos. 17 days.	14 babies.	9 babies.	23 babies.
Average age.....	108 mos. 4 days.	3 mos. 13 days.	3 mos. 20.5 days.	110 mos. 2 days.	3 mos. 22.5 days.	3 mos. 20.5 days.	55 mos. 28 days.	35 mos. 0 days.	91 mos. 4 days.
Total weight.....	304 lbs. 13 oz.	70 lbs. 11 oz.	383 lbs. 7 oz.	312 lbs. 12 oz.	70 lbs. 11 oz.	383 lbs. 7 oz.	171 lbs. 11 oz.	99 lbs. 5 oz.	271 lbs.
Average weight.....	10 lbs. 14.2 oz.	11 lbs. 12.5 oz.	10 lbs. 10.5 oz.	10 lbs. 6.8 oz.	11 lbs. 12.5 oz.	10 lbs. 10.5 oz.	12 lbs. 4.2 oz.	11 lbs. 0.5 oz.	11 lbs. 12 oz.
<b>First period:</b>									
Time of feeding.....	29 babies.	6 babies.	36 babies.	30 babies.	3 mos. 18 days.	48 mos. 29 days.	14 babies.	9 babies.	23 babies.
Total gain.....	40 mos. 2 days.	2 lbs. 14 oz.	82 lbs. 9 oz.	45 mos. 11 days.	3 mos. 14 oz.	82 lbs. 9 oz.	21 mos. 24 days.	8 mos. 23 days.	30 mos. 19 days.
Average gain per capita per day.....	0.635 oz.	0.426 oz.	0.899 oz.	0.937 oz.	0.426 oz.	0.899 oz.	0.798 oz.	0.313 oz.	0.658 oz.
<b>Second period:</b>									
Time of feeding.....	15 babies.		29 babies.	29 babies.	25 mos. 23 days.	25 mos. 23 days.	13 babies.		13 babies.
Total gain.....	17 mos. 1 day.		40 lbs. 12 oz.	40 lbs. 12 oz.	40 lbs. 12 oz.	40 lbs. 12 oz.	10 mos. 13 days.		10 mos. 13 days.
Average gain per capita per day.....	0.614 oz.		0.844 oz.	0.844 oz.	0.844 oz.	0.844 oz.	17 lbs. 1 oz.		17 lbs. 1 oz.
<b>Entire period:</b>									
Time of feeding.....	27 babies.		36 babies.	30 babies.	74 mos. 22 days.	74 mos. 22 days.	14 babies.		23 babies.
Total gain.....	60 mos. 3 days.		123 lbs. 5 oz.	71 mos. 4 days.	123 lbs. 5 oz.	123 lbs. 5 oz.	32 mos. 7 days.		41 mos. 2 days.
Average gain per capita per day.....	0.639 oz.		0.860 oz.	0.903 oz.	0.860 oz.	0.860 oz.	49 lbs. 11 oz.		54 lbs. 14 oz.
							0.822 oz.		0.713 oz.



The weight tables give individual and average ages and weights at the beginning of the study; individual and total time, in months and days, of feeding; individual gain or loss, in pounds and ounces, total gain, and average gain per baby per day. In the cases of Groups 2 and 3 separate tables are presented of such comparative weights as were obtained of the babies who were subsequently "Taken off." All comparative weights taken previous to October 22 were compiled and are here presented as "Time on," and "Gain" or "Loss" as of the "First period." Comparative times of feeding and comparative weights that were taken after October 22 and before November 13 are here presented as of the "Second period." Comparative times of feeding and comparative weights taken between the beginning of the study and November 13 are presented as of the "Entire period."

The averages of all groups, including age and weight at beginning, "Stayed on" and "Taken off," time on, total gain, and average gain per baby per day for all periods, are carried forward into a summary.

Satisfactory laboratory analyses and experiments with animals, the freedom from immediate dangers, and the increase in weight following the use of different foods used in infant feeding, are not sufficient criteria to warrant final conclusions relative to the comparative values of the different foods; nor, as has been said, are final conclusions warranted until the effects of use of different foods have been studied for a prolonged period. However, the opinions of trained and experienced workers—in this case the nurses of the Boston Baby Hygiene Association—who have had intimate contact with the units which go to make up a study of this kind, are of some value when considering the relative values of different foods.

Each nurse who had supervised one or more babies in Groups 2 or 3 (there were about 20 such nurses) was asked to express a conservative opinion on November 12 regarding the progress, with special reference to general development, activity, teething, and disposition, of such babies as she had supervised. In asking these opinions the point was emphasized, as it had been at all times during the study, that those who were cooperating in the study were not interested to determine superiority for any kind of food, but were only interested to secure facts as they exist. In order that these opinions might be reduced to a comparable basis, the nurses were asked to state how each baby had progressed on remade milk in comparison with the progress the same baby had made on its former diet (using the terms "Better," "No change," or "Not so well"), or with the progress similar babies are likely to accomplish on natural milk.

In this preliminary report the foregoing data—viz, laboratory analyses; removals from the powder, with special reference to the attitude thereto of the physicians and nurses of the Boston Baby

Hygiene Association; gain in weight per baby per day; and the judgment of the nurses as to the general development, activity, teething, and disposition of the babies in Groups 2 and 3—are used in drawing preliminary conclusions relative to the safety, usefulness, and comparative value of remade milk, of the brand employed, in infant feeding.

#### Conclusions From This Study.

*Safety.*—Such laboratory analyses as were made indicate that the dry milk powders and their remade products, used in this study, are safe for infant feeding.

Two babies died during the period of the study. Of these, one baby, a member of Group 2 (whole milk powder), died following an operation for a congenital defect. The other, a twin, and a member of Group 1, was badly nourished at the time she was placed on natural milk; she died of indigestion.

Only one other baby, a member of Group 2, developed serious illness. This illness resulted from misinformation furnished by the mother, who informed the conference physician that her baby was being fed on a milk mixture, when, as a matter of fact, she had been feeding him on a proprietary food which consists almost entirely of sugar. The conference physician prescribed whole milk powder in a strength corresponding with natural milk, as stated by the mother. A serious case of overfeeding resulted, but was followed by recovery.

These deaths and the serious illness are not considered to be significant so far as the foods used are concerned. Such other illnesses as occurred were slight and transitory.

In group 2, 49 babies in all were fed milk that had been reconstituted from whole milk powder. Nineteen babies were removed from this group. Two removals have already been accounted for. For various reasons, or for no material reason, 12 babies were removed within a few days, and 3 more after longer periods, by their mothers or by private physicians. Development of illness attributable to the milk powder was not a significant reason for these removals. Only 2 babies were removed from the powder by conference physicians or nurses. The conference physician removed 1 baby for the purpose of putting it on a fat-free formula. A conference nurse removed the other baby because other members of the family were using the milk powder.

The circumstances attending the removal of babies from the whole milk powder employed in this study furnish no indication that it is unsafe for infant feeding.

In Group 3, 28 babies in all were fed on remade milk which had been reconstructed from unsalted butter and skimmed milk powder. Difficulties experienced in making daily deliveries of this mixture,

account in larger measure for fewer babies being included in this group than in Group 2.

Fourteen babies were removed from Group 3. No baby in this group died, nor did any become seriously ill. The families of 2 moved and the babies were lost sight of; 5 were removed by their mothers for reasons that can not be considered adverse to the feeding mixture; conference physicians removed 7 for the purpose of putting them on other feeding mixtures.

The circumstances attending the removal of babies from the remade milk obtained by reconstructing unsalted butter and the skimmed milk powder employed in this study furnish no indication that the remade milk is unsafe for infant feeding; the circumstance that 50 per cent of the removals from reconstructed milk were approved by the conference physicians, as compared with 10 per cent in the case of milk that had been reconstituted from whole milk powder, justifies the conclusion that these forms of remade milk differ in their effects when fed to infants.

*Usefulness.*—In Group 1, 27 babies were fed on modifications of natural milk for a combined period of 60 months and 3 days; their combined gain in weight was 70 pounds and 15 ounces; the average gain per baby per day was 0.629 ounces.

In Group 2, 36 babies were fed on modifications of whole milk powder for a combined period of 74 months and 22 days; their combined gain in weight was 123 pounds and 5 ounces; the average gain per baby per day was 0.880 ounce.

In Group 3, 23 babies were fed on modifications of milk that had been reconstructed from unsalted butter and skimmed milk powder, for a combined period of 41 months and 2 days; their combined gain in weight was 54 pounds and 14 ounces; the average gain per baby per day was 0.713 ounces

While gain in weight alone is not sufficient evidence on which to base final conclusions relative to the adequacy of a food for infant feeding, and while it may prove that excess gain over that which has been considered normal may not be desirable, the foregoing figures seem to indicate that the whole milk powder and the skimmed milk powder and unsalted butter employed in this study are useful in infant feeding, and, further—and especially in the case of the whole milk powder, and in the case of babies who are undernourished and who digest natural milk badly—these remade milks may have points of distinct advantage in infant feeding. The figures also warrant the conclusion that reconstituted, reconstructed, and natural milks differ in their effects when fed to infants; and that reconstituted and reconstructed milks should be labeled and sold for what they are and that they should not be substituted and sold for natural milk in a manner to deceive the purchaser.

The figures further confirm the previous conclusion of the safety of this brand of remade milk in infant feeding.

*Comparative Value.*—The opinions expressed by the nurses with respect to the comparative value of reconstituted, reconstructed, and natural milk in infant feeding, and with special reference to the influence of these different milks on the babies' general development, activity, teething, and disposition, strengthen the conclusions already drawn—viz, that reconstituted and reconstructed milks, of the brand employed, are safe and useful for infant feeding, and that in certain respects, particularly in the case of reconstituted milk, and in the cases of babies who digest natural milk badly, they may have points of distinct advantage. The opinions of the nurses further strengthen the conclusion previously arrived at that reconstituted, reconstructed, and natural milks differ in their effects when fed to infants.

The facilities available for this study permitted the use of only one brand of dried milk powder. Therefore no conclusions are drawn relative to the safety, usefulness, advantages, or disadvantages of other brands of dried milk powder.

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## MODEL MOSQUITO ORDINANCE.

The United States Public Health Service recommends that State and local health authorities secure, wherever practicable, as an important feature of any campaign against malaria, the enactment of ordinances for the prevention of mosquito propagation.

The following model ordinance is presented with the suggestion that in every case it be examined by competent local counsel for changes in form, or in substance if necessary, dictated by special constitutional, legislative, or charter considerations.

It is manifestly impossible to prepare forms of ordinances which will in the original wording exactly fit the varying local requirements. The purpose of the model malaria ordinance is only to suggest in substance desirable and effective legislation; changes in titles, enacting clauses, penalty provisions, and other formal administrative details generally may be found necessary.

It should be stated that these provisions are suitable for a municipality only. It should also be noted that they provide for mosquito control in general and are aimed especially against the house mosquito.

This ordinance, with minor alterations, has been incorporated in the cooperative program for the control of malaria, which is being conducted by the United States Public Health Service, the State and local health authorities, and the International Health Board in a number of Southern States.

### MODEL ORDINANCE.

SECTION 1. It shall be unlawful for any person to have, keep, maintain, cause, or permit within the corporate limits of ..... any collection of standing or flowing water in which mosquitoes breed or are likely to breed, unless such collection of water is treated so as effectually to prevent such breeding.

SECTION 2. Collections of water in which mosquitoes breed or are likely to breed are those contained in ditches, ponds, pools, excavations, holes, depressions, open cesspools, privy vaults, fountains, cisterns, tanks, shallow wells, barrels, troughs (except horse troughs in frequent use), urns, cans, boxes, bottles, tubs, buckets, defective house roof gutters, tanks of flush closets, or other similar water containers.

SECTION 3. The natural presence of mosquito larvæ in standing or running water shall be evidence that mosquitoes are breeding there.

SECTION 4. Collections of water in which mosquitoes breed or are likely to breed shall be treated by such one or more of the following methods as shall be approved by the health officer:

- (a) Screening with wire netting of at least 16 meshes to the inch each way, or any other material which will effectually prevent the ingress or egress of mosquitoes.

- (b) Complete emptying every seven days of unscreened containers, together with their thorough drying or cleaning.
- (c) Using a larvicide approved and applied under the direction of the health officer.
- (d) Covering completely the surface of the water with kerosene, petroleum, or paraffin oil once every seven days.
- (e) Cleaning and keeping sufficiently free of vegetable growth and other obstructions, and stocking with mosquito destroying fish.
- (f) Filling or draining to the satisfaction of the health officer.
- (g) Proper disposal, by removal or destruction, of tin cans, tin boxes, broken or empty bottles, and similar articles likely to hold water.

SECTION 5. In case the person responsible for the condition of premises on which mosquitoes breed or are likely to breed fails or refuses to take necessary measures to prevent their breeding within three days after notice in writing has been given him by the health officer, or within such longer time after such notice as may be specified in the notice, the said person responsible shall be deemed guilty of a violation of this ordinance; and for each day after the expiration of three days from the day on which such notice is given him, or for each day after the expiration of the time specified in the notice, as the case may be, that the person responsible fails or refuses to take such measures, the said person responsible shall be deemed guilty of a separate violation of this ordinance, and in case of such failure or refusal of the person responsible the health officer is authorized to take necessary measures to prevent the breeding of mosquitoes, and all necessary costs incurred by the health officer for that purpose shall be a charge against the person responsible.

SECTION 6. For the purpose of this ordinance the person responsible for the condition of any premises is the person using or occupying the same; or, in case no person is using or occupying the premises, the person who by law is entitled to the immediate possession of the same; or, in case the premises are used or occupied by two or more tenants of a common landlord, or form grounds appurtenant to a house occupied by two or more tenants of a common landlord, then the landlord; each tenant, however, is responsible for that part of the premises which he occupies to the exclusion of the other tenants: *Provided*, That, in case the premises are occupied by a tenant under a yearly or monthly tenancy, or under a lease for not more than a year, or under any lease whereby the lessor is expressly or impliedly obligated to keep the premises in repair, and the collection of standing or flowing water in which mosquitoes breed or are likely to breed is owing to the disrepair of the building or buildings, or to any natural

quality of the premises, or to any condition that existed at the time when the tenant entered into possession, or to anything done on the premises by the landlord during the existence of the tenancy or lease, then, and in such case, the landlord is the person responsible: *Provided further*, That any person who has caused to exist on any premises of which he is not the owner, landlord, occupant, or tenant any collection of water in which mosquitoes breed or are likely to breed is responsible, as well as the owner, landlord, tenant, or occupant, as the case may be.

SECTION 7. For the purpose of enforcing the provisions of this ordinance, the health officer, or his lawful subordinate, may at all reasonable times enter in and upon any premises within his jurisdiction.

SECTION 8. Any person found guilty of a violation of this ordinance, as described in section 5 hereof, shall be punished by a fine of not less than one dollar (\$1) and not more than twenty-five dollars (\$25).

SECTION 9. This ordinance shall be in full force and effect on and after the ..... day from the day on which it is approved.

### DIVISION OF VENEREAL DISEASES, FEBRUARY, 1920.

Table I shows the number of new admissions during the month of February to the venereal disease clinics operating under the joint control of the United States Public Health Service and the State boards of health.

Table II shows the number of cases of gonorrhoea, syphilis, and chancroid reported by the State boards of health during February. Seven States have not submitted reports. The other States for which no figures are given have reported, but due to discrepancies it has been impossible to include them.

TABLE I.—*Number of cases of venereal diseases admitted during the month of February, 1920, to the venereal-disease clinics operating under the joint control of the United States Public Health Service and the State boards of health.*

State.	Total cases.	Gonorrhoea.	Syphilis.	Chancreoid.	State.	Total cases.	Gonorrhoea.	Syphilis.	Chancreoid.
Alabama.....	867	360	467	40	Indiana.....	643	342	272	29
Arizona.....	5	2	3	.....	Iowa.....	101	44	54	3
Arkansas.....	166	73	86	7	Kansas.....	206	94	109	3
California.....	363	135	225	3	Kentucky.....	107	44	57	6
Colorado.....	57	34	18	5	Louisiana.....	241	87	135	19
Connecticut <sup>1</sup> .....	.....	.....	.....	.....	Maine.....	19	6	13	.....
Delaware <sup>1</sup> .....	.....	.....	.....	.....	Maryland.....	160	121	28	11
District of Columbia.....	.....	.....	.....	.....	Massachusetts.....	461	217	243	1
Florida.....	195	61	119	15	Michigan.....	88	25	59	4
Georgia.....	366	186	147	33	Minnesota.....	97	52	38	7
Idaho <sup>2</sup> .....	.....	.....	.....	.....	Mississippi.....	101	34	65	2
Illinois.....	604	267	320	17	Missouri.....	508	272	213	23

<sup>1</sup> Report not received.

<sup>2</sup> No clinics.

TABLE I.—Number of cases of venereal diseases admitted during the month of February, 1920, to the venereal-disease clinics operating under the joint control of the United States Public Health Service and the State boards of health—Continued.

State	Total cases.	Gonorrhoea.	Syphilis.	Chancroid.	State	Total cases.	Gonorrhoea.	Syphilis.	Chancroid.
Montana <sup>1</sup> .....	.....	.....	.....	.....	South Carolina.....	604	230	336	38
Nebraska <sup>1</sup> .....	.....	.....	.....	.....	South Dakota.....	16	9	7	.....
Nevada.....	.....	.....	.....	.....	Tennessee <sup>1</sup> .....	.....	.....	.....	.....
New Hampshire.....	22	14	8	.....	Texas.....	.....	.....	.....	.....
New Jersey.....	189	93	93	3	Utah.....	66	35	27	4
New York.....	739	306	405	23	Vermont.....	18	6	12	.....
New Mexico.....	3	3	.....	.....	Virginia.....	338	143	167	28
North Carolina <sup>1</sup> .....	.....	.....	.....	.....	Washington.....	33	17	14	2
North Dakota.....	21	16	5	.....	West Virginia.....	32	6	25	1
Ohio.....	310	152	146	12	Wisconsin.....	23	12	15	1
Oklahoma.....	311	135	143	33	Wyoming.....	2	.....	2	.....
Oregon.....	28	12	16	.....	Total.....	8,115	3,645	4,092	378
Pennsylvania.....	.....	.....	.....	.....					
Rhode Island <sup>1</sup> .....	.....	.....	.....	.....					

<sup>1</sup> Report not received.

TABLE II.—Summary of cases of venereal diseases reported by the State boards of health for the month of February, 1920.

State.	Total cases.	Gonorrhoea.	Syphilis.	Chancroid.	State.	Total cases.	Gonorrhoea.	Syphilis.	Chancroid.
Alabama.....	1,273	580	634	59	Nevada.....	.....	.....	.....	.....
Arizona.....	.....	.....	.....	.....	New Hampshire.....	68	39	29	.....
Arkansas.....	453	250	173	30	New Jersey.....	319	163	151	5
California.....	777	379	398	.....	New York.....	2,452	584	1,868	.....
Colorado.....	253	174	67	12	New Mexico.....	48	40	6	2
Connecticut <sup>1</sup> .....	.....	.....	.....	.....	North Carolina <sup>1</sup> .....	.....	.....	.....	.....
Delaware <sup>1</sup> .....	.....	.....	.....	.....	North Dakota.....	71	57	14	.....
District of Columbia.....	.....	.....	.....	.....	Ohio.....	.....	.....	.....	.....
Florida.....	302	111	175	16	Oklahoma.....	261	172	70	19
Georgia.....	833	399	400	34	Oregon.....	.....	.....	.....	.....
Idaho.....	57	28	27	2	Pennsylvania.....	.....	.....	.....	.....
Illinois.....	1,760	966	724	70	Rhode Island <sup>1</sup> .....	.....	.....	.....	.....
Indiana.....	1,730	366	343	21	South Carolina.....	1,056	448	542	66
Iowa.....	251	188	55	8	South Dakota.....	84	64	20	.....
Kansas.....	248	132	111	5	Tennessee <sup>1</sup> .....	.....	.....	.....	.....
Kentucky.....	381	172	199	10	Texas.....	.....	.....	.....	.....
Louisiana.....	491	309	129	53	Utah.....	88	75	11	2
Maine.....	134	97	35	2	Vermont.....	45	24	21	.....
Maryland.....	.....	.....	.....	.....	Virginia.....	358	158	169	31
Massachusetts.....	681	465	216	.....	Washington.....	294	220	69	5
Michigan.....	1,918	965	921	32	West Virginia.....	.....	.....	.....	.....
Minnesota.....	695	424	264	7	Wisconsin.....	261	206	46	9
Mississippi.....	237	137	87	13	Wyoming.....	72	38	32	2
Missouri.....	574	327	219	28	Total.....	17,525	8,757	8,225	543
Montana <sup>1</sup> .....	.....	.....	.....	.....					
Nebraska <sup>1</sup> .....	.....	.....	.....	.....					

<sup>1</sup> Report not received.



