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SANITARY METHODS FOR SUPPLYING VESSELS WITH WATER FOR DRINKING AND CULINARY PURPOSES WHEN OBTAINED FROM SOURCES ASHORE.

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The following regulations, concerning water provided for drinking and culinary purposes on vessels, were approved by the Secretary of the Treasury and promulgated in Department Circular No. 234 of March 3, 1921:

On and after April 15, 1921, any person, firm, or corporation operating vessels in interstate traffic or between foreign ports on or near the frontiers of the United States and adjacent ports in the United States will be required to furnish on such vessels water for drinking or culinary purposes under one of the following conditions:

(a) If water for drinking or culinary purposes is not obtained ashore, it must be treated by an approved method.

(b) If water for drinking or culinary purposes is obtained ashore, it must be from an approved source or treated by an approved method.

On and after April 15, 1921, the piping system on all vessels must be so arranged that no connection can be made between the drinking-water system and any other water system aboard.

On and after April 15, 1921, an approved sign, stating that the water is unfit to drink, must be properly placed at every tap or other outlet from which water of an unsatisfactory sanitary quality and safety may be obtained.

Since these regulations affect vessels operating in coastwise as well as in inland river and lake traffic, it is obvious that widely different conditions for supplying drinking water must be dealt with. Coastwise vessels must of necessity, on account of the salt in sea water, if for no other reason, obtain water from sources of supply ashore or distill sea water aboard. On the other hand, vessels plying on rivers and most of the inland lakes of this country have available "overboard" fresh water of varying degrees of safety and desirability for drinking purposes, ranging from the clear, sparkling, cold, and practically sterile water of certain areas of the Great Lakes to the relatively warm, muddy, and sewage-laden waters of the Ohio and Mississippi Rivers below some of the large cities of the Central West. In the past, water obtained directly from these sources and provided to passengers and crews for drinking purposes has been responsible for several typhoid fever outbreaks. Under the Federal regulations quoted in the beginning of this report, such practices are now unlawful.

To a shipping company, the selection of either or both of these two methods outlined in Treasury Department Circular No. 234 for providing drinking water on its vessels depends largely on the expense involved. This, in turn, is dependent on the waters in which the ships navigate, the type of vessels, and the service in which they are operated. Large storage tanks on a vessel may take up valuable space. The weight of the water carried in them must be given serious consideration. A water-treatment apparatus aboard, although eliminating the necessity for carrying large quantities of water and the inconveniences connected with obtaining drinking water from sources ashore, is an addition to the equipment not necessary for the navigation of the ship and is an apparatus which requires the careful attention of the engine-room crew.

The practicability of obtaining water for drinking and culinary purposes from certified sources ashore, for a bulk freighter operating on the Great Lakes and docking at piers and wharves along various canals and slips in the rivers or harbor at terminal ports, would be questionable, owing to the uncertainty of knowing in advance whether such water would be conveniently available at the piers at which the vessel would load or unload cargoes during a season. On the other hand, in Ohio and Mississippi River shipping, the city water at the larger ports of call is usually of very satisfactory sanitary quality and could be made conveniently available at the steamboat landing or wharf boat. In such cases, to obtain the drinking water for a large passenger vessel from these turbid and sewage-laden rivers and efficiently to treat same aboard would require careful operation of the treatment apparatus by trained men—a condition not likely to be provided for. Generally, it can be made convenient for all passenger vessels to obtain drinking water from certified sources ashore, because at the large terminal ports a safe water supply is usually available. Since the vessel docks at the same wharf or pier each trip, hydrants can be placed to facilitate prompt filling of the ship's water-storage tanks. However, for vessels not calling regularly at ports where drinking water of satisfactory sanitary quality or safety is available, some sort of treatment apparatus, such as a distiller, should be installed.

In order that all water provided on vessels for ablutionary purposes may be of the same sanitary quality and safety as that provided for drinking and culinary purposes, it may be more desirable and economical, on account of the great quantities of water required and the necessity for limiting the number of large water-storage tanks, to treat aboard water taken on en route than to carry aboard in tanks water obtained from sources ashore. This is particularly true in the case of vessels operating on the Great Lakes, for the physical quality of this water is such that it can be readily treated.

The majority of the companies owning the larger passenger vessels operating daily between terminal cities on these lakes (at which the public water supply is not only highly satisfactory but conveniently available at the piers) have elected to comply with the Federal regulations by disinfecting aboard all water used for the above purposes on their ships, obtaining the water to be thus treated either from sources ashore or directly overboard, or both. For smaller passenger boats, especially those operating on regular schedules and stopping at one or more large ports each day, it is usually more convenient and economical for the operating companies to make provisions for obtaining the ship's drinking water from certified sources ashore and for storing same aboard in tanks. This paper deals largely with supplying these vessels with water from sources ashore.

There are two satisfactory systems by which water may be distributed aboard a vessel—the "gravity system" and the "pressure system." Under the former system the storage tank or tanks are located upon the upper decks of the vessel, so that water may flow by gravity to all parts of the ship where it is desired. For supplying water to cabins on the upper decks it may be desirable to locate a small tank on top of the "Texas" or wheel house (see Fig. 1). There are some objections to locating water-storage tanks on the upper deck of vessels, which must be taken into consideration when a decision is made relative to the adoption of a water-distributing system for a ship. In winter the water in these tanks may freeze unless protected. On Great Lakes freighters a steam pipe is passed through the water-storage tanks, and by circulating steam through the pipe during cold weather, freezing of the water is prevented. Heavy loads of water on the upper decks may be undesirable on vessels of shallow draft or of light construction. In such cases the distribution of the load by means of a number of small tanks may be helpful.

As implied by its name, distribution by the "pressure system" consists of delivering the water under dynamic pressure. This pressure may be attained by direct pumping or by air pressure on the water in the storage tank. The air-pressure system possesses the value of furnishing pressure in the distributing system for a limited period of time upon occasions when there would be no steam pressure available in the boilers for the operation of direct pumps, as when boilers on river vessels are being washed out. Under the pressure system the storage tank may be located at any desirable place on the ship, preferably convenient to the engine room.

Water-storage tanks are frequently located in the hold of a vessel and there can be no objection to such a location, provided the tanks are clear from all bilge water and are provided with water-tight covers, which are kept locked. Tanks located in the hold are frequently inconvenient of access and consequently liable to neglect. For this

reason it is highly desirable that tanks used for storing drinking and cooking water be located on deck. For their protection against damage by freight they should be inclosed.

Under no circumstances should drinking-water storage tanks be formed in part by the hull of the ship, because of the danger of contaminating the water stored therein in case a seam in the section

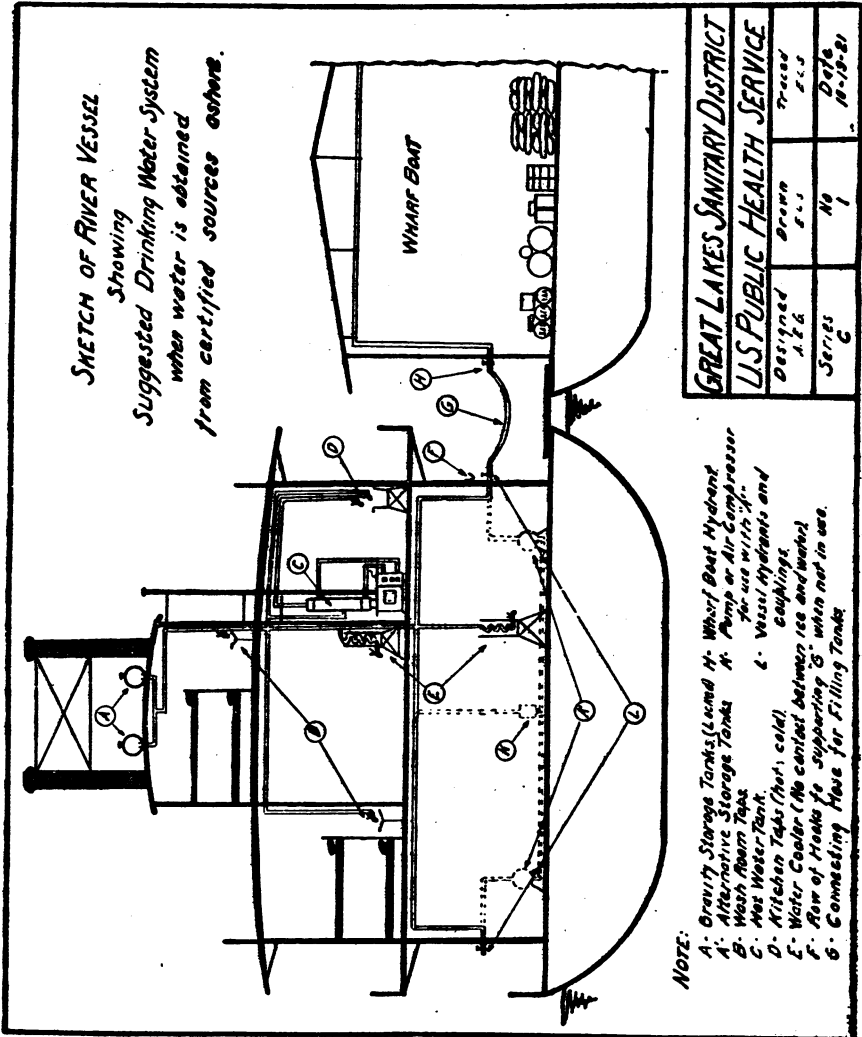


Fig. 1.

of the hull forming part of this tank should be opened as a result of an accident. Forward and aft "peak" tanks have been and still are being used for storage of drinking water, but it is advisable that the use of such tanks for this purpose be prohibited. Down pipes from toilets or any other sewer lines or drains should not pass through the drinking-water tanks on a vessel.

Drinking-water storage tanks should always be identified as such by a sign, especially when similar tanks for other water are located on the vessel. It is also desirable that the covers to all tanks used for storage of water for drinking or culinary purposes should fit tightly and be kept locked at all times when not necessary to open same. The keys should be intrusted to the charge of the ship's officer responsible for the drinking-water supply.

In either the "gravity" or "pressure" installations a distributing system physically separate from all other piping systems aboard should be installed for delivering the drinking water throughout the vessel to places where it may be conveniently available, such as the galley quarters, public saloons, parlors, vestibules, all decks, engine room, fire hold, and, when so desired, the staterooms. Of course, if the running water in public lavatories and staterooms is supplied from the drinking-water tanks, the distributing system for this water may be the same as the drinking-water system. All the taps and hydrants aboard which are conveniently located so that they can be drawn upon for drinking and culinary purposes and which deliver water that is not of the regular certified drinking and culinary supply should be posted with appropriate signs stating that the water is unfit to drink.

The hot water used in the galley quarters and the chilled water at the drinking water coolers should be supplied through branch feed lines having no returns to the main distributing system; but it is usually advisable to have all other branch lines connected back to the main line. Coils of pipe forming a gridiron in the ship's refrigerator or passing through the ice box of a cooler are more satisfactory than the separate ice and water compartments in drinking water coolers. By such an installation former water storage barrels can be converted into water coolers at little expense (see Fig. 1).

It is necessary that the drinking water supplied to roustabouts and members of the crew be of the same sanitary quality as that provided for the public. In fact, from a public health standpoint, it may be even more important that these persons should be protected; for, on account of their ignorance, if they should become "typhoid carriers" they would be a relatively greater menace to the public health. "Old timers" who tell of having drunk "the good old river or lake water" all their lives without experiencing a day's sickness, and superstitious Negroes, who believe that a lump of coal in the bottom of a barrel will "remove all sickness from river water," should be reasoned with if possible and their stories discredited by the truth.

