PUBLIC HEALTH REPORTS

VOL. 40 NOVEMBER 6, 1925 No. 45

A Demonstration at Tarboro, North Carolina, of a System for Sanitary Control of Milk Supplies of Towns and Small Cities

With Special Reference to Operation of a Municipal Pasteurizing Plant

By K. E. MILLER, Surgeon, United States Public Health Service

In January, 1917, the United States Public Health Service, at the request of the North Carolina State Board of Health, inaugurated a practical study of the principles of rural health administration in Edgecombe County, N. C. The writer was assigned to this duty, and in performing it he served two years and three months as the full-time health officer for the county.

Edgecombe County is a fairly typical southern rural county, approximately 600 square miles in area, situated on the western coastal plain. In 1917 it had a population of about 32,000, about 60 per cent of whom were colored and 40 per cent white. The only incorporated town of considerable size wholly within the county is Tarboro, the county seat, which in 1917 had a population of about 4,500.

Health activities had to be organized *de novo*, as there had been no intensive health work done in the county previously. Among the many urgently needed safeguards to health, a sanitary milk supply for the town of Tarboro was early recognized to be of critical importance. After having disposed of the danger from human filth by doing away with all the open surface privies and replacing them with either sanitary privies or sewer connections, the problem considered next in magnitude was that of obtaining for the town a safe milk supply.

Methods of municipal milk control requiring a dairy inspector, laboratory equipment, and laboratory technician for the laboratory check on milk samples, are ordinarily beyond the economic means of the town or city with less than 10,000 population. These items were impracticable for Tarboro, and were promptly ruled out of consideration.

The procedure that was adopted in providing Tarboro with a safe milk supply is here recounted because the milk situation there was typical of that in the two or three thousand other towns or small cities in the United States which are yet in serious need of sanitary milk supplies. The experience is valuable to other towns or small cities because there is nothing unusual about this particular town by reason

of which the plan of milk control adopted should not succeed elsewhere.

Before entering upon a description of the Tarboro milk plant, certain principles should be discussed. In appraising the elements of a milk supply, quantity as well as quality should be given a value The nutritional requirements of children especially demand milk. We must, therefore, be guarded against throwing obstacles in the way of milk production. Every means of increasing milk production and milk consumption must be studiously fostered. This is especially significant in connection with the milk supplies of the small towns. The milk producer for the small town is, with rare exceptions, conducting the business in conjunction with some other means of livelihood.

To set up requirements calling upon the small-town producer for extensive equipment, and imposing rigid restrictions, leads to one of two results: (1) The overhead expense is increased out of proportion to the volume of business to such an extent that the retail price of milk must be unduly advanced, so that milk consumption is cut down on account of the increased cost; or (2) the small producer is unwilling to go to the trouble and expense called for and consequently gives up the business.

In either case the purpose of getting more milk in the dietary is frustrated. Any successful plan for improving the milk supply, therefore, must make the milk business more attractive to the farmer, instead of loading him down with such burdens as to drive him out of the business. The plan that was devised for Tarboro had this factor in view as one of its guiding principles, and second in importance only to that of safety.

In the summer of 1918, the active study of the problem was begun. The milk supply was found to be derived from a variety of sources. None of the producers contributing to the milk supply was engaged exclusively in the dairy business. The total milk supply in October, 1918, for the entire town was approximately 100 quarts per day. Up to July, 1918, it had been about 160 quarts per day; but at that time the largest milk producer in the list discontinued his dairy business, on the ground that it did not pay. The retail price of milk was then 16 cents a quart; but as the experience just cited shows, milk production did not hold out sufficient attractions to the farmer.

The difficulty was found to be not so much with the expense of production itself, but rather with the expense of distribution. Each dairyman had to maintain his own delivery system, which involved an expense for a man, a horse, and a delivery wagon. Each dairyman also suffered a shrinkage in his earnings, due to the breakage and loss of bottles, bad accounts, surplus stock of milk at times,

bookkeeping, and cost of collection. For these reasons the dairymen gladly welcomed a plan which would relieve them of all expenses and losses associated with the distribution of the product. Their interest was directed to a proposal for a central municipal plant at which their output would be received in bulk, the municipality thereafter assuming all the responsibilities for distribution. The dairymen agreed in principle to this proposal, pending suitable adjustments as to the price they should receive for their product.

While the writer was taking steps to secure the interest and cooperation of the milk producers, he was laying plans for improving the quality of the milk and increasing the production. The idea of pooling the milk supply under one central and responsible agency introduced the feasibility of a pasteurizing plant.

The town council, was, therefore, approached on the subject and requested to install a municipal pasteurizing plant, where the milk delivered by the dairyman would be received, and thence distributed to the retail trade. In brief, the proposition was for the town to go into the retail milk business. A study of the situation led to the conclusion that a price of 12 cents a quart to the producers was fair and satisfactory. The retail price was fixed at 17 cents a quart. This was an advance of only 1 cent above the price for raw milk, and allowed a margin of 5 cents a quart for the expense of operation.

The proposition as outlined was approved by the council, as was a draft of an ordinance presented to govern the operation of the system. (See Appendix, pages 2469–2470.)

It should be noted that the local health establishment at that time consisted of the writer alone, and his interests and responsibilities extended to all health matters in the entire county. Therefore, it was necessary to draft the ordinance in such a way as to call for a minimum of inspection service.

In accordance with the resolution of the council approving the project, space was alloted in the water plant for installation of the milk plant equipment. (See Pl. I.) The equipment, exclusive of the delivery wagon and horse, which were already owned by the town, was obtained and put into operation at a total cost of $1,800. On account of the small amount of milk to be handled, a machine for pasteurizing it in the bottle was installed. The bottle pasteurizer, furthermore, had the theoretical advantage of eliminating all possibilities of contamination of the milk after pasteurization. Pasteurization in the bottle, however, calls for an unnecessary expense in heating and cooling a considerable mass of glass, which is a poor conductor of heat. Moreover, there is doubt as to the uniformity of heating that takes place within the bottle. These factors, coupled with the fact that the supply, after a time, outgrew the capacity of

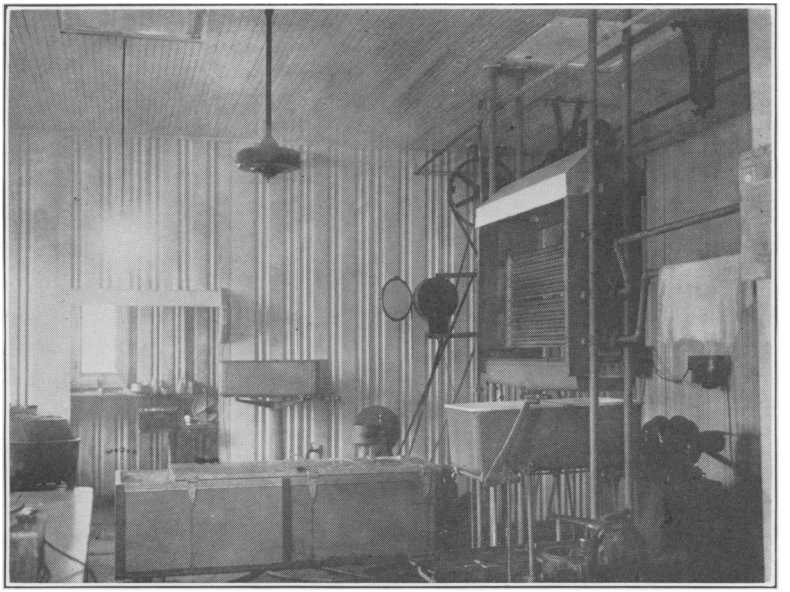
the original bottle-pasteurizer, brought about the change to a vat pasteurizer, which is now in use. (See Pl. I.) The other important elements of the equipment consist of (1) a turbine bottle-washer and sterilizing vat; (2) a bottling machine; (3) a milk cooler; (4) a turbine-driven clarifier; (5) a separator; and (6) a refrigerator.

Some authorities on milk favor the use of clarifiers, while others do not. The ground for objection against them is that they have a tendency to increase the bacterial count by reason of the fact that they break up the colonies into smaller groups, and consequently give a larger number of colonies when samples are plated out. However this may be, this objection appears difficult to defend when one sees the mass of slime, mucus, black sediment, and other objectionable matter that is removed by clarification. The installation of the clarifier was decided upon, not only for the purpose of removing the macroscopic dirt, but for the psychological advantage gained thereby. It was contemplated that in making a change so radical as the system here described there would inevitably be some persons who might create dissension. It means nothing to the average man to say that the pasteurization process kills the bulk of the germ life in the milk, as the proof of that is not visible to him. But the removal of visible dirt from the milk by clarification is something he can not dispute. One of the important motives, therefore, in installing the clarifier, was to use it to silence the enemies of the plant. Subsequent experience has amply justified the wisdom of this action.

The original procedure at the plant was as follows: A credit slip was given each day to the dairyman for as many quarts of milk as he delivered to the plant. At the end of the month these slips were turned in to the city clerk's office for collection. The milk was run through the clarifier, then over the cooler by gravity, and then into the bottling machine, from which it was bottled and capped. The steel crates containing the filled and capped bottles were then stacked in the pasteurizing machine, with the distributing pans in place over the bottle caps. The water circulating system of the pasteurizer was then set in operation, steam being turned in cautiously, so as to raise the temperature of the water 5° per minute until the temperature reached 145° F., after which it was allowed to drop back to 140°, where it was held for 30 minutes.

A record of each pasteurization was made by a recording thermometer. At the end of the pasteurizing period, the temperature was reduced at the rate of 5° per minute by turning cold (tap) water into the circulating system, until the temperature of tap water was reached. Ice was then introduced in the collecting tank at the bottom of the pasteurizing machine, and circulation was continued until 50° F. was reached, when the milk was removed and stored in the

Municipal Pasteurizing plant, Tarboro, N. C.



A corner of the Pasteurizing room. The wash room is seen through the open door in the left background

refrigerator until delivered. Morning and evening deliveries were made.

The present routine is the same as the original, with the exception that the vat pasteurizer has replaced the bottle pasteurizer. Also a refrigerating machine has been installed to replace ice refrigeration originally used.

The plant was put into operation on October 1, 1918. This report, therefore, is based on nearly seven years of practical experience. The standing of the plant with the public is fairly well indicated by the fact that it has not only successfully weathered all storms and continued to operate throughout four changes of municipal administration, but the volume of business handled at the plant continuously increased up to about eight months ago, when one of the producers established his own private plant, which has been operated in accordance with the pasteurizing ordinance under the supervision and control of the health department. Not a single case of disease reasonably attributable to milk-borne infection has occurred in Tarboro since the establishment of the plant, and the incidence of summer diarrhea of infants among the white population has been reduced to insignificance.

From the standpoint of the town's investment, it should be explained that the plan was never intended to be a source of revenue. It was planned, however, to pay operating expenses and return the original cost of installation. The records of the town show that this object has been accomplished. Not only that, but in 1921 the plant was housed in a new steel building costing $6,000, and new equipment throughout was installed. This building is shared between the milk plant and an electrical supply depot. It is understood that the milk plant has paid for its share of this building. Within the same year, 1921, the retail price of milk was reduced from 17 cents a quart to 15 cents.

Recent statements have been received setting forth some of the financial aspects of the plant during the past two years:

Gross profits for the fiscal year ending May 31, 1924	$773. 01
Less water and electric current furnished by town	350. 00
Net profit	423. 01
For 10 months ending March 31, 1925:	
Receipts	19, 208. 92
Expenditures	18, 741. 79
Gross profits	567. 13
Less water and electric current	250. 00
Net profit	317. 13

The average price of milk during the last 22 months was 17 cents a quart, ranging from 16 to 18 cents. The price of unpasteurized

milk in the nearby town of Rocky Mount during the same period averaged 20 cents a quart.

From the standpoint of the milk producers, we find a most significant condition. The supply used in October, 1918, 100 quarts per day, has been built up to a daily average of 500 quarts. The dairyman who was mentioned as having quit the milk business in July, 1918, because it was not profitable, again stocked his dairy in 1919, and now stands at the head of the list of producers in volume of production. It is interesting to note, also, that in December, 1918, the dairyman who was then the largest producer opposed certain requirements of the ordinance and tried to stop the operation of the plant by withholding his milk supply. Strict injunctions were enforced by the town authorities against the sale of unpasteurized milk in Tarboro. There was a temporary milk famine, but the people stood by the plant solidly, with the result that this dairyman was entirely eliminated from the business. The growth of the local milk business is such as to show conclusively that the system has been of unqualified advantage to all producers with it who were disposed to deal fairly.

The story of the Tarboro milk plant would not be complete without frank discussion of its faults and shortcomings. From the public have come occasional murmurings, which, when analyzed, have been found to be due to some one of the following causes: (1) The delivery system. The hours of delivery have been the source of some complaint, though it is obviously impossible to place the milk at each customer's door at the exact time when the milk is desired. In some instances patrons have had to eat their breakfast without milk for their coffee and cereal. (2) In certain seasons of the year there is a shortage of milk. In order to reach each customer in times of shortage, it is sometimes necessary to cut down the individual allotment somewhat by deducting a pint here and there from the larger customers. However, preference is always shown for those families having young children or sick persons. At such times the separation of milk is suspended, which gives rise to dissatisfaction on the part of patrons who may happen to want cream for special occasions. In all fairness, however, it must be admitted that complaint based on these grounds is unjustified. (3) Sour milk. There have been a few instances in which the milk is said to have soured early. Investigation usually shows the fault to have been that of the customer himself in leaving the bottle exposed to the hot sun for a considerable length of time before taking into the house. Also, insufficient home refrigeration in extremely hot weather has been the cause in some instances. On two occasions the complaint was general, and in each instance the milk was found to have been watered before delivery was made at the plant.

Among the dairymen there have been two factors offering difficulty of control. The most troublesome one is that of ineffective cooling. Coolers are cheap and very little trouble to operate, but a faithful observance of proper cooling has not been accomplished with satisfaction. The second difficulty is lack of prompt delivery at the plant. The pasteurization can not, of course, proceed until the milk is received. Frequently the tardiness of one dairyman will hold up the pasteurization an hour or more, resulting in complaints from the consumers on account of not receiving their milk as early as they would like.

From some of the milk producers who have invested in high-grade cows to furnish milk with a high butter fat content there has come a protest against the purchase of all milk at the same price. This complaint is considered to be well founded. The more equable procedure is undoubtedly to fix the price paid to the producers on the basis of butter fat content of the milk. This in turn would call for a separation of the milk at the plant and adjustment of the butter fat content to a uniform standard. While this makes extra work for the plant, the surplus cream gained in this way would doubtless more than pay for the trouble.

The greatest difficulty that the town has had to contend with is the handling of the surplus milk without undue loss. There are times in the year when the supply exceeds the demand. Demand tends to be more or less constant, while the supply undergoes seasonal fluctuations. There have been no restrictions upon the amount of milk that would be purchased from the dairyman. The town has felt morally obligated to take all that might be offered. Milk purchased at 12 cents per quart can not be economically converted into butter and sweet cream. Buttermilk and skim milk need hardly be considered in the economic return on surplus milk in a plant of this kind, as the experience in Tarboro has shown them to be almost a dead loss. There has been no other provision at the plant for disposal of the surplus supply.