## INFLUENZA PREVALENCE IN THE UNITED STATES.

The number of cases of influenza reported to the Public Health Service has continued to decrease, as shown by the accompanying table. The reports of deaths from influenza and pneumonia also show a decrease for the week ended March 27 as compared with previous weeks. There is no indication of a recrudescence of influenza in the reports received to date.

*Influenza case reports. Number of cases of influenza occurring in various States as reported to the Public Health Service by State health departments.*

[States omitted are those from which no reports have been received. Blank spaces indicate that no report was received for the week. These reports are preliminary and subject to change.]

State.	Cases reported week ended—								
	January.	February.				March.			
	31	7	14	21	28	6	13	20	27
Alabama	203	1,296	3,236	2,366	3,603	3,885	1,047	829	472
Arkansas	595	5,666	6,599	2,793	1,690	2,576	2,055	835	344
California	7,133	13,660	11,887	7,420	5,527	918	496	582	397
Connecticut	4,664	5,666	4,868	2,771	1,183	571	229	121	47
Delaware	21	86	78	43	36	50	33	13	
District of Columbia	1,616	557	298	104	36	21	6	6	8
Florida	1,547	1,581	1,735	1,420	1,026	580	413	298	440
Georgia	617	3,256	5,411	7,809	8,210	3,677	3,087	2,066	1,573
Idaho	2,783	2,304							
Illinois	29,156	30,330	23,037	7,237	3,062	1,344	453	430	319
Indiana		7,811	7,503	3,904	2,038	1,289	1,184	412	140
Iowa	3,960	5,070	1,981	869	170	86	96	22	59
Kansas	8,582	16,960	17,699	10,026	3,590	3,332	1,551	1,290	521
Kentucky	878	2,536	6,067	4,295	8,584	4,099	3,640	2,243	
Louisiana	763	1,901	3,690	3,153	3,363	2,541	1,982	1,045	513
Maine	387	936	3,942	3,702	2,134	1,130	1,105	848	73
Maryland <sup>1</sup>		4,935	8,942	4,758	3,184	2,052	1,206	747	428
Massachusetts	4,475	9,730	10,727	5,601	2,376	1,144	490	254	147
Michigan		14,201	13,470	6,672	3,861				
Minnesota	5,775	11,397	7,555	4,213	1,447	692	406	130	57
Mississippi		<sup>3</sup> 2,761	4,014	3,382	2,475	<sup>1</sup> 1,798	2,230		539
Missouri	4,043	5,359	1,696	466					
Montana	1,022	1,847	1,650	1,400	348	511	206	82	49
Nebraska	1,815	3,998	6,048	3,272	2,492	2,007	834	849	269
New Hampshire	382	460	701	383	488				
New Jersey	7,365	9,603	5,807	2,798	1,043	764	365	171	81
New Mexico	260	1,576	1,166	632	204	186	97	90	36
New York (exclusive of New York City)	4,755	11,616	13,259	11,301	5,330	4,030	2,434	1,081	493
New York City	30,456	21,388	8,091	3,030	1,069	483	381	230	151
North Carolina	3,356	12,892	25,571	18,439	8,398	3,800	1,605		
North Dakota		946	497	<sup>3</sup> 178					
Ohio		10,479							
Oregon		1,042	1,318	1,971	<sup>2</sup> 495	<sup>2</sup> 309			
Pennsylvania		16,090	13,324	9,365	<sup>1</sup> 1,723				
South Carolina	1,661	<sup>3</sup> 3,179	3,916	2,846	1,716	971	678	523	236
South Dakota		5,042	4,976	3,047	1,649	495	120	267	53
Tennessee		2,331	<sup>2</sup> 1,432						
Texas		11,265	6,783	1,035	588	134	55		
Utah		1,489	228	96					
Vermont	89	272	796	1,314	1,071	481	470	158	85
Virginia	3,097	6,318	2,934	1,512	<sup>3</sup> 1,073				
Washington	902	6,451	6,426	4,596	1,559	1,260	271	93	43
West Virginia	1,667	4,732	6,308	<sup>3</sup> 1,848	780				
Wisconsin	6,739	14,328	10,310	6,274	3,131	994	554	503	153
Wyoming	1,372								
Total	142,136	295,433	265,981	158,294	90,752	48,219	29,779	16,218	7,726
Number of States reporting	32	43	41	40	37	32	31	28	27

<sup>1</sup> Week ended Friday.

<sup>2</sup> Five days only.

<sup>3</sup> Six days only.

### **ANNUAL MEETING OF AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS.**

The Fifth Annual Meeting of the American Association of Industrial Physicians and Surgeons will be held in New Orleans, La., on April 26 and 27—the week of the meeting of the American Medical Association.

According to the notice recently sent out by Dr. Francis D. Patterson, secretary-treasurer of the association, the morning of Monday, April 26, is to be devoted to executive session. Monday afternoon and all of Tuesday will be given over to the reading of papers, discussions, and the reports of the various committees appointed at the last meeting.

Notice is given that an amendment to section 4, Article III (annual membership dues) will be voted on; also an amendment relative to the annual selection of the next meeting place.

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### **CONFERENCE OF HEALTH AUTHORITIES.**

#### **ANNUAL CONFERENCE OF STATE AND TERRITORIAL HEALTH AUTHORITIES WITH THE UNITED STATES PUBLIC HEALTH SERVICE TO BE HELD IN MAY, 1920.**

The Eighteenth Annual Conference of State and Territorial Health Authorities with the United States Public Health Service will be held in Washington, D. C., May 26 and 27, 1920. In a letter recently sent out by Surg. Gen. Cumming to the State and Territorial health officers it was urged that each State be represented by an official delegate, as important State and National public health matters will be brought before the conference for action. The conference will open at 10 a. m. on May 26.

## DEATHS DURING WEEK ENDED MAR. 20, 1920.

[From the "Weekly Health Index," Mar. 23, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Mar. 20, 1920, infant mortality (per cent), annual death rates, and comparison with corresponding week of preceding years.

City.	Population July 1, 1918, estimated.	Week ended Mar. 20, 1920.		Average annual death rate per 1,000. <sup>2</sup>	Per cent of deaths under 1 year.	
		Total deaths.	Death rate. <sup>1</sup>		Week ended Mar. 20, 1920.	Previous year or years. <sup>3</sup>
Albany, N. Y.	* 113,344	32	14.7	C 20.8	3.1	C 13.3
Atlanta, Ga.	201,732	76	19.6	C 13.2	14.5	C 3.9
Baltimore, Md.	* 669,981	209	16.3	A 21.0	12.0	A 12.7
Birmingham, Ala.	197,670	76	20.0	A 17.2	7.9	A 11.5
Boston, Mass.	785,245	251	16.7	A 18.3	20.7	A 13.6
Buffalo, N. Y.	473,229	136	15.0	C 15.9	20.6	C 15.3
Cambridge, Mass.	111,432	38	17.8	A 15.6	31.6	A 9.2
Chicago, Ill.	2,596,681	733	14.7	A 17.3	16.6	A 19.1
Cincinnati, Ohio.	* 401,158	140	18.2	C 20.0	8.6	C 7.5
Cleveland, Ohio.	810,306	220	14.2	C 13.5	17.7	C 10.0
Columbus, Ohio.	225,296	83	19.2	C 18.3	16.9	C 16.5
Dayton, Ohio.	130,655	33	13.2	C 14.4	39.4	C 16.7
Denver, Colo.		76			7.9	
Detroit, Mich.		256			22.7	
Fall River, Mass.	128,392	39	15.8	C 21.9	25.6	C 22.2
Grand Rapids, Mich.	135,450	41	15.8	C 15.8	9.8	C 7.3
Indianapolis, Ind.	290,389	90	16.2	C 16.2	10.0	C 16.7
Jersey City, N. J.	318,770	87	14.2	C 22.4	24.1	C 13.9
Kansas City, Mo.	313,785	116	19.3	C 24.6	10.3	C 5.4
Los Angeles, Calif.	568,495	177	16.2	A 14.3	7.9	A 7.4
Louisville, Ky.	* 234,891	75	16.6	C 21.1	6.7	C 5.1
Lowell, Mass.	109,081	41	19.6	A 18.7	17.1	A 17.5
Memphis, Tenn.		62		C 20.2	16.1	C 3.3
Milwaukee, Wis.	* 457,147	123	14.0	A 15.0	24.4	A 25.4
Minneapolis, Minn.	383,442	86	11.7	C 12.8	15.1	C 18.1
Nashville, Tenn.	119,215	53	23.2	C 24.5	11.3	C 8.9
Newark, N. J.	428,684	142	17.3	C 21.3	21.1	C 16.6
New Haven, Conn.	154,865	54	18.2	C 18.9	18.5	C 14.3
New Orleans, La.	382,273	160	21.8	A 22.0	11.9	A 8.3
New York, N. Y.	5,215,879	1,554	15.5	C 22.5	18.0	C 12.8
Oakland, Calif.	214,206	47	11.4	A 12.3	12.8	A 8.4
Omaha, Nebr.	180,264	41	11.9	C 13.9	24.4	C 12.5
Philadelphia, Pa.	1,761,371	597	17.7	* 18.1	13.7	* 13.5
Pittsburgh, Pa.	593,303	184	16.2	C 20.0	21.2	C 17.1
Portland, Oreg.		65			15.4	C 9.8
Providence, R. I.	263,613	69	13.6	C 17.2	18.8	C 21.8
Richmond, Va.	160,719	46	14.9	C 17.2	19.6	C 11.3
Rochester, N. Y.	264,856	63	12.4	C 15.2	15.9	C 22.1
St. Louis, Mo.	779,951	209	14.0	C 16.8	11.0	C 10.7
St. Paul, Minn.	* 234,595	66	14.7	C 12.3	6.1	C 11.5
San Francisco, Calif.	478,530	137	14.9	C 19.1	6.6	C 4.0
Seattle, Wash.		83			10.8	A 11.2
Spokane, Wash.		28			3.6	C 10.3
Syracuse, N. Y.	* 171,647	49	14.9	C 14.9	14.3	C 19.6
Toledo, Ohio.	* 243,109	61	13.1	A 14.5	16.4	A 14.8
Washington, D. C.	* 437,414	149	17.8	A 19.3	12.1	A 8.9
Worcester, Mass.	173,650	55	16.5	C 14.4	14.5	C 18.8

<sup>1</sup> Annual rates per 1,000 estimated population.

<sup>2</sup> "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1917.

<sup>3</sup> 1920 enumeration, subject to revision.

<sup>4</sup> Population estimated as of July 1, 1919.

<sup>5</sup> Data are based on statistics of 1915, 1916, and 1917.

Summary of information received by telegraph from industrial insurance companies for week ended Mar. 20, 1920.

Policies in force.....	42,645,255
Number of death claims.....	11,555
Death claims per 1,000 policies in force, annual rate.....	14.1



## CURRENT STATE SUMMARIES—Continued.

## Telegraphic Reports for Week Ended Mar. 27, 1920—Continued.

FLORIDA—continued.		INDIANA—continued.	
	Cases.		Cases.
Leprosy.....	3	Scarlet fever:	
Malaria.....	40	Elkhart County.....	37
Pneumonia.....	327	Marion County.....	23
Scarlet fever.....	3	Scattering.....	127
Smallpox.....	7	Smallpox.....	136
Typhoid fever.....	15	Typhoid fever.....	5
		Andrews County—Epidemic.	
GEORGIA.		IOWA.	
Chicken pox.....	35	Cerebrospinal meningitis:	
Conjunctivitis (acute infectious).....	2	Colfax.....	2
Diphtheria.....	10	Chicken pox.....	2
Dysentery (bacillary).....	3	Diphtheria.....	14
German measles.....	4	Influenza:	
Hookworm.....	27	Carroll County.....	21
Influenza.....	1,573	Fairfield.....	1
Malaria.....	44	Keokuk County.....	10
Measles.....	86	Little Rock.....	16
Mumps.....	3	Pottawattamie County.....	11
Paratyphoid fever.....	1	Measles.....	21
Pneumonia (lobar).....	75	Scarlet fever.....	60
Scarlet fever.....	13	Smallpox:	
Septic sore throat.....	8	Cedar Rapids.....	7
Smallpox.....	37	Davenport.....	13
Tuberculosis (pulmonary).....	25	Mason City.....	8
Typhoid fever.....	5	Scattering.....	51
Whooping cough.....	38	Whooping cough.....	5
ILLINOIS.		KANSAS.	
Diphtheria:		Diphtheria.....	41
Chicago.....	131	Influenza.....	521
Scattering.....	16	Scarlet fever.....	106
Influenza:		Smallpox.....	108
Chicago.....	92		
Scattering.....	227	LOUISIANA.	
Lethargic encephalitis:		Cerebrospinal meningitis.....	1
Chicago.....	3	Diphtheria.....	16
Pneumonia:		Influenza.....	513
Chicago.....	239	Pneumonia.....	24
Scattering.....	10	Poliomyelitis.....	1
Poliomyelitis.....	2	Smallpox.....	82
Scarlet fever:		Typhoid fever.....	5
Chicago.....	327		
Livingston County—Pleasant Ridge Twp..	8	MAINE.	
Scattering.....	55	Cerebrospinal meningitis:	
Smallpox.....	38	Baileyville.....	1
Typhoid fever.....	8	Chicken pox.....	19
		Diphtheria.....	9
INDIANA.		Influenza:	
Cerebrospinal meningitis:		Baileyville.....	20
Shelby County.....	1	Eastport.....	12
Wabash County.....	1	Stonington.....	17
Diphtheria.....	36	Scattering.....	24
Influenza.....	140	Measles:	
Measles:		North Berwick.....	7
Hendricks County.....	68	Portland.....	3
Lake County.....	74	South Berwick.....	22
Marion County.....	264	Mumps.....	10
Scattering.....	349	Pneumonia.....	8
Poliomyelitis:		Scarlet fever.....	7
DeKalb County.....	1		





**CURRENT STATE SUMMARIES—Continued.**

**Kentucky Report for Week Ended Mar. 20, 1920—Continued.**

	Cases.	Scarlet fever:	Cases.
Malaria .....	1	Campbell County .....	7
Measles:		Jefferson County .....	14
Campbell County .....	32	Kenton County .....	7
Clay County .....	11	Scattering .....	23
Fleming County .....	24	Septic sore throat .....	5
Kenton County .....	22	Smallpox:	
Scattering .....	78	Graves County .....	7
Mumps .....	5	Muhlenburg County .....	12
Pellagra .....	1	Scattering .....	26
Pneumonia:		Tonsillitis .....	3
Breckenridge County .....	7	Trachoma .....	6
Elliott County .....	7	Tuberculosis .....	18
Fleming County .....	8	Typhoid fever .....	23
Hart County .....	7	Whooping cough .....	15
Jefferson County .....	25		
Ohio County .....	7		
Scattering .....	80		

**SUMMARY OF CASES REPORTED MONTHLY BY STATES.**

Tables showing, by counties, the reported cases of cerebrospinal meningitis, influenza, malaria, pellagra, poliomyelitis, smallpox, and typhoid fever are published under the names of these diseases. (See names of these and other diseases in the table of contents.)

The following monthly State reports include only those which were received during the current week. These reports appear each week as received.

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
1920.										
Alabama (February).....		44	11,039	23	105	1		58	136	29
California (February).....	20	486	46,857	21	3,865	2	4	446	477	20
Connecticut (February).....	9	281	15,055		1,165		1	365		6
Idaho (February).....	2	12	120		37			85	268	2
Indiana (February).....	6	214	18,217		1,907			913	486	27
Iowa (February).....	3	64	7,993				3	201	278	
Minnesota (January).....	3	329	7,275	6	643			327	362	26
Montana (February).....	1	17	5,191		67			89	107	3
Nebraska (February).....	9	59	16,845		342			317	625	2
North Carolina (February).....	9	106			326		1	100	349	8
North Dakota (February).....	3	75	6,244		52			231	26	2
Oregon (February).....	3	27	5,965		44			129	436	2
Rhode Island (February).....		177	5,799		106	1		97		
South Carolina (February).....	5	59	12,000	30	58	4		16	69	2
South Dakota (February).....		9			201		1	234	187	7
Washington (February).....	7	142			1,107			275	955	8
Wisconsin (February).....	12	148	24,731		1,798		1	522	635	15
Wyoming (February).....		11	1,330		84			20	114	4



### RECIPROCAL NOTIFICATION.

Minnesota—January, 1920.

*Cases of communicable diseases referred during January, 1920, to other State health departments by department of health of the State of Minnesota.*

Disease and locality of notification.	Referred to health authority of—	Why referred.
<b>Diphtheria:</b> Winona General Hospital, Winona, Winona County.	Blair, Trempealeau County, Wis....	Case diagnosed as croup in Wisconsin, died one hour after arrival in Minnesota. Culture positive for diphtheria.
Blooming Prairie, Steele County.	Chicago, Cook County, Ill.....	Taken sick in Minnesota one day after arrival from Illinois.
St. Paul Bureau of Health, Ramsey County.	River Falls, Pierce County, Wis....	Patient left Minnesota for Wisconsin after throat culture showed diphtheria bacilli.
Rochester, Olmsted County.	Deer Park, St. Croix County, Wis...	Virulent diphtheria case left Minnesota for Wisconsin.
Encephalitis(?); meningitis(?); Fulda, Murray County....	West Bend, Palo Alto County, Iowa.	Patient left Minnesota for Iowa. Taken sick and died before reaching destination. Had been exposed to cases of meningitis and encephalitis.
<b>Tuberculosis:</b> Pokegama Sanatorium, Pine County.	Wankon, Allamakee County, Iowa (2 cases); Wilmot, Roberts County, S. Dak.	Two open and one quiescent case left sanatorium for homes.
<b>Typhoid fever:</b> Excelsior, Hennepin County.	United States Public Health Service.	Employed three weeks previous to first symptoms on dredge stationed on Mississippi River.
City and County Hospital, St. Paul, Ramsey County.	Max, McLean County, N. Dak.....	Employed at Max, N. Dak., three weeks previous to first symptoms.

### ANTHRAX.

Charlotte, N. C., Brainerd, Minn., New York, N. Y., Philadelphia, Pa., and San Francisco, Calif.

During the week ended March 13, 1920, one fatal case of anthrax was reported at Charlotte, N. C., one case was reported at New York, N. Y., and two cases were reported at Philadelphia, Pa. One case was reported at Brainerd, Minn., during January, and one at San Francisco, Calif., during February, 1920.

CEREBROSPINAL MENINGITIS.

State Reports for January and February, 1920.

Place.	New cases reported.	Place.	New cases reported.
California (February):		Nebraska (February):	
Alameda County—		Colfax County.....	3
Oakland.....	1	Dawson County.....	1
Kern County—		Douglas County.....	3
Bakersfield.....	1	Saunders County.....	1
Lassen County.....	1	Webster County.....	1
Los Angeles County—		Total.....	9
Long Beach.....	1		
Los Angeles.....	2	North Carolina (February):	
Placer County—		Durham County.....	1
Colfax.....	1	Harnett County.....	1
Sacramento County—		Jackson County.....	1
Sacramento.....	1	Lee County.....	1
San Francisco.....	11	New Hanover County.....	1
Tulare County—		Pitt County.....	1
Lindsay.....	1	Rockingham County.....	1
Total.....	20	Rutherford County.....	1
		Wake County.....	1
Connecticut (February):		Total.....	9
Fairfield County—			
Bridgeport.....	1	North Dakota (February):	
Greenwich.....	1	Cavalier County.....	1
Hartford County—		Walsh County—	
Berlin.....	1	Minot.....	2
Hartford.....	1	Total.....	3
New Haven County—			
New Haven.....	2	Oregon (February):	
Waterbury.....	2	Clackamas County.....	1
Windham County—		Portland.....	2
Killingly.....	1	Total.....	3
Total.....	9		
Idaho (February):		South Carolina (February):	
Bonner County—		Cherokee County.....	1
Sandpoint.....	1	Greenville County.....	1
Kootenai County—		Laurens County.....	1
Coeur d'Alene.....	1	Pickens County.....	1
Total.....	2	Spartanburg County.....	1
Indiana (February):		Total.....	5
Elkhart County.....	2		
St. Joseph County.....	1	Washington (February):	
Tippecanoe County.....	3	King County—	
Total.....	6	Seattle.....	3
Iowa (February):		Pierce County—	
Jasper County.....	2	Tacoma.....	2
Pottawattamie County.....	1	Spokane County—	
Total.....	3	Spokane.....	1
Minnesota (January):		Yakima County—	
Blue Earth County—		Zillah.....	1
Mankato.....	1	Total.....	7
Brown County—			
North Star Township.....	1	Wisconsin (February):	
Murray County—		Douglas County.....	1
Iona Township.....	1	Milwaukee County.....	8
Total.....	3	Outagamie County.....	1
Montana (February):		Polk County.....	1
Blaine County—		Racine County.....	1
Zurich (R. D.).....	1	Total.....	12

## CEREBROSPINAL MENINGITIS—Continued.

## City Reports for Week Ended Mar. 13, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	1	Milwaukee, Wis.....	1	1
Ashtabula, Ohio.....	1	1	Minneapolis, Minn.....	2	1
Baltimore, Md.....	2	1	Nashua, N. H.....	1	1
Birmingham, Ala.....	3	1	New Bedford, Mass.....	1	1
Boston, Mass.....	3	1	New Haven, Conn.....	1	1
Bridgeport, Conn.....	1	1	New London, Conn.....	1	1
Buffalo, N. Y.....	1	1	New Orleans, La.....	1	1
Cape Girardeau, Mo.....	1	1	New York, N. Y.....	6	1
Charlotte, N. C.....	1	1	Oakland, Calif.....	2	1
Chicago, Ill.....	2	2	Philadelphia, Pa.....	2	1
Cleveland, Ohio.....	1	1	Plymouth, Mass.....	1	1
Cohoes, N. Y.....	1	1	Pueblo, Colo.....	1	1
Dallas, Tex.....	1	1	Quincy, Ill.....	1	1
Detroit, Mich.....	3	2	Raleigh, N. C.....	1	1
East Chicago, Ind.....	1	1	St. Louis, Mo.....	1	1
Eau Claire, Wis.....	2	1	Salem, Ore.....	1	1
Flint, Mich.....	1	1	Salt Lake City, Utah.....	1	1
Kansas City, Kans.....	1	1	San Francisco, Calif.....	1	1
Lowell, Mass.....	1	1	South Bend, Ind.....	1	1
Lynn, Mass.....	1	1	Tranton, N. J.....	1	1
Marion, Ohio.....	1	1	West Orange, N. J.....	1	1
Memphis, Tenn.....	1	1			

## DIPHTHERIA.

See Telegraphic weekly reports from States, p. 836; Monthly summaries by States, p. 840; and Weekly reports from cities, p. 861.