The present practice on Ohio and Mississippi River vessels of storing water in barrels, tanks, or other containers and drawing the water in smaller receptacles from these containers as needed, is very

unsatisfactory and, where water to be used for drinking and culinary purposes is concerned, potentially dangerous, on account of the opportunities for contamination of the water through excessive handling. This "carry" system is very common on packet freight and passenger vessels operating on the Ohio and Mississippi Rivers.

Investigations of Ohio River Vessels.

During the summer of 1921 a special study was made of the sanitary quality of the water supplied for drinking and culinary purposes on passenger vessels operating on the Ohio River, especially out of Cincinnati.

Practically all of these vessels were supplied with drinking water from certified sources, such as the public supplies of Louisville, Ky., Cincinnati, Ohio, Evansville, Ind., Huntington, W. Va., and Pittsburgh, Pa. Water from these sources was delivered to the boats in many strange and different ways. On account of the fact that hydrants are not available at the landings in most of these cities, it was often necessary for the shipping companies to contract with some local truckman to deliver water to the landing in barrels. The contractor usually obtained this water from the nearest hydrant available above the public landing, and delivered it to the wharf boat in ordinary wooden kegs or barrels. In other cases, roustabouts were provided with wheelbarrows and sent to obtain water in kegs or barrels from the nearest hydrant available, or if wheelbarrows were not provided, the kegs or barrels were carried or rolled down the incline of the landing. The carrying of water in ordinary wooden buckets or galvanized-iron pails from the nearest hydrant to the storage tank or cooler aboard the vessel was another common practice. The cost of transporting water by these makeshift methods more than represents the interest charges upon a sum of money which would provide a satisfactory water-supply system upon the landing. As is usually the case in most shipping problems, the most satisfactory solution is the cheapest.

For general cooking, washing, and fire purposes, the water used aboard these vessels was invariably river water. Usually the hot water in the kitchen and pantry came direct from the boilers; whereas in some cases condensed steam was collected and used as far as possible, this supply being supplemented by the hot water from the boilers. Not infrequently the same container used for carrying river water from storage barrels to dry sinks in the staterooms for toilet purposes would be used for delivering drinking water from storage tanks to coolers and other smaller containers aboard the vessel. Sterilization of kegs, barrels, tanks, and pails in which drinking water was stored or transported was rarely done, the nearest attempt to it being a

rinsing of the container. To one familiar with the insanitary conditions which exist, on the lower deck especially, of river packet vessels, the need of further description to point out the potential dangers connected with the supplying of drinking water to these vessels is quite unnecessary.

The following table, giving data relative to the results of bacteriological analyses of samples of drinking water from packet freight and passenger vessels operating on the Ohio River out of Cincinnati, gives a good idea of the sanitary quality of the drinking water which was served to the crews and the traveling public on these vessels during the summer of 1921.

TABLE I.
[Samples were collected and analyzed by the Cincinnati Board of Health.]

Fleet. ^a	Vessel.	Source of supply.	Storage aboard.	Num-ber of sam-ples.	Average bacteria per c. c. 37° C. 24 hours.	B. coli determinations.										Use.
						Positive.					Negative.					
						c. c.					c. c.					
						10	1	0.1	10	1	0.1	10	1	0.1		
A	1	River; boilers	Wooden barrel	6	2,400	1	1	1	5	5	5	16.7	Washing dishes.			
A	1	City supplies	Galvanized-iron barrel	9	2,100	1	1	1	8	8	8	11.1	Drinking.			
A	1	do	do	6	2,500	4	4	4	2	2	2	66.7	Cooking.			
A	2	do	do	8	2,000	4	4	4	4	4	4	66.7	Drinking.			
A	2	do	do	5	2,200	7	7	7	5	5	5	88.3	Cooking.			
A	3	River; boilers	Wooden barrels	12	2,600	3	3	3	0	0	0	100	Washing dishes.			
A	3	do	Galvanized-iron barrel	3	2,500	3	3	3	11	11	11	21.4	Drinking.			
A	3	do	do	14	3,700	7	7	7	5	5	5	58.3	Cooking.			
B	1	City or private	Glass bottle or demijohn	12	2,800	5	5	5	4	4	4	4	55.6	Drinking.		
B	1	do	Galvanized-iron tank	9	5,000	0	0	0	1	1	1	0	Cooking.			
B	1	River; boilers	Wooden barrel	1	80	0	0	0	1	1	1	0	Cooking wash- ing dishes.			
C	1	City supplies	Galvanized-iron barrel	8	6,300	8	8	8	0	0	0	100	Drinking.			
C	1	do	do	3	4,100	3	3	3	0	0	0	100	Cooking.			
C	2	River; boilers	Wooden barrel	3	123	0	0	0	2	2	2	0	Washing dishes.			
C	2	City supplies	Galvanized-iron barrel	8	6,700	6	6	6	6	6	6	75	Drinking.			
C	2	do	do	3	10,300	2	2	2	2	2	2	66.7	Cooking.			
C	3	do	do	15	4,700	4	4	4	11	11	11	28.7	Drinking.			
C	3	do	do	13	6,200	3	3	3	10	10	10	33.1	Cooking.			
D	1	River; boilers	Wooden barrel	2	40	0	0	0	2	2	2	0	Washing dishes.			
D	1	City and private	Wooden tank	6	4,400	3	3	3	3	3	3	50	Drinking.			
D	1	do	do	6	6,300	6	6	6	6	6	6	100	Cooking.			
D	2	River; boilers	Wooden barrel	2	30	0	0	0	0	0	0	0	Washing dishes.			
D	2	do	do	8	3,000	1	1	1	2	2	2	7	Drinking.			
D	2	City and private	Wooden tank	8	2,000	0	0	0	4	4	4	12.5	Cooking.			
D	2	do	do	5	2,000	0	0	0	4	4	4	0	Cooking.			

^a Fleet A: Drinking water drawn from general storage tank to 5-gallon glass demijohns. Ice and water not in contact in cooler.
 Fleet B: Drinking water purchased in 5-gallon glass demijohns. Ice and water not in contact in cooler.
 Fleet C: Drinking water drawn from general storage tank in pails for filling metal cooler. Ice and water in contact.
 Fleet D: Drinking water cooler filled from storage barrels direct. Ice and water not in contact.

It will be noted that in practically all cases the bacteria counts on agar plates incubated at 37° C. are far in excess of the Treasury Department standard of 100 per cubic centimeter. The bacteria counts were frequently as high in samples which gave negative results in presumptive tests for the *B. coli* group as in those which gave positive results. Since the public and private supplies from which these vessels obtained their water were all certified as producing a water of satisfactory sanitary quality, one would not expect such high bacteria counts if the water was properly protected from the time it was drawn from the hydrants ashore until it was delivered to the crew or traveling public aboard, from the taps in the galley quarters or at the drinking-water coolers. As described above, excessive handling of this water under conditions existing in the steamboat traffic certainly exposes it to many potential sources of contamination, and, therefore, in order to protect the water obtained ashore for drinking and culinary purposes, it is imperative that a more direct and satisfactory method for delivering this water to and storing and distributing the same aboard vessels should be adopted. In the following paragraphs suggested methods for different classes of passenger vessels are described.

Inland River Vessels.

These vessels are of three classes: (1) Regular packet, freight, and passenger vessels operating on regular schedules between terminal river ports; (2) local excursion steamers operating out of a single port; and (3) miscellaneous craft, such as tows, barges, dredges, sand suckers, and others. Vessels of each of these classes stop at same landing or wharf boats each trip, and therefore arrangements could be made to locate hydrants for conveniently obtaining drinking water ashore. An exception to this statement would be vessels which frequently operate on rivers along which no cities are located for great distances, or vessels which remain away from port for weeks at a time. On such vessels, there should be installed a distiller of sufficient capacity to supply all water used for drinking and culinary purposes.

At one of the large Ohio River cities a line was extended from the city main to the public landing at the expense of one of the shipping companies. There has been some discussion among city water-works officials and the shipowners as to who should pay for such a line. As there is a distinct public health value to the community in having all vessels calling at its port provided with a safe drinking-water supply, the municipality should at least be willing to make reasonable concessions in connection with the extension of such a pipe line. Indeed, the more progressive city, in accordance with

its public health policies, might make this extension free of charge.

There is one feature common to river shipping which is different from that of lake or coastwise navigation, namely, the variation in the river level. On lakes the water level is fairly constant, and wharves and piers are built as "permanent" structures at a predetermined distance above high-water line. In tide-water ports, an elevation above high or mean tide is usually set for structures. But at river ports, if water shipping is to be uninterrupted, arrangements must be made to meet conditions developing as a result of varying levels of the river. Accordingly, the details in connection with the supplying of drinking water to these vessels must be adjusted to meet these conditions.

Obviously, a hydrant located at low-water level on the public landing or incline would be submerged during times of high water. Therefore, at river ports several connections to the water main at different hydrants could be set each in a valve box with a heavy cover fitting flush with the floor of the incline and provided with a seep drain (see Fig. 2). The spacing of these hydrants up the incline will in general depend on local conditions. It is believed that there should be at least one of these connections for every 15 feet vertical rise of the incline. Spacing at wider intervals will mean that long lengths of hose must lay on the landing. This hose, besides being inconvenient to trucking, will be liable to injury from the same.

Corresponding to the permanent piers and docks at lake and coastwise harbors are the river wharf boats, which serve as both piers and freight sheds. As the river rises or lowers, the position of the wharf boat is changed accordingly, and as a result the booms, gangplanks, and electric lines must be adjusted to accommodate this movement. So, also, it would be necessary to adjust the hose connection from the landing hydrants to the wharf boat, either by varying its length or by making a new hydrant connection. Between the wharf boat and the bank of the incline there is always a water space of several yards, depending upon the slope. Where public sewers discharge into the river at or above the wharf boats, the water around this vessel will be grossly contaminated, and every precaution must be taken to prevent the hose from dropping into it. If the water hose is attached to the wharf-boat connection and allowed to sag of its own weight between this point and the landing, it is very probable that when adjustments are made to this hose at the wharf-boat end, it will be dropped into the water. The contamination of the city water supplied to the storage tanks aboard the vessel with but a small quantity of this sewage-laden river water might result in the infection of a great many persons drinking water aboard. It is therefore desirable that the hose section between the wharf boat and the land-

ing be laid on or in a guideboard or pipe conduit, either of which may be conveniently attached to the frame structure supporting the guide rail on the gangplank (see Fig. 3).