There are four possible ways of solving this difficulty: (1) Rejecting all milk offered beyond the needed quota. The amount to be turned back to each producer would have to be governed by his proportion of the total offerings. This method should be avoided if possible, as it would discourage production. (2) The adoption of some method for realizing a better financial return on the surplus product. Although it has not been tried in the Tarboro plant, the investigations that have been made of the subject seem to justify the belief that this object could be accomplished by converting the surplus into ice cream. The season of surplus milk coincides very nearly with that of greatest ice cream demand. The output would have to be disposed of among the milk customers, but the price

fixed from the standpoint of avoiding loss, rather than making profit, could be made such as to call forth a demand that would rapidly absorb the output. The procedure that would appear to be indicated would be to leave a notice with each customer, announcing the fact that ice cream could be secured from the plant at a certain price, while the supply lasted. Delivery would then be made on order. (3) A small equipment for making dried milk powder is an attractive possibility which deserves investigation as an efficient and profitable means for handling milk surplus. (4) The fourth method suggested for caring for the surplus milk production is one which seems to offer the best solution of all. It is proposed that the pasteurization plant would become a nucleus around which to develop a local creamery industry, with possibly an ice cream factory added. As much milk as is required to meet the demands of the retail whole-milk trade would be purchased by the plant at a price that might be justified by the retail price received in the whole-milk trade; the surplus milk would be diverted to the creamery at a lower price which should be such as to enable the creamery to operate at a financial advantage.

To determine the amount of milk to be received by the pasteurizing plant at the higher price level from any given dairyman, the ratio between the quantity of milk supplied by that dairyman during the preceding month and the total amount supplied by all dairymen during that period should be established. Say, for instance, this is 10 per cent. That dairyman would thus be entitled to supply 10 per cent of the demand of the plant each day during the current month. All he might produce in excess of this amount would go to the creamery at the lower rate.

Instead of curtailing production, the plan would be to expand the business without limit, so as to provide working material for the creamery enterprise. If a sure market were provided for all the milk that might be produced, it would be found worth while for the farmer to go into the business on a larger scale. In some instances a creamery of this kind could become the feeder to a nearby city supply. In others the milk would have to be converted into creamery products. But a creamery with an established market can make profitable use of all milk products, thereby eliminating waste. An arrangement of this kind would stabilize the retail milk supply in two ways, namely, by guaranteeing an adequate amount at all times, and by guarding against loss from oversupply at times when the milk flow is greatest. From the standpoint of community prosperity the development of a dairy industry has uniformly proved to be a pronounced asset.

The pasteurizing plant in Tarboro is a municipally owned plant. Aside from the fact that the town operates the plant without profit,

there is no reason why a plant of this kind should not be operated by a dairymen's mutual stock company, or some other kind of private company. In fact, it may be stated as a principle that the entrance of a municipality into this field should be only to perform a service which private interests decline to undertake. The release of the pasteurizing business to private interests should be welcomed as soon as the industry is ready to take it over without loss to the municipality, and to submit to supervision and control by the municipality over the product of the plant.

Appendix

AN ORDNINANCE TO PROVIDE FOR A SAFE MILK SUPPLY IN TARBORO, N. C.

SECTION 1. The terms "milk" and "cream" used in this ordinance, unless otherwise designated, shall be taken to mean fresh, whole milk and sweet cream, respectively.

SEC. 2. After _____ (Date) it shall be unlawful for any milk or cream to be sold for human consumption in the town of Tarboro which shall not have been previously pasteurized in accordance with the standards set forth in this ordinance.

SEC. 3. For the purpose of aiding in the requirements of this ordinance the town of Tarboro shall at once establish a municipal milk plant, where milk may be sold by the producers and where said milk shall be bottled, pasteurized, and then distributed to consumers in the town of Tarboro.

SEC. 4. No milk may be sold in the town of Tarboro except by persons having a license for this purpose, which license shall have been obtained from the county health officer. Such license must be renewed yearly and is subject to cancellation at any time in case of violation of any of the provisions of this ordinance by the licensee.

SEC. 5. The licensee shall furnish monthly, on forms provided for this purpose, a signed statement setting forth the fact that so far as applicable to him or her all the provisions of this ordinance have been faithfully complied with. Failure to supply such statement, or any reason to doubt the accuracy thereof, shall constitute sufficient cause for temporary or permanent suspension of the privileges of said license, in accordance with the gravity of the case.

SEC. 6. No cow may be kept within the limits of the town of Tarboro without a permit from the county health officer, which permit shall remain in force during the time said cow is in the possession of said owner, provided no cause shall have arisen to justify the revoking of said permit.

SEC. 7. The processes of production and handling of milk on the part of the producers must conform to the principles of common cleanliness throughout and must be such that milk delivered at the pasteurizing plant shall be free of any gross evidence of dirt, as shown by the cotton filter test.

SEC. 8. Immediately after milking the milk must be cooled to a temperature of 60° F. or lower, unless delivered at the plant within two hours from the time of milking.

SEC. 9. It shall be unlawful either to add to or subtract from milk or cream any substance which would alter the chemical or bacteriological character of said milk, when offered as such for sale or barter in the town of Tarboro.

SEC. 10. It shall be unlawful to offer for sale or barter in the town of Tarboro any milk or milk products derived from any cow known or suspected to be suffering from any diseased or unhealthy condition, or from any cow before nine days days after calving.

SEC. 11. No milk or cream which shows any signs whatsoever of deterioration shall be marketable for human consumption in the town of Tarboro: *Provided*, Nothing in this section shall be construed to prohibit the sale of the following milk products: Skim milk, sour milk, sour cream, buttermilk, whey and clabber. In each case these products must undergo pasteurization as prescribed for sweet milk and cream, and when delivered the container must bear a label stating the contents thereof.

SEC. 12. The price of milk delivered to the pasteurizing plant shall be determined by the town council. Also, the price of milk delivered by the plant to the consumer shall be determined by said town council.

SEC. 13. Upon receipt of milk at the pasteurizing plant it shall be immediately transferred to bottles whose interior is clean and sterile.

SEC. 14. All milk having been bottled as in section 13 shall be pasteurized in the bottle by raising the temperature of the milk to 145° F. and holding it at or near this point for 30 minutes, after which it shall be immediately cooled down to 55° F. or lower, and held at or near this point until delivery.

SEC. 15. The sanitary management of the pasteurizing plant and the process of pasteurization shall be under the supervision and control of the county health officer.

SEC. 16. The floors and walls of the pasteurizing plant and the machinery and utensils used in the plant shall be kept at all times in a state of cleanliness. The plant and the operation of the same shall be at all times open to inspection by the citizens of Tarboro.

SEC. 17. A temperature record shall be made throughout each pasteurization by means of a chart placed upon the dial of recording thermometer. These charts shall be dated, certified as to their correctness, and submitted to the county health officer daily. They shall then be preserved as permanent records by the county health officer.

SEC. 18. One delivery daily shall be made, which shall endeavor to reach customer at or near the same hour of each day.

SEC. 19. No milk will be delivered except in return for coupons, which shall have been previously purchased for this purpose.

SEC. 20. Customers shall be held responsible for bottles in their possession, and for the loss of same by breakage, or, otherwise, shall be required to reimburse the town at the current price for such bottles.

SEC. 21. Bottles left by the deliveryman on any certain day shall be properly washed and returned to the deliveryman within two days.

SEC. 22. The town of Tarboro reserves the right to refuse to buy milk not produced and handled in accordance with the rules prescribed herein for the production and handling of milk. The town of Tarboro likewise reserves the right to refuse to sell milk, except to customers who conform to the rules herein prescribed for milk consumers.

SEC. 23. Violation of any of the provisions of this ordinance shall constitute a misdemeanor, and a fine of $5 shall be imposed upon any person found guilty of such violation.

The foregoing ordinance governed the operations of the Tarboro milk plant up to the early part of 1925, when it was replaced by another ordinance based on the "Standard Ordinance" developed by Associate Sanitary Engineer L. C. Frank, of the United States Public Health Service.[1] The ordinance of Mr. Frank has been

[1] A State-wide Milk Sanitation Program. By Leslie C. Frank. Pub. Health Reports, vol. 39, No. 45, Nov. 7, 1924. (Reprint No. 971.)

adopted by the North Carolina State Board of Health as its standard. It has many points of value, chief among which is the principle of milk grading. Its operation virtually assures a substantial improvement in the quality of milk when delivered at the plant. This ordinance, moreover, does not alter the requirement for pasteurization of all milk sold in the town of Tarboro.

PUBLIC HEALTH NURSING[1]

By J. G. TOWNSEND, Surgeon, United States Public Health Service

Public health nursing, as a specialized branch of general nursing, has been a natural development of the early work of ministration carried on by the bishops, priests, and deacons of the early church. In reviewing the history of the early church and its work of visitation among the poor, we find what might be called "visiting nursing work," in the third century, as a part of the church duty, with the following instructions:

> He is to minister to the infirm, to strangers and widows, to be a father to orphans, to go about into the houses of the poor to see if there is anyone in need, sickness, or any other adversity; he is to care for and give information to strangers; he is to wash the paralytic and infirm that they may have refreshment in their pains * * * He is also to visit inns and see if any poor or sick have entered or *any dead are in them.*

For some reason or other, however, this work was abandoned by the church, and from 600 to 1600 A. D. there was no organized care of the sick in their homes.

Prior to the time of Vincent de Paul (1580–1660), visitations to the sick, and their relief, were on a basis of pure charity, rich and prosperous individuals contributing to the wants and needs of the so-called poor, there being no methods of determination as to what really constituted poverty. Vincent de Paul was the first to introduce the aspect of social service in home visits. He saw that charity had been carried too far in that pauperizing was somewhat encouraged. He believed that promiscuous giving was harmful, and rightfully insisted that the condition of the poor should be investigated to learn the cause of their poverty, whether or not it was possible to get them employment, and, briefly, to put them in such a condition that they could help themselves. He did not believe in sending the individual member to the various asylums or hospitals, but thought instead that the family unit should be kept intact, even if it was necessary at times to pay the rent or lend home furnishings.

[1] Read at the annual convention of the State nurses and health officers of West Virginia, Clarksburg, W. Va., Sept. 25, 1925.

This was indeed a modern step for those times and is practically what social service in connection with public health nursing does at the present time.

In the meantime, the standards of the nursing profession, through the wonderful efforts of Florence Nightingale, were being raised to a point never before thought of. Miss Nightingale's work in the Crimea fortunately brought to her attention the dire need for trained nurses, with the proper interpretation of what the word "trained" means. As a result, in 1860 the first school for nurses was opened with an enrollment of 15 students. They were to have one year's training in the wards of the hospital, after which they were expected to remain for one or two years as full-fledged nurses. It was these 15 nurses, disciples of Miss Nightingale, who, in their turn, acted as teachers and from whose efforts the nursing profession as we know it to-day had its real beginning.

With the nursing personnel as it was in those times, it was possible to extend better scientific care, in the matter of district and home nursing, to the poor. William Rathbone of Liverpool, England, has been credited with being the first to inaugurate district nursing. At an early age he was always interested in the problems of the poor; and in a practical way he learned their needs, by making personal visits through the courts and alleys, calling from house to house, learning something of their habits and difficulties and, with it all, seeing their great need for medical attention, visioning, I suppose, in his own mind how much could be accomplished with systematic visitations by a trained personnel to advise them regarding general and personal hygiene.

In order to try out his theories in a practical way and to see whether the suffering and misery of the sick could not be alleviated by proper nursing and home conditions improved by instructions in hygiene, he employed a nurse who had been attending his wife, and at his own expense, obtained her cooperation in making these visits.

The reports of these visits are most interesting. We learn that the nurse was instructed not only to give nursing care to the sick, but to teach the families how to take care of themselves and of their own sick and how to lead the proper kind of lives. So here again we find social service work inevitably bound up with visiting nursing, the public health nurse becoming the social service worker as well.

The results of this feeble beginning were so satisfactory that, in 1859, with the aid of Miss Nightingale, other nurses were put on duty and of course the work grew.

In reviewing an account of this work, we have found a tendency, and a right one, to get away as far as possible from actual medica-

tion and to emphasize to the limit public health hygiene and prophylaxis, even though the knowledge of the prevention of infectious diseases in that day and time was meager. We read that, in those times, nurses were "urged over and over again" not to pauperize the patient by giving medical comforts unless they were actually necessary. Florence Nightingale also saw this danger and said: "If district nurses begin by giving relief they will end by doing nothing but giving relief."

In modern public health nursing of to-day we are, in the same way, cautioning the public health nurse not to fall into the error of practicing, to a great extent at least, bedside treatment—to remember that her duty is to preach prevention and to leave the treatment end of the disease to the practical nurse or practitioner.

Public health nursing in this country was rather slow in developing. In 1828 Doctor Warrington, of Philadelphia, only 23 years of age, inaugurated the society of district nursing. At first it was merely for the purpose of qualified nursing attendance to poor women in childbirth, but the work was gradually extended to take care of all classes of cases. The first charter of this organization read: [to] "Provide, sustain, and cause to be instructed, as far as possible, pious and prudent women as nurses, it being understood that the association does not confine itself to the supply of monthly nurses only, but for every variety of sickness of patients."

A district nursing organization was started in Boston in 1886, and in 1888 the association was incorporated under the name "Instructive District Nursing Association," with the purpose not only of caring for the sick but for giving them instruction in home nursing and public health. The objects of the association were stated to be—

1. To provide and support thoroughly trained nurses who, acting under the immediate direction of the out-patient physicians of the Boston Dispensary, shall care for the sick poor in their own homes instead of in hospitals.

2. By precept and example to give such instruction to the families which they are called upon to visit as shall enable them henceforth to take better care of themselves and their neighbors by observing the rules of wholesome living and by practicing the simple arts of domestic nursing.

So, again, we see that the idea of public-health instruction as a fundamental and most important duty of public health nursing was all-prominent. This phase was being gradually accepted by all as the most sensible way of carrying on public health nursing, the nurse thinking more of the community as a patient than of the individual sick.

In 1893 Isabel Hampton, in an address to the International Congress of Nurses, said:

In district nursing we are confronted with conditions which require the highest order of work, but the actual nursing of the patient is the least part of what her

work and influence should be among the class which the nurse will meet with. To this branch of nursing no more appropriate name can be given than "Instructive nursing," for educational, in the best sense of the word, it should be.

The first special work in district nursing was undertaken in London in 1892, when a staff of visiting nurses was organized to visit the schools and inspect school children. However, the honor of inaugurating school nursing in American is due to Miss Wald, founder of the Henry Street Settlement, who in 1902 suggested the use of nurses to supplement the work of doctors in the schools of New York. Medical inspection of school children had been in vogue in the schools before that time, but it was merely a perfunctory examination by a physician, the only thing accomplished being the exclusion of the child, nothing being done to prevent the cause of the illness, or a visitation at the homes of the school children to carry the principle and gospel of prevention of disabling illnesses.