## INFLUENZA.

## California and Minnesota Reports—January and February, 1920.

Place.	New cases reported.	Place.	New cases reported.
California (February).....	48,857	Minnesota (January)—Continued.	
Minnesota (January):		Meeker County.....	380
Aitkin County.....	1	Morrison County.....	13
Anoka County.....	4	Mower County.....	67
Becker County.....	31	Murray County.....	35
Beltrami County.....	42	Nicollet County.....	4
Benton County.....	19	Nobles County.....	61
Big Stone County.....	1	Norman County.....	5
Blue Earth County.....	143	Olmsted County.....	368
Brown County.....	76	Ottertail County.....	124
Carlton County.....	7	Pennington County.....	25
Carver County.....	9	Pine County.....	20
Cass County.....	24	Pipestone County.....	53
Chippewa County.....	110	Polk County.....	123
Chisago County.....	10	Pope County.....	3
Clay County.....	134	Ramsey County.....	9
Cottonwood County.....	57	St. Paul.....	984
Crow Wing County.....	8	Red Lake County.....	1
Dakota County.....	117	Redwood County.....	11
Dodge County.....	85	Renville County.....	27
Douglas County.....	17	Rice County.....	35
Faribault County.....	46	Rock County.....	68
Fillmore County.....	30	Roseau County.....	17
Freeborn County.....	328	St. Louis County.....	137
Goodhue County.....	124	Duluth.....	179
Grant County.....	38	Scott County.....	43
Hennepin County.....	79	Sherburne County.....	22
Minneapolis.....	1,573	Sibley County.....	18
Houston County.....	62	Stearns County.....	131
Isanti County.....	7	Steele County.....	107
Itasca County.....	26	Stevens County.....	11
Jackson County.....	27	Swift County.....	18
Kandiyohi County.....	16	Traverse County.....	3
Klittson County.....	18	Wabasha County.....	24
Koochiching County.....	25	Waseca County.....	40
Lac qui Parle County.....	20	Washington County.....	42
Le Sueur County.....	55	Watsonwan County.....	137
Lincoln County.....	35	Wilkin County.....	4
Lyon County.....	133	Winona County.....	57
McLeod County.....	33	Wright County.....	139
Mahnomen County.....	2	Yellow Medicine County.....	34
Marshall County.....	26		
Martin County.....	100	Total.....	7,275

INFLUENZA—Continued.

City Reports for Week Ended Mar. 13, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, Wash.	42		Harrison, N. J.	1	
Akron, Ohio	5		Hartford, Conn.		4
Ann Arbor, Mich.	5		Hattiesburg, Miss.	13	
Anniston, Ala.	6		Haverhill, Mass.	20	1
Appleton, Wis.	2		Hibbing, Minn.	11	
Arlington, Mass.	5		Hoboken, N. J.	1	
Asbury Park, N. J.	1		Hoquiam, Wash.	63	
Ashland, Ky.	9		Hot Springs, Ark.	35	
Atlanta, Ga.	143	12	Houston, Tex.	9	4
Atlantic City, N. J.	4		Huntington, W. Va.		1
Attleboro, Mass.		1	Independence, Mo.	1	
Auburn, Me.	3		Indianapolis, Ind.	9	9
Austin, Tex.		2	Ironton, Ohio	7	
Baltimore, Md.	178	11	Ironwood, Mich.	6	2
Baton Rouge, La.	2	2	Ishpeming, Mich.	11	1
Battle Creek, Mich.	1		Ithaca, N. Y.	23	
Beatrice, Nebr.		1	Jacksonville, Ill.		1
Beaumont, Tex.	2	2	Jamestown, N. Y.	5	
Berlin, N. H.		1	Jersey City, N. J.	1	
Binghamton, N. Y.	12	3	Kansas City, Kans.	9	
Birmingham, Ala.	43	21	Kansas City, Mo.	11	8
Bloomfield, N. J.	4		Kearny, N. J.	3	
Bloomington, Ind.		1	Keene, N. H.	5	
Bluefield, W. Va.	1		Kenosha, Wis.	4	
Boston, Mass.	80	11	Lackawanna, N. Y.	11	1
Brazil, Ind.	8		Lancaster, Ohio		1
Bridgeport, Conn.		6	La Salle, Ill.	1	1
Bristol, Conn.	10		Lawrence, Mass.		2
Brookton, Mass.	1		Leavenworth, Kans.	1	
Brunswick, Ga.	18		Leominster, Mass.	9	
Buffalo, N. Y.	42	6	Lexington, Ky.	5	2
Burlington, Iowa.	1		Lincoln, Nebr.		2
Burlington, Vt.	8	1	Little Rock, Ark.	51	
Butte, Mont.	2	3	Logansport, Ind.		2
Cadillac, Mich.	6		Long Beach, Calif.	28	
Cairo, Ill.	2		Lorain, Ohio.	1	
Charleston, S. C.	49	3	Los Angeles, Calif.	272	
Charlotte, N. C.		1	Louisville, Ky.	19	1
Chattanooga, Tenn.	20	4	Lowell, Mass.	14	2
Chelsea, Mass.	1		Lynchburg, Va.	1	
Chicago, Ill.	195	29	Lynn, Mass.	3	3
Chillicothe, Ohio.	7		Manchester, N. H.		6
Cincinnati, Ohio.	46	24	Mankato, Minn.	3	
Cleveland, Ohio.	38	10	Marion, Ind.	7	2
Coffeyville, Kans.	17	1	Mattoon, Ill.	1	
Cohoes, N. Y.	2		Melrose, Mass.		2
Columbia, S. C.	10		Memphis, Tenn.	30	4
Columbus, Ga.	3	1	Middletown, N. Y.	38	
Columbus, Ohio.		8	Milwaukee, Wis.	9	
Corpus Christi, Tex.	70		Minneapolis, Minn.	23	7
Covington, Ky.	10		Mobile, Ala.	15	2
Cranston, R. I.	1	1	Montclair, N. J.	1	
Cumberland, Md.	24	1	Montgomery, Ala.	5	9
Dallas, Tex.	81	3	Morgantown, W. Va.	11	
Danville, Ill.	5	2	Mount Vernon, N. Y.	2	
Danville, Va.	47	4	Nashua, N. H.	6	
Decatur, Ill.	2		Nashville, Tenn.	3	18
Detroit, Mich.	10	9	Newark, N. J.	69	6
Dover, N. H.	4		New Bedford, Mass.	10	
Duluth, Minn.	2	1	New Britain, Conn.	6	3
Durham, N. C.		1	Newburyport, Mass.	9	
East Orange, N. J.	1		New Haven, Conn.	33	7
East St. Louis, Ill.		8	New London, Conn.	5	
Elizabeth, N. J.	2	2	New Orleans, La.	125	15
El Paso, Tex.		5	Newton, Mass.	10	4
Eureka, Calif.	17	1	New York, N. Y.	381	74
Everett, Mass.	1		Niagara Falls, N. Y.	21	2
Fairmont, W. Va.	2		Norfolk, Va.	7	
Fall River, Mass.	11	4	North Little Rock, Ark.	46	
Findlay, Ohio.	68		North Tonawanda, N. Y.	3	
Fond du Lac, Wis.	1		Norwalk, Conn.		1
Fostoria, Ohio.	2		Norwood, Ohio.		1
Galesburg, Ill.		1	Oakland, Calif.	40	3
Gardner, Mass.		1	Oak Park, Ill.	2	
Gary, Ind.	1		Oklahoma City, Okla.	1	2
Grand Rapids, Mich.	22		Omaha, Nebr.	1	2
Granite City, Ill.	1		Orange, N. J.	9	
Great Falls, Mont.	21		Parsons, Kans.	1	
Greenwich, Conn.	9		Pasadena, Calif.	14	1
Hackensack, N. J.	2		Passaic, N. J.	4	1

## INFLUENZA—Continued.

## City Reports for Week Ended Mar. 13, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Paterson, N. J.	19	.....	Santa Barbara, Calif.	2	.....
Petersburg, Va.	28	.....	Saratoga Springs, N. Y.	20	.....
Philadelphia, Pa.	24	30	Savannah, Ga.	100	8
Piqua, Ohio.	4	1	Schnectady, N. Y.	6	.....
Plainfield, N. J.	.....	1	Seattle, Wash.	23	.....
Pontiac, Mich.	5	.....	Sioux Falls, S. Dak.	1	1
Port Chester, N. Y.	.....	1	Somerville, Mass.	1	.....
Port Huron, Mich.	1	.....	Southbridge, Mass.	2	1
Portland, Me.	4	1	Springfield, Mass.	6	5
Portland, Oreg.	49	10	Stockton, Calif.	3	.....
Portsmouth, Ohio.	1	.....	Syracuse, N. Y.	.....	1
Portsmouth, Va.	2	2	Terre Haute, Ind.	.....	1
Providence, R. I.	12	5	Tiffin, Ohio.	2	1
Quincy, Mass.	8	1	Toledo, Ohio.	1	6
Racine, Wis.	5	.....	Traverse City, Mich.	4	.....
Raleigh, N. C.	5	.....	Trenton, N. J.	35	1
Redlands, Calif.	5	.....	Troy, N. Y.	2	1
Reno, Nev.	10	.....	Waco, Tex.	.....	1
Richmond, Va.	8	4	Washington, D. C.	6	7
Riverside, Calif.	50	.....	Watertown, Mass.	1	.....
Roanoke, Va.	20	1	Watertown, N. Y.	32	.....
Rochester, N. Y.	4	7	Wausau, Wis.	9	1
Rockford, Ill.	.....	1	Westfield, Mass.	5	.....
Rock Island, Ill.	2	.....	West Hoboken, N. J.	1	.....
Rocky Mount, N. C.	.....	2	West New York, N. J.	.....	1
Rome, Ga.	113	.....	West Orange, N. J.	1	.....
Rome, N. Y.	3	.....	Wheeling, W. Va.	.....	1
Sacramento, Calif.	29	.....	Wilmington, Del.	.....	1
Salem, Oreg.	2	.....	Winston-Salem, N. C.	3	1
Salt Lake City, Utah.	.....	2	Winthrop, Mass.	2	.....
San Bernardino, Calif.	6	.....	Worcester, Mass.	28	5
Sanford, Me.	.....	1	Yonkers, N. Y.	1	1
San Francisco, Calif.	144	19	Zanesville, Ohio.	.....	3

## LEPROSY.

## Sacramento, Calif.—Week Ended Mar. 13, 1920.

During the week ended March 13, 1920, 1 case of leprosy was reported at Sacramento, Calif.

## LETHARGIC ENCEPHALITIS.

## California, Connecticut, Nebraska, New York, and Oregon.

During the month of February, 1920, there were reported 12 cases of lethargic encephalitis in California, 4 in Connecticut, 2 in Nebraska, and 4 in Oregon. During the week ended March 13, 1920, 1 case was reported at Meriden, Conn., and 1 death was reported at Yonkers, N. Y.

**MALARIA.**

**State Reports for January and February, 1920.**

Place.	New cases reported.	Place.	New cases reported.
<b>Alabama (February):</b>		<b>California (February)—Continued.</b>	
Calhoun County.....	1	Santa Clara County—	
Jefferson County.....	6	San Jose.....	1
Lamar County.....	1	Shasta County—	
Mobile County.....	9	Redding.....	2
Talladega County.....	5	<b>Total.....</b>	<b>21</b>
Walker County.....	1		
<b>Total.....</b>	<b>23</b>	<b>Minnesota (January):</b>	
<b>California (February):</b>		Goodhue County—	
Fresno County—		Red Wing.....	6
Fresno.....	1		
Kings County—		<b>South Carolina (February):</b>	
Lemoore.....	1	Clarendon County.....	4
Sacramento County—		Dorchester County.....	16
Sacramento.....	1	Marion County.....	9
San Francisco County—		York County.....	1
San Francisco.....	1	<b>Total.....</b>	<b>30</b>
United States Naval Station.....	13		
San Joaquin County—			
Stockton.....	1		

**City Reports for Week Ended Mar. 13, 1920.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alexandria, La.....	25	.....	North Little Rock, Ark.....	1	.....
Brunswick, Ga.....	1	.....	Rome, Ga.....	1	.....
Dallas, Tex.....	3	.....	Savannah, Ga.....	2	.....
Memphis, Tenn.....	1	.....			

**MEASLES.**

See Telegraphic weekly reports from States, p. 836; Monthly summaries by States, p. 840; and Weekly reports from cities, p. 861.

**PARAGONIMIASIS (JAPANESE LUNG-FLUKE DISEASE).**

**Washington Report for February, 1920.**

During February, 1920, one case of paragonimiasis was reported in the State of Washington.

**PELLAGRA.**

**State Reports for February, 1920.**

Place.	New cases reported.	Place.	New cases reported.
<b>Alabama:</b>		<b>Rhode Island:</b>	
Calhoun County.....	1	Cranston.....	1
<b>California:</b>		<b>South Carolina:</b>	
Los Angeles County—		Marion County.....	1
Burbank.....	1	Pickens County.....	1
Riverside County—		Union County.....	1
Elsinore.....	1	York County.....	1
<b>Total.....</b>	<b>2</b>	<b>Total.....</b>	<b>4</b>

## PELLAGRA—Continued.

## City Reports for Week Ended Mar. 13, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....		4	Little Rock, Ark.....	1	
Charleston, S. C.....		2	New Orleans, La.....	1	1
Columbus, Ga.....	1	1			

## PNEUMONIA (ALL FORMS).

## City Reports for Week Ended Mar. 13, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, Wash.....	1		Cumberland, Md.....	10	2
Akron, Ohio.....	4		Dallas, Tex.....	6	5
Alameda, Calif.....	2	2	Danville, Ill.....		5
Albany, N. Y.....	9		Dayton, Ohio.....	2	
Alexandria, La.....		2	Dedham, Mass.....		2
Alton, Ill.....	2		Denver, Colo.....		10
Anaconda, Mont.....		2	Detroit, Mich.....	37	75
Anderson, Ind.....	2	2	Dover, N. H.....		1
Ann Arbor, Mich.....		1	Duluth, Minn.....	2	
Ansonia, Conn.....		1	Durham, N. C.....		2
Arlington, Mass.....	1	1	East Chicago, Ind.....		5
Asbury Park, N. J.....		1	East Orange, N. J.....	2	1
Atlanta, Ga.....	5	17	Elgin, Ill.....	2	1
Atlantic City, N. J.....	5		Elizabeth, N. J.....	2	4
Attleboro, Mass.....		1	Elkhart, Ind.....		3
Baltimore, Md.....	92	54	Elmira, N. Y.....	1	
Barberton, Ohio.....		2	El Paso, Tex.....		10
Barre, Vt.....	1		Englewood, N. J.....	1	
Baton Rouge, La.....	1	1	Eureka, Calif.....		1
Battle Creek, Mich.....	1		Evanston, Ill.....	1	
Beatrice, Nebr.....		1	Everett, Mass.....		1
Beaumont, Tex.....	4	4	Fall River, Mass.....	9	10
Berlin, N. H.....		2	Findlay, Ohio.....	2	2
Beverly, Mass.....	1		Flint, Mich.....		2
Biddeford, Me.....		3	Fort Wayne, Ind.....		3
Billings, Mont.....		2	Fort Worth, Tex.....	4	4
Binghamton, N. Y.....	17		Framingham, Mass.....	1	2
Birmingham, Ala.....		24	Freeport, Ill.....		1
Bloomfield, N. J.....	1		Galesburg, Ill.....		1
Boston, Mass.....	29	37	Galveston, Tex.....		1
Bridgeport, Conn.....		6	Gardner, Mass.....	1	2
Bristol, Conn.....		1	Gary, Ind.....		9
Brockton, Mass.....		2	Glens Falls, N. Y.....	2	2
Brunswick, Ga.....	1	2	Gloucester, N. J.....	2	
Buffalo, N. Y.....	54	32	Grand Rapids, Mich.....	11	5
Burlington, Iowa.....		3	Granite City, Ill.....		2
Burlington, Vt.....	2	3	Great Falls, Mont.....	8	11
Butte, Mont.....	1	6	Greenfield, Mass.....	1	4
Cadillac, Mich.....	6	4	Hackensack, N. J.....	1	1
Cairo, Ill.....		2	Hammond, Ind.....		5
Cambridge, Mass.....	3	4	Hartford, Conn.....	2	6
Canton, Ill.....	5		Hattiesburg, Miss.....		1
Canton, Ohio.....		3	Haverhill, Mass.....	2	
Cape Girardeau, Mo.....	1	6	Hoboken, N. J.....	5	5
Chanute, Kans.....		1	Holyoke, Mass.....	2	8
Charlotte, N. C.....		4	Hoquiam, Wash.....	3	
Chattanooga, Tenn.....	3	5	Hof Springs, Ark.....	3	2
Chelsea, Mass.....	2	3	Houston, Tex.....	14	10
Chicago Heights, Ill.....	1	1	Huntington, Ind.....	1	1
Chicago, Ill.....	284	79	Huntington, W. Va.....		9
Chicopee, Mass.....		3	Independence, Mo.....	2	2
Cincinnati, Ohio.....	12	10	Indianapolis, Ind.....		11
Cleveland, Ohio.....	37	46	Ironton, Ohio.....	2	
Coffeyville, Kans.....		1	Ironwood, Mich.....		1
Cohoes, N. Y.....	3	1	Ishpeming, Mich.....	2	
Columbia, S. C.....	3		Ithaca, N. Y.....	1	
Columbus, Ga.....	6	7	Jacksonville, Ill.....		4
Columbus, Ohio.....		6	Jamestown, N. Y.....	7	1
Concord, N. H.....		4	Jefferson City, Mo.....		4
Corpus Christi, Tex.....	8		Jersey City, N. J.....	7	
Cortland, N. Y.....	1		Kalamazoo, Mich.....	5	6
Council Bluffs, Iowa.....		1	Kansas City, Kans.....	15	
Covington, Ky.....	3	10	Kansas City, Mo.....	21	15
Cranston, R. I.....	1	3	Keene, N. H.....		1

PNEUMONIA (ALL FORMS)—Continued.