On the wharf boat, from the land-side connection, a galvanized-iron pipe system could be installed to deliver this water to the river

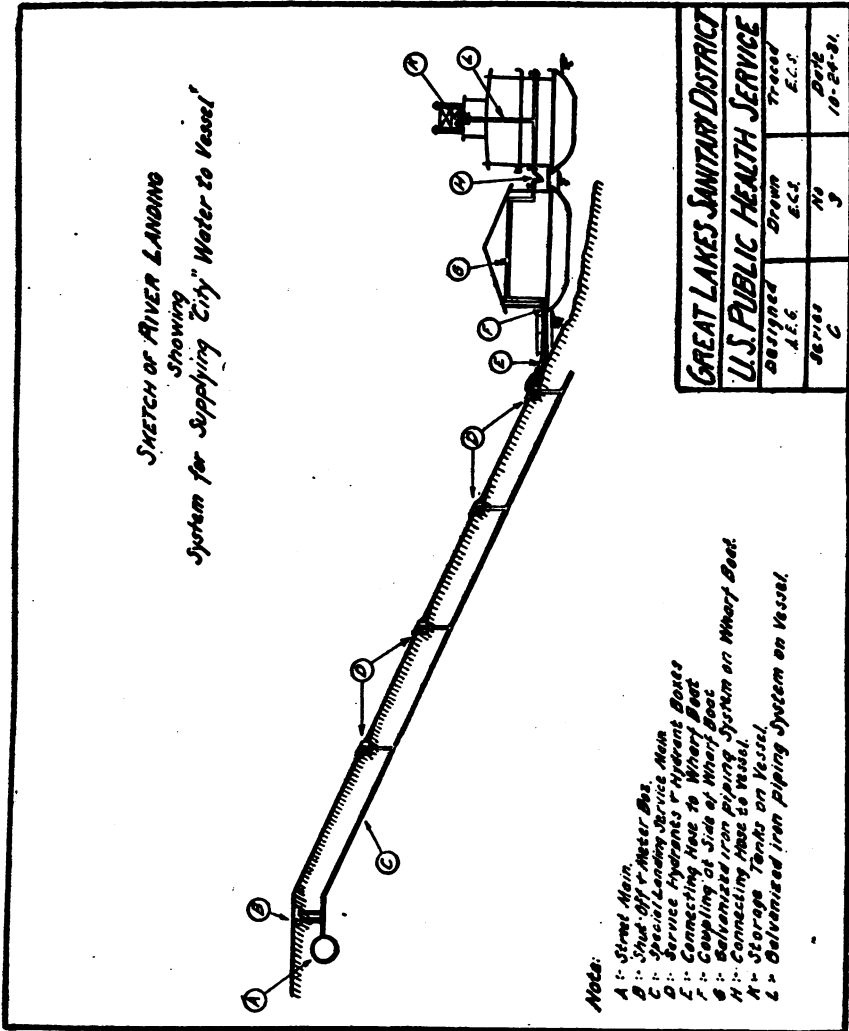


Fig. 2.

side of the boat. The pipe should be carried across the boat by attaching it to the lower chord of a roof truss. On the river side, as many connections can be made as are needed for the convenience of supplying water to the vessels docking alongside the wharf boat. Such a piping system on the wharf boat has a distinct value as a fire-protection measure.

It is very desirable that these connections be located as far above the floor of the wharf boat as will be convenient for making the hose attachment, in order to make as remote as possible the opportunities for contaminating the pipe ends. A valve at the river side of the wharf-boat piping should be provided, while one at the bank terminal would be convenient, although not necessary. For pur-

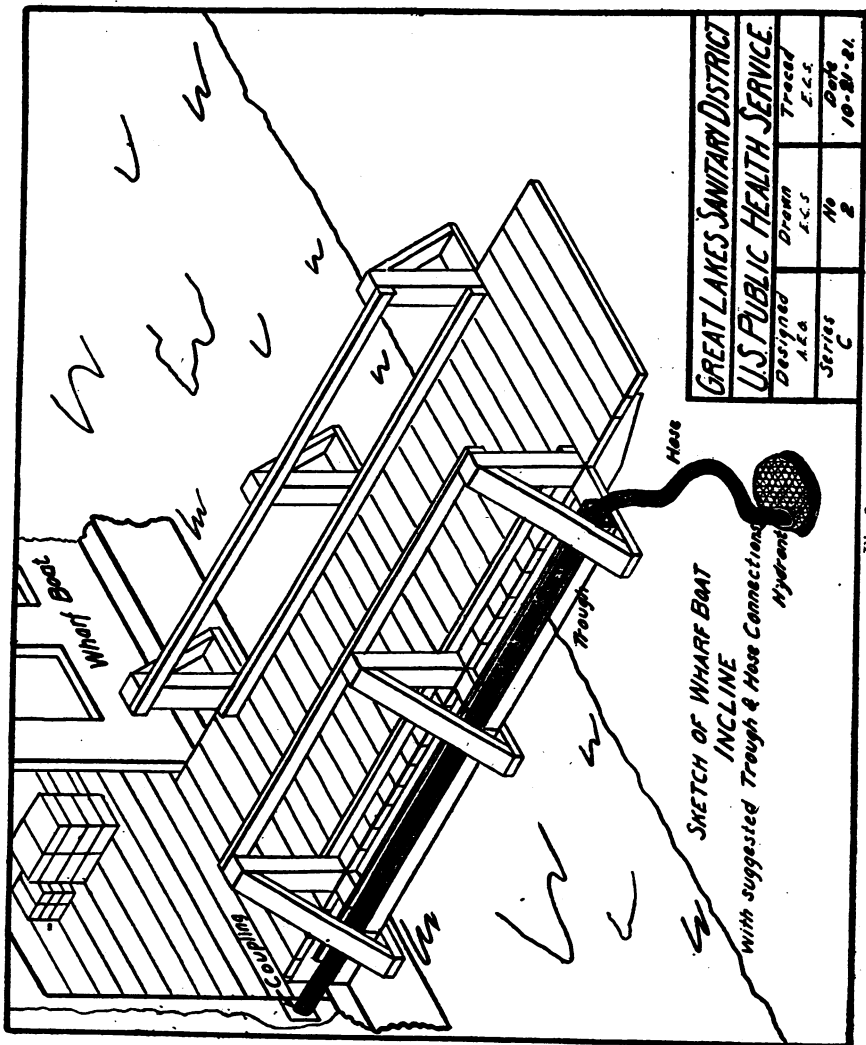


Fig. 3.

poses of identification and to warn against the stacking of freight in front of these water connections on the wharf boat, they should be properly posted. A sign with background in color of distinct contrast to the general color of the wharf-boat shed will very well serve this purpose. If pumps are installed on the wharf boats for pumping river water for fire purposes, or if any other hydrants for water other

than drinking water are located on the landing, all outlets and hydrants in these water systems should be identified and posted, warning against the use of this water for drinking purposes. The painting of drinking-water hydrants and outlets white and all others red is a simple way to distinguish between the two, the colors being symbolic of purity and danger, respectively.

Between the wharf-boat connection and the vessel a second section of hose will be necessary. Each vessel should carry its own drinking water supply hose, which should be used for no other purposes. It should be so stored away on the ship as to protect it from possible contamination. The shorter this section of hose is the better, and, therefore, it is highly desirable that delivery pipes to the storage tanks be installed on the vessel, with connections on both sides of the ship, to which the hose connecting with the wharf boat can be attached. The direct filling of storage tanks through a long hose inserted into the tanks is unsatisfactory, as careless handling of the hose or leaving the tank cover open may result in contamination of the drinking water.

Coastwise Vessels.

There are two methods by which water to be used for drinking and culinary purposes and obtained from certified sources ashore may be supplied to this class of ships:

- (1) Through hose direct from hydrants on the wharves or piers at which the vessel docks, or
- (2) Through hose direct from water boats, whose tanks are filled through hose from hydrants on wharves or piers.

(1) The location of hydrants on docks is a very important matter, and is one which should be given careful study. If it is desired to locate a hydrant under the floor of the wharf, in order to have no obstructions on the platforms, care should be taken to see that the end of this hydrant is protected against contamination which may result from filth dropping through the platform floor or being washed through during rains or flushing of the floors of the piers. A "goose-neck" curve on the pipe forming this hydrant is usually satisfactory in preventing filth from collecting in the end of the pipe. In order to prevent the dropping of the end of the hose into the polluted waters of the harbor, either through accident or carelessness, it is desirable to set all hydrants back at least 2 feet from the edge of the pier. It is obvious that the hydrants should be self-draining and the supply pipes protected against freezing in winter.

Drinking-water hydrants should be so marked as to be readily distinguished from all other hydrants on a pier, as outlined under the section on river vessels.

The size and length of water hose will, of course, depend upon local conditions; but every effort should be made to reduce the length of hose in the interests of economy and convenience. To prevent injury to hose having threaded-end couplings, a metallic cap should be provided and screwed over the end when not in use. The cap should be fastened to the hose coupling by a chain to insure against losing it. Suitable storage should be provided, either on board the vessel or on the dock, for drinking-water hose, which should be easily identified so that it would not be used for any other purposes. Painting this hose white would be an inexpensive way of identifying it.

(2) For water boats, particular care should be given to the details mentioned above for protecting the water delivered to its tanks. The pump for delivering water from the water boat to the supply tanks on a vessel should be used for this purpose only and should be independent of all other water systems. In case water is transferred from the water boat to the supply tanks aboard a vessel, on the "siphon principle," special care should be taken in charging this siphon that only the drinking-water supply is used. Sterilization and flushing of storage tanks on water boats should be done weekly without fail.

The design and sanitation of water boats are very important public-health problems, if the delivery of water by this medium to other vessels for drinking and culinary purposes from certified sources ashore is to be free from the many potential dangers associated with it. The ideal type of water boat is one in which the storage tanks are of iron or steel, each tank having no openings or connections other than a bolted manhole, an intake pipe, a discharge pipe, and a connection for complete draining of the contents of the tank into the bilge. There are many water boats in which the tanks are constructed of plain cypress planks with tar-pitched joints. The deck of the vessel usually forms the top of such tanks; and unless extreme care is taken to maintain them in a tightly calked condition, there is grave danger of contamination of the water in the tanks by leakage from the deck through these unprotected seams. The hatches to such tanks should be of water-tight construction, kept locked at all times, and the edges should be protected by a leather or rubber gasket fitting closely to a raised flange.

For filling the tanks, a filling plug (provided with a cap) raised above the level of the boat's deck, to which the delivery hose from the dock may be connected, should be provided. The discharge pumps for delivering water from the water boat should be independent of all other water-supply systems or sources. It is essential that there should be no way by which any water other than that obtained from the certified source of supply ashore may be admitted to the storage tanks or delivered to another vessel for drinking and culinary

purposes from the water boat. Care should be taken to prevent contamination of the hose used aboard this type of vessel. Threaded caps should be provided for the protection of the hose ends when not in use. The decks should be kept in a clean condition.

Weekly sterilization and thorough draining and flushing of the tanks should be part of the routine procedure. A satisfactory method of sterilization is to allow a solution of hypochlorite of lime in the proportion of 1 pound of the chemical to every 5,000 gallons of water to remain overnight in the tanks while completely filled. In the morning the tanks should be emptied and then flushed thoroughly.

Great Lakes Vessels.

The method of supplying water for drinking and culinary purposes from sources ashore to Great Lakes vessels is similar in every respect to that for coastwise vessels. The same precautions relative to location, protection, and identification of hydrants described above should be taken. Water boats are not common on the Great Lakes.

At Buffalo, Detroit, and Chicago city water was supplied to Great Lakes passenger vessels operating during the 1921 season with satisfactory results. The following table is a compilation of the results of bacteriological analyses of samples collected from the drinking systems on these vessels in the summer of 1921 and analyzed by the local city health departments:

TABLE II.

Fleet.	Ves- sel.	Source of supply.	Storage aboard.	Num- ber of sam- ples.	Average bacteria per c. c. 37° C., 24 hours.	B. coli determinations.						Per cent posi- tive, 10 c. c.
						Positive.			Negative.			
						C. c.			C. c.			
						10	1	0.1	10	1	0.1	
A.....	1	Detroit.....	Iron tanks....	37	145	6	5	1	31	32	36	16.2
B.....	1	do.....	do.....	8	225	0	0	0	8	8	8	0
C.....	1	do.....	do.....	21	180	0	0	0	21	21	21	0
C.....	2	do.....	do.....	2	250	0	0	0	2	2	2	0
C.....	3	do.....	do.....	7	200	0	0	0	7	7	7	0
D.....	1	Buffalo.....	do.....	48	330	13	4	0	35	44	48	27.1
D.....	2	do.....	do.....	41	410	12	7	0	29	34	41	29.3
E.....	1	Chicago.....	do.....	11	18	1	.....	.....	10	11	11	9.1

If one is to compare this table with the one (Table I) given for water supplies on Ohio River vessels he should bear in mind the point brought out by the sanitary experts reporting to the International Joint Commission in connection with their classification of Great Lakes water, given on pages 20 and 21 of the Progress Report of this

commission dated January 16, 1914, from which the following is quoted:

"In considering this classification it is to be remembered that it is *arbitrary*. The classification arises out of the data contained in this report. The differences in bacterial flow of these lake waters and that of comparatively warm river waters, subject to agricultural and municipal drainage, is very great, especially when measured by bacterial counts on agar and *B. coli*, which represent almost invariably for these lake waters recently added sewage organisms."