During these times of demonstrations in public health nursing and the arousing of public interest in these demonstrations, gradual progress was being made in the requirements of those who wished to enter the nursing and medical professions. While nursing was reaching the plane which it has now attained as a profession, wonderful strides were being made in the medical profession toward the prevention of diseases, such as the use of antitoxin against diphtheria, inoculation to prevent typhoid fever, and the valuable work now being carried on toward the standardization of antitoxin against scarlet fever. The dangers of neglected teeth, the tonsil and adenoid evil, and the value of scientific baby care began to be considered by the laity along with their previous ideas of safeguarding the health of cattle and hogs.

Dental prophylaxis, the outline of programs for prenatal hygiene, and the development of intensive school programs are all accomplishments which demand highly trained nurses in the public-health field for service in all recognized full-time health departments.

In the early history of public-health nursing we find that it had its inception in centers of population—the cities. Those who lived in the country and in rural districts were indeed deemed fortunate. Living in the country (and the same idea has held to the present day) was thought to be a protection against sickness. For this reason public health of rural communities has been, and still is, greatly neglected. Thirteen years ago there was not one full-time county health department in the United States among the three thousand and odd counties composing this country.

We finally awoke to the fact that a real health problem existed in the country, and one of even greater importance than the urban health question. The death rate was higher, the morbidity index was higher, and the rural dweller did not have a protected water

supply, a protected milk supply, or proper methods of sewage disposal, as provided by ordinances in cities. Therefore, he drifted along by himself, contracting typhoid fever from his own water supply, polluted by his own sewage, and blaming the causation of the disease on God, the devil, tin cans, weeds, or whatever came to his mind.

It took us a long time to realize these things, but since that realization full-time county health units have been organized and are in operation in over 280 counties in the country, with new ones developing every year through the financial cooperation of the United States Public Health Service, the International Health Board, and the State boards of heath.

I know of no greater service in public-health nursing than is given by nurses working in full-time county health units. Nor do I know of any better way in which a nurse can produce real service in virgin fields than in this branch of nursing work, which in itself is a *specialized* branch of the profession.

Just because an individual has M. D. after his name is no index at all that he will make a health officer; just because an individual has R. N. after her name is no index that she will make a good public-health nurse. In both instances it is absolutely essential that certain periods of training and practical experience be undertaken before the proper qualifications can be attained in this special field. The great difficulty experienced in the development of full-time county health departments is to find properly qualified public-health officers and properly qualified public health nurses.

The part which the public-health nurse of to-day plays in the general scheme of full-time health service—municipal or rural—is elaborated very much in detail in a report of the "Committee to Study Visiting Nursing," instigated by the National Organization for Public Health Nursing, with the assistance of the Metropolitan Life Insurance Co.

This committee, in an effort to valuate the present status of visiting nurse associations and learn their cost, made a study of public health nursing in 14 communities in various localities of the United States, including rural nursing as well as work in large and small cities. The various types of nursing work carried out in the various cities were as follows:

Maternity nursing:
- Prenatal.
- Delivery.
- Postpartum.

Infant welfare.
Child welfare (preschool):
- Orthopedica.
- Nutrition.

School nursing.
General medical and surgical nursing.
Acute communicable disease nursing:
- Tuberculosis nursing.
- Venereal disease nursing.

Health education.
Industrial nursing.
Nursing of chronics.
Mental hygiene.

In the summary of conclusions and recommendations in this exhaustive report it is recommended that—

1. Every agency should have an established routine for introducing new nurses into the work of the agency.

2. In addition to the initial period, there should be a more or less continuous staff educational program.

3. Adequate supervision is essential to the efficient administration of every public health nursing agency.

Of course there are other recommendations regarding the cost of nursing and routine methods of operation, but I mention the above to emphasize that, in present-day programs, there is a continual cry for well-trained personnel, in realization of the fact that public-health nursing is indeed a separate and distinct specialty of your profession.

Last year the United States Public Health Service, through Miss Lucy Minnigerode, superintendent of nurses, sent a questionnaire to all State departments of health, in order to obtain information as to the status of public-health nursing as it is carried on by the several States.

It was learned that 17 States and the Philippine Islands have separate divisions or bureaus of public-health nursing; 8 States have bureaus of public-health nursing and child hygiene combined; 10 States have only bureaus of child hygiene; and 11 States andAlaska have no bureau of nursing of any description. A few States were not heard from.

The duties performed by the nurses in these State health departments included the following:

1. Child health conferences and demonstrations.
2. Organization of volunteer services.
3. Classes for midwives and mothers, with prenatal instructions.
4. School nursing, physical examination of school children, inspections.
5. Health educational work and health talks.
6. Follow up of clinic and school cases.
7. Maternal and infant hygiene under the Sheppard-Towner Act.

It might not be amiss to give verbatim a few quotations from some of the State health officers regarding their ideas of public-health nursing as an aid in the State health program. One health officer said:

"Public-health nursing is an indispensable aid, since the success of the entire program depends upon education of the public, and the public-health nurse is the best teaching agent we have yet found for dealing with individuals and families in the home."

Another said:

"Next to an efficient director, an efficient public-health nurse is the most important part of any public-health unit."

Still another:

"It would take a manuscript to answer such a question as this."

And another:

"Much of the program of the State board of health is made possible through the cooperation of local public health nursing services."

With the need for public-health nurses, which we all can appreciate to-day, it is hoped that the time is not far distant when theoretical and practical teaching in the public-health field will be a part of the nurse's training. At least the problem can be given to the probationer; and if she feels the call of the public-health field, provision should be made to have her located with successfully functioning units, in order to get practical training to supplement her lectures.

A start has been made in courses in public-health nursing which are in vogue at certain universities in the country; but the number offering these facilities is certainly all too few to supply the demand now existing for this type of health endeavor.

In the work of a State board of health, the fundamental problem is the rural one. For that reason much concentration and labor are being expended in the development of new full-time county health projects and the standardization of those now in operation. No rural health unit is complete without a nurse or nurses on the staff. The duties of these nurses are familiar to all of you—visits to schools, assisting in the inoculation and vaccination of school children, visits to contagious-disease cases, assistance in the keeping of records, giving health talks, and the like. With these duties it is all-imperative that the rural health nurse develop an attitude of social service.

Social service has been a much misused term because its practical application has not been conducive to the best results, at least in some places. Certainly social service has a place in the public-health nursing program. But all too often we are prone to think of social service in terms of social uplift. The average person visited resents any attitude on the part of the visiting agency implying that he needs to be uplifted socially, and we can hardly blame him. Social service should carry with it a neighborly and friendly advice which will help the family out of their difficulties. For example, a visiting nurse finds a case of tuberculosis in a family. The wage earner in the family goes to work every day in the factory and is in such a condition that tuberculosis might easily develop. It is not enough merely to say that the individual should seek another line of work where he would not be subjected to the stifling atmosphere of the factory. Real social service goes a step farther and tries to find for that man a position which would be best applicable to his case.

It is not meant that real social-service work should be the crowning duty of the public-health nurse, but a part of her duty which is so interwoven and so cemented with her work that she can not escape it. This is especially so in the communities in which we are laboring.

In our enthusiasm for better rural health work, there is always the danger of overdeveloping specialized health service. I have been in counties where I have found a nurse attached to the county health unit doing routine work; a nurse on duty with the tuberculosis association, looking up tuberculosis cases for specific diagnosis; a nurse placed on duty especially by the public schools of the county for the purpose of school inspection; a nurse representing the Red Cross; and, in some places the Metropolitan Life Insurance Co. is doing most valuable work in the public-health units among the policyholders of its company.

The result of this specialized, officially uncorrelated service is confusing and overlapping; and, in my own mind, there is a question as to whether the maximum results can be obtained by such service. Only recently I was talking to the health officer of a large city where various agencies were carrying on public-health work in this way. I was told by him that, in one day, a home which occupied a rather strategic position just outside of the city was visited by five different nurses. I can imagine the feeling of the householder when the fifth nurse arrived. One visit should have been enough to obtain all of the information that all of these different agencies wished to learn.

It is not desired that the individuality of these different organizations be taken away, but it is essential at least that they report their findings to the county health board or the county health officer as the case may be. If the health officer wishes a case of tuberculosis investigated, there does not seem to be any valid reason why he should not call upon the tuberculosis nurse or the Red Cross nurse to assist in the work, and no valid reason why the nurse placed on duty by the school board should not assist in the school examinations.

If this correlation existed, we would find, in many counties, smoothly working machines with an adequate nursing force to take care of all their needs. As a matter of fact, in one of our Western States last year the county tuberculosis association actually amalgamated with the county health unit in the support of its program and for the better attainment of the purposes of both the county health unit and the county tuberculosis association.

As yet public health nursing is in its infancy. The future holds unlimited service for this branch of your profession. The difficulty is to find the workers; and it is our duty as public-health workers to present this problem before the nursing profession with a plea for the "trained" worker. This plea has been continuous from the days of the early church; it is urgent now and will be ever sounding in the future.

(NOTE: An abstract of "Evolution of Public Health Nursing," by Annie M. Brainard, furnished some of the historical data used in this article.)

DEATHS DURING WEEK ENDED OCTOBER 24, 1925

Summary of information received by telegraph from industrial insurance companies for week ended October 24, 1925, and corresponding week of 1924. (From the Weekly Health Index, October 28, 1925, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Oct. 24, 1925	Corresponding week, 1924
Policies in force	61, 666, 572	57, 441, 567
Number of death claims	11, 350	10, 450
Death claims per 1,000 policies in force, annual rate	9. 6	9. 5

Deaths from all causes in certain large cities of the United States during the week ended October 24, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, October 28, 1925, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Oct. 24, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate week ended Oct. 24, 1925 [2]
	Total deaths	Death rate [1]		Week ended Oct. 24, 1925	Corresponding week, 1924	
Total (65 cities)	6,599	12.0	10.9	758	689	[3] 63
Akron	34			1	8	11
Albany [4]	29	12.6	15.4	3	2	65
Atlanta	68			7	9	
Baltimore [4]	215	14.1	13.5	24	21	72
Birmingham	50	12.7	15.3	8	10	
Boston	185	12.3	12.4	24	21	63
Bridgeport	22			3	2	48
Buffalo	167	15.7	11.9	10	15	40
Cambridge	23	10.7	10.2	3	1	50
Camden	34	13.8	12.4	6	7	95
Chicago [4]	599	10.4	9.1	73	64	65
Cincinnati	124	15.8	15.6	10	14	59
Cleveland	182	10.1	6.6	18	17	45
Columbus	73	13.6	15.7	2	10	18
Dallas	48	12.9	11.9	11	6	
Denver	92	17.1	17.0	12	11	
Des Moines	29	10.1	7.9	1	1	17
Detroit	259	10.8	8.5	47	35	81
Duluth	25	11.8	5.8	7	1	151
Erie	23			5	2	97
Fall River [4]	22	9.5	13.8	5	4	73
Flint	20	8.0	8.0	4	4	63
Fort Worth	18	6.2	6.7	3	4	
Grand Rapids	41	14.0	8.8	4	3	63
Houston	47	14.9	12.4	5	4	
Indianapolis	101	14.7	14.1	12	5	85
Jersey City	67	11.1	11.2	14	3	99
Kansas City, Kans	34	14.3	12.8	6	1	119
Kansas City, Mo	78	11.1	11.6	8	8	
Los Angeles	193			24	12	66
Louisville	90	18.1	13.9	11	9	92
Lowell	15	6.7	12.6	0	5	0
Lynn	15	7.5	5.0	2	0	50
Memphis	50	14.9	15.4	4	7	
Milwaukee	98	10.2	8.1	17	1	78
Minneapolis	77	9.4	10.0	3	4	16
Nashville [4]	43	16.5	22.8	8	14	
New Bedford	28	10.8	10.6	3	4	49
New Haven	42	12.2	11.6	4	3	52
New Orleans	151	19.0	14.3	9	12	

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1924. Cities left blank are not in the registration area for births.
[3] Data for 60 cities.
[4] Deaths for week ended Friday, Oct. 23, 1925.

Deaths from all causes in certain large cities of the United States during the week ended October 24, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, October 28, 1925, issued by the Bureau of the Census, Department of Commerce) —Continued

City	Week ended Oct. 24, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate week ended Oct. 24, 1925
	Total deaths	Death rate		Week ended Oct 24, 1925	Corresponding week, 1924	
New York	1,247	10.7	10.2	145	125	58
Bronx Borough	154	8.9	7.7	14	7	48
Brooklyn Borough	418	9.7	8.8	40	47	41
Manhattan Borough	554	12.8	12.2	76	58	79
Queens Borough	98	8.9	9.8	12	9	56
Richmond Borough	23	9.0	17.2	3	4	54
Newark, N. J.	97	11.2	10.9	11	13	50
Norfolk	28			5	2	92
Oakland	51	10.5	8.9	5	2	57
Oklahoma City	20			6	3	
Omaha	68	16.8	10.8	5	4	51
Paterson	28	10.3	11.1	2	4	34
Philadelphia	498	13.1	11.3	59	52	74
Pittsburgh	166	13.7	16.1	24	29	80
Portland, Oreg	71	13.1	9.6	6	9	60
Providence	63	13.4	9.6	8	8	63
Richmond	37	10.4	12.5	8	3	96
Rochester	77	12.1	10.1	12	6	96
St. Louis	192	12.2	12.4	13	19	
St. Paul	52	11.0	12.2	4	6	34
Salt Lake City [1]	23	9.2	15.0	1	3	15
San Antonio	51	13.4	10.6	5	7	
San Diego	29	14.3	16.8	0	4	0
San Francisco	150	14.0	10.6	9	6	52
Schenectady	19	9.7	4.2	2	2	56
Seattle	59			2	4	19
Somerville	26	13.3	6.7	4	0	106
Spokane	30	14.4	10.5	2	2	45
Springfield, Mass	32	10.9	12.3	3	5	44
Syracuse	42	11.4	10.5	6	5	75
Tacoma	22	11.0	10.1	1	1	23
Toledo	75	13.6	10.2	11	7	99
Trenton	28	11.1	16.1	5	4	82
Washington, D. C.	134	14.0	12.6	11	13	62
Waterbury	22			5	5	107
Wilmington, Del	28	12.0	10.4	3	4	68
Worcester	51	13.4	12.3	7	3	80
Yonkers	16	7.5	6.2	1	3	22
Youngstown	25	8.2	9.7	4	9	49

[1] Deaths for week ended Friday, Oct. 23, 1925.