City Reports for Week Ended Mar. 13, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Kokomo, Ind.		2	Plymouth, Mass.		1
Lackawanna, N. Y.	4		Pontiac, Mich.	6	2
La Fayette, Ind.		2	Port Chester, N. Y.	2	
La Salle, Ill.		1	Port Huron, Mich.	1	
Lawrence, Mass.	5	2	Portland, Me.	2	4
Lexington, Ky.	6	8	Portland, Oreg.		10
Lima, Ohio.	2	3	Portsmouth, Ohio.	2	3
Lincoln, Nebr.		3	Portsmouth, Va.	1	4
Little Rock, Ark.	7		Poughkeepsie, N. Y.	1	1
Lockport, N. Y.	4	2	Providence, R. I.		10
Logansport, Ind.		2	Pueblo, Colo.		3
Long Beach, Calif.	4	3	Quincy, Ill.	1	3
Los Angeles, Calif.	51	20	Quincy, Mass.	3	2
Louisville, Ky.	7	17	Rahway, N. J.		1
Lowell, Mass.	6	14	Raleigh, N. C.	1	
Lynchburg, Va.		1	Richmond, Ind.		2
Lynn, Mass.	4	4	Roanoke, Va.	4	1
Macon, Ga.	4		Rochester, N. Y.	21	8
Manchester, N. H.	4	4	Rockford, Ill.		6
Mankato, Minn.		1	Rock Island, Ill.	4	1
Medford, Mass.	1		Rocky Mount, N. C.		1
Memphis, Tenn.		19	Rome, Ga.	6	
Methuen, Mass.		1	Rome, N. Y.	1	
Middletown, N. Y.	3		Sacramento, Calif.	7	8
Middletown, Ohio.	1	1	St. Joseph, Mo.		1
Milwaukee, Wis.		14	Salem, Mass.	5	3
Minneapolis, Minn.		11	Salem, Oreg.		1
Mishawaka, Ind.		1	Salt Lake City, Utah.		3
Missoula, Mont.		2	San Bernardino, Calif.	1	3
Mobile, Ala.	1	7	Sandusky, Ohio.		1
Montclair, N. J.	3	1	Sanford, Me.		2
Morganstown, W. Va.	1	1	San Francisco, Calif.	15	4
Mount Vernon, N. Y.	6	4	Saratoga Springs, N. Y.	8	1
Muncie, Ind.		2	Savannah, Ga.		11
Nashua, N. H.		1	Schenectady, N. Y.	3	2
Nashville, Tenn.	2	5	Sioux Falls, S. Dak.	1	1
Newark, N. J.	92	23	Somerville, Mass.	3	5
New Bedford, Mass.	1	13	South Bend, Ind.	1	
New Britain, Conn.		3	Springfield, Ill.		9
Newburyport, Mass.		1	Springfield, Mass.	3	2
Newcastle, Ind.	1	1	Stockton, Calif.		3
New Haven, Conn.		10	Syracuse, N. Y.	2	5
New London, Conn.	7	1	Taunton, Mass.	3	13
New Orleans, La.	3	44	Terre Haute, Ind.		11
New York, N. Y.	451	243	Tiffin, Ohio.	2	
Niagara Falls, N. Y.	15	4	Toledo, Ohio.		7
Norfolk, Va.	8		Topeka, Kans.		1
North Adams, Mass.		2	Traverse City, Mich.	2	1
North Little Rock, Ark.	2		Trenton, N. J.		9
North Tonawanda, N. Y.	2	3	Troy, N. Y.	11	6
Norwalk, Conn.		3	Vallejo, Calif.		1
Norwich, Conn.	2	2	Waco, Tex.		1
Norwood, Ohio.	1		Waltham, Mass.	4	2
Oakland, Calif.	2	16	Washington, D. C.		13
Oak Park, Ill.	1	5	Waterbury, Conn.	1	
Oklahoma City, Okla.		5	Watertown, Mass.		1
Olean, N. Y.		4	Watertown, N. Y.	2	6
Omaha, Nebr.		11	Wausau, Wis.		1
Orange, N. J.	7		West Hoboken, N. J.	2	
Pasadena, Calif.	1	1	West New York, N. J.		1
Passaic, N. J.	2	1	West Orange, N. J.	2	
Paterson, N. J.	6		Wheeling, W. Va.	3	2
Pawtucket, R. I.		3	White Plains, N. Y.	1	
Peekskill, N. Y.		1	Wichita, Kans.	2	2
Peoria, Ill.	2	1	Wilmington, Del.		7
Perth Amboy, N. J.	2	1	Winchester, Mass.	1	
Petersburg, Va.		4	Winston-Salem, N. C.	7	3
Philadelphia, Pa.	171	123	Woburn, Mass.		1
Piqua, Ohio.	1	1	Worcester, Mass.	8	13
Plainfield, N. J.	4	3	Yonkers, N. Y.	14	4
			Zanesville, Ohio.		2



**POLIOMYELITIS (INFANTILE PARALYSIS).****State Reports for February, 1920.**

Place.	New cases reported.	Place.	New cases reported.
California:		North Carolina:	
Los Angeles County.....	1	Cumberland.....	1
Los Angeles.....	1	South Dakota:	
Orange County.....	1	Butte County.....	1
Stanislaus County.....	1	Wisconsin:	
Total.....	4	Green County.....	1
Connecticut:			
Windham County—			
Woodstock.....	1		
Iowa:			
Buchanan County.....	1		
Johnson County.....	1		
Wapello County.....	1		
Total.....	3		

**Chicago, Ill.—Week Ended Mar. 13, 1920.**

During the week ended March 13, 1920, one case of poliomyelitis was reported in Chicago, Ill.

**RABIES IN ANIMALS.****City Reports for Week Ended Mar. 13, 1920.**

During the week ended March 13, 1920, one case of rabies in animals was reported at Akron, Ohio; one at Cranston, R. I.; one at Fall River, Mass.; and five were reported at Kansas City, Mo.

**RABIES IN MAN.****Nebraska and South Carolina—February, 1920.**

During February, 1920, one case of rabies was reported in Nebraska and one in South Carolina.

**SCARLET FEVER.**

See Telegraphic weekly reports from States, p. 836; Monthly summaries by States, p. 840; and Weekly reports from cities, p. 861.

**SMALLPOX.****Jones County, Miss.**

An outbreak of virulent smallpox was reported on March 29, 1920, in Jones County, Miss. At Laurel 53 cases, with 15 deaths were notified.

**Belleville, N. J.**

A report dated March 29, 1920, stated that smallpox was unusually prevalent in Belleville, N. J. Thirty-two cases were reported during the week ended March 27. Cases were reported in Newark, Bloomfield, and East Orange.

SMALLPOX—Continued.

State Reports for January and February, 1920—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
California (February):						
Alameda County—						
Alameda.....	4		3		1	
Oakland.....	6		1		5	
Amador County.....	1				1	
Butte County.....	14				14	
Chico.....	6			1	5	
Contra Costa County—						
Martinez.....	10				10	
Pittsburgh.....	1				1	
Richmond.....	1				1	
El Dorado County.....	1				1	
Fresno County.....	10		2	3	5	
Coalinga.....	1				1	
Glenn County.....	1				1	
Humboldt County.....	5				4	1
Blue Lake.....	1				1	
Fortuna.....	1			1		
Imperial County.....	14		2		11	1
Calexico.....	1		1 <sup>1</sup>	( <sup>1</sup> )	( <sup>1</sup> )	
Holtsville.....	34		2	3	29	
Imperial.....	4			1	3	
Kern County.....	2		1			1
Kings County.....	7		1		6	
Hanford.....	2				2	
Lemoore.....	2				1	1
Los Angeles County.....	38		2	1	35	
El Monte.....	1			1		
Long Beach.....	28		2	1	25	
Los Angeles.....	42		2	1	30	9
Monrovia.....	2				2	
Pomona.....	3				3	
Venice.....	9			2	7	
Whittier.....	2				2	
Madera County.....	1				1	
Madera.....	2			1	1	
Marin County.....	1				1	
Monterey County—						
Monterey.....	1				1	
Napa County.....	1				1	
Orange County.....	1				1	
Brea.....	1				1	
Santa Ana.....	1				1	
Roseville.....	2				1	1
Riverside County.....	15			2	13	
Beaumont.....	1					1
Blythe.....	3				3	
Corona.....	13				13	
Riverside.....	3			1	1	1
Sacramento County—						
Sacramento.....	2			1		1
San Benito County—						
Hollister.....	1				1	
San Bernardino County—						
Colton.....	2		1		1	
Ontario.....	1			1		
San Bernardino.....	1				1	
San Diego County—						
San Diego.....	7		1	1	4	1
San Francisco.....	44		1	6	37	
San Joaquin County.....	4				4	
Manitoba.....	4				4	
Tracy.....	1				1	
San Mateo County.....	1			1		
Santa Barbara County.....	2					2
Santa Barbara.....	65		<sup>2</sup> 43		22	
Santa Clara County—						
Gilroy.....	2		2			
Los Gatos.....	2		1		1	
San Jose.....	6				6	
Sunnyvale.....	1				1	

<sup>1</sup> Thirteen times.

<sup>2</sup> A few days after onset.

## SMALLPOX—Continued.

## State Reports for January and February, 1920—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
California (February)—Contd.						
Siskiyou County.....	2				2	
Montague.....	1				1	
Solano County.....	3				3	
Rio Vista.....	3		2	1		
Suisun.....	1					1
Vallejo.....	1				1	
Stanislaus County.....	2			1	1	
Turlock.....	1				1	
Tehama County—						
Red Bluff.....	1				1	
Tulare County—						
Lindsay.....	4				4	
Porterville.....	1				1	
Ventura County.....	2				2	
Santa Paula.....	3				3	
Yolo County.....	2				2	
Yuba County—						
Marysville.....	4				1	3
Total.....	477		70	31	352	24
Minnesota (January):						
Becker County—						
Detroit.....	10				10	
Lake Park.....	1				1	
Audubon Township.....	1				1	
Detroit Township.....	2				2	
Benton County—						
Foley.....	1				1	
Sauk Rapids.....	1				1	
Big Stone County—						
Beardsley.....	5				4	1
Big Stone.....	1				1	
Graceville Township.....	1				1	
Blue Earth County—						
Mankato.....	3				3	
Lincoln Township.....	1	1				
Clay County—						
Glyndon.....	1				1	
Highland Grove Town- ship.....	1				1	
Riverton Township.....	1				1	
Crow Wing County—						
Crosby.....	19				19	
Deerwood Township.....	2				2	
Dakota County—						
Inver Grove.....	1					1
South St. Paul.....	5			1	1	3
Douglas County—						
Alexandria.....	47			1	46	
Hudson Township.....	1				1	
La Grand Township.....	1				1	
Lake Mary Township.....	1				1	
Leaf Valley Township.....	3				3	
Urness Township.....	1				1	
Fairbault County—						
Guckeen.....	1				1	
Winnebago.....	2				1	1
Verona Township.....	1				1	
Fillmore County—						
Spring Valley.....	1				1	
Sumner Township.....	1			1		
Freeborn County—						
Glenville.....	1				1	
Bath Township.....	1				1	
Goodhue County—						
Canon Falls.....	2				2	
Kenyon.....	1				1	
Goodhue Township.....	1				1	

SMALLPOX—Continued.

State Reports for January and February, 1920—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
Minnesota—Continued.						
Grant County—						
Elbow Lake .....	6				6	
Norcross .....	1				1	
North Ottawa Township .....	1				1	
Hennepin County—						
Brooklyn Township .....	3				3	
Hubbard County—						
Park Rapids .....	2				2	
Hubbard Township .....	2				2	
Isanti County—						
Braham .....	1				1	
Athens Township .....	2				2	
Kanabec County—						
Mora .....	9			1	8	
Ogilvie .....	5				5	
Pomroy Township .....	1				1	
Kandiyohi County—						
Collfax Township .....	1				1	
Genessee Township .....	2				2	
Green Lake Township .....	1				1	
Harrison Township .....	7				7	
Kittson County—						
Kennedy .....	2				2	
Koochiching County—						
Ericsburg .....	1				1	
Rat Root Township .....	1			1		
Lac qui Parle County—						
Dawson .....	9		1	1	7	
Lac qui Parle Township .....	1				1	
Maxwell Township .....	2				2	
Riverside Township .....	3				3	
McLeod County—						
Acoma Township .....	1				1	
Mahnomen County—						
Island Lake Township .....	1				1	
Marshall County—						
Argyle .....	7				7	
Warren .....	1				1	
Bloomer Township .....	1				1	
Martin County—						
Fairmont .....	2				2	
Truman .....	2				2	
Tenhassen Township .....	2				2	
Meeker County—						
Forest Prairie Township .....	8				8	
Kingston Township .....	1				1	
Mille Lacs County—						
Isle Harbor Township .....	2				2	
Morrison County—						
Two Rivers Township .....	1				1	
Mower County—						
Austin .....	2				2	
Olmsted County—						
Rochester .....	10				10	
Ottertail County—						
Fergus Falls .....	26				26	
Parkers Prairie .....	1				1	
Underwood .....	1				1	
Rice County—						
Faribault .....	1				1	
St. Louis County—						
Chisholm .....	1				1	
Duluth .....	12			1	11	
Stuntz Township .....	5				5	
Sibley County—						
Arlington .....	1				1	
Arlington Township .....	1				1	
Stearns County—						
Brooten .....	1					1
Kimball .....	4				4	
St. Cloud .....	24				24	

## SMALLPOX—Continued.

## State Reports for January and February, 1920—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
<b>Minnesota—Continued.</b>						
Steele County—						
Owatonna.....	12			1	9	2
Clinton Falls Township.....	6				6	
Swift County—						
Clontarf.....	10				10	
Todd County—						
Grey Eagle.....	7				4	3
Staples.....	12		1		10	1
Traverse County—						
Browns Valley.....	1				1	
Wabasha County—						
Elgin Township.....	1				1	
Washington County—						
Newport.....	1				1	
St. Paul Park.....	6				6	
Cottage Grove Township.....	1				1	
<b>Total.....</b>	<b>362</b>		<b>3</b>	<b>8</b>	<b>329</b>	<b>22</b>
<b>Montana (February):</b>						
Carlton County—						
Luther.....	1					1
Carter County—						
Sykes.....	1				1	
Cascade County—						
Great Falls.....	16		1	1	14	
Custer County—						
Miles City.....	1				1	
Dawson County—						
Glendive.....	4				4	
Fergus County—						
Lewistown.....	4				4	
Stanford.....	11				11	
Winifred.....	2				2	
Flathead County—						
Columbia Falls.....	2				2	
Mildred.....	4			1	3	
Whitefish.....	6			2	4	
Gallatin County—						
Manhattan (R. D.).....	1				1	
Granite County—						
Phillipsburg.....	2			1	1	
Hill County—						
Havre.....	1				1	
Lewis and Clarke County—						
Marysville.....	2				2	
Lincoln County—						
Libby.....	6				6	
Troy.....	1				1	
Missoula County—						
Missoula.....	1				1	
Park County—						
Livingston.....	15			2	13	
Ravalli County—						
Hamilton (3 R. D.).....	5				5	
Roosevelt County—						
Culbertson (R. D.).....	5				5	
Wolf Point.....	1				1	
Rosebud County—						
Freyth.....	2				2	
Valley County—						
Glasgow.....	4				4	
Wheatland County—						
Judith Gap.....	1				1	
Yellowstone County—						
Laurel (R. D.).....	8				8	
<b>Total.....</b>	<b>107</b>		<b>1</b>	<b>7</b>	<b>98</b>	<b>1</b>

SMALLPOX—Continued.

State Reports for February, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
<b>Alabama:</b>			<b>Indiana:</b>		
Autauga County.....	1		Allen County.....	2	
Bibb County.....	2		Bartholomew County.....	1	
Butler County.....	8		Boone County.....	1	
Clarke County.....	1		Carroll County.....	4	
Clay County.....	1		Cass County.....	1	
Cleburne County.....	2		Clinton County.....	1	
Conecuh County.....	1		Crawford County.....	2	
Cullman County.....	4		Dearborn County.....	9	
Elmore County.....	1		Delaware County.....	6	
Escambia County.....	3		Dubois County.....	3	
Geneva County.....	2		Fayette County.....	4	
Jefferson County.....	82		Floyd County.....	1	
Lamar County.....	1		Fontain County.....	13	
Madison County.....	2		Fulton County.....	2	
Marion County.....	2		Gibson County.....	27	
Marshall County.....	1		Grant County.....	19	
Mobile County.....	8		Greene County.....	1	
Monroe County.....	1		Hancock County.....	1	
Montgomery County.....	1		Howard County.....	36	
Perry County.....	1		Huntington County.....	17	
Pickens County.....	1		Jackson County.....	49	
Pike County.....	3		Jasper County.....	6	
Randolph County.....	2		Jay County.....	1	
Talladega County.....	1		Jennings County.....	2	
Tallapoosa County.....	1		Kosciusko County.....	1	
Tuscaloosa County.....	2		Lake County.....	18	
Washington County.....	1		Lawrence County.....	1	
<b>Total.....</b>	<b>136</b>		Madison County.....	3	
<b>Idaho:</b>			Marion County.....	39	
Boise County—			Martin County.....	2	
Boise.....	28		Monroe County.....	1	
Bannock County—			Montgomery County.....	1	
Pocatello.....	3		Morgan County.....	2	
Bancroft.....	12		Orange County.....	2	
Grace.....	6		Parke County.....	8	
Bingham County—			Pike County.....	11	
Blackfoot.....	18		Porter County.....	5	
Bonner County—			Posey County.....	6	
Sandpoint.....	9		Putnam County.....	4	
Bonnors Ferry.....	2		Rush County.....	3	
Bonneville County—			Shelby County.....	4	
Idaho Falls.....	4		Spencer County.....	15	
Butte County—			St. Joseph County.....	49	
Arco.....	12		Sullivan County.....	1	
Cassia County—			Tippecanoe County.....	8	
Oakley.....	8		Tipton County.....	3	
Elmore County—			Vanderburg County.....	6	
Mountain Home.....	5		Vermillion County.....	2	
Franklin County.....	53		Vigo County.....	6	
Preston.....	25		Wabash County.....	28	
Fremont County.....	1		Warren County.....	11	
Idaho County—			Warrick County.....	10	
Grangeville.....	6		Wayne County.....	1	
Kootenai County—			Wells County.....	5	
Coeur d'Alene.....	3		White County.....	21	
Potlatch.....	1		<b>Total.....</b>	<b>486</b>	
Latah County—			<b>Iowa:</b>		
Moscow.....	5		Allamakee County.....	1	
Genessee.....	3		Benton County.....	2	
Lewis County.....	1		Blackhawk County.....	53	
Madison County.....	18		Boone County.....	3	
Nez Perce County—			Bremer County.....	2	
Lewiston.....	1		Buchanan County.....	2	
Power County.....	1		Calhoun County.....	2	
Shoshone County—			Carroll County.....	6	
Wallace.....	2		Cedar County.....	2	
Leton County—			Cerro Gordo County.....	24	
Driggs.....	1		Cherokee County.....	1	
Twin Falls County.....	29		Crawford County.....	2	
Washington County—			Davis County.....	4	
Weiser.....	1		Dickinson County.....	2	
Canyon County—			Emmet County.....	1	
Nampa.....	7		Fayette County.....	1	
Caribou County.....	3		Floyd County.....	1	
<b>Total.....</b>	<b>268</b>		Franklin County.....	6	
			Fremont County.....	1	
			Guthrie County.....	2	

## SMALLPOX—Continued.

## State Reports for February, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Iowa—Continued.			Nebraska—Continued.		
Grundy County	2		Seward County	12	
Hardin County	13		Thurston County	3	
Harrison County	1		Valley County	8	
Jasper County	12		Washington County	1	
Jones County	2		Webster County	2	
Linn County	15		York County	14	
Lyon County	2		Total	625	
Mahaska County	2		North Carolina:		
Marshall County	4		Alexander County	3	
O'Brien County	1		Bertie County	2	
Pace County	3		Bladen County	1	
Polk County	7		Buncombe County	1	
Pottawattamie County	6		Burke County	1	
Scott County	73		Cabarrus County	3	
Sioux County	1		Catawba County	1	
Story County	8		Cherokee County	4	
Tama County	2		Chowan County	2	
Wapello County	2		Cleveland County	10	
Wayne County	1		Columbus County	1	
Winnebago County	2		Craven County	1	
Winneshiek County	1		Cumberland County	1	
Total	278		Duplin County	4	
Nebraska:			Durham County	8	
Adams County	2		Edgecombe County	3	
Antelope County	7		Forsyth County	5	
Boone County	3		Franklin County	1	
Box Butte County	10		Gaston County	8	
Boyd County	3		Gates County	3	
Buffalo County	19		Granville County	33	
Burt County	2		Halifax County	4	
Chase County	2		Haywood County	10	
Cheyenne County	25		Iredell County	3	
Clay County	3		Johnston County	7	
Colfax County	8		Lee County	3	
Cuming County	1		Lenoir County	5	
Dawson County	6		Madison County	3	
Deuel County	21		Martin County	3	
Dixon County	3		Nash County	1	
Dodge County	13		New Hanover County	4	
Douglas County	47		Perquimans County	1	
Dundy County	31		Person County	1	
Fillmore County	7		Pitt County	83	
Franklin County	11		Robeson County	10	
Frontier County	7		Rockingham County	11	
Furnas County	2		Rowan County	4	
Gage County	12		Rutherford County	7	
Garfield County	2		Sampson County	4	
Gasper County	1		Scotland County	12	
Greeley County	1		Stokes County	1	
Hall County	1		Surry County	8	
Hamilton County	1		Wake County	2	
Harlan County	5		Washington County	35	
Hitchcock County	3		Wayne County	18	
Holt County	4		Wilson County	1	
Hooker County	1		Yadkin County	3	
Howard County	4		Total	340	
Jefferson County	6		North Dakota:		
Johnson County	2		Walsh County	3	
Keith County	1		Cavalier County	1	
Keyapaha County	1		Ramsey County—		
Lancaster County	111		Devis Lake	6	
Lincoln County	1		Pembina County	3	
Merrick County	17		Cass County—		
Nemaha County	64		Fargo	9	
Nuckolls County	22		Adams County	1	
Otoe County	5		Steele County	2	
Pawnee County	23		Burleigh County—		
Phelps County	6		Bismarck	1	
Pierce County	1		Total	26	
Platte County	8		Oregon:		
Polk County	4		Benton County	6	
Redwillow County	4		Clackamas County	40	
Richardson County	12		Clatsop County	13	
Richardson County	1				
Sarsy County	1				
Sanders County	16				
Scotts Bluff County	13				

SMALLPOX—Continued.