By their classification, bacteria counts on agar which might be considered relatively low (under 100 per c. c.) in waters of some district could and probably would be associated with gross pollution of recent origin in the waters of the Great Lakes. The water supplies from Buffalo, Detroit, and Chicago are all obtained from the Great Lakes in areas subjected to pollution, the only treatment before delivery to the city mains being disinfection by chlorine. For this reason it is believed that the bacterial counts on agar reported in the above table are not of great sanitary significance where the determinations for *B. coli* were negative; for while stored in tanks aboard the vessels, especially if these tanks were in proximity to the engine rooms, "aftergrowths" of spore-forming bacteria of nonfecal origin might develop.

Tugs, Tender, Tows, Canal Barges, and Miscellaneous Craft.

The water supply for these smaller vessels, if obtained from sources ashore, should be delivered to and stored aboard the boat with the same care as that given to larger vessels. The gravity system with a storage tank or tanks on the cabin house is probably the most economical installation. The carrying of water aboard in pails and storing it in a keg or crock is very unsatisfactory from a sanitary standpoint for the reasons already outlined in this report. The practice of obtaining water for drinking and culinary purposes from overboard in a pail to which a rope is attached, which is so common on these small boats, is as primitive as it is vicious and insanitary. This practice is all the more dangerous on smaller craft, as they frequently navigate in harbors and relatively shallow waters near shore, which are usually grossly polluted by sewage. (See Fig. 4.)

Conclusions.

1. Where water to be supplied for drinking and culinary purposes on vessels is obtained from sources ashore which are certified as producing water of satisfactory sanitary quality and safety, such water may, through excessive handling in delivery to and storage aboard a vessel, be so contaminated as to render it entirely unfit and unsafe for human consumption.

2. The methods by which drinking water was delivered to passenger vessels operating on the Ohio and Mississippi Rivers during the

summer, 1921, involved such excessive handling of this water that it was frequently contaminated and thereby rendered unsafe for human consumption.

3. Water obtained from sources ashore, where the hydrants are located on or at the pier or wharves, can be delivered to these vessels

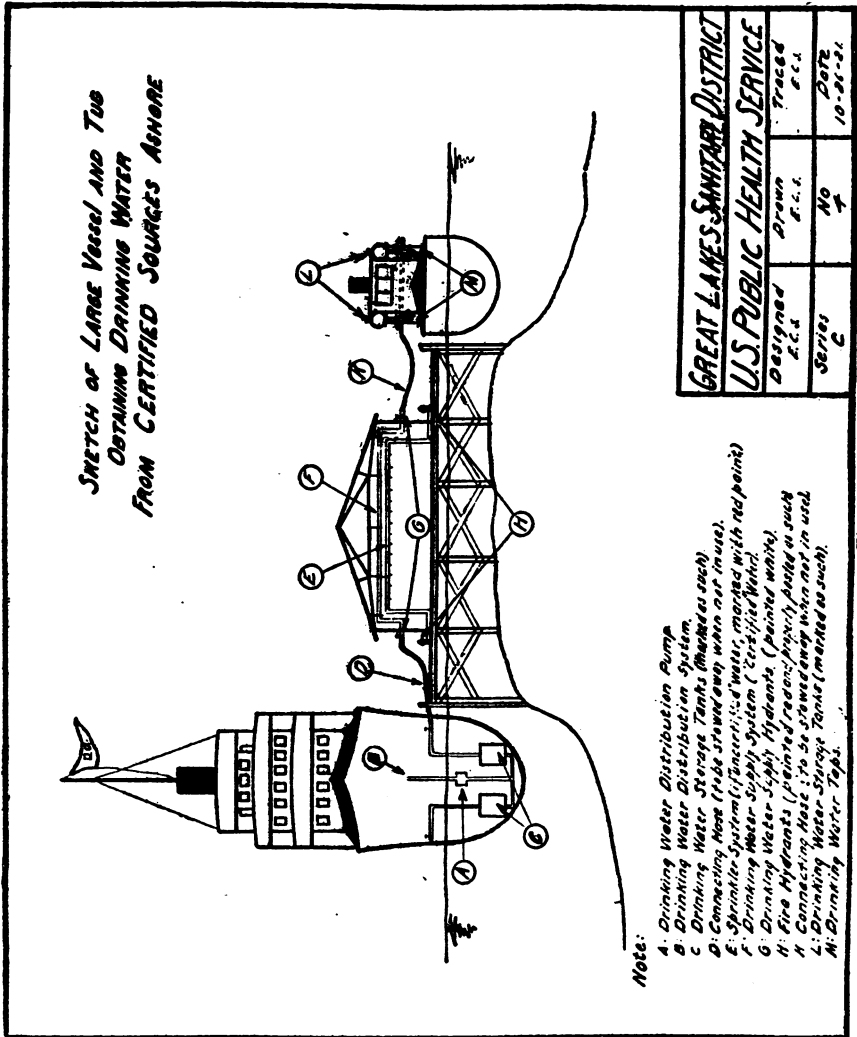


Fig. 4.

through hose with a reasonable minimum exposure to contamination, if proper precautions are taken.

4. The method by which drinking water is stored aboard and distributed throughout a vessel is fully as important in protecting this water against contamination as the means by which it is delivered to the vessel.

Recommendations.

1. Where water to be used for drinking and culinary purposes on vessels is obtained from certified sources ashore, hydrants from which this water is to be drawn should be located on the pier, dock, or landing so that this water can be conveniently delivered to the vessel through a hose or pipe, with a minimum opportunity for exposure to possible sources of contamination.

2. Consistent with local conditions, the length of hose necessary to deliver water from the hydrant on the pier or landing to the boat should be as short as practical.

(NOTE.—By installing a delivery pipe line from the lower deck of a vessel to the storage tanks, a length of hose necessary to connect the hydrant to this delivery line will be all that is necessary.)

3. In river shipping, when the water for drinking and culinary purposes for a vessel is obtained from sources ashore, the hose connecting the hydrant on the landing to the wharf boat should be protected against possible contamination from being accidentally dropped into the river by attaching it to a guide board or passing it through a protecting conduit fastened to the gangplank.

(NOTE.—For delivery of water across the wharf boat a special pipe line should be installed.)

4. In locating the drinking-water hydrants on piers, wharves, landings, and wharf boats, special consideration should be given to the nature of the traffic at these places, with a view to preventing contamination of the delivery hose connections on the hydrant.

5. All hydrants at which drinking water is obtained at the pier, wharf, landing, or wharf boat should be identified as such by a conspicuous sign of letters not less than 4 inches in height; and in case hydrants at which water for other than drinking purposes is available are located on the pier, wharf, landing, or wharf boat, they should be painted red and the drinking-water hydrants white, and both identified by signs.

6. The hose used for filling drinking-water tanks on vessels should be used for no other purposes, and it should be stored aboard the ship or at the pier, wharf, landing, or wharf boat so as to protect it against possible contamination.

7. One of the licensed officers of every vessel should be designated as "water-supply officer" and held responsible for the drinking water provided on the vessel.

LET THE CHILD DO THE "FOLLOW-UP" IN SCHOOL HEALTH WORK.¹

By EDITH B. LOWRY, Acting Assistant Surgeon, United States Public Health Service.

Medical examination of school children has been carried on in a more or less efficient manner in some parts of the country for approximately 30 years. However, it required the revelations of the World War to start the wave of public opinion in favor of general health for children. Following the cessation of war activities, public opinion has been focused upon the physical condition of the children, as shown by the country-wide campaign for their weighing and measurement, and by the extensive practice of physical examinations and inspections. But, while the need for correction has been established, little has been accomplished as yet in the way of results. Moreover, there is danger that undirected or misdirected effort, failing in definite results and causing annoyance to teachers, may tend to close the schools to health activities.

Investigations proved that although in many cases the physical examinations had been made in a satisfactory manner, the correction of defects was anything but satisfactory. Notes sent to the parents were lost by the wayside or ignored at home; the few public health nurses could reach only an infinitesimal portion of the parents by home visits, which seemed to be the best method of obtaining results. "Lack of trained workers" was the cry everywhere. Efficient workers were unattainable even if funds were provided.

In an effort to discover some method of obtaining results without a prohibitive staff of home visitors, many schools were visited where physical examinations already had been carried on. Questioning the children revealed that the majority of them had forgotten the health advice given them, and the teachers were equally ignorant of the physical condition of their pupils. Everywhere the teachers expressed a desire for some form of record of the physical examinations that could be left in the schoolroom. The ordinary medical examination card was not of much value for this purpose, for the teachers already were overburdened with the multiplicity of duties and could not spend much time going over cards time and again, even if the records on the cards meant anything to them. The teachers, as a rule, were as poorly informed on the subject of health as were their pupils. In many instances the teachers themselves were in as poor physical condition as any of the pupils, some even were found with active tuberculosis, and the teacher with perfect teeth was almost as rare as the efficient health worker. "Yes; I know I should go to a dentist," was a remark frequently called forth.

¹ Read at the meeting of the American Medical Association, Boston, June, 1921.

What were we to do about it and what was the solution? Somewhere memory brought forth the old saying, "When in Rome do as Romans do." This, translated according to present needs, meant, "When in the schools, follow the methods of the school people to which the children as well as the teachers are accustomed."

In all lines of education except health, educators have found it necessary to set a certain standard for the children toward which they can work. For instance, a third-grade child is required to learn a certain amount of arithmetic and be able to read certain books. He is not given the indefinite instruction to "Learn arithmetic," "Learn to read."

Following this line of thought, the question came whether it were possible to set a definite standard of health for the children rather than say to them, "Be healthy; be well," without giving them an adequate idea of what health meant.

In the course of child-hygiene investigations by the Service in Mississippi it was suggested that a definite requirement be set for the health of school children for the current year. This suggestion was adopted by the State health department and the State department of education. Later it was adopted by the Kentucky division of child hygiene with satisfactory results.

The requirement outlined is as follows:

Eyes—

- (a) Vision normal or corrected by glasses.
- (b) No evidence of disease or inflammation.

Ears—

- (a) Hearing normal.
- (b) No evidence of disease or inflammation.

Nose—

- (a) No adenoids.
- (b) No other obstruction.

Throat—

- (a) No diseased or enlarged tonsils.
- (b) No evidence of disease or inflammation.

Mouth—

- (a) No unfilled cavities in teeth.
- (b) Teeth clean, showing evidence of daily care.
- (c) Gums healthy.

Skin—

- (a) No eruption.
- (b) Scalp clean, free from scales.
- (c) Scalp free from pediculosis.

Chest—

- (a) No evidence of disease or inflammation of lungs.
- (b) Chest expansion of at least 2 inches.

Vaccination—

Good scar or certificate of recent vaccination for smallpox.

Nutrition—

- (a) Weight normal or not more than 10 per cent over.
- (b) Negative hookworm report.
- (c) No enlarged spleen (malaria).