PREVALENCE OF DISEASE

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

UNITED STATES

CURRENT WEEKLY STATE REPORTS

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

Reports for Week Ended October 31, 1925

ALABAMA

	Cases
Chicken pox	2
Dengue	4
Diphtheria	68
Influenza	28
Malaria	50
Measles	8
Mumps	13
Ophthalmia neonatorum	5
Pellagra	8
Pneumonia	21
Scabies	1
Scarlet fever	21
Smallpox	20
Tetanus	2
Tuberculosis	68
Typhoid fever	43
Whooping cough	9

ARIZONA

Chicken pox	23
Diphtheria	2
Mumps	2
Paratyphoid fever	1
Scarlet fever	16
Trachoma	1
Tuberculosis	29
Whooping cough	7

ARKANSAS

Chicken pox	3
Diphtheria	16
Hookworm disease	1
Influenza	65
Malaria	36
Pellagra	9
Poliomyelitis	1
Tuberculosis	5
Typhoid fever	38
Whooping cough	4

CALIFORNIA

	Cases
Anthrax—Fresno County	1
Diphtheria	108
Influenza	14
Lethargic encephalitis:	
San Francisco	1
San Mateo	1
Measles	12
Poliomyelitis:	
Glendale	1
Los Angeles County	1
Marysville	1
Shasta County	1
Scarlet fever	70
Smallpox:	
Los Angeles	5
Oakland	5
Richmond	8
Sacramento	6
Scattering	6
Typhoid fever	12

COLORADO
(Exclusive of Denver)

Chicken pox	21
Diphtheria	41
Measles	2
Mumps	4
Pneumonia	4
Poliomyelitis	1
Scarlet fever	10
Tuberculosis	44
Typhoid fever	16
Whooping cough	13

CONNECTICUT

Chicken pox	51
Conjunctivitis (infectious)	1
Diphtheria	36
German measles	3

CONNECTICUT—continued

	Cases
Influenza	5
Malaria	1
Measles	49
Mumps	7
Pneumonia (bronchial)	12
Pneumonia (lobar)	38
Scarlet fever	44
Septic sore throat	4
Tetanus	2
Tuberculosis (all forms)	29
Typhoid fever	3
Whooping cough	30

DELAWARE

Chicken pox	5
Diphtheria	9
Pneumonia	2
Scarlet fever	4
Tuberculosis	1
Typhoid fever	9

FLORIDA

Chicken pox	2
Diphtheria	14
Influenza	1
Malaria	14
Measles	1
Pneumonia	1
Scarlet fever	1
Tuberculosis	11
Typhoid fever	6
Whooping cough	3

GEORGIA

Chicken pox	2
Conjunctivitis (acute)	2
Diphtheria	37
Dysentery	7
Hookworm disease	1
Influenza	41
Malaria	26
Mumps	14
Pellagra	2
Pneumonia	25
Poliomyelitis	2
Scarlet fever	6
Septic sore throat	13
Smallpox	2
Tuberculosis	14
Typhoid fever	36
Typhus fever	1
Whooping cough	46

ILLINOIS

Cerebrospinal meningitis:	
Cook County	2
Mercer County	1
Winnebago County	1
Diphtheria:	
Cook County	92
Scattering	37
Influenza	15
Measles	61
Pneumonia	216

ILLINOIS—continued

	Cases
Poliomyelitis:	
Christian County	1
Coles County	2
Cook County	1
Henry County	1
McLean County	1
Tazewell County	1
Scarlet fever	240
Smallpox:	
Cook County	1
McLean County	25
Scattering	1
Tuberculosis	212
Typhoid fever:	
Cook County	3
Massac County	5
Scattering	48
Whooping cough	142

INDIANA

Cerebrospinal meningitis	1
Chicken pox	80
Diphtheria	89
Influenza	60
Measles	3
Pneumonia	10
Poliomyelitis	3
Scarlet fever	121
Smallpox	25
Trachoma	1
Tuberculosis	51
Typhoid fever	26
Whooping cough	59

KANSAS

Botulism	1
Chicken pox	69
Diphtheria	43
Influenza	4
Measles	5
Mumps	8
Pellagra	1
Pneumonia	25
Poliomyelitis:	
Florence	1
Jamestown	1
Kingman	1
Republic City	1
Robinson	1
Wichita	1
Rabies	1
Scabies	3
Scarlet fever	56
Smallpox	16
Tuberculosis	119
Typhoid fever	22
Whooping cough	26

LOUISIANA

Diphtheria	42
Influenza	25
Leprosy	1
Malaria	25
Pneumonia	24
Poliomyelitis	1
Scarlet fever	8
Tuberculosis	31
Typhoid fever	42
Whooping cough	16

MAINE

	Cases
Chicken pox	10
Diphtheria	4
Dysentery	3
German measles	2
Influenza	2
Measles	1
Mumps	10
Pneumonia	13
Scarlet fever	30
Tuberculosis	7
Typhoid fever	14
Whooping cough	32

MARYLAND [1]

Cerebrospinal meningitis	1
Chicken pox	54
Diphtheria	39
Dysentery	6
German measles	1
Influenza	18
Lethargic encephalitis	1
Malaria	3
Measles	28
Mumps	31
Ophthalmia neonatorum	1
Paratyphoid fever	1
Pneumonia (broncho)	30
Pneumonia (lobar)	8
Poliomyelitis	4
Scarlet fever	27
Tetanus	1
Tuberculosis	36
Typhoid fever	40
Typhus fever	1
Vincent's angina	1
Whooping cough	54

MASSACHUSETTS

Cerebrospinal meningitis	1
Chicken pox	138
Conjunctivitis (suppurative)	24
Diphtheria	112
Dysentery	1
German measles	12
Influenza	4
Lethargic encephalitis	1
Malaria	1
Measles	414
Mumps	26
Ophthalmia neonatorum	19
Pellagra	1
Pneumonia (lobar)	95
Poliomyelitis	4
Scarlet fever	179
Septic sore throat	2
Trachoma	1
Tuberculosis (pulmonary)	102
Tuberculosis (other forms)	11
Typhoid fever	16
Whooping cough	173

[1] Week ended Friday.

MICHIGAN

	Cases
Diphtheria	106
Measles	49
Pneumonia	109
Scarlet fever	173
Smallpox	11
Tuberculosis	45
Typhoid fever	39
Whooping cough	108

MINNESOTA

Chicken pox	71
Diphtheria	84
Influenza	1
Measles	5
Pneumonia	2
Poliomyelitis	18
Scarlet fever	162
Smallpox	1
Tuberculosis	90
Typhoid fever	4
Whooping cough	36

MISSISSIPPI

Diphtheria	35
Scarlet fever	13
Typhoid fever	20

MISSOURI

Chicken pox	33
Diphtheria	78
Influenza	19
Measles	4
Mumps	9
Ophthalmia neonatorum	1
Pneumonia	25
Poliomyelitis	4
Scarlet fever	127
Septic sore throat	1
Smallpox	2
Trachoma	2
Tuberculosis	73
Typhoid fever	25
Whooping cough	40

MONTANA

Chicken pox	42
Diphtheria	2
Measles	1
Mumps	87
Scarlet fever	37
Smallpox	1
Tuberculosis	3
Typhoid fever	14
Whooping cough	1

NEW JERSEY

Cerebrospinal meningitis	1
Chicken pox	111
Diphtheria	107
Influenza	3
Measles	67
Pneumonia	113

NEW JERSEY—continued

	Cases
Poliomyelitis	2
Scarlet fever	74
Trachoma	1
Typhoid fever	23
Whooping cough	47

NEW MEXICO

Chicken pox	6
Diphtheria	4
Measles	2
Mumps	1
Pneumonia	1
Poliomyelitis	1
Scarlet fever	10
Tuberculosis	12
Typhoid fever	20
Whooping cough	15

NEW YORK

(Exclusive of New York City)

Cerebrospinal meningitis	2
Chicken pox	11
Diphtheria	124
Influenza	6
Lethargic encephalitis	3
Measles	290
Mumps	1
Pneumonia	170
Scarlet fever	145
Tuberculosis	4
Typhoid fever	58
Whooping cough	137

NORTH CAROLINA

Chicken pox	17
Diphtheria	159
German measles	2
Measles	12
Scarlet fever	77
Septic sore throat	6
Smallpox	4
Typhoid fever	14
Whooping cough	26

OKLAHOMA

(Exclusive of Tulsa and Oklahoma City)

Chicken pox	4
Diphtheria	37
Influenza	104
Malaria	56
Measles	4
Pellagra	6
Pneumonia	12
Scarlet fever	14
Smallpox—Kay	1
Typhoid fever:	
Leflore	8
Pittsburg	8
Scattering	83
Whooping cough	17

[1] Deaths.

OREGON

	Cases
Chicken pox	16
Diphtheria	21
Influenza	13
Measles	2
Mumps	19
Pneumonia	[1] 6
Scarlet fever	35
Septic sore throat	3
Smallpox	17
Tuberculosis	6
Typhoid fever	4
Whooping cough	10

SOUTH DAKOTA

Chicken pox	1
Diphtheria	12
Mumps	29
Pneumonia	3
Poliomyelitis	2
Scarlet fever	16
Smallpox	2
Tuberculosis	2
Typhoid fever	7
Whooping cough	11

TEXAS

Dengue	1
Diphtheria	17
Influenza	3
Measles	2
Pneumonia	1
Scarlet fever	16
Tuberculosis	18
Typhoid fever	10
Whooping cough	10

UTAH

Chicken pox	48
Diphtheria	7
Measles	5
Mumps	8
Pneumonia	3
Scarlet fever	15
Tuberculosis	4
Typhoid fever	11
Whooping cough	20

VERMONT

Chicken pox	17
Diphtheria	4
Measles	4
Mumps	19
Poliomyelitis	2
Scarlet fever	9
Whooping cough	53

WASHINGTON

Cerebrospinal meningitis—Spokane	1
Chicken pox	97
Diphtheria	20
German measles	2
Measles	3

WASHINGTON—continued

	Cases
Mumps	23
Poliomyelitis:	
King County	1
Kitsap County	1
Pierce County	1
Seattle	2
Tacoma	3
Vancouver	1
Scarlet fever	93
Smallpox	29
Tuberculosis	6
Typhoid fever	7
Whooping cough	19

WISCONSIN

Milwaukee:	
Chicken pox	55
Diphtheria	25
Influenza	1
Measles	2
Mumps	9
Ophthalmia neonatorum	1
Pneumonia	23
Scarlet fever	18
Tuberculosis	6
Typhoid fever	5
Whooping cough	32

WISCONSIN—continued

Scattering:	Cases
Cerebrospinal meningitis	1
Chicken pox	72
Diphtheria	27
German measles	7
Influenza	24
Measles	110
Mumps	36
Pneumonia	6
Poliomyelitis	14
Scarlet fever	100
Smallpox	2
Tuberculosis	21
Typhoid fever	17
Whooping cough	63

WYOMING

Chicken pox	19
Diphtheria	1
Measles	2
Mumps	1
Pneumonia	1
Scarlet fever	8
Septic sore throat	1
Smallpox	2
Typhoid fever	5
Whooping cough	2

Reports for Week Ended October 24, 1925

DISTRICT OF COLUMBIA

	Cases
Chicken pox	2
Diphtheria	17
Lethargic encephalitis	2
Measles	1
Pneumonia	27
Scarlet fever	26
Tuberculosis	16
Typhoid fever	1
Whooping cough	8

NORTH DAKOTA

Diphtheria	11
German measles	1
Mumps	10
Paratyphoid fever	4
Pneumonia	6
Poliomyelitis	3

NORTH DAKOTA—continued

	Cases
Scarlet fever	18
Trachoma	1
Tuberculosis	1
Typhoid fever	32
Whooping cough	6

SOUTH CAROLINA

Dengue	11
Diphtheria	44
Influenza	171
Malaria	234
Poliomyelitis	3
Scarlet fever	16
Smallpox	10
Tuberculosis	35
Typhoid fever	34
Whooping cough	37

SUMMARY OF MONTHLY REPORTS FROM STATES

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

State	Cerebrospinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
June, 1925										
Hawaii Territory	2	25	21	----	59	----	1	0	----	16
July, 1925										
District of Columbia	0	19	0	----	68	1	2	18	0	9
September, 1925										
California	11	376	35	21	74	4	104	225	91	120
District of Columbia	0	31	0	----	8	0	4	32	0	16
Georgia	5	83	39	238	10	16	2	19	3	243
Kansas	14	56	8	2	25	3	38	114	0	166
Maine	1	14	1	0	4	0	3	36	0	49
Mississippi	----	151	181	10,152	180	520	7	37	48	516
Montana	----	19	----	1	5	----	7	66	5	81
Oregon	8	54	3	----	8	----	7	66	16	33
South Dakota	----	23	4	----	3	----	3	108	5	23
Washington	3	101	----	----	7	----	30	98	63	82
Wyoming	1	15	3	----	1	----	2	25	1	8

PLAGUE-ERADICATIVE MEASURES IN THE UNITED STATES

The following items were taken from the reports of plague-eradicative measures from the cities named:

Los Angeles, Calif.

Week ended Oct. 17, 1925:

Number of rats trapped	2,493
Number of rats found plague infected	3
Number of squirrels examined	461
Number of squirrels found plague infected	0
Number of mice trapped	4,213
Number of mice found plague infected	0

Date of discovery of last plague-infected rodent, Oct. 12, 1925.
Date of last human case, Jan. 15, 1925.

Oakland, Calif.

(Including other East Bay communities)

Week ended Oct. 17, 1925:

Number of rats trapped	878
Number of rats found to be plague infected	0

Totals:

Number of rats trapped Jan. 1 to Oct. 17, 1925	71,708
Number of rats found plague infected	21

Date of discovery of last plague-infected rat, Mar. 4, 1925.
Date of last human case, Sept. 10, 1919.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

Diphtheria.—For the week ended October 17, 1925, 37 States reported 1,742 cases of diphtheria. For the week ended October 18, 1924, the same States reported 2,253 cases of this disease. One hundred and two cities, situated in all parts of the country and having an aggregate population of about 29,000,000, reported 855 cases of diphtheria for the week ended October 17, 1925. Last year for the corresponding week they reported 924 cases. The estimated expectancy for these cities was 1,151 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty-four States reported 765 cases of measles for the week ended October 17, 1925, and 519 cases of this disease for the week ended October 18, 1924. One hundred and two cities reported 386 cases of measles for the week this year and 193 cases last year.

Poliomyelitis.—The health officers of 37 States reported 179 cases of poliomyelitis for the week ended October 17, 1925. The same States reported 203 cases for the week ended October 18, 1924.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-six States—this year, 1,589 cases; last year, 1,953 cases. One hundred and two cities—this year, 694 cases; last year, 786 cases; estimated expectancy, 606 cases.

Smallpox.—For the week ended October 17, 1925, 37 States reported 109 cases of smallpox. Last year for the corresponding week they reported 328 cases. One hundred and two cities reported smallpox for the week as follows: 1925, 45 cases; 1924, 99 cases; estimated expectancy, 23 cases.

Typhoid fever.—Eight hundred and sixty-four cases of typhoid fever were reported for the week ended October 17, 1925, by 36 States. For the corresponding week of 1924 the same States reported 640 cases of this disease. One hundred and two cities reported 196 cases of typhoid fever for the week this year and 159 cases for the corresponding week last year. The estimated expectancy for these cities was 179 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia were reported by 95 cities for the week as follows: 1925, 537; 1924, 513.