State Reports for February, 1920—Continued.

Place	Cases.	Deaths.	Place.	Cases.	Deaths.
Oregon—Continued.			Washington—Continued.		
Coos County	38		Chelan County	5	
Deschutes County	1		Wenatchee	9	
Douglas County	12		Clallam County—		
Gilliam County	10		Port Angeles	1	
Hood River County	6		Clarke County—		
Jackson County	2		Vancouver	30	
Jefferson County	1		Columbia County	11	
Lane County	6		Dayton	8	
Lincoln County	2		Cowlitz County	3	
Linn County	4		Castle Rock	4	
Marion County	11		Kelso	3	
Morrow County	3		Douglas County	3	
Multnomah County	14		Ferry County	5	
Polk County	3		Franklin County	5	
Tillamook County	1		Grant County	29	
Umatilla County	9		Coulee City	18	
Union County	1		Ephrata	2	
Wasco County	15		Grays Harbor County—		
Washington County	4		Elma	6	
Portland	234		Hoquiam	10	
Total	436		Oakville	3	
South Carolina:			Island County	3	
Anderson County	4		King County	33	
Barnwell County	1		Seattle	93	
Charleston County	11		Tolt	2	
Chesterfield County	1		Kittitas County	7	
Dorchester County	4		Cle Elum	25	
Greenville County	9		Ellensburg	8	
Greenwood County	9		Lewis County	12	
Laurens County	1		Centralia	16	
Lexington County	1		Lincoln County	1	
Newberry County	1		Davenport	1	
Orangeburg County	1		Mason County	5	
Pickens County	4		Okanogan County	2	
Richland County	1		Pacific County—		
Spartanburg County	11		Raymond	5	
Sumter County	1		South Bend	3	
York County	9		Pend Oreille County	4	
Total	69		Mettaline Falls	5	
South Dakota:			Pierce County—		
Beadle County	4		Tacoma	41	
Butte County	6		Skagit County	12	
Clark County	2		Burlington	23	
Codington County	2		Mount Vernon	2	
Custer County	10		Snohomish County	17	
Davison County	7		Everett	13	
Deuel County	7		Granite Falls	18	
Douglas County	4		Snohomish	6	
Grant County	57		Spokane County	9	
Hanson County	22		Cheney	2	
Hughes County	5		Deer Park	5	
Hutchinson County	2		Hillyard	2	
Jackson County	5		Medical Lake	4	
Jerauld County	7		Spokane	206	
Kingsbury County	7		Stevens County	10	
Lincoln County	1		Chewelah	31	
Minnehaha County	11		Thurston County	2	
Pennington County	18		Olympia	2	
Perkins County	3		Teno	2	
Sanborn County	2		Walla Walla County	8	
Turner County	2		Waitsburg	6	
Yankton County	3		Walla Walla	19	
Total	187		Whatcom County	5	
Washington:			Bellingham	33	
Adams County	5		Sumas	1	
Lind	2		Blaine	5	
Ritzville	8		Whitman County—		
Asotin County—			Malden	5	
Clarkston	1		Yakima County	19	
Benton County	4		Grandview	1	
			Zillah	1	
			Wapato	2	
			Granger	2	
			Toppenish	3	
			Yakima	38	
			Total	955	



**SMALLPOX—Continued.**  
**State Reports for February, 1920—Continued.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
<b>Wisconsin:</b>			<b>Wisconsin—Continued.</b>		
Barron County.....	1	.....	Racine County.....	2	.....
Brown County.....	38	.....	Richland County.....	1	.....
Calumet County.....	148	.....	Rock County.....	37	.....
Chippewa County.....	1	.....	Sauk County.....	1	.....
Clark County.....	10	.....	Sawyer County.....	3	.....
Crawford County.....	14	.....	Shawano County.....	18	.....
Dane County.....	10	.....	Sheboygan County.....	2	.....
Dodge County.....	3	.....	Taylor County.....	9	.....
Door County.....	11	.....	Vernon County.....	7	.....
Douglas County.....	18	.....	Washington County.....	3	.....
Eau Claire County.....	2	.....	Waushara County.....	1	.....
Fond du Lac County.....	30	.....	Waupaca County.....	9	.....
Forest County.....	1	.....	Waushara County.....	7	.....
Grant County.....	1	.....	Winnebago County.....	3	.....
Jackson County.....	1	.....	Wood County.....	22	.....
Kenosha County.....	19	.....			
La Crosse County.....	3	.....	<b>Total.....</b>	<b>635</b>	<b>.....</b>
Lafayette County.....	2	.....			
Lanigade County.....	10	.....	<b>Wyoming:</b>		
Lincoln County.....	15	.....	Albany County.....	13	.....
Manitowoc County.....	9	.....	Big Horn County.....	14	.....
Marathon County.....	15	.....	Campbell County.....	1	.....
Marinette County.....	4	.....	Converse County.....	13	.....
Marquette County.....	5	.....	Crook County.....	5	.....
Milwaukee County.....	71	.....	Johnson County.....	4	.....
Monroe County.....	8	.....	Laramie County.....	6	.....
Oconto County.....	18	.....	Natrona County.....	27	.....
Oneida County.....	9	.....	Sheridan County.....	24	.....
Outagamie County.....	22	.....	Uinta County.....	6	.....
Pepin County.....	3	.....	Weston County.....	1	.....
Polk County.....	2	.....			
Portage County.....	4	.....	<b>Total.....</b>	<b>114</b>	<b>.....</b>
Price County.....	2	.....			

**City Reports for Week Ended Mar. 13, 1920.**

Aberdeen, S. Dak.....	1	.....	Fort Smith, Ark.....	1	.....
Aberdeen, Wash.....	2	.....	Fort Worth, Tex.....	4	.....
Akron, Ohio.....	9	.....	Galesburg, Ill.....	9	.....
Alameda, Calif.....	2	.....	Gary, Ind.....	3	.....
Ann Arbor, Mich.....	2	.....	Grand Rapids, Mich.....	1	.....
Appleton, Wis.....	1	.....	Granite City, Ill.....	1	.....
Ashland, Ky.....	1	.....	Great Falls, Mont.....	4	.....
Atlanta, Ga.....	3	.....	Green Bay, Wis.....	8	.....
Battle Creek, Mich.....	1	.....	Hammond, Ind.....	4	.....
Bellingham, Wash.....	6	.....	Hoquiam, Wash.....	1	.....
Birmingham, Ala.....	9	.....	Hot Springs, Ark.....	1	.....
Bloomington, Ind.....	1	.....	Huntington, Ind.....	8	.....
Bluefield, W. Va.....	16	.....	Indianapolis, Ind.....	18	.....
Boise, Idaho.....	11	.....	Iowa City, Iowa.....	1	.....
Burlington, Iowa.....	1	.....	Jacksonville, Ill.....	4	.....
Canton, Ohio.....	3	.....	Joplin, Mo.....	1	.....
Cedar Rapids, Iowa.....	7	.....	Kalamazoo, Mich.....	1	.....
Charleston, S. C.....	2	.....	Kansas City, Kans.....	1	.....
Chattanooga, Tenn.....	2	.....	Kansas City, Mo.....	23	.....
Chicago, Ill.....	5	.....	Kenosha, Wis.....	4	.....
Cleveland, Ohio.....	3	.....	Kewanee, Ill.....	1	.....
Clinton, Iowa.....	3	.....	Knoxville, Tenn.....	1	.....
Columbia, S. C.....	1	.....	Kokomo, Ind.....	16	.....
Columbus, Ga.....	1	.....	La Crosse, Wis.....	1	.....
Council Bluffs, Iowa.....	4	.....	La Fayette, Ind.....	1	.....
Cumberland, Md.....	1	.....	Lawrence, Kans.....	1	.....
Dallas, Tex.....	25	.....	Lima, Ohio.....	1	.....
Danville, Ill.....	2	.....	Lincoln, Nebr.....	28	.....
Davenport, Iowa.....	14	.....	Logansport, Ind.....	8	.....
Dayton, Ohio.....	5	.....	Long Beach, Calif.....	2	.....
Decatur, Ill.....	5	.....	Los Angeles, Calif.....	3	.....
Denver, Colo.....	22	.....	Louisville, Ky.....	1	.....
Des Moines, Iowa.....	1	.....	Lynchburg, Va.....	1	.....
Detroit, Mich.....	17	.....	Macon, Ga.....	2	.....
Dubuque, Iowa.....	2	.....	Marinette, Wis.....	1	.....
Duluth, Minn.....	5	.....	Marion, Ind.....	1	.....
Eau Claire, Wis.....	2	.....	Marion, Ohio.....	4	.....
Everett, Wash.....	1	.....	Memphis, Tenn.....	9	.....
Flint, Mich.....	1	.....	Middletown, Ohio.....	1	.....
Fond du Lac, Wis.....	6	.....	Milwaukee, Wis.....	11	.....
Fort Scott, Kans.....	1	.....	Minneapolis, Minn.....	34	.....

**SMALLPOX—Continued.**

**City Reports for Week Ended Mar. 13, 1920—Continued.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Mishawaka, Ind.	1		St. Joseph, Mo.	27	
Missoula, Mont.	1		St. Louis, Mo.	13	
Mobile, Ala.	3		Salt Lake City, Utah.	13	
Muskogee, Okla.	2		San Bernardino, Calif.	2	
Newcastle, Ind.	1		San Francisco, Calif.	19	
New Orleans, La.	28	8	Seattle, Wash.	25	
Oakland, Calif.	1		Sioux Falls, S. Dak.	2	
Oklahoma City, Okla.	12		South Bend, Ind.	1	
Omaha, Nebr.	11		Spokane, Wash.	22	
Oshkosh, Wis.	1		Springfield, Ohio.	2	
Paducah, Ky.	1		Steubenville, Ohio.	2	
Parsons, Kans.	5		Stockton, Calif.	2	
Philadelphia, Pa.	1		Superior, Wis.	7	
Portland, Oreg.	27		Tacoma, Wash.	5	
Portsmouth, Ohio.	1	1	Terre Haute, Ind.	1	
Portsmouth, Va.	2		Tiffin, Ohio.	1	
Quincy, Ill.	2		Topeka, Kans.	2	
Racine, Wis.	2		Trinidad, Colo.	4	
Reno, Nev.	3		Vancouver, Wash.	1	
Richmond, Va.	1		Waco, Tex.	5	
Rcanoke, Va.	1		Walla Walla, Wash.	1	
Rock Island, Ill.	1		Wichita, Kans.	11	
Sacramento, Calif.	2		Winston-Salem, N. C.	3	
St. Cloud, Minn.	2		Yakima, Wash.	7	

**Outbreak on the Mexican Border, 1919-20.**

With an outbreak of smallpox in the State of Chihuahua, Mexico, in November, 1919, the United States Public Health Service immediately took steps to prevent the introduction of the disease into this country. A modified quarantine was established, which restricted immigration from the infected districts, and provision was made for vaccination and fumigation.

From November 3, 1919, to March 11, 1920, there occurred 143 cases of smallpox in five towns in Chihuahua close to the border. Only 7 cases (6 Mexicans and 1 American) developed in the United States, one of which, a Mexican, died.

Vaccination of traffic, disinfection, and fumigation, as well as encouragement of sanitation, are being continued.

**TETANUS.**

**Charleston, S. C., New Orleans, La., and New York, N. Y.**

During the week ended March 13, 1920, there were reported one death from tetanus at Charleston, S. C., one at New Orleans, La., and one at New York, N. Y.

**TRICHINOSIS.**

**California—February, 1920.**

During February, 1920, one case of trichinosis was reported in California.

**TUBERCULOSIS.**

See Telegraphic weekly reports from States, p. 836, and Weekly reports from cities, p. 861.

## TYPHOID FEVER.

## State Reports for January and February, 1920.

Place.	New cases reported.	Place.	New cases reported.
<b>Alabama (February):</b>		<b>Minnesota (January):</b>	
Baldwin County.....	3	Beltrami County—	
Butler County.....	2	Bemidji.....	1
Colbert County.....	1	Big Stone County—	
Covington County.....	1	Graceville.....	1
Dallas County.....	1	Clay County—	
Elmore County.....	1	Moorhead.....	1
Geneva County.....	1	Crow Wing County—	
Jefferson County.....	6	Brainerd.....	1
Marengo County.....	2	Crosby.....	1
Mobile County.....	1	Hennepin County—	
Montgomery County.....	1	Excelsior.....	1
Pike County.....	2	Minneapolis.....	6
Talladega County.....	7	Morrison County—	
Total.....	29	Little Falls.....	1
<b>California (February):</b>		Ottertail County—	
Alameda County—		Kergus Falls.....	1
Oakland.....	3	Deer Creek Township.....	1
Hayward.....	1	Ramsey County—	
Imperial County—		St. Paul.....	4
Holtville.....	1	Redwood County—	
Los Angeles County—		North Redwood.....	1
Los Angeles.....	3	St. Louis County—	
Monrovia.....	1	Chisholm.....	1
Pasadena.....	2	Duluth.....	1
San Fernando.....	1	Embarass Township.....	1
Orange County.....	1	Stevens County—	
Riverside County—		Baker Township.....	1
Riverside.....	1	Wadena County—	
Sacramento County—		Rockwood Township.....	1
Sacramento.....	3	Wilkin County—	
San Bernardino County—		Wolverton Township.....	1
Redlands.....	1	Total.....	26
San Francisco County—		<b>Montana (February):</b>	
San Francisco.....	2	Big Horn County—	
Total.....	20	Foster.....	1
<b>Connecticut (February):</b>		Blaine County—	
Litchfield County—		Fort Belknap.....	1
Thomaston.....	1	Silver Bow County—	
Middlesex County—		Butte.....	1
Westbrook.....	1	Total.....	3
New Haven County—		<b>Nebraska (February):</b>	
Waterbury.....	1	Lancaster County.....	1
New London County—		Sheridan County.....	1
New London.....	1	Total.....	2
Norwich.....	2	<b>North Carolina (February):</b>	
Total.....	6	Cabarrus County.....	2
<b>Idaho (February):</b>		Caldwell County.....	1
Bingham County—		Caswell County.....	1
Blackfoot.....	1	Cumberland County.....	1
Canyon County—		Johnston County.....	1
Nampa.....	1	Martin County.....	1
Total.....	2	Wayne County.....	1
<b>Indiana (February):</b>		Total.....	8
Crawford County.....	1	<b>North Dakota (February):</b>	
Dekalb County.....	2	Mountrail County.....	1
Fountain County.....	1	McLean County.....	1
Howard County.....	2	Total.....	2
Jefferson County.....	1	<b>Oregon (February):</b>	
Lake County.....	8	Portland.....	2
Madison County.....	1	<b>South Carolina (February):</b>	
Marion County.....	5	Greenville County.....	1
Parke County.....	1	Richland County.....	1
Steuben County.....	2	Total.....	2
Wabash County.....	2		
Whitley County.....	1		
Total.....	27		

**TYPHOID FEVER—Continued.**

**State Reports for January and February, 1920—Continued.**

Place.	New cases reported.	Place.	New cases reported.
<b>South Dakota (February):</b>		<b>Wisconsin (February):</b>	
Beadle County.....	1	Bayfield County.....	1
Hand County.....	1	Clark County.....	1
Pennington County.....	4	Crawford County.....	2
Spink County.....	1	Iowa County.....	2
<b>Total.....</b>	<b>7</b>	Iron County.....	1
		Milwaukee County.....	1
		Outagamie County.....	1
		Portage County.....	2
		Racine County.....	1
		St. Croix County.....	1
		Sheboygan County.....	1
		Winnebago County.....	1
		<b>Total.....</b>	<b>15</b>
<b>Washington (February):</b>		<b>Wyoming (February):</b>	
Chelan County.....	3	Natrona County.....	2
Wenatchee.....	2	Uinta County.....	2
King County—		<b>Total.....</b>	<b>4</b>
Seattle.....	1		
Kittitas County—			
Ellensburg.....	1		
Snohomish County—			
Everett.....	1		
<b>Total.....</b>	<b>8</b>		

**City Reports for Week Ended Mar. 13, 1920.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlantic City, N. J.....	1		Minneapolis, Minn.....	1	1
Baltimore, Md.....	3	1	Newark, N. J.....	1	
Binghamton, N. Y.....	1	1	New Bedford, Mass.....		1
Bloomington, Ill.....	1	1	New Philadelphia, Ohio.....	1	
Bluefield, W. Va.....	2		New York, N. Y.....	10	1
Boston, Mass.....	3		Oshkosh, Wis.....	2	
Charleston, S. C.....		1	Philadelphia, Pa.....	4	1
Chicago, Ill.....	3	1	Quincy, Ill.....		1
Dallas, Tex.....	1		Richmond, Va.....	2	
Detroit, Mich.....	6		Riverside, Calif.....	1	1
Hammond, Ind.....	1		Sacramento, Calif.....	1	
Independence, Mo.....	1		St. Louis, Mo.....	1	
Indianapolis, Ind.....		1	Salt Lake City, Utah.....	2	
Kalamazoo, Mich.....	1		Sandusky, Ohio.....	1	
Kansas City, Mo.....	2		San Francisco, Calif.....		1
Lima, Ohio.....	1		Savannah, Ga.....	1	
Little Rock, Ark.....	2		Springfield, Mass.....	1	
Lockport, N. Y.....	1		Toledo, Ohio.....	2	2
Lorain, Ohio.....	1		Trenton, N. J.....		1
Los Angeles, Calif.....	1		Washington, D. C.....	1	
Louisville, Ky.....	1		Waterbury, Conn.....	1	
Medford, Mass.....	1				

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Mar. 13, 1920.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Aberdeen, S. Dak.	15,926	6	1		10		8			
Aberdeen, Wash.	21,392				2					
Adams, Mass.	14,406	2								
Akron, Ohio.	93,604	47	2		56		124		1	
Alameda, Calif.	28,433	13	1		28	1	3		5	2
Albany, N. Y.	106,632		1				17			
Alexandria, La.	16,232	9			1				3	
Alexandria, Va.	17,959	5								
Alpena, Mich.	13,365		1		6					
Alton, Ill.	23,783	5	2		6	1				1
Amesbury, Mass.	10,200	3			6					1
Anaconda, Mont.	10,631	14								
Anderson, Ind.	24,230	18								4
Ann Arbor, Mich.	15,041	14	1		14					
Ansonia, Conn.	16,954	5			5		1	1		1
Appleton, Wis.	18,005				4		1			
Arlington, Mass.	13,073	2			6		2			
Asbury Park, N. J.	14,629	2			3					
Ashland, Ky.	12,195						2			
Ashtabula, Ohio.	22,008	5	2		3					1
Atlanta, Ga.	196,144	73	2		29	1	6		1	3
Atlantic City, N. J.	53,515	17	3		34		3		6	2
Attleboro, Mass.	19,776	9	1						1	1
Auburn, Me.	16,607	3	1				1			
Aurora, Ill.	34,795	5								
Austin, Tex.	35,612	2	3		11					
Baltimore, Md.	594,637	277	34	1	170	6	44	2	29	31
Bangor, Me.	26,958						1			
Barberton, Ohio.	14,187	6	1		9					
Barre, Vt.	12,401				4					
Baton Rouge, La.	17,544	7							2	2
Battle Creek, Mich.	30,159		3		25		22			
Bayonne, N. J.	72,204		3		1				5	
Beatrice, Nebr.	10,437	8								
Beaumont, Tex.	28,851	15								
Bedford, Ind.	10,613	1				1				
Bellingham, Wash.	34,362				2		5			
Beloit, Wis.	18,547		1				6			
Benton Harbor, Mich.	11,099				9					
Berlin, N. H.	13,892	8					2			1
Beverly, Mass.	22,128	11								
Biddeford, Me.	17,760	3								
Billings, Mont.	15,123	5			9					
Binghampton, N. Y.	54,864	26	2	1			3		5	1
Birmingham, Ala.	189,716	90	5		10	5	5		7	3
Bloomfield, N. J.	19,013	7	2		7		2			3
Bloomington, Ill.	27,462	11					6		2	
Bloomington, Ind.	14,661	1	2		7					
Boise, Idaho.	35,951	4								
Boston, Mass.	767,813	250	24	2	199	2	60	1	55	20
Brazil, Ind.	10,472	1								
Bridgeport, Conn.	124,724	40	7		3		5		4	3
Bristol, Conn.	16,318	12	1						1	1
Brockton, Mass.	69,152	13	3		5		7			1
Brookline, Mass.	33,526	6	2		5		4		2	
Brunswick, Ga.	10,984	5							1	1
Buffalo, N. Y.	475,781	174	60	8	60	3	19		16	10
Burlington, Iowa.	25,144	11					4	1		
Burlington, Vt.	21,802	11								
Butte, Mont.	44,037	29					1			2
Cadillac, Mich.	10,158	8	2		12					
Cairo, Ill.	15,995	8			8					
Cambridge, Mass.	114,293	30	5		12	1	7		5	5
Canton, Ill.	13,674	5								
Canton, Ohio.	62,566	23	3		2		7	1	1	
Cape Girardeau, Mo.	11,146	14	1							2
Cedar Rapids, Iowa.	38,033						2			
Centralla, Ill.	11,838	5	2		4					
Chanute, Kans.	12,968	5								1
Charleston, S. C.	61,041	41	1			1	2			8
Charleston, W. Va.	31,060		1				1			
Charlotte, N. C.	40,759	15	1				1		5	
Chattanooga, Tenn.	61,575	28			3		3		4	4
Chelsea, Mass.	46,405	21			5		3		2	1