No claim is made that this is an ideal health standard, but it is claimed to be a standard that should and can be lived up to by every person, whether child or adult. The requirement purposely was set sufficiently low so that it would be possible for it to be reached by practically every child in school who made the effort. For this reason, no mention was made of cardiac lesions, for instance, as such a condition probably could not be corrected by the child. The child should not be discouraged by an impossible standard.

The outline was arranged to take in the more obvious defects and does not include many defects that would be noted on a more rigid examination, the object being to interest the child in his own health and to secure his cooperation in having these more common defects corrected. As the health condition of a school improves from year to year, the requirement can be raised accordingly. How common the defects mentioned in the requirement are in the average school is shown by the fact that it is rare to find more than one child in a room (with the exception of a few cities) that meets all the requirements. The greatest failure was under the requirement for mouth, and the failure for throat requirement followed a close second.

HEALTH SCORE CHART.

In order to visualize health to the pupils and teachers, to give it a definite meaning, a Health Score was devised which tells at a glance the physical condition of the children in the room.

The charts were designed, first, to meet the request of teachers for a record to be left in the school and, second, to impress upon the children the ideal of health. In other words, "It is a record in the language to which children are accustomed." Charts and stars are used in practically every school all over the country. By the use of these charts the child himself is stimulated to do "follow-up work" in the home. It is felt that in his desire to "follow the crowd" and have a gold star placed before his name, his importunities will be more successful in securing the attention of the parents than any other method.

What the Health Score means in the school room is this: The principal of the school is visiting this room and hears a little child read very badly. Looking at the Health Record he probably finds that the child has no star in the column headed "Eyes." The thought comes immediately, "Why, that child has something the matter with his eyes." At once health is a vital subject to him.

On the Health Score a red star indicates that the child was, on the original examination, up to the standard in the subject indicated at the head of the column. For instance, a red star in the column marked "Eyes" indicates that at the time of the first examination

the child's vision was normal or corrected by glasses; also that there was no evidence of disease or inflammation.

Blue stars indicate corrections. For example, if the child had poor vision and later had this corrected by glasses, and there was no evidence of disease or inflammation, he would be entitled to a blue star under "Eyes." The two colors simply show graphically whether any corrections are being obtained.

Gold stars are placed before the names of children who have met all health requirements, that is, when every space following the child's name is filled with either a red or a blue star.

An especially designed health button may be presented to every child who has obtained a gold star. This should be presented with as much ceremony as a diploma, for we consider that any child who has given the necessary attention to his health to become a gold star pupil is entitled to some recognition.

The following instructions are given for using the Health Score Chart, which is intended to be used in connection with the height and weight record.

Names.—The names of the children should be filled in plainly with black ink in the same order as they appear on the classroom weight chart. The two charts are companions and should be hung together in the schoolroom in such position that they can be seen readily by the pupils.

Red Star.—Red stars are stamped in the various columns when the child is free from defects or is up to the standard of the subject indicated at the head of the column at the time of the original medical examination. For example, a red star in the column marked "Eyes" indicates that at the first examination the child's vision was either normal or had been corrected by glasses, and also that there was no evidence of disease or inflammation of the eyes.

Blue Star.—Blue stars indicate correction. For example, if at the time of the first medical examination the child had poor vision, which was later corrected by glasses and there is no evidence of disease or inflammation, he would be entitled to a blue star under the heading "Eyes."

Gold Star.—A gold star is placed in the column in front of the name of the child who has met all the health requirements; that is, when every space following the child's name is filled with either a red or blue star.

Two Gold Stars.—Two gold stars may be placed in the column in front of the name of the child when it is impossible for the child to obtain relief from certain physical defects, even though everything possible has been done. In such a case the child may have two gold stars after all other corrections have been made. For example, if a child's deafness is such that it is impossible to correct it, even though everything possible is done; or if a child suffering from chronic infantile paralysis has met all the other requirements of the health score card, then he is entitled to the two gold stars.

The child should not be given a health button in such case until after conference with the director of the State division of child hygiene.

Health button.—In order further to stimulate the interest of the child in completing the health score, an award in addition to the gold star should be made in the form of a health button, after the physician in charge of the examination finds that he has completed the health score.

The health button should show the year in which it is given so that if the score is changed another year, or the child develops defects, there will be no question con-

cerning his right to wear the button. The health button should be furnished by the State division of child hygiene.

The presentation of a health button should be an occasion of special ceremony, and the child's parents should be invited to attend.

How to make out the Health Score record.—The health record can be made in the office from the school examination cards. It will save time to make the entire chart before adding any stars, indicating by "O" the space for red stars and then pasting or stamping the stars over these letters.

Every space after a child's name should be marked in some manner, as *blank spaces will indicate that the examination has not been made.*

Indicate by "a," "b," or "c" the defects found, using the Health Score Chart as a guide. Example:

In the column headed "Eyes"—

If the examination has not been completed, leave this space blank.

If vision is normal and there is no evidence of disease or inflammation, put an "o" in this space.

If vision is normal but there is some inflammation, use a "b."

If vision is defective but there is no inflammation or disease, use an "a."

If vision is defective and there is also inflammation, use "a-b."

Again, under nutrition, a small "a" will indicate under weight, while a capital "A" will indicate those who are over weight for a given age. This will make it easy to distinguish the children who are under weight and those who are over weight.

By using this method, it will be easy to make a summary of defects from the chart, as by adding all the "a" marks in the column under "Eyes" the total number with defective vision will be found.

CLASSROOM WEIGHT CHARTS.

The following instructions are given for the use of the Weight Chart:

Names of the children should be filled in by the teacher in alphabetical order, surname first. Use black ink.

Age (nearest birthday) should be filled in by the teacher. Use black ink.

Height should be recorded in inches. Height should be taken *without* shoes, as the heels of shoes vary in height. Use black ink.

Normal weight can be found by consulting height and weight tables. The normal weight column should be filled in with *red* ink.

Monthly weight may be filled in first with pencil, then inked according to the following directions:

(a) If a child is of normal weight or not more than 10 per cent above, use red ink. This calls attention to the children who have reached the goal.

(b) If the child is below normal weight or more than 10 per cent above, use black ink.

Weight should be taken *without* shoes, coats, or sweaters.

Later weighing.—Arrangements should be made to have the children weighed every month, as this will show whether they are improving in nutrition. In some cases the nurse or permanent worker will have time to do this; in others the teachers will do the weighing; in other cases a committee of two mothers will volunteer for this help; sometimes this may be assigned to one of the older pupils. In all cases the weighing should be done as nearly as possible on the same day of the month.

Scales.—Every school building should have good balance scales as a part of the permanent equipment. Do not buy spring scales, as they get out of order easily and are not reliable. It is economy to buy good scales. A description of scales and price

lists will be furnished from this office on request. The money to buy scales may be obtained in several ways, among which are the following: (1) Appropriated from school funds; (2) purchased from funds of parent-teacher organization; (3) purchased from Christmas seal money; (4) purchased from Junior Red Cross funds; (5) purchased by proceeds from entertainment or "tea" given for this purpose.

These charts are designed to be left in the schoolroom. They are supplied by the State. They may be obtained from the United States Public Health Service or the Bureau of Education, Department of the Interior, Washington, D. C.

CASES OF INFLUENZA REPORTED BY STATES.

COMPARISON OF THE FIRST 10 WEEKS OF THE YEARS 1920, 1921, AND 1922.

The accompanying table shows the number of cases of influenza reported for the first 10 weeks of 1922 by 24 States, compared with similar reports for the corresponding weeks of the years 1920 and 1921.

All weeks ended on Saturday. The first week of 1922 ended January 7; in 1921 the first week ended January 8; and in 1920 it ended January 10.

Number of cases of influenza reported by States for the first 10 weeks of the years 1920 to 1922, inclusive.

State.	Week number.									
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Sev-enth.	Eighth.	Ninth.	Tenth.
Alabama:										
1922.....	2		5	3	26	95	29	20	31	185
1921.....						5	11		7	14
1920.....			8	203	1,296	3,236	2,366	3,603	3,885	1,047
Arkansas:										
1922.....	83	40	64	88	192	232	158	202	371	409
1921.....	63	78	75	37	52	70	19	94	63	83
1920.....	35	53	179	595	5,663	6,599	2,793	1,690	2,576	2,055
California:										
1922.....	38		28	48	92	845	4,315	10,033	9,917	4627
1921.....	22	23	30	37		98		194	143	149
1920.....	32	322	1,604	7,133	13,660	11,887	7,420	5,527	918	496
Connecticut:										
1922.....	5	7	9	22	109	518	1,325	675	711	486
1921.....	13	14	13	13	8	9	12	18	18	6
1920.....	1	14	1,123	4,664	5,666	4,868	2,771	1,133	571	229
Delaware:										
1922.....			5	2	7	2	2	9		2
1921.....	9	12	12	4	2	7	19	20	19	10
1920.....	1		5	21	86	78	43	36	50	33
District of Columbia:										
1922.....	1	3	4	7	5	9	8	7	9	9
1921.....	2	2	2	4	4	1	1	1	4	8
1920.....	9	126	1,216	1,616	557	298	104	36	21	6
Florida:										
1922.....	3	6	21	6	15	35	123	118	68	72
1921.....	6	3	4	10	3	6	4	4	6	12
1920.....	2	10	484	1,547	1,581	1,735	1,420	1,026	580	413
Georgia:										
1922.....	21	19	52	64	74	81	128	162	179	149
1921.....	30	24	26	25	37	26	35	8	32	44
1920.....	27	27	95	617	3,256	5,411	7,809	8,210	3,677	3,087
Illinois:										
1922.....	25	49	38	125	108	417	633	1,069	809	735
1921.....	42	13	27	19	28	35	34	23	19	15
1920.....	73	3,251	14,805	29,156	30,330	23,037	7,237	3,062	1,344	453
Kansas:										
1922.....	9	23	88	121	364	440	480	901	626	557
1921.....	13	9	13	29	5	9	9	12	5	6
1920.....	17	45	1,130	8,582	16,960	17,699	10,026	3,590	3,332	1,551
Kentucky:										
1922.....	17	25	18	51	332	640	705	748	1,088	
1921.....	10	8	40	19	33	21	25	28	53	13
1920.....	45	75	170	878	2,536	6,067	4,295	8,584	4,099	3,640
Louisiana:										
1922.....	7	8	4	8	10	39	36	368	469	1,603
1921.....	39			10			22			
1920.....	52	27	123	763	1,901	3,690	3,153	3,363	2,541	1,982
Maine:										
1922.....	5	9	18	14	97	145	131	441	487	352
1921.....	18	6	14	7	1	2	2	1		3
1920.....	1	4		387	936	3,942	3,702	2,134	1,130	1,105
Maryland:										
1922.....	21	40	52	93	110	189	263	431	612	814
1921.....	70	79	82	107	125	164	143	279	368	367
1920.....					4,935	8,942	4,758	3,184	2,052	1,206

Number of cases of influenza reported by States for the first 10 weeks of the years 1920 to 1922, inclusive—Continued.