City reports for week ended October 17, 1925

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	73,129	0	2	1	0	0	0	0	2
New Hampshire:									
Concord	22,408	0	1	0	0	0	0	0	0
Manchester	81,383	0	4	0	0	0	0	0	0
Nashua	29,234	0	1	1	0	0	0	0	0
Vermont:									
Barre	[1] 10,008	0	0	0	0	0	0	0	0
Burlington	23,613	1	0	0	0	0	0	0	0
Massachusetts:									
Boston	770,400	7	47	25	2	0	25	5	12
Fall River	120,912	0	4	4	0	0	36	0	2
Springfield	144,227	3	4	1	0	0	2	0	0
Worcester	191,927	9	6	7	0	0	98	0	3
Rhode Island:									
Pawtucket	68,799	0	2	1	0	0	0	0	1
Providence	242,378	0	9	3	0	0	4	0	7
Connecticut:									
Bridgeport	[1] 143,555	0	9	5	0	0	11	0	3
Hartford	[1] 138,036	2	7	3	1	0	1	0	5
New Haven	172,967	3	3	0	0	0	3	0	4
MIDDLE ATLANTIC									
New York:									
Buffalo	536,718	10	22	9	0	0	4	0	11
New York	5,927,625	20	129	109	3	7	97	0	124
Rochester	317,867	8	6	18	0	1	6	0	4
Syracuse	184,511	1	9	2	0	0	1	0	2
New Jersey:									
Camden	124,157	----	7	----	----	----	----	----	----
Newark	438,699	7	13	12	4	0	6	5	6
Trenton	127,390	0	4	1	0	1	0	0	2
Pennsylvania:									
Philadelphia	1,922,788	34	49	85	0	0	10	6	34
Pittsburgh	613,442	0	31	15	0	----	4	0	----
Reading	110,917	11	4	1	0	0	0	2	0
Scranton	140,636	0	4	2	0	----	1	0	----
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	406,312	2	14	9	0	1	1	0	7
Cleveland	888,519	6	46	61	5	1	12	1	19
Columbus	261,082	4	7	4	0	1	1	0	9
Toledo	268,338	7	12	16	0	2	0	0	4
Indiana:									
Fort Wayne	93,573	1	4	0	0	0	0	0	0
Indianapolis	342,718	3	22	20	0	0	3	2	11
South Bend	76,709	2	2	4	0	0	0	0	3
Terre Haute	68,939	0	3	0	0	0	0	0	1
Illinois:									
Chicago	2,886,121	17	154	58	4	2	7	5	39
Springfield	61,833	0	3	0	2	2	1	3	0

[1] Population Jan. 1, 1920.

City reports for week ended October 17, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chickenpox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST NORTH CENTRAL—continued									
Michigan:									
Detroit	1,155,000	14	68	51	4	3	7	2	23
Flint	117,968	0	12	2	0	0	1	0	0
Grand Rapids	145,947	1	6	1	0	1	0	1	1
Wisconsin:									
Madison	42,519	2	1	0	0	0	0	0	0
Milwaukee	484,595	16	21	24	0	0	1	5	11
Racine	64,393	1	2	3	0	0	0	1	1
Superior	[1] 39,671	1	1	1	0	0	0	0	3
WEST NORTH CENTRAL									
Minnesota:									
Duluth	106,289	16	5	0	0	0	0	0	1
Minneapolis	409,125	8	29	31	0	2	3	0	6
St. Paul	241,891	9	20	19	0	0	0	0	8
Iowa:									
Davenport	61,262	0	2	13	0	----	0	0	----
Sioux City	79,662	0	2	2	0	----	1	1	----
Waterloo	39,667	----	1	1	0	----	0	----	----
Missouri:									
Kansas City	351,819	6	14	7	1	1	1	1	3
St. Joseph	78,232	0	4	0	0	0	0	0	0
St. Louis	803,853	3	56	45	1	0	0	0	----
North Dakota:									
Fargo	24,841	2	1	0	0	0	0	5	0
Grand Forks	14,547	0	1	0	0	0	0	0	0
South Dakota:									
Aberdeen	15,829	2	0	0	0	----	0	7	----
Sioux Falls	29,206	1	1	0	0	0	0	0	1
Nebraska:									
Lincoln	58,761	0	2	0	0	0	0	0	1
Omaha	204,382	3	13	4	0	0	0	0	6
Kansas:									
Topeka	52,555	1	2	4	0	0	0	0	1
Wichita	79,261	10	4	1	0	0	0	0	2
SOUTH ATLANTIC									
Delaware:									
Wilmington	117,728	1	2	7	0	0	0	0	1
Maryland:									
Baltimore	773,580	23	23	13	2	1	17	9	25
Cumberland	32,361	0	1	4	0	0	0	0	0
Frederick	11,301	1	1	0	0	0	0	0	0
District of Columbia:									
Washington	[1] 437,571	4	14	12	0	0	3	0	11
Virginia:									
Lynchburg	30,277	1	1	4	0	0	0	1	0
Norfolk	159,089	0	3	2	0	0	1	1	1
Richmond	181,044	0	16	28	0	0	1	0	4
Roanoke	55,502	2	4	17	0	0	1	0	1
West Virginia:									
Charleston	45,597	0	3	0	0	0	0	0	0
Huntington	57,918	0	4	4	0	0	0	0	0
Wheeling	[1] 56,208	0	3	0	0	0	0	0	1
North Carolina:									
Raleigh	29,171	0	5	4	0	0	0	0	1
Wilmington	35,719	0	1	2	0	0	0	0	3
Winston-Salem	56,230	0	5	0	0	0	1	2	0
South Carolina:									
Charleston	71,245	0	1	2	0	0	0	0	4
Columbia	39,688	0	3	0	0	0	0	0	0
Greenville	25,789	0	1	2	0	0	0	0	0
Georgia:									
Atlanta	222,963	0	10	6	5	0	3	0	7
Brunswick	15,937	0	0	0	0	0	0	0	0
Savannah	89,448	0	4	5	3	0	0	0	4
Florida:									
St. Petersburg	24,403	0	0	0	0	0	0	0	1
Tampa	56,050	0	2	1	0	0	0	0	0

[1] Population Jan. 1, 1920.

City reports for week ended October 17, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST SOUTH CENTRAL									
Kentucky:									
Covington	57,877	0	2	4	0	0	0	0	0
Louisville	257,671	2	12	2	1	0	0	1	8
Tennessee:									
Memphis	170,067	0	15	3	0	1	0	0	7
Nashville	121,128	1	5	0	0	1	1	0	3
Alabama:									
Birmingham	195,901	1	7	6	1	0	0	1	0
Mobile	63,858	0	2	1	0	1	0	0	0
Montgomery	45,383	0	3	1	0	0	0	5	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	30,635	0	2	0	0	----	0	0	----
Little Rock	70,916	0	2	1	0	----	0	0	----
Louisiana:									
New Orleans	404,575	0	11	7	3	1	0	0	8
Shreveport	54,590	0	0	0	0	0	0	0	0
Oklahoma:									
Oklahoma City	101,150	0	3	2	4	0	0	0	2
Texas:									
Dallas	177,274	0	11	8	0	0	0	0	0
Galveston	46,877	0	1	1	0	0	0	0	1
Houston	154,970	0	3	2	0	0	0	0	1
San Antonio	184,727	1	1	1	0	1	0	0	1
MOUNTAIN									
Montana:									
Billings	16,927	0	0	0	0	0	0	2	0
Great Falls	27,787	11	1	0	0	0	0	37	1
Helena	[1] 12,037	----	0	0	0	0	0	----	0
Missoula	[1] 12,668	0	0	1	0	0	0	0	0
Idaho:									
Boise	22,806	0	1	1	0	0	0	0	0
Colorado:									
Denver	272,031	13	14	2	0	0	1	2	4
Pueblo	43,519	1	3	8	0	0	0	2	3
New Mexico:									
Albuquerque	16,648	0	1	1	0	0	1	0	0
Arizona:									
Phoenix	33,899	----	----	0	0	0	0	----	0
Utah:									
Salt Lake City	126,241	10	3	5	0	0	1	12	5
Nevada:									
Reno	12,429	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle	[1] 315,685	3	6	1	0	----	1	8	----
Spokane	104,573	2	5	4	0	----	0	0	----
Tacoma	101,731	1	3	7	0	0	0	0	3
Oregon:									
Portland	273,621	4	7	23	0	0	2	5	2
California:									
Los Angeles	666,853	14	38	12	6	2	3	6	12
Sacramento	69,950	2	2	2	0	0	3	0	3
San Francisco	539,038	11	17	12	2	1	3	5	4

[1] Population Jan. 1, 1920.

City reports for week ended October 17, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	1	5	0	0	0	0	1	0	0	8	19
New Hampshire:											
Concord	1	0	0	0	0	1	1	0	0	0	10
Manchester	1	7	0	0	0	0	0	0	0	0	11
Nashua	0	0	0	0	0	1	0	0	0	0	9
Vermont:											
Barre	0	0	0	0	0	1	0	0	0	0	1
Burlington	1	0	0	0	0	0	0	0	0	0	7
Massachusetts:											
Boston	24	22	0	0	0	12	4	3	1	21	186
Fall River	1	1	0	0	0	5	2	2	0	5	26
Springfield	5	8	0	0	0	1	0	0	0	0	30
Worcester	7	6	0	0	0	2	0	1	0	13	43
Rhode Island:											
Pawtucket	1	0	0	0	0	0	0	0	0	2	18
Providence	4	4	0	0	0	3	1	1	0	3	52
Connecticut:											
Bridgeport	3	3	0	0	0	1	1	1	0	4	33
Hartford	3	1	0	0	0	1	1	1	0	5	44
New Haven	4	3	0	0	0	0	3	1	0	8	44
MIDDLE ATLANTIC											
New York:											
Buffalo	13	10	0	0	0	6	2	2	0	11	142
New York	56	51	0	0	0	[1] 94	29	28	6	49	1,323
Rochester	6	5	0	0	0	4	1	0	0	8	71
Syracuse	6	1	0	0	0	1	1	1	0	14	46
New Jersey:											
Camden	1		0				1				
Newark	7	5	0	0	0	4	3	1	1	13	103
Trenton	0	2	0	0	0	3	1	5	0	0	43
Pennsylvania:											
Philadelphia	34	40	0	0	0	39	13	12	1	32	478
Pittsburgh	25	22	0	0			4	4		0	
Reading	1	6	0	0	0	0	1	0	0	4	21
Scranton	1	0	0	0			0	0		0	
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	10	7	0	0	0	4	1	21	0	12	120
Cleveland	18	14	0	0	0	12	4	2	0	55	166
Columbus	7	6	1	0	0	3	2	4	0	1	76
Toledo	8	8	0	0	0	8	4	6	1	5	74
Indiana:											
Fort Wayne	1	1	1	0	0	2	0	2	1	1	23
Indianapolis	7	0	1	8	0	2	2	4	1	3	103
South Bend	2	2	0	1	0	2	0	0	0	0	14
Terre Haute	1	7	0	1	0	1	0	0	1	0	21
Illinois:											
Chicago	72	64	1	0	0	39	7	5	3	39	587
Springfield	2	1	0	0	0	0	2	0	0	0	23
Michigan:											
Detroit	44	72	3	1	0	20	5	5	0	30	276
Flint	7	7	0	0	0	1	0	1	0	2	16
Grand Rapids	6	11	0	0	0	0	0	0	0	9	34
Wisconsin:											
Madison	1	0	0	0	0	0	0	0	0	0	10
Milwaukee	19	7	1	0	0	4	1	0	0	40	106
Racine	3	1	0	0	0	0	0	0	0	13	15
Superior	2	6	0	0	0	2	0	0	0	0	16

[1] Pulmonary tuberculosis only.

City reports for week ended October 17, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases estimated expectancy	Cases reported	Deaths reported		
WEST NORTH CENTRAL											
Minnesota:											
Duluth	3	11	0	0	0	1	1	1	0	17	22
Minneapolis	20	27	1	0	0	1	1	0	1	0	89
St. Paul	9	21	3	0	0	3	2	0	0	16	62
Iowa:											
Davenport	1	1	0	0	----	----	0	0	----	1	----
Sioux City	2	1	0	0	----	----	0	0	----	2	----
Waterloo	2	6	0	0	----	----	1	1	----	4	----
Missouri:											
Kansas City	7	5	0	0	0	6	3	1	1	14	74
St. Joseph	3	2	0	0	0	0	0	0	1	0	33
St. Louis	24	32	0	0	0	14	4	5	1	10	195
North Dakota:											
Fargo	1	1	1	0	0	1	0	0	0	7	8
Grand Forks	1	0	0	0	----	----	0	0	----	5	----
South Dakota:											
Aberdeen	0	1	0	0	----	----	0	0	----	0	----
Sioux Falls	1	8	0	0	0	1	0	0	0	0	8
Nebraska:											
Lincoln	0	0	0	0	0	0	1	0	0	2	20
Omaha	3	12	1	0	3	3	1	0	0	0	48
Kansas:											
Topeka	1	6	0	0	0	1	0	1	0	0	13
Wichita	2	1	0	0	0	0	1	1	0	1	27
SOUTH ATLANTIC											
Delaware:											
Wilmington	1	2	0	0	0	1	2	0	0	0	31
Maryland:											
Baltimore	10	7	0	----	----	15	9	9	0	26	222
Cumberland	0	1	0	0	0	0	0	0	0	1	11
Frederick	0	0	0	0	0	0	0	0	0	0	2
District of Columbia:											
Washington	10	23	0	0	0	9	4	3	1	0	160
Virginia:											
Lynchburg	1	3	0	0	0	0	1	2	0	1	4
Norfolk	1	1	0	0	0	5	0	2	1	0	----
Richmond	6	13	0	0	0	2	2	0	0	1	46
Roanoke	2	1	0	0	0	0	1	2	1	4	13
West Virginia:											
Charleston	1	0	0	0	0	2	1	10	1	0	20
Huntington	1	2	0	0	0	2	0	1	1	0	21
Wheeling	2	5	0	0	0	1	2	5	0	0	24
North Carolina:											
Raleigh	2	4	0	0	0	3	0	0	0	1	12
Wilmington	1	2	0	0	0	0	0	0	0	0	9
Winston-Salem	2	2	0	3	0	2	1	0	0	1	13
South Carolina:											
Charleston	0	0	0	0	0	2	2	0	0	0	25
Columbia	1	0	0	0	----	----	1	0	----	0	----
Greenville	1	0	0	0	0	1	1	0	0	1	8
Georgia:											
Atlanta	6	2	1	0	0	7	2	0	2	0	76
Brunswick	1	0	0	0	0	1	0	0	0	0	2
Savannah	1	1	0	0	0	3	2	0	0	1	39
Florida:											
St. Petersburg	0	0	0	0	0	1	0	0	0	0	12
Tampa	1	0	0	0	0	1	1	1	0	0	28
EAST SOUTH CENTRAL											
Kentucky:											
Covington	2	0	0	0	0	0	0	0	1	0	27
Louisville	4	8	0	0	0	6	3	3	2	1	70
Tennessee:											
Memphis	4	8	0	0	0	2	3	6	0	3	63
Nashville	4	3	0	0	0	3	3	12	2	0	39
Alabama:											
Birmingham	6	7	0	7	0	3	4	2	1	0	44
Mobile	1	1	0	1	0	1	1	0	0	0	19
Montgomery	1	0	0	0	0	0	0	0	0	1	14