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

**City Reports for Week Ended Mar. 13, 1920—Continued.**

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cheyenne, Wyo.	11,320	4			23		1			
Chicago Heights, Ill.	22,863	4			3					
Chicago, Ill.	2,547,201	764	137	9	251	3	348	11	279	66
Chicopec, Mass.	29,950	12			1		1			1
Chillicothe, Ohio.	15,625	2								
Cincinnati, Ohio.	414,248	130	2	2	188	5	88	1	30	9
Cleveland, Ohio.	692,259	242	25	2	109	3	45	2	26	21
Clinton, Iowa.	27,678						1			
Clinton, Mass.	13,075	6					3		1	2
Coffeyville, Kans.	18,331	7			6					
Cohoes, N. Y.	25,232	9								
Columbia, S. C.	35,165		2		3					
Columbus, Ga.	26,306	23	1				1			
Columbus, Ohio.	223,135	79	1		112		17		4	7
Concord, N. H.	22,858	9			38					
Corpus Christi, Tex.	10,789	9							1	1
Cortland, N. Y.	13,521	8					4			2
Council Bluffs, Iowa.	31,838	9	1		3		6			1
Covington, Ky.	59,623	26	6		35		7			
Cranston, R. I.	26,773	6	1	1				1		
Cumberland, Md.	26,656	16	1				1		1	
Dallas, Tex.	129,738	48	6		4		1		16	2
Danbury, Conn.	22,931	5			5					
Danvers, Mass.	10,037						2			
Danville, Ill.	32,969	15			15					
Danville, Va.	20,183				1		1			
Davenport, Iowa.	49,618		2		3		6		2	
Dayton, Ohio.	128,939	44	5		60		6		5	
Decatur, Ill.	41,483	9			70					2
Dedham, Mass.	10,618	6								
Denver, Colo.	268,439	67	5	2	61		5			15
Des Moines, Iowa.	104,052		3				10			
Detroit, Mich.	619,648	318	75	9	100	1	99	1	43	25
Dover, N. H.	13,276	7							2	1
Dubuque, Iowa.	40,096		1							
Duluth, Minn.	97,077	20	1				7		2	5
Durham, N. C.	25,160	7							4	1
East Chicago, Ind.	30,286	13		1						2
East Cleveland, Ohio.	13,864				25		1			
Easthampton, Mass.	10,656	1	1		1		2			1
East Orange, N. J.	43,761	6			16					
East St. Louis, Ill.	77,312	22	2		7		1		1	3
Eau Claire, Wis.	18,887				4					
Elgin, Ill.	28,562	14	1		1		7		3	
Elizabeth, N. J.	88,820		1	1	72		10		2	
Elkhart, Ind.	22,273	10					5			2
Elmira, N. Y.	38,272	14	1		18		1		2	
El Paso, Tex.	69,149	54								
Englewood, N. J.	12,603	2	1		4					6
Eureka, Calif.	15,142	4	1							
Evanston, Ill.	29,304	9			1					
Everett, Mass.	40,160	12	3		36		5			
Everett, Wash.	37,205		1		2					
Fairmount, W. Va.	16,111		2				2			
Fall River, Mass.	129,828	69	6	1	13		1		3	3
Fargo, N. Dak.	17,872	12	3				17	1		
Findlay, Ohio.	14,858	10			1					
Flint, Mich.	57,386	18	6		1		14			1
Fond du Lac, Wis.	21,486		1				1		1	
Fort Scott, Kans.	10,564	2			3					
Fort Smith, Ark.	29,390						2			
Fort Wayne, Ind.	78,014	29	5		9		18			
Fort Worth, Tex.	109,597	22	3				1		4	1
Fostoria, Ohio.	10,959	4			5				1	
Framingham, Mass.	14,149	6			2		1			
Freeport, Ill.	19,844	15							1	1
Fremont, Ohio.	11,034	3			11		2			
Galesburg, Ill.	24,629	9			1		3			
Galveston, Tex.	42,650	18	1						2	2
Gardner, Mass.	17,534	5					1		1	

<sup>1</sup>Population Apr. 15, 1910.

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

City Reports for Week Ended Mar. 13, 1920—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Gary, Ind.	56,000	16	1				4		1	
Glens Falls, N. Y.	17,160	6								
Gloucester City, N. J.	11,375				1					
Grand Rapids, Mich.	132,861	41	1		118	1	3		2	2
Granite City, Ill.	15,890	6	1		18		1			
Great Falls, Mont.	13,948	16							2	
Green Bay, Wis.	30,017		2		4		1			
Greenfield, Mass.	12,251	7	1		2		2	2		
Greenwich, Conn.	19,594	3	4		2		2		1	
Hackensack, N. J.	17,412	7	1		5				1	1
Hammond, Ind.	27,016	21	4		43		3			
Harrison, N. J.	17,345		1		1				1	
Hartford, Conn.	112,831	45	8		13		5		3	3
Haverhill, Mass.	49,180	16	7	1	33		1		2	1
Hibbing, Minn.	17,550		3							
Hoboken, N. J.	78,324	16	5		8				2	2
Holyoke, Mass.	66,503	17	1		17		4		2	1
Hot Springs, Ark.	17,690	7								
Houston, Tex.	116,878	65	9		38		2			5
Hudson, N. Y.	12,898	3								
Huntington, Ind.	10,982	2					2			
Huntington, W. Va.	47,686	26	1	1	1					3
Hutchinson, Kans.	21,461				2					
Independence, Mo.	11,964	6								
Indianapolis, Ind.	283,622	96	6	2	121		16		2	3
Iowa City, Iowa	11,626		1							
Ironton, Ohio	14,079	4								
Ironwood, Mich.	15,095	10						1		
Ishpeming, Mich.	12,448	3								1
Ithaca, N. Y.	16,017	3	1				1			
Jacksonville, Ill.	15,506	10			3		1			1
Jamestown, N. Y.	37,431	18	2	1			2		2	2
Janesville, Wis.	14,411				5		2			
Jefferson City, Mo.	13,712	7				2				
Jersey City, N. J.	312,557		10		80		5		12	
Joplin, Mo.	33,400	3					1			
Kalamazoo, Mich.	50,408	45	2		7		9		3	3
Kankakee, Ill.	14,270	5			1					
Kansas City, Kans.	102,096		6		37		4		5	
Kansas City, Mo.	305,816	105	9	1	55		10		6	6
Kearny, N. J.	24,325	9			19				2	3
Keene, N. H.	10,725	3								1
Kenosha, Wis.	32,833				3		5			
Kewanee, Ill.	13,607	4			1					
Knoxville, Tenn.	59,112		3	1	40	8	1		2	2
Kokomo, Ind.	21,929	4			20		7	1	1	
Lackawanna, N. Y.	16,219	5	1						1	
La Crosse, Wis.	31,833				17					
La Fayette, Ind.	21,481	12			3		3			2
Lancaster, Ohio	16,086	6	1							1
La Salle, Ill.	12,332	8								
Lawrence, Kans.	13,477	1			1					
Lawrence, Mass.	102,923	33	2		1		3		1	3
Leavenworth, Kans.	19,363	4	1		1					
Leominster, Mass.	21,365	1								
Lexington, Ky.	41,997	30	1		2				1	3
Lima, Ohio	37,145	13			1					
Lincoln, Nebr.	46,957	20	1	1	38	1	4			
Little Rock, Ark.	58,716		1		1					
Lockport, N. Y.	20,028	8	1				1			
Logansport, Ind.	21,338	14			35		7			
Long Beach, Calif.	29,163	13	2		10		1		1	
Long Branch, N. J.	15,733				2					
Lorain, Ohio	38,266						1		1	
Los Angeles, Calif.	535,485	166	40	1	57		11		75	13
Louisville, Ky.	240,808	82	2		7		4		17	6
Lowell, Mass.	114,366	51	5				3		5	3
Lynchburg, Va.	33,497	8					1		1	
Lynn, Mass.	104,534	26	5				21	1	3	2
Macon, Ga.	46,999		1		8		4			
Manchester, Conn.	15,859	3								

1 Population Apr. 15, 1910.

**DIPHThERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—**  
Continued.

City Reports for Week Ended Mar. 13, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Manchester, N. H.	79,607	35	3	1	1	1	1	3	3	
Manitowoc, Wis.	13,931		1			3		1		
Mankato, Minn.	10,365	5			5				1	
Marquette, Wis.	14,610				2	1				
Marion, Ind.	19,923	9			26				1	
Marion, Ohio	24,129	1	2		17	1				
Martinsburg, W. Va.	12,984					1				
Mattoon, Ill.	12,764				14					
Medford, Mass.	26,681	16			1	3		2		
Melrose, Mass.	17,724	18	1		15	2				
Memphis, Tenn.	151,874	86	7		4	4		12	4	
Meriden, Conn.	29,431		3		2	3		3		
Methuen, Mass.	14,320	5	1			1				
Middletown, N. Y.	15,890					10		2		
Middletown, Ohio	16,384	5			5	1		2		
Milwaukee, Wis.	445,008	94	28	2	69	32	1	18	7	
Minneapolis, Minn.	373,448	96	16	1	49	8	1	17	9	
Mishawaka, Ind.	17,083	2				1				
Missoula, Mont.	19,075	9							1	
Mobile, Ala.	59,201	23				1			2	
Monmouth, Ill.	10,346	1	1							
Montclair, N. J.	27,087	4	2		6	1		1		
Montgomery, Ala.	44,039					1		1	1	
Morgantown, W. Va.	14,444	3	1	1		1				
Morristown, N. J.	13,410	3	1							
Moundsville, W. Va.	11,515	4			3	1				
Mount Vernon, N. Y.	37,991	21	5		96	1				
Muncie, Ind.	25,653	12	1		32	2	1		2	
Muskogee, Okla.	47,173		3							
Nashua, N. H.	27,541	10	1			1				
Nashville, Tenn.	118,136	65	4		3	3		5	6	
Newark, N. J.	418,789	107	12	1	239	2	21	23	6	
New Bedford, Mass.	21,622	40	2		13	9		4	4	
New Britain, Conn.	55,385	16	7	2	8					
New Brunswick, N. J.	25,855		2					2		
Newburyport, Mass.	15,291	3				2				
New Castle, Ind.	14,144	2								
New Haven, Conn.	152,275	64	13		33	1	8	17	4	
New London, Conn.	21,199				94	1	1	3	1	
New Orleans, La.	377,010	211	4	1	14	4		27	18	
New Philadelphia, Ohio	10,133		1		3					
Newport, R. I.	20,585	5	1			1		1		
Newton, Mass.	44,343		1		21	2				
New York, N. Y.	5,737,492	1,676	330	36	1,394	31	135	442	166	
Niagara Falls, N. Y.	38,466	19	6		65	2	4	2	2	
Norfolk, Va.	91,148				3	1				
North Adams, Mass.	22,019	11							1	
Northampton, Mass.	20,006	5			1					
North Attleboro, Mass.	11,248	5								
North Tonawanda, N. Y.	14,060	6	2				3			
Norwalk, Conn.	27,332	11						2		
Norwich, Conn.	21,923	11						1	1	
Norwood, Ohio	23,269	5			8	3		1		
Oakland, Calif.	206,405	70	1		16	6		4	3	
Oak Park, Ill.	27,816	17	2			7				
Ogdensburg, N. Y.	16,845	5								
Oklahoma City, Okla.	97,588	26	1	1	69	1		1	1	
Olean, N. Y.	16,927	14								
Omaha, Nebr.	177,777	48	6	1	25	19	1		5	
Orange, N. J.	33,636	10	2		10	1			2	
Oshkosh, Wis.	36,549		1		43			1		
Paducah, Ky.	25,178				4					
Parkersburg, W. Va.	21,059	3	1		3	2				
Parsons, Kans.	15,952		4							
Pasadena, Calif.	49,620	16			16	4		6	2	
Passaic, N. J.	74,478	20	3		2	1		5	2	
Paterson, N. J.	140,512	9	6		76	1		9		
Pawtucket, R. I.	60,666	11	1			2				
Peckskill, N. Y.	19,031	7								
Peoria, Ill.	72,184	17	1			3			2	
Perth Amboy, N. J.	42,646	10	4			2			1	



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

**City Reports for Week Ended Mar. 13, 1920—Continued.**

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Petersburg, Va.	25,817	9			2				3	1
Philadelphia, Pa.	1,735,514	673	73	13	642	6	55	4	84	76
Phillipsburg, N. J.	15,879	3					1			
Piqua, Ohio.	14,275	5			9		1			1
Pittsfield, Mass.	39,678	9							2	2
Plainfield, N. J.	24,330	10			1		1			
Plattsburg, N. Y.	13,111	3								
Plymouth, Mass.	14,001	6								
Pontiac, Mich.	18,006	10	6		2			4		1
Port Chester, N. Y.	16,727	5	4				1			
Port Huron, Mich.	18,863	7	2		8		2		1	
Portland, Me.	64,720	18	2		3		4			1
Portland, Oreg.	308,399	81	4		10		15		3	5
Portsmouth, N. H.	11,730				4		5			
Portsmouth, Ohio.	29,356	12	2		1					1
Portsmouth, Va.	40,693	21			1					2
Poughkeepsie, N. Y.	30,786	15					1		3	2
Providence, R. I.	259,895	74	27	1	18	1	10	2		6
Pueblo, Colo.	56,084	19					1			1
Quincy, Ill.	36,832	13								1
Quincy, Mass.	39,022	10					2			1
Racine, Wis.	47,465		1		22		8			
Rahway, N. J.	10,361	1								
Raleigh, N. C.	20,274	11			1			1		1
Redlands, Calif.	14,573	5								
Reno, Nev.	15,514	3			28					
Richmond, Ind.	25,080	4	1		9		1		1	
Richmond, Va.	158,702	73	1		98		3		6	9
Riverside, Calif.	20,496	3			1					
Roanoke, Va.	46,282	5							1	2
Rochester, N. Y.	264,714	89	17	2	136		10	1	1	6
Rockford, Ill.	56,739	27	2		1		3			4
Rock Island, Ill.	29,452	1			23		1		5	
Rocky Mount, N. C.	12,673	7			1					
Rome, Ga.	15,007						3		1	
Rome, N. Y.	24,259						6		2	
Sacramento, Calif.	68,984	30	1		19		3		3	2
St. Joseph, Mo.	86,498	26					2	1		2
St. Louis, Mo.	768,630	247	62	5	551	4	31	1	44	10
Salem, Mass.	49,346		2				3			1
Salem, Oreg.	21,274	7					1			
Salt Lake City, Utah	121,623	27			1		2		1	
San Angelo, Tex.	10,321	0								
San Bernardino, Calif.	17,616	9					2		1	1
Sandusky, Ohio.	20,226	9			2				1	
Sanford, Me.	11,217	12			1					
San Francisco, Calif.	471,023	175	24	1	133	2	9	1	33	17
Santa Barbara, Calif.	15,360	5			1					1
Saratoga Springs, N. Y.	13,839	10								
Sault Ste. Marie, Mich.	14,130	2			5					
Savannah, Ga.	69,250	57	1				1		1	8
Schenectady, N. Y.	103,774	26			12	1	4		2	1
Seattle, Wash.	366,445		4		101		17			
Sheboygan, Wis.	28,907		1		4		3			
Sioux Falls, S. Dak.	16,887	8	2		2		5			
Somerville, Mass.	88,618	27	4		16		6		4	1
South Bend, Ind.	70,967	16	1		1		4		3	3
Southbridge, Mass.	14,465	4								
Spokane, Wash.	157,656		1		38					
Springfield, Ill.	62,623	18								
Springfield, Mass.	108,668	34	2		20	1	9		1	2
Springfield, Ohio	52,296	8			4		1		1	3
Stamford, Conn.	31,810		3		9		1			
Steubenville, Ohio.	28,259	10			6					
Stillwater, Minn.	10,198	3	2							
Stockton, Calif.	36,209	13	2	1	5		1			1
Superior, Wis.	47,167	11			14		5		8	1
Syracuse, N. Y.	158,559	49	1		4		7		5	1
Tacoma, Wash.	117,446		2		44		5			
Taunton, Mass.	36,610	27								
Terre Haute, Ind.	67,361	38			21		4			5
Tiffin, Ohio.	12,962	8			10	1				

<sup>1</sup>Population Apr 15, 1910.

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

**City Reports for Week Ended Mar. 13, 1920—Continued.**

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Toledo, Ohio.....	202,010	83	4	1	183	2	30	.....	2	6
Topeka, Kans.....	49,538	15	.....	.....	2	.....	.....	.....	3	1
Traverse City, Mich.....	14,090	1	.....	.....	4	.....	.....	.....	.....	.....
Trenton, N. J.....	113,974	143	3	1	2	.....	3	.....	6	3
Troy, N. Y.....	78,094	43	3	3	1	.....	1	.....	.....	1
Vallejo, Calif.....	13,803	3	1	.....	.....	.....	.....	.....	.....	.....
Vancouver, Wash.....	13,805	.....	1	.....	.....	.....	11	.....	.....	.....
Virginia, Minn.....	15,954	.....	.....	.....	.....	.....	1	.....	.....	.....
Waco, Tex.....	34,015	14	1	.....	.....	.....	.....	.....	.....	.....
Waltham, Mass.....	31,011	11	1	.....	.....	.....	1	.....	.....	.....
Washington, D. C.....	369,282	135	9	1	21	.....	31	.....	26	13
Waterbury, Conn.....	89,201	.....	3	1	3	.....	35	1	1	1
Watertown, Mass.....	15,188	7	.....	.....	12	.....	3	.....	2	.....
Watertown, N. Y.....	30,404	.....	.....	.....	.....	.....	1	.....	.....	1
Wausau, Wis.....	19,666	6	.....	.....	62	1	.....	.....	1	.....
Westfield, Mass.....	18,769	5	.....	.....	3	.....	2	.....	.....	.....
West Hoboken, N. J.....	44,386	14	5	1	13	.....	1	.....	.....	4
West New York, N. J.....	19,613	3	.....	.....	11	.....	.....	.....	2	.....
West Orange, N. J.....	13,964	1	1	.....	3	.....	.....	.....	.....	.....
Wheeling, W. Va.....	43,657	21	1	.....	27	1	.....	.....	1	.....
White Plains, N. Y.....	23,331	3	1	1	48	.....	1	.....	.....	.....
Wichita, Kans.....	73,597	19	.....	.....	1	.....	1	.....	1	2
Wilmington, Del.....	95,369	30	3	1	20	.....	1	.....	.....	.....
Winchester, Mass.....	10,812	2	1	.....	.....	.....	.....	.....	.....	1
Winona, Minn.....	18,583	3	.....	.....	3	.....	1	.....	.....	.....
Winston-Salem, N. C.....	33,136	17	3	.....	.....	.....	.....	.....	4	2
Winthrop, Mass.....	13,105	6	.....	.....	7	.....	2	.....	.....	.....
Woburn, Mass.....	16,076	3	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.....	166,106	68	1	1	1	.....	22	.....	7	4
Yakima, Wash.....	22,058	.....	.....	.....	.....	.....	7	.....	4	.....
Yonkers, N. Y.....	103,066	20	1	.....	17	.....	.....	.....	.....	2
Zanesville, Ohio.....	31,320	15	.....	.....	.....	.....	3	.....	1	2

<sup>1</sup> Population Apr. 15, 1910.

## FOREIGN AND INSULAR.

### PLAGUE ON VESSEL.

#### Steamship "Alps Maru"—Further Development of Plague—London.<sup>1</sup>

A second fatal case of plague occurring among the crew of the steamship *Alps Maru* in the port of London, England, was reported March 5, 1920.

### CEYLON.

#### Influenza and Pneumonia—July–September, 1919.<sup>2</sup>

During the third quarter of the year 1919, 37,512 deaths from all causes were registered in Ceylon, giving an annual death rate for the three months of 31.5 per 1,000 inhabitants. During the corresponding quarter of 1918 the death rate was 22.4 per 1,000; the average for third quarters for the period 1909–1918 was 27.7 per 1,000. The number of deaths attributed to influenza during the third quarter of 1919 was 3,897, showing a decrease on the number registered during each of the two preceding quarters—i. e., second quarter, 5,498; first quarter, 12,324. The deaths from pneumonia numbered 3,419, being more than the number registered during either of the two previous quarters. The estimated population of the island on the last day of the quarter was 4,743,672. The figures given are taken from the report of the registrar-general of marriages, births, and deaths of Ceylon for the third quarter of 1919.