State.	Week number.									
	First.	Second.	Thirsd.	Fourth.	Fifth.	Sixth.	Sev-enth.	Eighth.	Ninth.	Tenth.
Massachusetts:										
1922.....	7	12	18	66	398	1,469	1,764	1,285	904	521
1921.....	37	63	39	15	17	37	32		20	32
1920.....	46	58	489	4,495	9,627	10,747	5,601	2,375	1,144	490
Missouri:										
1922.....	7	16	8	20	71	99	234	313	406	279
1921.....	51	48	40	43	26	32	30	22	23	28
1920.....				4,043	5,359	1,666	466			
Nebraska:										
1922.....			1	1	6	6	10	161	66	119
1921.....	3	4		1	9	2		5		6
1920.....	2		154	1,815	3,998	6,048	3,272	2,492	2,007	834
New Jersey:										
1922.....	28	36	40	126	426	1,288	1,555	918	512	221
1921.....	34	26	22	33	32	20	94	51	85	105
1920.....	23	98	753	7,365	9,603	5,807	2,798	1,043	764	365
New Mexico:										
1922.....			1		10	14	35	92	304	209
1921.....				2	1	6		5		
1920.....	8	4	61	260	1,576	1,166	632	204	186	97
New York (exclusive of New York City):										
1922.....	28	48	80	173	694	771	1,577	1,568	1,774	1,973
1921.....	66	109	96	79	43	44	63	44	47	38
1920.....	31	61	555	4,755	11,616	13,259	11,304	5,330	4,030	2,434
New York City:										
1922.....	56	57	110	1,230	5,731	7,070	3,284	1,312	592	310
1921.....	134	78	84	72	59	84	109	102	101	124
1920.....	100	384	5,690	30,456	21,388	8,091	3,030	1,069	489	381
Texas:										
1922.....	48	5	5	5	57	141	123	76	353	1,181
1921.....	39	24			9	113	8	39		79
1920.....					11,265	6,788	1,035	588	134	55
Vermont:										
1922.....		1		1	7	2	12	1	2	15
1921.....	5	1	2	3	6	1		3	1	1
1920.....			25	89	272	796	1,314	1,071	481	470
Washington:										
1922.....			1	33	176	1,061	902	360	389	81
1921.....										
1920.....			12	902	6,451	6,426	4,596	1,559	1,260	271
Wisconsin:										
1922.....	46	17	59	22	24	37	22	73	129	321
1921.....	64	81	44	43	25	48	22	62	24	28
1920.....	3	67	1,944	6,739	14,328	10,310	6,274	3,131	994	554
Total:										
1922.....	457	416	728	2,328	9,141	15,645	17,854	21,343	20,808	15,230
1921.....	790	710	666	612	525	840	694	1,015	1,038	1,176
1920.....	508	4,627	30,625	117,081	184,849	168,623	98,219	64,090	38,265	23,254
Number of States re- porting cases:										
1922.....	19	17	22	22	24	24	24	24	23	23
1921.....	21	20	19	21	20	22	19	20	18	22
1920.....	18	17	20	22	24	24	24	22	23	23

DEATHS FROM INFLUENZA AND PNEUMONIA COMBINED.

COMPARISON OF THE FIRST 10 WEEKS OF THE YEARS 1919-1922, INCLUSIVE, FOR CERTAIN LARGE CITIES OF THE UNITED STATES.

The accompanying table gives the number of reported deaths from influenza and pneumonia (all forms), combined, during the first 10 weeks of the years 1919, 1920, 1921, and 1922, in 36 large cities of the United States.

This is a continuation of the table printed on pages 535-537 of the Public Health Reports of March 10, 1922 (vol. 37, No. 10).

The weeks for which figures are given all ended on Saturday, the "first" week for each year ending on the following days, respectively: January 4, 1919, January 10, 1920, January 8, 1921, and January 7, 1922.

The figures for 1919 and 1920 were taken from the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce, supplemented by reports to the Public Health Service. For 1921 and 1922 the figures are taken from reports made by the city health officers to the Public Health Service.

Blanks in the table indicate that no reports of deaths from influenza or pneumonia were received for the week. This does not always indicate that no deaths from these diseases occurred.

Number of deaths from influenza and pneumonia (all forms) combined.

City.	Week number.									
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.
Birmingham, Ala.:										
1922.....	8	10	14	6	13	4	4	14	9	7
1921.....	7	14	6	4	9	9	12	6	13	7
1920.....	13	9	16	14	22	18	59	70	76	45
1919.....	36	44	52	41	29	21	28	26	10	10
Los Angeles, Calif.:										
1922.....	18	19	14	21	26	29	33	79	84	69
1921.....	12	19	9	13	15	12	17	15	15	16
1920.....	16	18	19	22	42	88	74	57	49	20
1919.....	99	151	178	177	104	47	21	8	14	8
Oakland, Calif.:										
1922.....	4	5	5	6	8	8	12	12	16	18
1921.....	4	3	8	7	9	4	6	4	5	9
1920.....	4	8	20	24	55	54	60	21	17	19
1919.....	66	92	111	67	38	18	18	13	4	14
San Francisco, Calif.:										
1922.....	11	12	4	12	9	15	36	79	51	31
1921.....	5	8	8	9	7	11	13	6	11	11
1920.....	14	26	48	59	115	137	113	89	54	32
1919.....	194	290	310	149	59	41	20	18	21	22
Denver, Colo.:										
1922.....	22	11	10	17	18	16	19	22	26	40
1921.....	25	22	23	11	16	21	20	13	21	13
1920.....	21	18	24	49	159	160	67	44	21	10
1919.....	65	47	35	24	29	30	37	29	27	27
New Haven, Conn.:										
1922.....	5	1	5	4	13	10	14	30	27	23
1921.....	4	7	7	7	2	6	9	9	11	11
1920.....	6	8	10	19	20	60	68	31	23	17
1919.....	40	38	27	26	20	12	11	6	13	12
Washington, D. C.:										
1922.....	20	22	27	27	25	22	27	26	27	22
1921.....	22	22	14	9	9	12	19	24	22	22
1920.....	22	27	81	181	164	92	55	30	23	20
1919.....	139	109	107	73	60	42	40	28	35	38
Atlanta, Ga.:										
1922.....	13	7	9	7	20	17	11	16	13	20
1921.....	10	8	9	5	7	18	10	11	7	6
1920.....	19	11	10	15	32	75	104	75	46	26
1919.....	140	140	154	157	154	128	121	125	112	113
Chicago, Ill.:										
1922.....	48	43	63	65	72	80	56	94	139	150
1921.....	64	79	89	102	92	90	75	79	84	72
1920.....	107	153	472	1,109	1,005	494	243	136	120	108
1919.....	321	269	328	341	277	194	235	233	230	213
Indianapolis, Ind.:										
1922.....	20	11	9	17	29	42	39	38	36	24
1921.....	15	12	13	13	21	6	13	6	9	5
1920.....	18	16	21	36	92	124	72	49	41	20
1919.....	34	40	25	28	25	23	28	33	34	34

¹ Pneumonia (all forms) deaths only.

Number of deaths from influenza and pneumonia (all forms) combined—Continued.

City.	Week number.									
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.
Louisville, Ky.:										
1922.....	6	12	18	7	16	24	28	25	19	16
1921.....	6	4	5	5	2	2	9	13	8	10
1920.....	10	10	9	18	40	52	48	30	20	18
1919.....	22	20	21	30	20	19	19	37	34	88
New Orleans, La.:										
1922.....	13	14	14	13	19	25	20	19	31	52
1921.....	18	18	21	13	12	21	23	14	16	26
1920.....	27	27	37	32	36	62	89	76	58	59
1919.....	94	141	203	201	126	58	49	44	30	27
Baltimore, Md.:										
1922.....	32	25	24	26	29	27	29	40	47	71
1921.....	33	20	24	18	26	56	44	44	43	68
1920.....	20	35	24	59	122	268	231	123	80	65
1919.....	48	75	83	150	138	126	117	90	66	51
Boston, Mass.:										
1922.....	21	17	36	28	33	38	51	83	84	61
1921.....	27	23	36	33	23	10	26	21	23	29
1920.....	28	28	45	85	156	255	216	136	80	48
1919.....	244	227	158	153	110	89	71	72	70	69
Cambridge, Mass.:										
1922.....	5	8	3	4	7	7	8	9	8	16
1921.....	4	5	5	5	1	3	4	4	4	6
1920.....	8	7	8	14	22	28	23	13	4	5
1919.....	39	22	20	16	15	10	3	6	2	4
Fall River, Mass.:										
1922.....	5	4	8	6	5	7	9	22	29	24
1921.....	14	5	11	4	5	8	5	3	12	15
1920.....	7	10	5	3	5	16	25	19	18	14
1919.....	10	18	16	14	17	17	15	17	13	12
Lowell, Mass.:										
1922.....	4	7	5	4	4	6	5	13	11	4
1921.....	7	6	8	3	6	4	2	3	6	6
1920.....	5	4	2	7	12	10	36	29	27	16
1919.....	13	10	20	26	11	17	18	4	13	9
Worcester, Mass.:										
1922.....	5	10	11	7	16	16	16	15	13	4
1921.....	4	7	13	9	4	10	12	7	9	13
1920.....	10	9	7	14	15	44	62	34	59	18
1919.....	40	36	44	22	23	21	23	28	8	20
Minneapolis, Minn.:										
1922.....	10	6	9	9	6	9	4	8	19	20
1921.....	13	14	10	8	10	16	20	18	14	13
1920.....	12	10	9	63	168	125	53	13	8	18
1919.....	37	45	24	32	31	31	14	34	17	29
St. Paul, Minn.:										
1922.....	7	13	7	3	8	6	6	5	9	18
1921.....	9	5	9	9	8	7	8	5	8	12
1920.....	4	10	26	75	80	63	26	14	5	10
1919.....	39	25	14	12	15	13	11	12	15	14
Kansas City, Mo.:										
1922.....	15	13	14	25	25	28	39	71	52	41
1921.....	17	17	19	13	14	17	16	16	10	15
1920.....	13	29	98	120	220	167	74	53	29	23
1919.....	49	50	68	45	58	40	51	46	55	47
Omaha, Nebr.:										
1922.....	11	9	17	12	16	12	11	17	16	9
1921.....	8	7	4	14	4	4	12	11	8	7
1920.....	4	7	13	45	62	63	32	28	19	13
1919.....	25	25	17	17	11	12	10	12	9	16
Newark, N. J.:										
1922.....	13	15	20	20	38	33	39	37	28	20
1921.....	18	14	15	7	12	13	12	13	11	20
1920.....	17	14	30	55	116	142	93	54	34	24
1919.....	72	66	57	53	50	45	32	46	54	38
Buffalo, N. Y.:										
1922.....	6	20	13	19	21	15	15	20	22	36
1921.....	20	18	18	20	13	18	20	18	13	2
1920.....	10	7	19	17	67	141	145	98	56	38
1919.....	48	119	90	123	90	75	35	34	44	20
New York, N. Y.:										
1922.....	215	263	284	302	481	596	576	548	404	331
1921.....	235	216	204	203	199	212	212	269	268	239
1920.....	218	261	511	1,308	1,988	1,796	987	513	369	317
1919.....	753	570	998	1,193	1,153	893	786	788	864	747

¹ Pneumonia (all forms) deaths only.

² Influenza deaths only.

Number of deaths from influenza and pneumonia (all forms) combined—Continued.