City reports for week ended October 17, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases estimated expectancy	Cases reported	Deaths reported		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	1	0	0	0	-------	-------	0	0	-------	0	-------
Little Rock	2	2	0	0	-------	-------	1	0	-------	0	-------
Louisiana:											
New Orleans	3	2	0	0	0	10	5	4	1	8	131
Shreveport	0	1	0	0	0	2	0	1	1	0	20
Oklahoma:											
Oklahoma	2	1	0	0	0	0	1	3	1	0	20
Texas:											
Dallas	4	4	0	0	0	2	2	4	0	1	45
Galveston	0	1	0	0	0	0	1	0	0	0	6
Houston	0	0	0	0	0	1	0	0	1	0	47
San Antonio	0	2	0	0	0	8	0	1	0	0	56
MOUNTAIN											
Montana:											
Billings	0	0	0	0	0	0	1	0	0	0	1
Great Falls	1	1	0	0	0	0	0	0	0	2	7
Helena	0	1	0	0	0	0	0	0	0	-------	2
Missoula	0	0	0	0	0	0	0	0	0	1	5
Idaho:											
Boise	0	0	1	3	0	0	0	0	0	0	4
Colorado:											
Denver	5	2	1	0	0	8	3	1	1	8	65
Pueblo	1	0	0	0	0	2	1	1	0	-------	12
New Mexico:											
Albuquerque	0	9	0	0	0	3	2	1	0	0	11
Arizona:											
Phoenix	-------	0	-------	0	0	7	-------	0	0	-------	16
Utah:											
Salt Lake City	2	1	0	0	0	4	2	3	0	1	34
Nevada.											
Reno	1	0	0	0	0	0	0	0	0	0	1
PACIFIC											
Washington:											
Seattle	7	9	2	1	-------	-------	2	2	-------	0	-------
Spokane	5	4	3	2	-------	-------	1	0	-------	0	-------
Tacoma	1	2	0	2	0	0	0	1	0	2	22
Oregon:											
Portland	6	12	3	0	0	1	2	1	0	0	-------
California:											
Los Angeles	10	19	1	8	0	15	5	4	0	17	181
Sacramento	2	3	0	4	0	2	1	0	0	0	23
San Francisco	6	12	0	3	0	9	2	0	0	8	132

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)			Typhus fever	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	Cases	Deaths
NEW ENGLAND											
Maine:											
Portland	0	0	0	0	0	0	0	1	1	0	0
Massachusetts:											
Boston	0	1	0	0	0	0	2	1	0	0	0
Fall River	0	0	0	0	0	0	0	2	0	0	0
Rhode Island:											
Providence	0	0	0	0	0	0	0	2	0	0	0
Connecticut:											
Hartford	0	1	0	0	0	0	0	0	0	0	0

City reports for week ended October 17, 1925—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)			Typhus fever	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	Cases	Deaths
MIDDLE ATLANTIC											
New York:											
Buffalo	0	1	0	0	0	0	0	0	4	0	0
New York City	2	3	12	3	0	0	15	15	6	0	0
Rochester	0	0	0	0	0	0	0	2	0	0	0
New Jersey:											
Newark	0	0	0	0	0	0	1	1	0	0	0
Pennsylvania:											
Philadelphia	1	1	0	0	0	0	0	0	0	0	0
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	0	0	0	0	0	0	1	1	1	0	0
Cleveland	5	0	0	0	0	0	1	5	2	0	0
Indiana:											
Indianapolis	0	0	0	0	0	0	0	3	0	0	0
Illinois.											
Chicago	0	0	0	0	0	0	5	3	0	0	0
Michigan:											
Detroit	1	1	0	0	0	1	1	0	0	0	0
Wisconsin:											
Milwaukee	0	0	1	1	0	0	1	0	0	0	0
WEST NORTH CENTRAL											
Minnesota:											
Minneapolis	0	0	0	0	0	0	0	1	0	0	0
St. Paul	0	0	1	0	0	0	0	1	0	0	0
Iowa:											
Sioux City	0	0	0	0	0	0	0	1	0	0	0
Missouri:											
Kansas City	0	0	0	0	1	1	1	2	1	0	0
Nebraska:											
Omaha	0	0	0	0	0	0	0	7	2	0	0
SOUTH ATLANTIC											
Maryland:											
Baltimore	1	1	0	0	0	0	1	0	0	0	0
District of Columbia:											
Washington	0	0	0	0	0	0	0	1	0	0	0
Georgia:											
Atlanta	0	0	0	0	1	1	0	0	0	2	0
EAST SOUTH CENTRAL											
Kentucky:											
Louisville	0	0	0	0	0	0	0	4	2	0	0
Tennessee:											
Memphis	0	0	0	0	1	1	0	0	0	0	0
Alabama: [1]											
Birmingham	0	0	0	0	0	0	0	1	0	0	0
WEST SOUTH CENTRAL											
Arkansas:											
Little Rock	0	0	0	0	1	0	0	0	0	0	0
Louisiana:											
New Orleans	0	0	1	1	0	1	0	0	0	0	0
Shreveport	0	0	0	0	0	1	0	0	0	0	0
Texas:											
Dallas [1]	0	0	0	0	0	0	0	1	0	0	0
MOUNTAIN											
Montana:											
Great Falls	0	0	0	0	0	0	0	1	0	0	0
Colorado:											
Denver	0	0	0	1	0	0	1	0	0	0	0
Utah:											
Salt Lake City	1	0	0	0	0	0	0	0	0	0	0
PACIFIC											
Washington:											
Seattle	0	0	0	0	0	0	0	1	0	0	0
Tacoma	0	0	0	0	0	0	0	3	0	0	0
California:											
Los Angeles	0	0	0	0	0	0	1	1	0	0	0
San Francisco	0	0	0	0	0	0	0	1	0	0	0

[1] Dengue—Mobile, Ala., 1 case; Dallas, Tex., 1 case.

The following table gives the rates per hundred thousand population for 103 cities for the 10-week period ended October 17, 1925. The population figures used in computing the rates were estimated as of July 1, 1923, as this is the latest date for which estimates are available. The 103 cities reporting cases had an estimated aggregate population of nearly 29,000,000, and the 96 cities reporting deaths had more than 28,000,000 population. The number of cities included in each group and the aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, August 9 to October 17, 1925—Annual rates per 100,000 population [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Aug. 15	Aug. 22	Aug. 29	Sept. 5	Sept. 12	Sept. 19	Sept. 26	Oct. 3	Oct. 10	Oct. 17
103 cities	80	70	[2] 75	[3] 72	96	99	[4] 102	[5] 121	[6] 154	[7] 155
New England	92	52	42	45	77	144	84	77	99	124
Middle Atlantic	78	73	63	62	89	83	81	[8] 84	[6] 155	[7] 129
East North Central	72	55	72	61	75	81	113	[9] 140	164	174
West North Central	113	102	118	102	145	149	155	195	207	236
South Atlantic	74	64	[2] 73	113	127	94	117	225	191	224
East South Central	34	63	40	34	80	80	63	69	97	97
West South Central	51	60	97	32	125	60	79	65	83	93
Mountain	162	76	172	315	200	224	[4] 195	134	200	162
Pacific	84	104	110	[3] 80	78	136	107	107	107	110

MEASLES CASE RATES

103 cities	48	31	[2] 28	[3] 22	23	30	[4] 36	[5] 40	[6] 53	[7] 70
New England	129	97	89	52	94	112	184	250	385	447
Middle Atlantic	57	38	34	25	25	34	32	[8] 32	[6] 24	[7] 66
East North Central	37	19	22	21	17	24	24	[9] 26	26	25
West North Central	30	6	4	6	4	10	6	8	6	10
South Atlantic	43	35	[2] 25	25	23	16	31	25	16	55
East South Central	17	6	11	0	0	6	11	11	11	6
West South Central	9	9	0	0	5	5	0	0	0	0
Mountain	19	29	29	0	10	10	[4] 29	10	38	10
Pacific	20	12	6	[3] 28	9	15	20	3	12	29

SCARLET FEVER CASE RATES

103 cities	59	53	[2] 40	[3] 56	54	63	[4] 66	[5] 87	[6] 113	[7] 125
New England	84	92	70	47	65	62	47	89	109	132
Middle Atlantic	36	23	27	30	31	47	49	[8] 49	[6] 111	[7] 73
East North Central	58	58	48	62	61	62	70	[9] 104	117	151
West North Central	137	147	112	125	114	151	147	195	135	276
South Atlantic	41	43	[2] 41	59	57	39	66	69	98	137
East South Central	40	34	29	143	120	57	80	80	132	154
West South Central	70	51	19	37	32	42	14	51	65	56
Mountain	95	67	29	76	38	166	[4] 38	181	153	48
Pacific	87	44	70	[3] 52	38	67	81	93	107	142

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1923.
[2] Greenville, S. C., not included.
[3] Spokane, Wash., not included.
[4] Helena, Mont., not included.
[5] Pittsburgh, Pa., and Superior, Wis., not included.
[6] New York, N. Y., not included.
[7] Camden, N. J., not included.
[8] Pittsburgh, Pa., not included.
[9] Superior, Wis., not included.

Summary of weekly reports from cities, August 9 to October 17, 1925—Annual rates per 100,000 population—Continued

SMALLPOX CASE RATES

	Week ended—									
	Aug. 15	Aug. 22	Aug. 29	Sept. 5	Sept. 12	Sept. 19	Sept. 26	Oct. 3	Oct. 10	Oct. 17
103 cities	7	6	[2] 8	[3] 5	6	7	[4] 6	[5] 2	[6] 7	[7] 8
New England	0	0	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	1	0	0	0	0	[8] 0	[6] 0	[7] 0
East North Central	3	2	8	5	2	2	2	[9] 0	1	8
West North Central	11	6	4	4	4	4	2	2	10	0
South Atlantic	2	4	[2] 12	2	12	12	6	0	6	6
East South Central	23	40	57	11	23	40	34	0	17	46
West South Central	9	5	14	5	5	5	0	0	0	0
Mountain	10	10	10	10	19	0	[4] 39	10	10	29
Pacific	67	44	29	[3] 40	44	49	41	26	46	58

TYPHOID FEVER CASE RATES

103 cities	48	57	[2] 47	[3] 40	42	51	[4] 45	[5] 40	[6] 38	[7] 35
New England	40	32	27	30	35	30	22	47	17	25
Middle Atlantic	33	45	30	29	27	35	34	[8] 33	[6] 33	[7] 27
East North Central	19	31	28	19	22	19	31	[9] 18	22	32
West North Central	58	48	35	21	62	58	17	35	33	21
South Atlantic	92	111	[2] 95	62	51	111	94	54	55	70
East South Central	217	183	177	183	246	212	217	143	177	132
West South Central	102	134	111	176	74	167	102	97	60	46
Mountain	105	105	115	29	133	88	[4] 98	115	124	48
Pacific	44	64	55	[3] 31	29	29	23	29	9	20

INFLUENZA DEATH RATES

96 cities	2	2	[2] 4	[3] 3	5	5	[4] 3	[5] 5	[6] 3	[7] 6
New England	0	0	0	0	2	0	0	0	0	0
Middle Atlantic	2	2	3	3	3	6	3	[8] 3	[6] 1	[7] 5
East North Central	3	1	4	3	7	4	5	[9] 7	3	8
West North Central	0	0	2	2	0	7	4	7	4	7
South Atlantic	0	0	[2] 2	2	0	2	2	4	2	2
East South Central	6	11	6	0	6	6	0	17	0	17
West South Central	0	10	15	5	5	10	0	20	15	10
Mountain	10	10	10	19	29	20	[4] 10	0	10	0
Pacific	0	8	0	[3] 0	4	0	4	0	0	11

PNEUMONIA DEATH RATES

96 cities	63	55	[2] 64	[3] 73	64	62	[4] 57	[5] 62	[6] 67	[7] 93
New England	30	40	42	55	52	70	55	32	60	97
Middle Atlantic	73	65	65	84	68	62	66	[8] 63	[6] 68	[7] 94
East North Central	51	43	54	64	49	47	42	[9] 47	65	94
West North Central	44	31	53	33	37	46	28	37	46	61
South Atlantic	78	64	[2] 85	57	64	86	92	87	76	129
East South Central	63	80	69	143	154	86	46	109	120	103
West South Central	87	82	112	76	87	82	51	66	66	56
Mountain	57	67	76	86	38	117	[4] 78	143	95	124
Pacific	90	53	69	[3] 106	102	69	57	98	57	83

[2] Greenville, S. C., not included.
[3] Spokane, Wash., not included.
[4] Helena, Mont., not included.
[5] Pittsburgh,, Pa., and Superior, Wis., not included.
[6] New York, N. Y., not included.
[7] Camden, N. J., not included.
[8] Pittsburgh, Pa., not included.
[9] Superior, Wis., not included.

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases	Aggregate population of cities reporting deaths
Total	103	96	28,977,311	28,321,623
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	16	16	7,135,899	7,135,899
West North Central	14	11	2,515,330	2,381,454
South Atlantic	21	21	2,542,498	2,542,498
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	4	1,797,830	1,377,572

FOREIGN AND INSULAR

CHINA

Cholera—Foochow—September, 1925.—An outbreak of cholera has been reported at Foochow, China, with a total of 19 cases with 9 deaths reported from September 6 to 19, 1925. The disease was stated not to be epidemic, but to be unusually virulent in form. In a fatal case, which was stated to be typical, death occurred within 12 hours after onset of the disease.

Cholera—Shanghai—July-September, 1925.—Information received under date of September 30, 1925, shows an estimated occurrence of cholera at Shanghai from the date of outbreak in July to September 30, 1925, of 2,000 cases occurring in the native population and 58 in the foreign population. The reported mortality was 203 deaths of natives and 15 of foreigners. It was stated that complete statistics of occurrence of cholera among natives were not available.

CZECHOSLOVAKIA

Communicable diseases—April-June, 1925.—During the period April 1 to June 30, 1925, communicable diseases were reported in Czechoslovakia as follows:

Disease	Cases	Deaths	Provinces showing greatest number of cases and deaths
Anthrax	11		Slovakia: Cases, 6.
Cerebrospinal meningitis	45	22	Bohemia: Cases, 15; deaths, 12.
Diphtheria	814	63	Bohemia: Cases, 370; deaths, 34.
Dysentery	146	12	Russinia: Cases, 67; deaths, 10.
Malaria	94		Russinia: Cases, 81.
Paratyphoid fever A	1		Bohemia.
Paratyphoid fever B	12	1	Bohemia: Cases, 11; death, 1.
Scarlet fever	2,396	73	Bohemia: Cases, 1,369; deaths, 37.
Smallpox	3	1	Slovakia.
Trachoma	1,001		Slovakia: Cases, 463.
Typhoid fever	1,187	123	Bohemia: Cases, 457; deaths, 56.
Typhus fever	1		Russinia: Case, 1.

Population, 13,611,349. Largest areas of population, Bohemia, Moravia, Slovakia.

Rabies.—During the period under report a fatal case of rabies, occurring in Bohemia, was reported in Czechoslovakia.

ECUADOR

Plague—Guayaquil—September 16-30, 1925.—During the period September 16 to 30, 1925, four cases of plague with two deaths were reported at Guayaquil, Ecuador.

Plague-infected rodents.—During the same period, out of 11,155 rats taken at Guayaquil, 55 rats were found plague infected.