*Number of deaths from all causes and from influenza and pneumonia in Ceylon, July–September, inclusive, 1919.*

District.	Popula- tion.	Total deaths, all causes.	Deaths, influ- enza.	Deaths, pneu- monia.	Total deaths, influenza and pneumonia combined.
Colombo.....	705,638	4,402	394	260	654
Negombo.....	191,472	1,073	100	17	117
Kalutara.....	312,877	2,257	159	121	271
Kandy.....	440,751	4,285	325	591	916
Matale.....	107,591	1,308	85	191	276
Nuwara Eliya.....	170,217	2,534	347	899	1,246
Galle.....	326,028	2,492	405	23	428
Matara.....	258,027	2,472	223	24	247
Hambantota.....	111,894	1,352	69	14	83
Jaffna.....	341,916	1,818	82	183	265
Mannar.....	22,939	229	1	20	21
Mullaittivu.....	17,007	155	1	49	50
Batticaloa.....	183,751	2,114	668	119	787
Trincomalee.....	30,535	166	.....	36	36
Kurunegala.....	307,324	2,772	86	95	181
Puttalam.....	37,682	243	.....	24	24
Chilaw.....	96,127	469	6	18	24
Anuradhapura.....	84,729	734	51	14	65
Badulla.....	221,078	3,033	690	481	1,171
Ratnapura.....	172,232	1,742	143	114	257
Kegalla.....	262,582	1,862	71	126	197
<b>Total.....</b>	<b>4,382,397</b>	<b>37,512</b>	<b>3,897</b>	<b>3,419</b>	<b>7,316</b>

<sup>1</sup> Public Health Reports, Mar. 26, 1920, p. 798.

<sup>2</sup> Public Health Reports, Oct. 24, 1919, p. 2415, and Dec. 5, 1919, p. 2816.

**GAMBIA.****Influenza—1918.**

Information received relative to the outbreak of influenza in the Colony of Gambia, West Africa, in 1918 shows that the first cases reported occurred in passengers on the steamship *Prah* from Freetown, Sierra Leone. The *Prah* left Freetown August 25, arriving at Bathurst August 29, 1918. On August 30 influenza developed in one of the three European passengers on the vessel, the other two subsequently developing the disease, and a fatal case of pneumonia occurred in a member of the crew. Scattered cases of influenza were reported during the week ended September 7, and by the end of the week the disease became general, spreading with great rapidity. At Bathurst it was estimated that 3,000 persons applied at the hospital for treatment, but records were not kept, practically every official of the hospital being attacked by the disease. Among the European population of 68 persons there were 49 cases with 5 fatalities. Among the native population, stated to be about 8,000, 317 fatal cases of influenza were reported. The epidemic terminated abruptly by the end of September, with a few prolonged cases of bronchopneumonia.

In the Protectorate the total number of deaths from influenza during the period of the epidemic is given as 7,813. The estimated population is 154,000.

The medical officer of health of the Gambia Colony states in his annual report that the "disease has proved to be most startling in its effects on the Gambian native. Individuals who prior to an attack were strong, burly, healthy persons, in a few days became emaciated wrecks of humanity, barely able to crawl, and unable to undertake the slightest amount of exertion. \* \* \* The fact that influenza is a new disease among these people may in some way help to explain the very marked symptoms."

**MEXICO.****Yellow Fever—Merida—Quarantine at Mexican Ports.**

The occurrence of a case of yellow fever was reported March 20, 1920, at Merida, State of Yucatan, Mexico. On the same date quarantine was stated to have been put in force at Vera Cruz and other Mexican ports against the port of Progreso, Yucatan.

## VIRGIN ISLANDS.

## Contagious Diseases—February, 1920.

The occurrence of contagious diseases in the Virgin Islands during the month of February, 1920, was reported as follows:

	Cases.	Remarks.		Cases.	Remarks.
<b>In St. Thomas and St. John:</b>			<b>In St. Croix:</b>		
Chancroid.....	18	9 imported.	Dysentery (entame- ble).....	4	
Chicken pox.....	1		Filariasis.....	13	
Gonorrhoea.....	9	8 imported.	Gonorrhoea.....	1	
Malaria.....	1	Imported.	Influenza.....	3	
Mumps.....	2	Do.	Mumps.....	1	
Sprue.....	1		Syphilis.....	14	
Syphilis.....	9	3 imported.	Tuberculosis.....	1	
Tuberculosis (pulmo- nary).....	3	1 imported.	Trachoma.....	3	
Whooping cough.....	5		Yaws.....	1	

## LEPROSY.

A case of leprosy was notified in the Virgin Islands, March 8, 1920.

## INFLUENZA.

The following information was taken from reports received during the week ended April 2, 1920:

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Algeria:</b>				
Departments—				
Algiers.....	Jan. 21-31.....	24		
Constantine.....	do.....	32		
Oran.....	do.....	10		
<b>Brazil:</b>				
Bahia.....	Feb. 1-7.....	1	1	
<b>Bulgaria:</b>				
Sofia.....	Feb. 2-8.....			Present.
<b>Canada:</b>				
British Columbia—				
Prince Rupert.....	Feb. 15-21.....	60	2	
Victoria.....	Mar. 6-13.....		4	
Manitoba—				
Winnipeg.....	Dec. 28-Mar. 6....	69	23	
Nova Scotia—				
Halifax.....	Mar. 7-13.....	2		
Sydney.....	do.....	3		
Yarmouth.....	do.....	2		
<b>Ontario—</b>				
Fernie.....	Feb. 28-Mar. 6....			Present.
Port William and Port Arthur.....	Mar. 7-13.....	5	2	
Hamilton.....	Mar. 14-20.....	4		
Sarnia.....	Mar. 7-20.....	34	1	
Toronto.....	do.....		31	
Windsor.....	Mar. 6-13.....		1	
Prince Edward Island—				
Summerside.....	Mar. 6-19.....			Present.
<b>Quebec—</b>				
Montreal.....	Mar. 7-13.....			Do.
Quebec.....	Feb. 28-Mar. 6....	393	2	
<b>Saskatchewan—</b>				
Saskatoon.....	Mar. 7-13.....	15		
<b>Ceylon:</b>				
Colombo.....	Feb. 1-7.....		11	
<b>China:</b>				
Hankow.....	do.....			1 death, acute pneumonia, in a foreigner.
<b>Cuba:</b>				
Cienfuegos.....	Mar. 7-13.....	1	1	
Sagua la Grande.....	do.....	3	1	

INFLUENZA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks
Czecho-Slovakia:				
Prague.....	Jan. 25-Feb. 21.....		64	
France:				
Bordeaux.....	Feb. 2-8.....		11	Present.
Cette.....	Feb. 1-28.....		2	
Havre.....	Feb. 16-22.....		2	
Limoges.....	Jan. 1-31.....		2	
Paris.....	Jan. 22-31.....		156	
Great Britain:				
England and Wales.....	Feb. 22-28.....		178	In 96 great towns. Population, aggregate, 16,577,344. Greater London, including Outer Ring, 47 deaths.
London.....	do.....		38	
Scotland.....				
Do.....	Feb. 22-28.....		4	October-December, 1919: Deaths, 38; with complications, 97 deaths. In 16 principal towns. Population, 2,416,900. With complications, 10 deaths. In 16 principal towns.
Honduras:				
San Pedro Sula.....	Jan. 1-31.....			Present.
Tegucigalpa.....	Feb. 15-21.....		1	
India:				
Rangoon.....	Jan. 25-Feb. 7.....		29	
Italy:				
Leghorn.....	Feb. 23-29.....	63		Do.
Turin.....	Jan. 4-Feb. 15.....			
Japan:				
Nagasaki.....	Feb. 9-23.....			Do.
Mexico:				
Acapulco.....	Feb. 15-21.....			Do.
Ciudad Juarez.....	Mar. 8-14.....		2	
Saltillo.....	Mar. 7-13.....		3	
Vera Cruz.....	Mar. 8-14.....		2	
Norway:				
Christiania.....	Feb. 15-28.....		3	
Panama:				
Colon.....	Mar. 1-7.....	9	1	
Spain:				
Corunna.....	Feb. 7-Mar. 3.....		4	
Madrid.....	Jan. 1-31.....		311	
Tunis:				
Tunis.....	Feb. 23-29.....		3	

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

Reports Received During Week Ended Apr. 2, 1920.<sup>1</sup>

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India.....				Jan. 4-24, 1920: Deaths, 6,877.
Rangoon.....	Jan. 25-31.....	1	1	
Java:				Jan. 24-29, 1920: Cases, 1.
West Java.....				
Batavia.....	Jan. 24-29.....	1	1	
Philippine Islands:				Feb. 8-14, 1920: Cases, 92; deaths, 61.
Manila.....	Feb. 8-14.....	1		
Provinces:				
Albay.....	Feb. 8-14.....	4	3	
Ambos Camarines.....	do.....	60	39	
Antique.....	do.....	12	10	
Palawan.....	do.....	16	9	
Siam:				
Bangkok.....	Jan. 4-10.....	26	18	

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

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

**Reports Received During Week Ended Apr. 2, 1920—Continued.**

**PLAGUE.**

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Feb. 1-7.....	8	6	
Chile:				
Antofagasta.....	Feb. 8-14.....	1		
Ecuador:				
Guayaquil.....	Feb. 1-28.....	23	3	
India.....				Jan. 25-31, 1920: Cases, 5,491;
Bombay.....	Jan. 25-31.....	1	2	deaths, 4,377.
Rangoon.....	Jan. 23-Feb. 7.....	72	66	
Java:				
East Java.....				Jan. 8-14, 1920: Cases, 2; deaths, 2.
Surabaya.....	Jan. 8-14.....	2	2	
Straits Settlements:				
Singapore.....	Jan. 25-31.....	2	1	
On vessel:				
S. S. Alps Maru.....	Mar. 5.....	1	1	Additional.

**SMALLPOX.**

Algeria:				
Department—				
Algiers.....	Jan. 21-31.....	24		
Oran.....	do.....	49		
Argentina:				
Rosario.....	Jan. 1-31.....		1	
Bolivia:				
La Paz.....	Feb. 15-21.....	2	2	
Brazil:				
Bahia.....	Feb. 1-7.....	37	34	
Canada:				
Manitoba—				
Winnipeg.....	Feb. 22-Mar. 6.....	4		
New Brunswick—				
St. John.....	Mar. 7-13.....	1		
Ontario—				
Hamilton.....	Mar. 14-20.....	2		
Ottawa.....	Mar. 7-20.....	3		
Toronto.....	do.....	68	2	
Quebec—				
Montreal.....	Mar. 7-13.....	1		
Quebec.....	Feb. 28-Mar. 6.....	2		
Ceylon:				
Colombo.....	Feb. 1-7.....	5		
China:				Present.
Chungking.....	Jan. 18-24.....			
Dairen.....	Feb. 3-9.....	1		Do.
Nanking.....	Jan. 25-Feb. 7.....			
Tientsin.....	Feb. 1-7.....	1		
Chosen:				
Chemulpo.....	Jan. 1-31.....	2	1	
Seoul.....	do.....	48	12	
Colombia:				
Barranquilla.....	Feb. 14-28.....	350	1	
Czecho-Slovakia:				
Prague.....	Feb. 8-14.....	1		
Egypt:				
Cairo.....	Jan. 1-7.....	4	2	
Port Said.....	do.....	11	3	
France:				
Paris.....	Jan. 22-31.....	2		
Great Britain:				
Glasgow.....	Feb. 29-Mar. 6.....	3		
London.....	Feb. 22-28.....	4		
India.....				Jan. 4-10, 1920: Deaths, 2,981.
Bombay.....	Jan. 25-31.....	13	2	
Karachi.....	Jan. 8-14.....	2	2	
Rangoon.....	Jan. 25-Feb. 7.....	37	14	
Italy:				
Genoa.....	Feb. 2-8.....	4		
Turin.....	Jan. 1-Feb. 15.....	4		
Java:				
West Java.....				Jan. 16-22, 1920: Cases, 104;
Batavia.....	Jan. 16-22.....	4	4	deaths, 13.
Mesopotamia:				
Bagdad.....	Jan. 24-30.....	2		

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

**Reports Received During Week Ended Apr. 2, 1920—Continued.**

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Chihuahua.....	Feb. 15-Mar. 7....	1	1	
Mexico City.....	Feb. 15-21.....	1		
San Luis Potosi.....	Mar. 1-14.....	4		
Portugal:				
Lisbon.....	Feb. 1-21.....		31	
Portuguese East Africa:				Feb. 1-7, 1920: Present in interior.
Chai-Chai.....	Feb. 1-7.....	1		
Inhambane.....	do.....	2		
Spain:				
Barcelona.....	Feb. 8-18.....		5	
Valencia.....	Feb. 22-28.....	23	4	
Tunis:				
Tunis.....	Feb. 23-29.....		1	

**TYPHUS FEVER.**

Algeria:				
Departments—				
Constantine.....	Jan. 21-31.....	16		
Oran.....	do.....	16		
Bolivia:				
La Paz.....	Feb. 15-21.....		2	
Brazil:				
Porto Alegre.....	Feb. 1-7.....		1	
Bulgaria:				
Sofia.....	Jan. 12-18.....	1		
Varna.....	Feb. 2-8.....	110		
China:				
Tientsin.....	Feb. 1-7.....	1		
Czecho-Slovakia:				
Prague.....	Jan. 25-Feb. 7.....	2	1	
Egypt:				
Cairo.....	Jan. 1-7.....	8	3	
Japan:				
Nagasaki.....	Feb. 9-22.....	2		
Mexico:				
Mexico City.....	Feb. 8-21.....	37		
San Luis Potosi.....	Mar. 1-7.....			Present.
Spain:				
Madrid.....	Jan. 1-31.....		1	
Tunis:				
Tunis.....	Feb. 23-29.....	1		

**YELLOW FEVER.**

Mexico:				
Merida.....	Mar. 20.....	1		

**Reports Received from Dec. 27, 1919, to Mar. 26, 1920.**

**CHOLERA.**

China:				
Amoy.....	Nov. 4-17.....		2	
Chosen (Korea):				
Chemulpo.....	Oct. 1-31.....	6	4	
Fusan.....	do.....	34	30	
Provinces—				
Keiki.....	Aug. 15-Nov. 16..	224	135	
Kogen.....	do.....	64	38	
Kokai.....	do.....	4,015	2,770	
North Chusei.....	do.....	1	1	
North Heian.....	do.....	3,196	2,434	
North Kankyo.....	do.....	497	275	
North Keisho.....	do.....	63	35	
North Zenra.....	do.....	1,326	692	
South Chusei.....	do.....	330	590	
				Oct. 20-Nov. 16, 1919: Cases, 3,525; deaths, 3,144. Aug. 15-Nov. 16, 1919: Cases, 15,192; deaths, 9,823.



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

Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.

### CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.	
Chosen (Korea)—Continued.					
Provinces—Continued.					
South Heian	Aug. 15–Nov. 16	3,031	1,858		
South Kankyo	do	870	551		
South Keisho	do	318	156		
South Zenra	do	657	288		
Greece:					
Saloniki	Oct. 10	1			
India:					
Bombay	Nov. 2–8	1	1	Oct. 19–Dec. 27, 1919: Deaths, 23,388.	
Do	Jan. 11–24	2	2		
Calcutta	Oct. 26–Dec. 27	181	166		
Do	Dec. 28–Jan. 31	73	71		
Madras	Nov. 23–Dec. 27	14	5		
Do	Dec. 28–Feb. 7	16	6		
Rangoon	Nov. 30–Dec. 27	12	9		
Do	Dec. 28–Jan. 17	2	2		
Indo-China:					
Saigon	Oct. 27–Nov. 23	5	4		
Japan:					
Kobe	Nov. 24–30	2		For entire island: Oct. 22–Nov. 30, 1919: Cases, 651; deaths, 385.	
Taiwan					
Tokyo	Nov. 10–20	1	1		
Java:					
East Java				Oct. 5–11, 1919: One case, 1 death.	
West Java				At Pasoeroean.	
Batavia	Nov. 5–Dec. 25	17		Nov. 5–Dec. 25, 1919: Cases, 17.	
Philippine Islands:					
Manila	Nov. 2–Dec. 27	20	10	Nov. 2–Dec. 27, 1919: Cases 1,574; deaths, 1,151.	
Provinces					
Albay	Nov. 2–Dec. 27	339	240		
Ambos Camarines	Nov. 2–Dec. 20	66	34		
Antique	Nov. 2–Dec. 27	160	113		
Batangas	do	39	28		
Bohol	do	34	27		
Cagayan	Nov. 3–15	35	20		
Capiz	Nov. 2–8	6	5		
Cavite	Nov. 2–Dec. 6	25	16		
Cebu	Nov. 2–Dec. 20	23	14		
Davao	Nov. 9–15	6	4		
Ilocos Notre	Nov. 2–29	42	40		
Ilocos Sur	Nov. 2–22	18	15		
Iloilo	Nov. 2–Dec. 20	55	33		
Isabela	Nov. 2–Dec. 13	167	77		
Laguna	Nov. 2–Dec. 20	23	17		
Mindoro	Nov. 2–Dec. 6	81	30		
Mountain	Nov. 2–Dec. 13	6	4		
Occidental Negros	Nov. 2–Dec. 27	100	53		
Pangasinan	Nov. 20–Dec. 20	60	46		
Rizal	do	41	15		
Sorsogon	Nov. 2–Dec. 13	208	139		
Tarlac	Nov. 2–22	11	11		
Tayabas	Nov. 2–Dec. 27	60	35		
Union	Nov. 9–15	5	5		
Provinces					
Albay	Dec. 28–Feb. 7	30	17		Dec. 28, 1919–Feb. 7, 1920: Cases, 635; deaths, 412.
Ambos Camarines	do	156	99		
Antique	do	191	42		
Batangas	do	19	12		
Cavite	Jan. 11–17	1	1		
Iloilo	Dec. 28–Jan. 3	9	2		
Isabela	Jan. 11–17	6	3		
Laguna	Dec. 28–Jan. 3	2	2		
Mindoro	Jan. 4–24	24	11		
Mountain	Dec. 28–Jan. 10	11	6		
Occidental Negros	Jan. 4–17	21	19		
Palawan	Jan. 11–Feb. 7	33	19		
Pangasinan	Dec. 28–Jan. 3	1			
Rizal	Feb. 1–7	3			
Samar	Jan. 4–24	44	30		
Sorsogon	do	51	40		
Tayabas	do	23	19		
Poland:					
Garwolin				Present in November, 1919.	
Kowal				Do.	
Stryl				Do.	

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

**Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.**

**CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Novorossisk.....	Nov. 8-11.....	3		
Odessa.....	Oct. 25-Nov. 7.....	93		
Siam:				
Bankok.....	Dec. 7-27.....	163	57	Oct. 5-Dec. 15, 1919: Deaths, 1,080.
Do.....	Dec. 23-Jan. 3.....	27	3	
Straits Settlements:				
Singapore.....	Oct. 5-Dec. 27.....	15	14	
Do.....	Dec. 28-Jan. 17.....	4	2	
Sumatra:				
Deli.....	Oct. 1-31.....	1	1	

**PLAGUE.**

Argentina:					
Rosario.....	Dec. 1-31.....		7		
Brazil:					
Bahia.....	Nov. 9-15.....	1	1		
Do.....	Jan. 25-31.....	1	1		
Porto Alegre.....	Nov. 1-30.....		3		
Rio de Janeiro.....	Nov. 2-Dec. 27.....	9	4		
Do.....	Jan. 11-17.....	1			
British East Africa:					
Kisumu.....	Sept. 28-Nov. 1.....	6	6	Dec. 14-20, 1919: Present in vicinity.	
Ceylon:					
Colombo.....	Oct. 26-Dec. 27.....	36	35		
Do.....	Dec. 28-Jan. 31.....	25	4		
Chile:					
Antofagasta.....	Dec. 8-14.....	1			
China:					
Hongkong.....	Dec. 7-13.....	1			
Ecuador:					
Guayaquil.....	Nov. 1-31.....	2			
Do.....	Jan. 1-31.....	8			
Egypt:					
Cities—					Jan. 1-Dec. 25, 1919: Cases, 867; deaths, 469. Jan. 1-Feb. 19, 1920: Cases, 46; deaths, 32. From vessel Rachid Pacha.
Alexandria.....	Dec. 3.....	1	1		
Port Said.....	Feb. 13.....	1			
Suez.....	Feb. 1-15.....	1	1		
Province—					
Assiout.....	Nov. 15-21.....	30	17		
Do.....	Jan. 13-Feb. 17.....	29	16		
Greece:					
Saloniki.....	Oct. 6-Dec. 21.....	19	7		
Hawaii:					
Kaloha.....	Feb. 23.....	1	1		
India:					
Bombay.....	Oct. 19-Dec. 27.....	6	6	Oct. 19-Dec. 27, 1919: Cases, 31,542; deaths, 23,443. Dec. 28, 1919-Jan. 24, 1920: Cases, 13,012; deaths, 10,186.	
Do.....	Jan. 4-10.....	1	1		
Calcutta.....	Jan. 25-31.....	1	1		
Karachi.....	Nov. 9-29.....	3	2		
Do.....	Jan. 11-17.....	2			
Madras Presidency.....	Nov. 9-Dec. 27.....	1,063	704		
Do.....	Dec. 28-Feb. 7.....	2,186	1,572		
Madras.....	Jan. 25-Feb. 7.....	2	2		
Rangoon.....	Nov. 2-Dec. 27.....	29	27	Oct. 19-Nov. 1, 1919: Cases, 10; deaths, 7.	
Do.....	Dec. 28-Jan. 24.....	58	55		
Indo-China:					
Saigon.....	Oct. 27-Dec. 7.....	11	9		
Java:					
East Java.....					Sept. 28-Dec. 31, 1919: Cases, 1,500; deaths, 1,499. Surabaya Residency, Jan. 1-7, 1920: Cases, 9; deaths, 9.
Surabaya.....	Jan. 1-7.....	9	9		
Mesopotamia:					
Bagdad.....	Jan. 3-9.....	1	1		
Peru:					
Callao.....	Nov. 1-30.....		3		
Paíta.....	Dec. 29-Jan. 17.....	23	17		
Salaverry (Trujillo).....	Nov. 23-Dec. 21.....	9	1	Present in surrounding country. And in vicinity.	
Do.....	Dec. 29-Feb. 1.....	19	8		
Senegal:					
Dakar.....	Nov. 1-30.....		146	Including Dakar and vicinity.	