City.	Week number.									
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.
Rochester, N. Y.:										
1922.....	5	11	12	14	6	7	14	11	11	18
1921.....	4	3	6	8	5	5	4	8	4	11
1920.....	13	7	12	23	50	52	27	19	12	15
1919.....	50	26	17	21	12	16	16	18	7	19
Syracuse, N. Y.:										
1922.....	4	6	4	6	7	7			7	3
1921.....	4	8	3	5	6	2	7	4	9	6
1920.....	9	8	10	31	89	78	29	23	11	6
1919.....	8	13	4	14	18	10	10	18	19	16
Cincinnati, Ohio:										
1922.....	14	20	15	19	21	27	41	54	49	42
1921.....	14	16	13	11	18	16	17	16	15	18
1920.....	14	12	17	25	38	62	81	99	73	34
1919.....	51	18	18	26	23	39	37	78	90	107
Cleveland, Ohio:										
1922.....			30	28	25	18	25	60	55	61
1921.....	25	22	23	24	31	28	31	27	34	26
1920.....	21	25	26	41	158	258	177	125	71	57
1919.....	132	94	92	92	108	100	80	82	94	131
Columbus, Ohio:										
1922.....	5	9	4	10	8	6	10	11	13	20
1921.....	6	8	12	12	13	12	7	9	9	6
1920.....	15	9	8	22	59	118	66	48	19	14
1919.....	15	14	10	20	19	11	15	20	27	27
Toledo, Ohio:										
1922.....	6	9	8	12	7	6	5	6	10	15
1921.....		3	9	10	5	4	3	8	7	2
1920.....	9	8	9	18	54	50	50	26	15	13
1919.....	19	15	19	20	15	6	11	21	14	23
Portland, Oreg.:										
1922.....	4	7	4	6	5	15	17	27	32	28
1921.....	6	5	7	6	4	8	5	4	4	7
1920.....	13	8	9	17	21	57	52	41	28	13
1919.....	55	101	123	122	50	15	10	12	7	8
Philadelphia, Pa.:										
1922.....	73	98	87	86	85	91	101	162	136	143
1921.....	72	83	85	101	114	108	115	108	128	101
1920.....	55	75	108	153	289	564	620	873	217	153
1919.....	142	194	229	259	306	262	232	231	207	183
Providence, R. I.:										
1922.....	13	8	12	17	11	15	26	32	39	19
1921.....	14	6	5	8	14	11	9	14	7	4
1920.....	12	13	8	14	39	88	92	57	37	15
1919.....	47	59	62	61	35	30	28	11	21	36
Nashville, Tenn.:										
1922.....	2	7		3	5	5	4	10	17	16
1921.....	2	8	4		10	9	9	9	10	7
1920.....	6	11	6	12	8	23	47	62	33	26
1919.....	20	17	21	21	17	15	16	23	19	18
Richmond, Va.:										
1922.....	8	9	9	4	8	9	12	21	19	8
1921.....	5	5	13	6	5	7	10	9	13	7
1920.....	2	9	6	21	35	38	28	13	8	7
1919.....	50	26	34	30	23	11	9	9	10	19
Total:										
1922.....	671	761	823	872	1,140	1,298	1,362	1,736	1,608	1,500
1921.....	750	737	738	725	738	800	836	848	891	837
1920.....	802	947	1,771	3,820	5,657	5,922	4,314	2,721	1,858	1,356
1919.....	3,165	3,346	3,688	3,756	3,180	2,427	2,167	2,191	2,209	2,159

1 Pneumonia (all forms), deaths only.

DEATHS FROM LETHARGIC ENCEPHALITIS IN THE UNITED STATES REGISTRATION AREA, 1920.

The Department of Commerce, through the Bureau of the Census, has issued a statement showing the number of deaths from lethargic encephalitis in 1920. This disease is often called "sleeping sickness," although the true "sleeping sickness" is a very different disease and is found principally in Africa.

In 1920, in the death registration area of the United States, lethargic encephalitis was given as a cause of death on 1,505 death certificates, as against 589 in 1919, giving mortality rates, respectively, of 1.7 and 0.7 per 100,000 population.

Deaths from this cause were reported for every State in the registration area except Delaware; the largest number in any one State was 364, reported for New York State, a rate of 3.5 per 100,000 population.

Cities are credited with 1,129 of the 1,505 deaths, and rural sections with 376, or mortality rates, respectively, of 2.6 and 0.8 per 100,000.

The white population, with 1,453 deaths from lethargic encephalitis, has a rate of 1.8 per 100,000 population, while the colored population, with only 52 deaths, has a rate of 0.7. Males and females contribute about equally to the total deaths from this cause, with 781 males and 724 females.

More of these deaths appear for persons aged 20 to 29 than for any other age group, though nearly as many are found for the age groups 30 to 39 and 40 to 49, and no age group escapes entirely.

Number of deaths reported as due to lethargic encephalitis in the registration area (exclusive of Hawaii) and each registration State, 1919 and 1920.

Area.	Number of death certificates giving lethargic encephalitis as cause of death.		Area.	Number of death certificates giving lethargic encephalitis as cause of death.	
	1920	1919		1920	1919
<i>Summary.</i>			<i>Registration States—Continued.</i>		
The registration area.....	1,505	589	Massachusetts.....	53	25
Registration States.....	1,476	564	Michigan.....	94	18
Cities in registration States.....	1,100	323	Minnesota.....	43	25
Rural part of registration States.....	376	241	Mississippi.....	8	4
Registration cities in nonregistration States.....	29	25	Missouri.....	20	19
All registration cities.....	1,129	348	Montana.....	6	4
<i>Registration States.</i>			Nebraska.....	14	(¹)
California.....	57	49	New Hampshire.....	2	2
Colorado.....	14	1	New Jersey.....	59	23
Connecticut.....	40	13	New York.....	364	81
Delaware.....	.....	3	North Carolina.....	20	11
Florida.....	14	2	Ohio.....	97	35
Illinois.....	92	55	Oregon.....	23	10
Indiana.....	35	23	Pennsylvania.....	142	29
Kansas.....	21	5	Rhode Island.....	8	3
Kentucky.....	20	10	South Carolina.....	18	6
Louisiana.....	14	16	Tennessee.....	17	12
Maine.....	9	1	Utah.....	3	.....
Maryland.....	36	5	Vermont.....	3	.....
			Virginia.....	24	34
			Washington.....	68	24
			Wisconsin.....	24	14
			District of Columbia.....	14	2

¹ Not added to registration area until 1920.

Deaths reported due to lethargic encephalitis, by age, sex, and color, in the registration area (exclusive of Hawaii), 1920.

Age.	Males.			Females.		
	Total.	White.	Colored.	Total.	White.	Colored.
All ages.....	781	755	26	724	698	26
Under 1 year.....	15	15	.....	15	11	4
1 year.....	16	15	1	25	24	1
2 years.....	19	17	2	12	12	.....
3 years.....	10	9	1	14	13	1
4 years.....	8	8	.....	15	15	.....
5 to 9 years.....	41	39	2	47	45	2
10 to 19 years.....	91	89	2	90	89	1
20 to 29 years.....	152	147	5	122	118	4
30 to 39 years.....	127	122	5	119	115	4
40 to 49 years.....	141	136	5	123	116	7
50 to 59 years.....	102	100	2	70	69	1
60 to 69 years.....	43	42	1	53	53	.....
70 to 79 years.....	12	12	.....	14	14	.....
80 to 89 years.....	2	2	.....	2	2	.....
90 years and over.....	.....	.....	.....	3	2	1
Unknown age.....	2	2	.....	.....	.....	.....

DEATH RATES IN A GROUP OF INSURED PERSONS.

DEATH RATES FOR PRINCIPAL CAUSES, DECEMBER AND YEAR, 1921, AND JANUARY 1921 AND 1922; AND COMPARISON BY COLOR FOR THE LAST QUARTERS OF 1919, 1920, AND 1921.

The accompanying tables are taken from the Statistical Bulletin of the Metropolitan Life Insurance Co. for February, 1922. They present the mortality data of the industrial department of the company for December, 1921, and January, 1921 and 1922, and compare, by color, the death rates for the last quarters of the years 1919, 1920, and 1921.

The gross death rate among this group was slightly lower in January, 1922 (9.1 per 1,000) than in the corresponding month of either 1921 (9.5) or 1920 (10.4).

The death rate from influenza was slightly higher for January, 1922 (12.6 per 100,000) than for the same month of 1921 (10.2). The pneumonia death rate for January, 1922 (101.5 per 100,000), although it showed an increase over the rate for December, 1921 (76.5), was lower than the rate for January, 1921 (106.0).

The death rate for tuberculosis for January, 1922, was much lower than the rates for this disease for December, January, and year, 1921.

Increases in death rates over those for the corresponding period of 1921 are shown for organic heart disease, cancer, and Bright's disease.

Death rates (annual basis) for principal causes per 100,000 lives exposed, December and year, 1921, and January, 1921 and 1922.

[Industrial Department, Metropolitan Life Insurance Co.]

Cause of death.	Death rate per 100,000 lives exposed.			
	January, 1922.	December, 1921.	January, 1921.	Year 1921. ¹
Total, all causes.....	910.0	885.9	948.7	853.8
Typhoid fever.....	3.7	6.0	3.7	6.6
Measles.....	2.3	1.3	3.0	3.1
Scarlet fever.....	7.2	5.5	10.2	6.9
Whooping cough.....	1.9	1.1	3.8	3.9
Diphtheria.....	24.7	31.3	28.4	23.3
Influenza.....	12.6	7.2	10.2	8.6
Tuberculosis (all forms).....	102.3	105.6	116.5	115.1
Tuberculosis of respiratory system.....	93.1	95.5	107.7	103.6
Cancer.....	69.0	75.6	66.6	70.4
Cerebral hemorrhage.....	63.7	70.6	64.1	60.9
Organic diseases of heart.....	137.2	124.9	127.7	115.0
Pneumonia (all forms).....	101.5	76.5	106.0	66.5
Other respiratory diseases.....	16.0	16.2	18.5	14.1
Diarrhea and enteritis.....	7.7	7.1	8.8	13.9
Bright's disease (chronic nephritis).....	74.5	71.9	68.9	66.7
Puerperal state.....	17.3	17.0	17.5	19.5
Suicides.....	6.0	6.9	7.7	7.5
Homicides.....	7.3	8.4	7.2	6.6
Other external causes (excluding suicides and homicides).....	47.9	50.2	50.7	56.2
Traumatism by automobile.....	8.5	12.5	7.8	11.9
All other causes.....	207.5	201.8	200.2	189.0

¹ Based on provisional estimates of lives exposed to risk in 1921

Death rates (annual basis) per 100,000 persons exposed, for principal causes, compared by color, for the last quarters of the years 1919, 1920, and 1921.

[Industrial Department, Metropolitan Life Insurance Co.]