ESTHONIA

Communicable diseases—August, 1925.—During the month of August, 1925, communicable diseases were reported in the Republic of Esthonia, as follows: Diphtheria, 27 cases; measles, 1; scarlet fever, 47; tuberculosis, 78; typhoid fever, 85; typhus fever, 1.

Leprosy.—During the same period, two cases of leprosy were reported in Esthonia. Population, 1922, 1,110,538.

GIBRALTAR

Mortality and communicable diseases, 1924.—During the year 1924, 254 deaths were registered at Gibraltar, in addition to 44 deaths of persons landed from ships or brought into the town for treatment. The population was estimated at 17,324. Communicable diseases were reported during the year as follows: Influenza, 955 cases; typhoid fever, 17; measles, 147; diphtheria, 19; smallpox, 6; Malta fever, 4; poliomyelitis, 2; paratyphoid fever, 5.

LATVIA

Communicable diseases—August, 1925.—During the period August 1 to 31, 1925, communicable diseases were reported in the Republic of Latvia, as follows: Diphtheria, 40 cases; dysentery, 64; measles 68; mumps, 10; paratyphoid fever, 2; scarlet fever, 110; typhoid fever, 136; typhus fever, 3; whooping cough, 45.

Leprosy.—During the same period two cases of leprosy were reported in Latvia. Population, estimated, 1,850,000.

MADAGASCAR

Plague—Tananarive Province—August, 1925.—During the month of August, 1925, 51 cases of plague with 47 deaths were reported in the Province of Tananarive, Madagascar, of which five cases with five deaths occurred in the town of Tananarive. The occurrence was distributed by type, as follows: Bubonic, 20 cases; pneumonic, 20; septicemic, 11.

MEXICO

Antimosquito measures—Smallpox—Yucatan.—A report dated October 16, 1925, shows continued active application of antimosquito measures in Yucatan during the latter part of September and to October 10.

The smallpox outbreak previously reported in Yucatan was stated to be under control. Up to the date of the above report but two cases had been notified in Merida, where control measures had been promptly instituted.[1]

[1] Public Health Reports, Oct. 16, 1925, p. 2243.

Foot-and-mouth disease—Tabasco.—On October 17, 1925, foot-and-mouth disease was reported still present [1] in the State of Tabasco. The reports were at variance with regard to the extent and severity of the disease.

Fumigation of vessels discontinued at Tampico.—The chief sanitary officer has ordered discontinued the fumigation of vessels at Tampico, stating that six months had elapsed since the discovery of a plague-infected rat at that place.

Unidentified disease—Mexico City.—According to the Mexican press dated October 15 and 17, an unidentified contagious disease with rapidly fatal termination had appeared in Mexico City. The later report stated that it had been diagnosed as influenza.

SWITZERLAND

Law providing for measures against tuberculosis.—According to information furnished by the American consul at Zurich, the Federal Council of Switzerland has recently passed a law providing for anti-tuberculosis measures, the cost of which is estimated to be from 3,000,000 to 4,000,000 francs annually for actual antituberculosis work and 500,000 francs to be devoted to insurance against the disease.

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

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

Reports Received During Week Ended November 6, 1925 [2]

CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Foochow	Sept. 6–19	19	9	Stated to be severe in type.
Hongkong	Sept. 13–19	2	2	
Shanghai				July-Sept., 1925: Cases, native, 2,000; foreign, 58. Deaths—native, 203; foreign, 15.
Philippine Islands:				
Manila	Sept. 7–20	8	6	
Rizal Province	Aug. 16–22	3	3	

PLAGUE

Ceylon:				
Colombo				Sept. 18, 1925: Plague in rats.
Ecuador:				
Guayaquil	Sept. 16–30	4	2	Rats taken, 11,155; found infected, 55.
Indo-China (French:)				
Saigon	Aug. 31–Sept. 13	2	1	Including 100 square kilometers of surrounding country.
Java:				
Batavia	Sept. 5–11	46	44	Province.
Soerabaya	Aug. 23–29	1	1	
Madagascar:				
Tananarive Province				August, 1925: Cases, 51; deaths, 47. Type—bubonic, 20 cases; pneumonic, 20; septicemic, 11.
Tananarive Town	Aug. 1–31	5	5	
Mauritius				Sept. 18, 1925: Plague-infected rats found.
Siam:				
Bangkok				Sept. 18, 1925: Plague-infected rats found.

[1] Public Health Reports, Oct. 16, 1925, p. 2243.
[2] 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 November 6, 1925—Continued

SMALLPOX

Place	Date	Cases	Deaths	Remarks
Brazil:				
Bahia	Sept. 19–26	2		
Rio de Janeiro	Sept. 19–26	30	14	
Canada:				
Ontario—				
Toronto	Oct. 11–17	2		
China:				
Amoy	Sept. 13–19			Present.
Nanking	Sept. 13–26			Do.
Czechoslovakia				Apr. 1–June 30, 1925: Cases, 3; deaths, 1. Occurring in State of Slovakia.
Gibraltar				Year 1924: Cases, 6.
Great Britain:				
England and Wales	Oct. 4–10	34		
Newcastle-on-Tyne	Oct. 4–10	1		
Sheffield	Oct. 4–10	8		
Indo-China (French):				
Saigon	Aug. 31–Sept. 6	2	1	Including 100 square kilometers of surrounding country.
Java:				
Soerabaya	Aug. 23–29	104	23	
Mexico:				
Merida	Oct. 16	2		
Mexico City	Sept. 27–Oct. 3	2		Including municipalities in Federal District.
San Luis Potosi	Oct. 11–17		2	
Spain:				
Malaga	Oct. 4–10		1	
Tunis:				
Tunis	Sept. 30–Oct. 6		12	

TYPHUS FEVER

Chile:				
Valparaiso	Sept. 20–26		1	
Czechoslovakia				Apr. 1–June 30, 1925: Cases, 1; occurring in province of Russinia.
Esthonia				Aug. 1–31, 1925; Cases, 1.
Latvia				Aug. 1–31, 1925: Cases, 3.
Mexico:				
Mexico City	Sept. 27–Oct. 10	15		Including municipalities in Federal District.
Palestine:				
Haifa	Sept. 22–28	1		

Reports Received from June 27 to October 30, 1925[1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 11–20	1		
Ceylon				Jan. 25–June 27, 1925: Cases, 172; deaths, 120. June 28–Aug. 8, 1925: Cases, 27; deaths, 21.
Colombo	May 10–16	2	2	
China:				
Foochow	Aug. 23–29			Present.
Nanking	Sept. 6–12			Sporadic cases.
Shanghai	July 26–Aug. 15	82	39	
Do				Aug. 22, 1925: Prevalent with 100 new cases (estimated) daily.
Swatow	Oct. 8			Present.

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

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

Reports Received from June 27 to October 30, 1925—Continued

CHOLERA

Place	Date	Cases	Deaths	Remarks
India				Apr. 26–June 27, 1925: Cases, 33,647; deaths, 19,950. June 28–Aug. 29, 1925: Cases, 16,453, deaths, 9,239.
Bombay	May 10–June 27	2	1	
Do	June 28–Aug. 15	11	7	
Calcutta	May 3–9	58	49	
Do	May 17–23	79	61	
Do	June 14–20	12	11	
Do	July 5–Sept. 12	81	66	
Karachi	Aug. 30–Sept. 5	1	1	
Madras Presidency	June 6–20	4	1	
Do	July 5–Sept. 19	47	17	
Rangoon	May 3–June 6	22	15	Feb. 8–14, 1925: Cases, 2; deaths, 2. (Received out of date.)
Do	June 14–27	12	8	
Do	June 28–Sept. 5	7	6	
Indo-China:				
Saigon	May 4–June 7	4	3	Including 100 square kilometers of surrounding country.
Do	June 22–July 12	3	2	
Do	Aug. 3–9	1	1	Do.
Japan:				
Kobe	Sept. 4–6	5	2	
Yokohama	Sept. 2	5	3	
Philippine Islands:				
Albay—				
Tabaco	June 14–20	1	1	
Bulacan	do	1	1	
Do	June 28–July 18	3	2	
Camarines Sur	July 3–9	1		
Lagonoy	June 6–12	2	1	
Leyte	July 8–14	1	1	
Manila	June 15–28	3		
Do	June 29–Aug. 16	17	4	June 1–Aug. 8, 1925: Cases, 17.
Mountain Province	June 23–29	1	1	
Rizal Province	Aug. 2–8	2		
Siam:				
Bangkok	Apr. 29–June 27	9	4	
Do	Aug. 23–29	1	1	
Turkey:				
Constantinople	May 16–22	1		
On vessel:				
———		1		At Nagasaki. Reported Sept. 2, 1925, arrived on vessel from China.
Steamship President Lincoln.		1		At Kobe, Sept. 5, 1925, from Shanghai.

PLAGUE

Brazil:				
Bahia	May 3–June 13	5	4	
Do	Sept. 6–12	1	1	
British East Africa:				
Uganda	Feb. 1–28	28	28	
Entebbe	May 4–June 30	79	74	Apr. 1–May 31, 1925: Cases, 129; deaths, 118.
Ceylon:				
Colombo	May 10–June 30	11	10	
Do	June 28–Aug. 15	16	13	
Do	Aug. 30–Sept. 5	3	3	
China:				
Foochow	May 24–31			Reported present in epidemic form.
Do	Aug. 23–29			Present.
Nanking	July 25–Sept. 12			Do.
North Manchuria	May 27	2	1	
Ecuador:				
Guayaquil	June 1–15	1	1	May 16–June 30, 1925: Rats examined, 30,347; found infected, 95. July 1–Sept. 15, 1925: Rats taken, 43,298; rats found infected, 160.
Do	Sept. 1–15		1	

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

Reports Received from June 27 to October 30, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Egypt				Jan. 1–Sept. 9, 1925: Cases, 111. Corresponding period year 1914: Cases, 354.
City—				
Alexandria	June 17–24	2	2	Bubonic.
Port Said	June 17–18	1	1	
Do	June 28–Sept. 3	11	3	
Suez	June 14–27	3	2	
Do	Aug. 19	1	1	Septicemic
Province—				
Assiut	June 5	1	1	
Beni-Souef	June 10–16	8	4	
Do	Aug. 6–12	5	2	
Charkieh	June 6–8	1	1	
Kena	June 17	1	1	
Minia	June 6–17	3	2	
France:				
Marseille	Aug. 13–18	3		
Gold Coast	March–April	3	3	
Greece:				
Athens	July 1–Aug. 14	26		
Do	Sept. 1–30	19	5	
Pireus	July 18–Aug. 14	9		
Pyrgos	Sept. 1	1		
Saloniki	Oct. 3	1		
Hawaii Territory:				
Honokaa	June 28			Plague-infected rat.
Do	Aug. 7	1		
Do	Aug. 15			Plague-infected rat, near Pauuilo.
Kukuihaele	July 31			Plague-infected rat.
Paauhau	Aug. 12			Do.
India				Apr. 26–June 27, 1925: Cases, 10,166; deaths, 8,913. June 28–Aug. 29, 1925: Cases, 4,967; deaths, 3,265.
Bombay	Apr. 26–June 27	65	59	
Do	June 28–Aug. 25	16	11	
Calcutta	May 30–June 6	1	1	
Do	July 5–11	1	1	
Karachi	May 18–June 6	4	3	
Do	July 31–Aug. 6	1	1	
Do	Sept. 6–19	2	2	
Madras	May 10–June 27	15	8	
Do	June 28–Aug. 29	108	41	
Rangoon	May 3–June 27	113	95	Feb. 8–14, 1925: Cases, 13; deaths, 13. (Received out of date.)
Do	June 28–July 4	20	18	
Do	July 12–Sept. 12	193	161	
Indo-China:				
Cochin-China—				
Saigon	Apr. 20–June 21	3	3	Including 100 square kilometers of surrounding country.
Irak:				
Bagdad	May 24–June 6	9		
Do	June 21–27	5	1	
Japan:				
Taiwan—				
Taihoku	Oct. 2–6	1	1	
Java:				
Batavia	May 6–June 19	32	31	
Do	July 5–31	65	65	In Province.
Do	Aug. 8–14	28	26	Do.
Do	Aug. 22–Sept. 4	54	57	Do.
Besoeki Residency	Aug. 4–12			Epidemic in capital and in five native villages.
Cheribon	Apr. 1–June 27		102	
Do	June 28–Aug. 22		66	
Pasoerocan Residency	Mar. 7–May 25			Epidemic in several localities.
Do	July 13			Do.
Pekalongan	Apr. 9–June 27		96	
Do	June 28–July 25		9	
Soerabaya	May 7–27	3	3	
Do	June 28–Aug. 22	21	6	
Soerakarta Residency	May 28			Epidemic at Kalidgambe.
Do	Aug. 5–12			Epidemic at Klaten.
Tegal	Apr. 2–May 16		36	
Do	May 24–June 13		16	

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

Reports Received from June 27 to October 30, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Madagascar:				
Province—				
Itasy	Apr. 1–15	1	1	
Do	July 1–15	4	4	Bubonic, 3; septicemic, 1.
Tananarive	Apr. 1–June 30	232	200	
Do	July 1–31	19	19	Bubonic, 5; pneumonic, 8; septicemic, 6.
Town—				
Tamatave (port)	Apr. 1–15	2		
Do	June 1–7		1	
Tananarive Town	Apr. 16–May 31	5	5	
Mauritius				April, 1925; One case.
Nigeria	December, 1924	17	13	
Do	January, 1925	10	6	
Do	March–June	25	20	
Peru:				
Callao	July, 1925			Present. Press reports.
Cañete	August, 1925			Do.
Lima	Aug. 14	14		Press reports.
Russia:				
Kalmyk District	May 19–31	10	8	
North Caucasus	June 6–7	2	2	
Urts	May 25–June 3	2	2	In laboratory worker and contact. Locality, Province of Bukeevsk.
Siam:				
Bankok	Apr. 26–June 20	13	11	
Do	June 28–Aug. 22	5	4	
Straits Settlements:				
Singapore	May 3–30	9	9	
Do	June 28–Aug. 1	3	3	
Syria:				
Beirut	Sept. 4–10	2		
Tunis:				
Tunis	Aug. 12–18			Plague rodent.
Turkey:				
Constantinople	May 25–31	1		
Union of South Africa:				
Cape Province—				
Kimberley	June 14–20	1	1	In a Malay camp.
Do	July 5–11			One plague-infested house mouse.
Orange Free State—				
Boshof District	June 28–Aug. 15	5	2	Natives.
On vessel:				
Steamship Efstratios Cavoundis.	July 7–11	4	1	At Alexandria, Egypt. Vessel arrived July 7, 1925. Regular route, ports in Syria, Greece, and Port Said. Dead rats reported found on board.
Steamship Arcadia	July 24–27	2		At Piræus, Greece, from Alexandria, Egypt.
Steamship Anatolia	Aug. 8	1		Do.
Steamship City of Norwich.	Apr. 15	1		At Port Said, Egypt, Apr. 14, 1925, from Rangoon, Colombo, and Perim; destination, London. Case occurred in first officer of vessel.
Steamship Naxos	Sept. 12	1		At Rhodes, from Dodecanese Islands via Alexandria, Egypt. The vessel left Alexandria Sept. 9, 1925.