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

**Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.**

**PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Siam:				
Bangkok.....	Dec. 14-20.....	4	2	
Straits Settlements:				
Singapore.....	Oct. 26-Dec. 27....	7	6	
Do.....	Jan. 4-17.....	2	1	
Syria:				
Beirut.....	Dec. 22.....	29		
Turkey:				
Constantinople.....	Nov. 14-Dec. 20...	11		Present Dec. 11, 1919. Nov. 14-20, 1919: Present in vicinity.
On vessel:				
S. S. Alps Maru.....	Feb. 28.....	1		At Port of London, England. Vessel left Yokohama, Japan, Dec. 3, 1919; arrived Suez Jan. 21, 1920. Destination, Hamburg.
S. S. Kaisar-i-Hind.....	Nov. 28.....	3		At Port Said, Egypt. From Bombay, Nov. 15, for London.

**SMALLPOX.**

Algeria:					
Department—					
Algiers.....	Nov. 11-Dec. 31...	65			
Do.....	Jan. 1-20.....	55			
Constantine.....	Nov. 11-Dec. 31...	15			
Do.....	Jan. 1-20.....	32			
Oran.....	Nov. 11-Dec. 31...	90			
Do.....	Jan. 1-10.....	25			
South Territory.....	do.....	5			
Arabia:					
Aden.....	Dec. 24-30.....	1	1		
Do.....	Jan. 6-20.....		3		
Belgium:					
Brussels.....	Dec. 28-Jan. 3.....		1		
Bolivia:					
La Paz.....	June 29-Dec. 27....		216	Dec. 29, 1918-June 28, 1919: Cases, 86; deaths, 44. Dec. 14-20, 1919: Cases, 7; deaths, 5.	
Do.....	Dec. 28-Feb. 7.....	19	30		
Brazil:					
Bahia.....	Oct. 26-Nov. 22....	1,704	1,022		
Do.....	Dec. 28-Jan. 31....	413	314		
Para.....	Feb. 8-14.....		2		
Pernambuco.....	Nov. 10-Dec. 28....	123	9		
Do.....	Dec. 29-Jan. 11....	82	4		
Rio de Janeiro.....	Sept. 28-Dec. 27....	429	119		
Do.....	Dec. 28-Jan. 17....		13		
Santos.....	Nov. 24-30.....		1		
Do.....	Jan. 5-18.....		2		
Canada:					
British Columbia—					
Vancouver.....	Nov. 30-Dec. 6.....	1			
Do.....	Jan. 4-17.....	1			
Manitoba—					
Winnipeg.....	Jan. 11-17.....	2			
New Brunswick—					
St. John.....	Jan. 29-Mar. 6.....	7			
Nova Scotia—					
Halifax.....	Dec. 21-27.....	2			
Do.....	Jan. 4-Feb. 14.....	4			
Sydney.....	Dec. 7-13.....	1			
Do.....	Dec. 28-Mar. 6.....	20			
Counties—					
Cumberland.....	Dec. 14-20.....			Present.	
Inverness.....	do.....			Do.	
Pictou.....	do.....			Do.	
Ontario.....				Nov. 1-29, 1919: Cases, 1,673. Nov. 30-Dec. 6, 1919: Cases, 125, in 45 localities, exclusive of Dysart and Toronto. Dec. 1-31, 1919: Cases, 1,414; deaths, 2. Dec. 28, 1919-Mar. 6, 1920: Cases, 1,997; deaths, 32.	
Fort William and Port Arthur.....	Jan. 25-Feb. 14....	5			

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

**Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.**

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario—Continued.				
Gloucester County.....				Oct.—Nov., 1919: Cases, 3.
Hamilton.....	Dec. 14-20.....	3		
Do.....	Jan. 4—Mar. 13.....	28		
Kingston.....	Dec. 21-27.....	1		
Do.....	Dec. 28—Mar. 6.....	11		
North Bay.....	Jan. 11—Mar. 6.....	4		
Ottawa.....	Dec. 14-20.....	1		
Do.....	Dec. 28—Feb. 28.....	16		
Peterborough.....	Dec. 21-27.....	3		
Do.....	Dec. 28—Mar. 6.....	38	2	
Prescott.....	Jan. 4-10.....	1		
Sault Ste. Marie.....	Dec. 7-27.....	1		
Do.....	Dec. 28—Jan. 3.....	1		
Toronto.....	Dec. 7-27.....	727		
Do.....	Dec. 28—Feb. 28.....	773	5	
Windsor.....	Dec. 14-27.....	2		
Prince Edward Island—				
Summerside.....	Feb. 14-20.....	3		In one family.
Quebec—				Counties.
Bonaventure and Gaspé	Jan 1—Feb. 28.....	23		
Montreal.....	Dec. 7-27.....	3		
Do.....	Jan. 18—Mar. 6.....	14		
Quebec.....	Dec. 7-27.....	4		
Do.....	Jan. 4—Feb. 28.....	13		
Saskatchewan—				
Moosejaw.....	Dec. 28—Jan. 31.....			
Saskatoon.....	Dec. 14-20.....	1		
Ceylon:				
Colombo.....	Nov. 16—Dec. 13.....	10	9	
Do.....	Dec. 28—Jan. 31.....	4	1	
China:				
Amoy.....	Nov. 4—Dec. 22.....			Present. Dec. 22: Four deaths.
Do.....	Dec. 30—Jan. 5.....	1		
Canton.....	Nov. 2—Dec. 27.....			Present.
Do.....	Dec. 28—Jan. 10.....			Do.
Chungsha.....	Jan. 4-10.....	55		
Chungking.....	do.....			Do.
Do.....	Dec. 28—Jan. 17.....			Do.
Foochow.....	Nov. 16—Dec. 27.....			Do.
Do.....	Dec. 28—Jan. 24.....			Do.
Mukden.....	Jan. 18-24.....			Do.
Nanking.....	Dec. 6-27.....			Do.
Do.....	Dec. 28—Jan. 24.....			Do.
Shanghai.....	Dec. 22-28.....	2		
Chosen (Korea):				
Chemulpo.....	Dec. 1-31.....	1	1	
Fusan.....	Oct. 1—Dec. 31.....	12	1	
Seoul.....	do.....	19	4	
Colombia:				
Barranquilla.....	Nov. 16—Dec. 20.....	50	2	
Do.....	Jan. 11—Feb. 14.....		3	Stated to be epidemic, Jan. 18-24, 1920. About 200 cases, Feb. 1-14.
Cuba:				
Habana.....	Jan. 31.....	4		Children living in same house.
Egypt:				
Alexandria.....	Nov. 12—Dec. 16.....	32	22	
Do.....	Jan. 1—Feb. 11.....	35	14	
Cairo.....	Oct. 1—Dec. 23.....	64	31	
Port Said.....	do.....	13	6	
Finland:				
Provinces				July 16—Dec. 31, 1919: Cases, 83.
Abo Oeh Borneborg.....	Nov. 1-15.....	1		
Nyland.....	July 16—Dec. 15.....	29		
St. Michael.....	Dec. 1-15.....	7		
Tavastehus.....	July 16—Dec. 31.....	7		
Vasa.....	Dec. 1-31.....	2		
Viborg.....	July 16—Dec. 31.....	37		
France:				
Paris.....	Jan. 1-10.....	1	2	
Germany.....				Oct. 5-15, 1919: Cases, 32. In addition to previously reported cases; Sept. 28—Dec. 6, 1919: Cases, 161 (exclusive of Prussia).
Prussia.....	Oct. 29—Nov. 29.....	1,100	323	

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

**Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.**

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki.....	Nov. 10-Dec. 28...	26	26	
Do.....	Dec. 29-Feb. 1....	37	29	In vicinity: Drama, 1 case; Zago- ritzani, 9 cases, 1 death; Serres- 1 case.
India.....				Oct. 19-Dec. 27, 1919: Deaths, 3,421.
Bombay.....	Oct. 12-Dec. 20....	46	11	
Do.....	Dec. 28-Jan. 24....	36	13	
Calcutta.....	Oct. 26-Dec. 27....	186	260	
Do.....	Dec. 28-Jan. 17....	782	677	
Karachi.....	Dec. 21-27.....	6	2	
Do.....	Jan. 18-Feb. 7....	29	10	
Madras.....	Nov. 2-Dec. 27....	31	13	
Do.....	Dec. 28-Feb. 7....	31	10	
Rangoon.....	Oct. 19-Dec. 27....	51	18	
Do.....	Dec. 28-Jan. 24....	24	7	
Indo-China:				
Saigon.....	Oct. 27-Nov. 23....	2		
Italy:				
Genoa.....	Jan. 5-11.....	1		Province: Nov. 17-Dec. 28, 1919: Cases, 15; deaths, 3. Jan. 12- 18, 1920: Cases, 13.
Leghorn.....	Jan. 4-10.....	1		
Messina.....	Nov. 10-Dec. 28....	55	8	Province of Messina: Dec. 14- 28, 1919: Cases, 68. Jan. 5- Feb. 8, 1920: Cases, 120; 1 death.
Do.....	Dec. 29-Feb. 8....	30	3	
Milan.....	Oct. 1-Nov. 30....	12	2	
Naples.....	Dec. 28-Feb. 15....	13	17	
Palermo.....	Dec. 27-Feb. 9....	12	3	
San Fratello.....	Dec. 1-28.....	49	5	
Do.....	Dec. 29-Feb. 8....	27	1	
Trieste.....	Jan. 3-10.....	2		
Turin.....	Dec. 28-Jan. 4....	1		
Japan:				
Kobe.....	Dec. 15-21.....	1		
Nagasaki.....	Feb. 2-8.....	1	1	
Taiwan.....	Nov. 1-31.....	36	7	Entire island.
Do.....	Jan. 1-31.....	160	46	
Java:				
East Java.....				Sept. 28-Dec. 18, 1919: Cases, 34. Jan. 1-7, 1920: Cases, 1.
Residency— Surabaya.....	Oct. 25-Dec. 18....	26		
Do.....	Jan. 1-7.....	1		
West Java.....				Oct. 17-Dec. 25, 1919: Cases, 659; deaths, 151. Jan. 2-8, 1920: Cases, 78; deaths, 10.
Batavia.....	Oct. 17-Dec. 12....	49	22	
Do.....	Jan. 2-8.....	1		
Mesopotamia:				
Bagdad.....	Jan. 10-16.....	3		
Mexico:				
Acapulco.....	Nov. 9-15.....	2		
Chihuahua.....	Dec. 21-27.....	3	3	
Do.....	Jan. 11-Feb. 15....		1	
Ciudad Juarez.....	Jan. 11-Feb. 7....		2	
Guadalajara.....	Dec. 1-31.....	1		
Do.....	Jan. 1-31.....	1		
Mexico City.....	Nov. 16-Dec. 20....	11		
Salina Cruz.....	Feb. 1-15.....	6		
San Luis Potosi.....	Dec. 14-20.....		1	
Do.....	Jan. 18-29.....		6	
Tehuantepec.....	Dec. 25-31.....	6		
Do.....	Jan. 1-Feb. 15....	52		
Newfoundland:				
St. Johns.....	Dec. 20-26.....	3		Dec. 13-26, at outports, 6 cases. Present at 8 other localities.
Do.....	Dec. 27-Mar. 5....	13		Outports, Dec. 27, 1919-Feb. 20, 1920: Cases, 22. Present at other localities.
Panama:				
Colon.....	Dec. 15-21.....	1		
Portugal:				
Lisbon.....	Nov. 30-Dec. 27....		55	
Do.....	Dec. 28-Jan. 31....		68	
Oporto.....	Dec. 7-20.....	5	5	
Do.....	Dec. 28-Jan. 3....	1	1	

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

Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.

### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portuguese East Africa				President in interior, in 5 districts, Nov. 9-Dec. 20, 1919, with 56 reported cases. In interior, Dec. 28, 1919-Jan. 31, 1920: Present.
Towns—				
Chinde	Dec. 28-Jan. 25	21		
Inhambane	Dec. 7-27	7		
Do	Jan. 4-17	3		
Lourenco Marques	Nov. 23-Dec. 20	9		
Mozambique	Dec. 7-27	2		
Quelimane	do	4		
Do	Jan. 4-31	4		
Tete	Dec. 7-27	1		
Siberia:				
Vladivostok	Dec. 19-31	17	3	
Spain:				
Barcelona	Nov. 6-Dec. 27		26	
Do	Dec. 28-Feb. 3		26	
Bilbao	Nov. 1-Dec. 20		4	
Cadiz	Oct. 1-Nov. 30		6	
Valencia	Nov. 10-Dec. 27	39	9	
Do	Dec. 28-Feb. 21	69	12	
Vigo	Nov. 18-Dec. 27	14		
Do	Dec. 28-Jan. 31	2	3	Jan. 11-17, 1920: Present in vicinity.
Sumatra:				
Medan	Oct. 1-31	8		
Tunis:				
Tunis	Dec. 23-29	1		
Do	Jan. 19-Feb. 22	6	3	
Turkey:				
Constantinople	Nov. 9-Dec. 14	27		
Do	Feb. 18-24	5	3	
Union of South Africa:				
Johannesburg	Oct. 1-Dec. 31	21		
On vessel:				
S. S. Roggeveen		1		Vessel from Java; at Noumea, New Caledonia. Case left at Noumea. Vessel arrived at Sydney, Jan. 2, 1920.
S. S. Sarcoxle	Dec. 23	1		At Ponta Delgada, Azores, from Rotterdam for New York.
S. S. Vestnorge	Jan. 15	1		Mild. At Kingston, Jamaica, from Philadelphia, via Norfolk.

### TYPHUS FEVER.

Algeria:				
Departments—				
Algiers	Dec. 11-31	2		Algiers (city), Jan. 1-31, 1920: Cases, 1; deaths, 1.
Do	Jan. 11-20	1		
Constantine	Nov. 11-Dec. 31	2		
Do	Jan. 1-20	3		
Oran	Nov. 21-Dec. 11	5		
Austria:				
Vienna	Sept. 7-14	5		Sept. 7-Nov. 22, 1919: Cases, 17.
Belgium:				
Ghent	Jan. 25-31		2	
Bolivia:				
La Paz	June 29-Dec. 20	30	31	Dec. 29, 1918-June 28, 1919: Deaths, 52.
Do	Jan. 4-Feb. 7	10	4	
Brazil:				
Ceara	Jan. 4-10	1		
Bulgaria:				
Sofia	Dec. 21-31	1	1	
Do	Jan. 1-10	2		
Varna	Feb. 18	110		
Vratsa	Jan. 25-31			Present. Also in vicinity.
Canada:				
Ontario Province				Dec. 1-31, 1919: One case.
Chile:				
Antofagasta	Nov. 17-Dec. 14	14		
Santiago				Jan. 12-Sept. 30, 1919: Cases, 5,153; deaths, 1,023: Outbreak in October, 1919.
Valparaiso	Nov. 9-Dec. 27	955	114	Dec. 1-13, 1819. Cases, 700; deaths, 18.
Do	Dec. 28-Feb. 8	235	66	

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

Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.

### TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Antung .....	Nov. 3-Dec. 14 .....	2		
Czecho-Slovakia:				
Prague .....	Dec. 21-27 .....	1		
Egypt:				
Alexandria .....	Nov. 12-Dec. 16 .....	6	1	
Do .....	Jan. 1-Feb. 11 .....	31	8	
Cairo .....	Oct. 1-Dec. 23 .....	113	46	
Port Said .....	Oct. 1-Dec. 16 .....	3	1	
Esthonia:				
Narva .....	Feb. 16 .....	2,500		Feb. 16, 1920: Cases, 7,500 to 8,000. Estimated mortality, 40 per cent.
Reval .....	do. ....	2,500		
Finland:				
Province—				
Viborg .....	July 16-31 .....	2		
Germany .....				Oct. 5-Dec. 6, 1919: Cases, 10—civil population, 3; military, 4; repatriated soldiers, 3.
Great Britain:				
Belfast .....	Dec. 28-Jan. 3 .....	1	1	
Glasgow .....	Nov. 30-Dec. 6 .....	2		
Greece:				
Cavalla .....	Nov. 17-Dec. 28 .....	4		
Drama .....	Nov. 24-Dec. 28 .....	6		
Saloniki .....	Oct. 6-Dec. 21 .....		43	
Do .....	Dec. 28-Feb. 1 .....	11	1	In vicinity, at Vertekep, 4 cases; Zagoritzi, 1.
Thassos Island .....	Dec. 22-28 .....	1		
Zihna .....	do. ....	1		
Hungary .....				Aug. 25-Sept. 14, 1919: Cases, 6.
Italy:				
Brindisi .....	Dec. 22-28 .....	1		
Naples .....	Jan. 19-25 .....	2	1	
Trieste .....	Dec. 14-27 .....	3		
Do .....	Dec. 28-Feb. 3 .....	5	2	
Venice .....	Nov. 17-Dec. 21 .....	6	1	
Japan:				
Nagasaki .....	Dec. 1-28 .....	4	2	
Do .....	Jan. 12-Feb. 8 .....	2	1	
Mexico:				
Chihuahua .....	Dec. 21-27 .....	2		
Do .....	Jan. 11-17 .....		1	
Mexico City .....	Nov. 16-Dec. 27 .....	129		
Do .....	Dec. 28-Feb. 7 .....	132		
Saltillo .....	Nov. 1-30 .....	2	1	
San Luis Potosi .....	Dec. 14-27 .....			Present.
Do .....	Dec. 28-Feb. 29 .....			Do.
Paraguay:				
Asuncion .....	Nov. 30-Dec. 6 .....	1		
Peru:				
Callao .....	Nov. 1-30 .....		1	
Cerro de Pasco .....	Dec. 7-13 .....	1		
Poland .....				Nov. 1-30, 1919: Cases, 11,264; deaths, 912. Including Province of Posen.
Galicia (Province) .....	Nov. 1-30 .....	5,716	616	Oct. 1-31, 1919: Cases, 129; deaths, 12.
Warsaw .....	do. ....	107	19	
Portugal:				
Lisbon .....	Dec. 6-12 .....		2	
Oporto .....	Dec. 21-27 .....	1		
Siberia:				
Vladivostok .....	Dec. 25-31 .....	23	13	
Spain:				
Barcelona .....	Nov. 20-26 .....	7		
Bilbao .....	Dec. 22-31 .....		1	
Corunna .....	Nov. 24-Dec. 7 .....	2		
Tunis:				
Tunis .....	Dec. 14-20 .....	1		
Do .....	Dec. 29-Feb. 8 .....	3	1	
Turkey:				
Constantinople .....	Nov. 14-Dec. 27 .....	49		
Do .....	Feb. 8-14 .....	25	1	

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

**Reports Received from Dec. 27, 1919, to Mar. 26, 1920—Continued.**

**YELLOW FEVER.**

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Oct. 26–Nov. 8....	1	2	
Mexico:				
Campeche.....	Dec. 20.....	1		
Merida.....	Dec. 7–27.....	4	2	
Do.....	Dec. 28–Jan. 31....	1		
				The cases were sent from Oplchen, vicinity of Muna. One death in case from Muna. Total to Dec. 27: Cases, 47; deaths, 21.

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