SMALLPOX

Algeria:			
Algiers	May 1–June 30	43	2
Do	July 1–Aug. 20	67	
Do	Sept. 1–10	4	
Constantine	——do	47	
Bolivia:			
La Paz	Apr. 1–June 30	10	
Do	July 1–Aug. 31	8	

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

Reports Received from June 27 to October 30, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Brazil:				
Bahia	June 28–Sept. 5	8	6	
Pernambuco	Apr. 26–May 30	40	21	
Do	June 7–27	5	3	
Do	July 5–18	1	1	
Porto Alegre	June 14–20		1	
Do	Aug. 9–15		1	
Rio de Janeiro	May 9–June 27	5	1	
Do	June 28–Aug. 15	122	36	
Do	Aug. 29–Sept. 19	86	50	
British East Africa:				
Kenya—				
Mombasa	Apr. 19–June 20	27	13	
Do	July 5–Sept. 5	72	15	
Nairobi	May 3–9	3	2	
Tanganyika Territory	Apr. 5–May 23	82	24	
Do	June 14–27	48	3	
Do	Aug. 9–15	1,181	427	
Uganda	Feb. 1–28	2		
Entebbe	June 1–30	1		
British South Africa:				
Northern Rhodesia	Apr. 28–May 4	3		
Southern Rhodesia	June 11–July 1	2		
Bulgaria:				
Sofia	Aug. 6–19	2		
Canada:				
Alberta—				
Calgary	Aug. 2–Sept. 26	2		
British Columbia—				
Vancouver	June 1–28	7		
Do	July 6–Oct. 4	16	1	
New Brunswick—				
Restigouche County	June 1–30	1		
Ontario				May 31–Sept. 30, 1925: Cases, 52; deaths, 1.
Galt	June 14–20	2		
Kingston	do	1		
Do	Aug. 23–29	1		
North Bay	June 28–July 18	3		
Toronto	Oct. 4–10	1		
Saskatchewan—				
Regina	May 24–30	3		
China:				
Amoy	May 17–June 30		7	
Do	July 12–Sept. 15			Present.
Antung	May 11–June 21	7		
Do	June 29–Aug. 9	3		
Do	Sept. 7–13	4		
Canton	May 10–June 13			Do.
Chungking	May 3–30			Widespread.
Foochow	May 9–Aug. 22			Present.
Hongkong	Apr. 19–June 13	15	12	
Do	July 19–25	1		
Manchuria—				
Dairen	Apr. 13–June 28	115	17	
Do	June 28–Aug. 30	5	2	
Harbin	May 13–June 2	2		
Nanking	May 9–Sept. 12			Do.
Shanghai	May 3–June 6	5	2	
Do	July 6–25	1	1	
Swatow	May 17–Sept. 12			Stated to be endemic.
Tientsin	May 9–June 6	3		
Do	July 12–18	1		
Chosen	January–May	1,663	386	
Seoul				January–June, 1925: Cases, 341; deaths, 74.
Colombia:				
Buenaventura	Sept. 15–29	1		
Egypt				January–July, 1925: Cases, 341; deaths, 74.
Alexandria	May 21–27	1	1	
Cairo	Mar. 19–May 13	5		
Do	June 18–24	17	5	
France				February–June, 1925: Cases, 102.
Paris	May 21–31	1		July, 1925: Cases, 49.
Germany:				
Baden (State)	July 12–25	2	1	
Stuttgart	July 5–Sept. 19	4	1	
Gold Coast				January–June, 1925: Cases, 1,121, deaths, 99. July, 1925: Cases, 159, deaths, 36.

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

Reports Received from June 27 to October 30, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Great Britain:				
England and Wales				May 24–June 27, 1925: Cases, 441.
Birmingham	July 7–13	1		June 28–Oct. 3, 1925: Cases, 688.
Cardiff	June 14–20	1		
Do	Aug. 2–8	14	8	
Newcastle-on-Tyne	May 31–June 27	4		
Do	June 28–Oct. 3	15	1	
Greece				January–June, 1925: Cases, 47; deaths, 8. July, 1925: Cases, 2.
Athens	May 1–31		2	
Do	June 24–30	27	3	
Do	July 1–31	14	1	
Do	Sept. 1–30	8		
Haiti:				
Port au Prince	Aug. 23–29	1		Reported at Jean Rabel Aug. 27.
Hungary:				
Budapest	July 5–18	13		
India				Apr. 26–June 27, 1925: Cases, 37,107; deaths, 9,152. June 28–Aug. 29, 1925: Cases, 18,972; deaths, 4,612.
Bombay	Apr. 26–June 27	156	115	
Do	June 28–Sept. 5	32	23	
Calcutta	May 3–9	109	100	
Do	May 17–23	75	61	
Do	May 31–June 20	88	81	
Do	July 5–Sept. 12	64	53	
Karachi	May 18–June 27	6	1	
Do	June 28–July 4	1	1	
Do	Aug. 30–Sept. 19	6	5	
Madras	May 18–June 27	152	66	
Do	June 28–July 18	68	25	
Do	Aug. 2–Sept. 19	122	43	
Rangoon	May 3–June 27	207	99	
Do	June 28–July 4	2	1	
Do	July 12–Sept. 12	28	13	
Indo-China:				
Cochin-China—				
Saigon	Apr. 20–May 21	13	9	Including 100 square kilometers of surrounding country.
Do	Aug. 17–30	13	3	Do.
Irak				Jan. 11–May 30, 1925: Cases, 136; deaths, 46.
Bagdad	Apr. 26–June 20	4	1	
Italy	Dec. 28–June 27	97		
Do	June 28–Aug. 1	29		
Catania	Aug. 17–23	1		
Syracuse Province	do	1		
Turin	Aug. 17–Sept. 13	7		
Venice	July 27–Aug. 2	3		
Jamaica				Apr. 26–June 27, 1925: Cases, 110. June 28–Sept. 26, 1925: Cases, 151 (reported as alastrim).
Kingston	Apr. 26–June 27	19		Reported as alastrim.
Do	June 28–Sept. 26	59		Do.
Japan:				
Kobe	May 24–June 27	2		
Nagasaki	May 15–21	2		
Do	July 6–19	1	1	
Taiwan	June 1–30	11		
Do	July 1–31	1		
Tokyo	June 14–20	1		
Yokohama	May 25–June 12	3		
Java:				
Bantam Residency	June 14–27	2		
Batavia	May 2–June 26	2		
Do	July 4–31	5		
Do	Aug. 8–22	5		Province.
Brebes	Apr. 22–28	1		
Cheribon	Apr. 16–22		1	
Do	July 12–18	1		Do.
Kediri Residency	July 14			Epidemic.
Pekalongan	Apr. 2–8	1		
Rembang Residency	Apr. 23			Epidemic at Kawedanan.
Do	Aug. 8			Epidemic at Montong.
Soerabaya	Apr. 16–June 27	304	41	
Do	June 28–Aug. 8	373	43	
Do	Aug. 16–22	69	13	
South Bantam	Apr. 16–22	1		
Tegal	Mar. 29–May 2	2	1	

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

Reports Received from June 27 to October 30, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Latvia				May-June, 1925: Cases, 4. July, 1925: Case, 1.
Lithuania				February-May, 1925: Cases, 6.
Malta	June 1-30	9		
Do	July 1-Aug. 31	9	1	
Mexico				January-June, 1925: Deaths, 2,667.
Durango	July-August		22	
Guadalajara	June 2-29		10	
Do	June 30-Sept. 21		3	
Merida	Sept. 20-26			Outbreak.
Mexico City	May 24-June 27	12		Including municipalities in Federal district.
Do	July 5-11	3		Do.
Do	July 26-Sept. 5	8		Epidemic at El Hule and other localities.
Oaxaca, State	Aug. 14			
San Luis Potosi	Aug. 16-Sept. 19	3	2	
Tampico	June 1-10		1	
Do	July 1-31	4	2	
Torreon	Aug. 1-Sept. 30	2	4	
Morocco:				
Tangier	May 17-June 5			Present among natives.
Nigeria				December, 1924: Cases, 40; deaths, 16.
Do				January-June, 1925: Cases, 1,541; deaths, 169.
Persia:				
Teheran	Mar. 21-May 21		29	
Peru:				
Arequipa	June 1-30		1	
Poland				Mar. 1-June 27, 1925: Cases, 41. July 5-12, 1925: Cases, 2.
Portugal:				
Lisbon	Apr. 26-June 27	36	6	
Do	June 28-Oct. 3	100	14	Sept. 7-20, 1925: Deaths, 6.
Oporto	June 14-20	1		
Do	July 19-Aug. 29	7		
Rumania				January-May, 1925: Cases, 22: deaths, 1.
Russia				December, 1924: Cases, 1,000. January-April, 1925: Cases, 5,733.
Siam:				
Bangkok	Apr. 26-June 27	27	19	
Do	June 28-July 11	2	1	
Spain:				
Malaga	May 24-June 20		15	
Do	July 5-Oct. 3		43	
Valencia	May 31-June 27	3	1	
Straits Settlements:				
Singapore	May 17-23	1		
Do	Ju'y 5-11	1	1	
Sumatra:				
Pedang	July 12-25	5		
Switzerland:				
Berne	June 7-13	1		
Lucerne	June 14-20	4		
Syria:				
Beirut	Apr. 21-30	1		
Tripoli				Jan. 3-Apr. 15, 1925: Cases, 14.
Tunis:				
Tunis	May 6-June 30		46	
Do	July 1-Sept. 29		79	
Turkey:				
Constantinople	May 16-22	2		
Union of South Africa:				
Cape Province	May 24-Aug. 8			Outbreaks.
Port Elizabeth	Apr. 18-25	8	1	
Orange Free State	Aug. 9-15			Outbreak in Ladybrand district.
Transvaal	May 3-June 6			Outbreaks.
Uruguay				December, 1924: Cases, 8.
Do				February-May, 1925: Cases, 11.

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

Reports Received from June 27 to October 30, 1925—Continued

TYPHUS FEVER

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 11-20	6	2	In vicinity, 12 cases. Isolated.
Do	July 1-Aug. 20	18	8	
Constantine	July 1-10	17		District.
Do	July 21-31	7		Department.
Oran	do	8		Do.
Bolivia:				
La Paz	Apr. 1-June 30	5		
Do	Aug. 1-31	1		
Bulgaria				November-December, 1924; one case. January - June, 1925: Cases, 124; deaths, 7. July, 1925: Cases, 27; deaths, 3.
Sofia	May 28-June 3	2		
Canary Islands:				
Santa Cruz de Teneriffe	Sept. 14-20		1	
Chile:				
Iquique	Aug. 8-22		2	
Valparaiso	May 10-June 27		2	
Do	June 28-Sept. 12		10	
China:				
Manchuria—				
Harbin	May 19-June 2	2		
Do	Sept. 2-8	2		
Chosen	January-May	394	69	
Czechoslovakia				April, 1925: 1 case. July, 1925: Cases, 3.
Egypt				January-June, 1925: Cases, 1,011; deaths, 211. July 2-Aug. 4, 1925: Cases, 107; deaths, 19.
Alexandria	May 7-June 3	3	1	
Do	July 9-Sept. 17	3		
Cairo	Mar. 26-May 13	6	4	
Do	July 16-29	3	1	
Port Said	May 14-20	1	1	
Do	July 30-Aug. 12	4	1	
Do	Aug. 20-26	3		
Esthonia				Apr. 1-May 30, 1925: Cases, 6.
Great Britain:				
Scotland—				
Glasgow	Sept. 6-Oct. 8	2		
Greenock	May		2	
Do	Aug. 6-18	7		
Greece				January-June, 1925: Cases, 57; deaths, 6. July, 1925: Cases, 3.
Athens	May 1-31		2	
Do	Sept. 1-30	12	1	Including Piræus.
Kalamata	Apr. 1-30		2	
Patras	June 28-July 4		2	
Irak:				
Bagdad	July 12-18	1		
Ireland:				
Cork County	Aug. 25	3		
Latvia				April-June, 1925: Cases, 26. July, 1925: Cases, 6.
Libau	July 14-20	1		
Lithuania				March-May, 1925: Cases, 158; deaths, 7.
Mexico				January-June, 1925: Deaths, 124.
Mexico City	May 24-June 6	24		Including municipalities in Federal district.
Do	June 28-Aug. 1	39		Do.
Do	Aug. 16-Sept. 26	48		Do.
San Luis Potosi	June 26-July 4		1	
Tampico	Aug. 20-31	1		
Morocco				January-June, 1925: Cases, 421. July, 1925: Cases, 59.
Palestine:				
Dagania	July 21-27	1		
Ekron	do	1		
Haifa	Aug. 20	1		
Jaffa district	June 28	2		
Do	Aug. 20-Sept. 14	3		
Jerusalem	July 29-Sept. 14	9		From Ramleh district.
Majdal	May 23-June 8	3		
Ramleh	May 19-25	1		
Safad	June 9-15	1		
Do	July 21-27	1		
Tel Aviv	do	1		

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

Reports Received from June 27 to October 30, 1925—Continued

TYPHUS FEVER—Continued

Place	Date	Cases	Deaths	Remarks
Persia:				
Teheran	Apr. 21–May 21		1	
Peru:				
Arequipa	Apr. 1–June 30		3	
Do	July 1–31		1	
Poland				Mar. 1–Apr. 11, 1925: Cases, 1,195; deaths, 74. Apr. 19–June 27, 1925: Cases, 1,001; deaths, 87. July 5–Aug. 1, 1925: Cases, 146; deaths, 13.
Portugal:				
Oporto	May 31–June 6	1		
Do	July 5–Sept. 26	2		
Rumania	January–May	1,360	152	
Constantza	May 1–June 30	2		
Russia				December, 1924: Cases, 5,062. January–April, 1925: Cases, 30,107.
Spain:				
Seville	Aug. 20–26		1	
Valencia	June 7–13		1	
Tripoli	June 1–30	3		
Tunis:				
Tunis	May 21–June 17	16	8	
Do	July 8–Sept. 8	12	5	
Turkey:				
Constantinople	May 11–31	7	2	
Union of South Africa				June, 1925: Cases, 61; deaths, 4.
Cape Province	Apr. 19–July 25	39	5	June, 1925: Cases, 26; deaths, 1.
Do	Aug. 9–15			Outbreaks.
Natal	May 3–July 11	14		June, 1925: Cases, 2.
Durban	Feb. 1–July 4	18		
Orange Free State	Feb. 1–Jun 27	26	4	June, 1925: Cases, 27; deaths, 1.
Hoopstad	July 5–11			Outbreaks.
Transvaal	May–June	17	4	
Do	Aug. 9–15			Do.
Johannesburg	July 19–25	1		
Yugoslavia:				
Belgrade	June 8–14	1		
Zagreb	May 8–21	7	1	

YELLOW FEVER

Gold Coast	Apr. 1–30	1		
Ivory Coast:				
Lahou	June 1–10	1	1	
Liberia:				
Monrovia	Aug. 7	4		
Nigeria:				
Ibaden	Apr. 24–30	1		
Lagos	Apr. 29–May 5	4	1	

65090°—25†——4