Cause of death.	Death rate per 100,000 persons exposed.					
	White.			Colored.		
	Oct.-Dec., 1921.	Oct.-Dec., 1920.	Oct.-Dec., 1919.	Oct.-Dec., 1921.	Oct.-Dec., 1920.	Oct.-Dec., 1919.
All causes of death.....	752.4	771.9	781.3	1,262.8	1,308.7	1,305.8
Typhoid fever.....	6.4	7.5	6.9	16.7	14.6	18.2
Measles.....	.8	2.7	2.8	.5	.3	.5
Scarlet fever.....	5.4	7.1	4.8	.7	1.3	1.1
Whooping cough.....	1.3	3.8	2.5	2.1	6.3	2.9
Diphtheria and croup.....	32.0	32.2	33.2	17.2	9.3	10.7
Influenza.....	5.3	5.5	9.8	12.2	14.1	18.2
Tuberculosis (all forms).....	81.0	97.2	106.2	233.8	259.9	281.2
Tuberculosis of lungs.....	73.2	87.2	95.8	214.7	235.3	259.3
Tuberculous meningitis.....	2.9	4.8	5.1	4.5	6.8	6.7
Other forms of tuberculosis.....	5.0	5.3	5.4	14.6	17.8	15.2
Meningitis (total).....	4.4	3.9	5.3	5.3	3.3	4.3
Cerebral hemorrhage; apoplexy.....	58.4	53.5	53.3	92.2	92.2	90.5
Organic diseases of heart.....	107.2	97.6	95.5	168.5	152.2	154.6
Total respiratory diseases.....	68.7	68.7	70.5	119.4	115.3	118.3
Bronchitis.....	5.7	5.6	6.6	9.3	10.3	10.1
Bronchopneumonia.....	19.6	20.5	21.7	28.2	25.9	25.6
Pneumonia (lobar and undefined).....	33.6	33.0	34.8	69.5	67.3	71.8
Other diseases of respiratory system.....	7.9	7.7	7.5	12.4	11.8	10.7
Diarrhea and enteritis.....	12.3	15.9	15.9	10.5	17.1	17.9
Under 2 years.....	5.5	7.4	7.2	1.7	4.3	4.5
2 years and over.....	6.7	8.5	8.7	8.8	12.8	13.4
Nephritis and Bright's disease.....	65.3	64.0	67.4	124.7	123.5	124.4
Total puerperal state.....	15.2	15.7	14.9	24.8	27.9	26.7
Puerperal septicemia.....	5.8	6.1	4.6	8.6	14.8	13.1
Puerperal albuminuria and convulsions.....	3.9	4.0	4.5	8.4	5.3	6.4
Other diseases of puerperal state.....	5.4	5.6	5.8	8.1	7.8	7.2
Total external causes ¹	61.4	67.6	67.4	89.3	97.9	90.5
Suicides.....	7.3	6.6	4.9	6.4	3.0	5.6
Homicides.....	4.4	3.1	3.1	28.9	29.4	27.0
Accidental and unspecified violence ²	49.6	57.5	56.8	53.7	65.5	56.6
Accidental drowning.....	2.4	3.6	3.8	2.9	5.0	3.5
Automobile accidents.....	14.1	14.6	12.8	9.3	6.5	10.4
War deaths.....	.2	.3	2.6	.2	.....	1.3
All other and ill-defined causes of deaths.....	229.1	231.1	225.0	346.8	368.9	345.3

¹ Includes "war deaths."

² Excludes "war deaths."

CONFERENCE OF HEALTH AUTHORITIES.

ANNUAL CONFERENCE OF STATE AND TERRITORIAL HEALTH AUTHORITIES WITH THE UNITED STATES PUBLIC HEALTH SERVICE TO BE HELD AT WASHINGTON, D. C., ON MAY 17 AND 18, 1922.

The Twentieth Annual Conference of State and Territorial Health Authorities with the United States Public Health Service will be held at Washington, D. C., on May 17 and 18, 1922.

It is expected that important State and National public health matters will be brought before the conference for action and the Surgeon General has urged that each State be represented by an official delegate and also that the chief sanitary engineers of the different States be present.

DEATHS DURING WEEK ENDED MAR. 4, 1922.

Summary of information received by telegraph from industrial insurance companies for week ended Mar. 4, 1922, and corresponding week, 1921. (From the Weekly Health Index, Mar. 7, 1922, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Mar. 4, 1922.	Corresponding week, 1921.
Policies in force.....	49, 109, 724	46, 146, 658
Number of death claims.....	12, 430	9, 560
Death claims per 1,000 policies in force, annual rate.....	13. 2	10. 8

Deaths from all causes in certain large cities of the United States during the week ended Mar. 4, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, Mar. 7, 1922, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population July 1, 1921.	Week ended Mar. 4, 1922.		Annual death rate per 1,000, corre- sponding week, 1921.	Deaths under 1 year.		Infant mor- tality rate, week ended Mar. 4, 1922. ³
		Total deaths.	Death rate. ¹		Week ended Mar. 4, 1922.	Corre- sponding week, 1921.	
Total.....	25, 680, 108	8, 505	17. 3	14. 3	1, 115	1, 055	.....
Akron, Ohio.....	208, 435	39	9. 8	12. 3	6	14	64
Albany, N. Y.....	115, 071	40	18. 1	21. 3	4	5	90
Atlanta, Ga.....	207, 473	68	17. 1	12. 1	5	10	.....
Baltimore, Md.....	750, 864	244	16. 9	15. 6	34	38	96
Birmingham, Ala.....	186, 133	44	12. 3	16. 0	3	12	.....
Boston, Mass.....	757, 634	322	22. 2	14. 9	51	30	136
Bridgeport, Conn.....	143, 555	42	15. 3	11. 1	9	7	112
Buffalo, N. Y.....	519, 608	149	15. 0	16. 2	29	34	114
Cambridge, Mass.....	110, 444	45	21. 2	13. 7	4	6	73
Camden, N. J.....	119, 672	35	15. 3	21. 8	5	10	76
Chicago, Ill.....	2, 780, 655	855	16. 0	13. 7	129	120	.....
Cleveland, Ohio.....	831, 138	225	14. 1	12. 6	43	34	111
Columbus, Ohio.....	245, 358	77	16. 4	12. 5	12	0	127
Dallas, Tex.....	165, 282	43	13. 6	12. 6	7	4	.....
Denver, Colo.....	263, 152	86	17. 0	16. 1	10	8	.....
Fall River, Mass.....	120, 668	87	37. 6	18. 1	20	7	279
Fort Worth, Tex.....	111, 423	21	9. 8	.....	1	.....	.....
Grand Rapids, Mich.....	141, 197	44	16. 2	10. 7	3	4	50
Houston, Tex.....	144, 340	38	13. 7	9. 4	2	3	.....
Indianapolis, Ind.....	325, 632	121	19. 4	10. 2	14	12	107
Jersey City, N. J.....	302, 788	94	16. 2	15. 5	13	14	83
Kansas City, Kans.....	103, 884	44	22. 1	10. 0	7	3	162
Kansas City, Mo.....	336, 157	151	23. 4	11. 9	21	14	.....
Los Angeles, Calif.....	614, 160	305	25. 9	17. 0	24	25	100
Louisville, Ky.....	236, 083	86	19. 0	12. 1	10	3	108
Lowell, Mass.....	113, 757	45	20. 6	16. 5	4	9	67
Memphis, Tenn.....	165, 656	76	23. 9	13. 5	11	2	.....
Milwaukee, Wis.....	468, 386	111	12. 4	11. 8	19	16	93
Minneapolis, Minn.....	392, 815	95	12. 6	12. 6	13	18	71
Nashville, Tenn.....	122, 036	55	23. 5	24. 4	6	2	.....
New Bedford, Mass.....	125, 012	50	20. 9	15. 4	17	12	25
New Haven, Conn.....	167, 007	71	22. 2	17. 5	12	7	147
New Orleans, La.....	394, 657	146	19. 3	34. 7	13	17	.....
New York, N. Y.....	5, 751, 867	1, 666	15. 1	13. 9	233	240	90
Newark, N. J.....	424, 885	145	17. 8	14. 5	20	23	89
Norfolk, Va.....	121, 200	34	14. 6	13. 8	4	3	71
Oakland, Calif.....	226, 472	91	21. 0	10. 4	6	4	76
Omaha, Nebr.....	197, 066	72	19. 1	16. 1	7	14	75
Paterson, N. J.....	137, 463	38	14. 4	14. 0	6	4	92
Philadelphia, Pa.....	1, 866, 212	651	18. 2	17. 2	89	87	105
Pittsburgh, Pa.....	602, 452	207	17. 9	17. 7	38	32	121
Portland, Oreg.....	264, 859	111	21. 9	11. 0	5	5	49
Providence, R. I.....	239, 645	126	27. 4	14. 6	11	10	87
Richmond, Va.....	175, 686	71	21. 1	15. 7	9	10	110
Rochester, N. Y.....	305, 229	85	14. 5	14. 7	7	16	54
St. Louis, Mo.....	786, 164	291	19. 3	14. 5	15	20	.....

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—based on deaths under 1 year for the week and estimated births for 1921. Cities left blank are not in the registration area for births.

³ Enumerated population Jan. 1, 1920.

Deaths from all causes in certain large cities of the United States during the week ended Mar. 4, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, Mar. 7, 1922, issued by the Bureau of the Census, Department of Commerce.)—Continued.

City.	Estimated population July 1, 1921.	Week ended Mar. 4, 1922.		Annual death rate per 1,000, corresponding week, 1921.	Deaths under 1 year.		Infant mortality rate, week ended Mar. 4, 1922.
		Total deaths.	Death rate.		Week ended Mar. 4, 1922.	Corresponding week, 1921.	
St. Paul, Minn.....	237,781	81	17.3	12.5	9	8	84
Salt Lake City, Utah.....	121,595	35	15.0	17.2	1	13	15
San Francisco, Calif.....	520,546	254	25.4	13.5	15	4	87
Seattle, Wash.....	* 315,212	85	14.1	9.1	4	5	34
Spokane, Wash.....	104,442	40	20.0	13.0	4	2	85
Springfield, Mass.....	135,877	35	13.4	12.7	7	2	104
Toledo, Ohio.....	253,696	65	13.4	11.1	6	7	59
Trenton, N. J.....	122,760	54	22.9	11.9	9	5	138
Washington, D. C.....	* 437,571	141	16.8	16.2	24	13	138
Wilmington, Del.....	113,408	39	17.9	15.6	6	9	117
Worcester, Mass.....	184,972	68	19.2	11.3	8	9	87
Yonkers, N. Y.....	103,324	26	13.1	13.6	5	4	104
Youngstown, Ohio.....	139,432	40	15.0	12.3	6	6	79

* Enumerated population Jan. 1, 1920.

PREVALENCE OF DISEASE.

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

UNITED STATES.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Mar. 11, 1922.

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

ALABAMA.	Cases.	CALIFORNIA—continued.	Cases.
Chicken pox.....	45	Lethargic encephalitis:	
Diphtheria.....	12	San Francisco.....	1
Hookworm disease.....	55	Measles.....	22
Influenza:		Poliomyelitis:	
Barbour County.....	74	Pasadena.....	1
Montgomery County.....	62	Tehama County.....	1
Scattering.....	49	Scarlet fever.....	89
Malaria.....	3	Smallpox:	
Ophthalmia neonatorum.....	1	San Jose.....	10
Pellagra.....	1	Santa Clara County.....	11
Pneumonia.....	6	Scattering.....	31
Scarlet fever.....	10	Typhoid fever.....	5
Smallpox.....	32		
Trachoma.....	1		
Tuberculosis.....	14		
Typhoid fever.....	2		
		COLORADO.	
		(Exclusive of Denver.)	
		Cerebrospinal meningitis.....	1
		Chicken pox.....	9
		Diphtheria.....	13
		Impetigo contagiosa.....	1
		Influenza.....	937
		Measles.....	26
		Mumps.....	1
		Pneumonia.....	41
		Scarlet fever.....	47
		Septic sore throat.....	1
		Smallpox.....	7
		Tuberculosis.....	19
		Typhoid fever.....	4
		Whooping cough.....	1
		CONNECTICUT.	
		Cerebrospinal meningitis.....	4
		Chicken pox.....	53
		Conjunctivitis (infectious).....	2
		Diphtheria:	
		Bridgeport.....	11
		Hartford.....	12
		Scattering.....	52
		German measles.....	3
		Influenza:	
		Fairfield County.....	19
		Hartford County.....	50
CALIFORNIA.			
Cerebrospinal meningitis:			
San Francisco.....	1		
Diphtheria.....	143		
Influenza:			
Berkeley.....	129		
Los Angeles.....	1,243		
Los Angeles County.....	292		
Oakland.....	32		
Pasadena.....	79		
San Francisco.....	131		
Scattering.....	2,721		

CONNECTICUT—continued.

	Cases.
Influenza—Continued.	
Litchfield County.....	164
Middlesex County.....	23
New Haven County.....	46
New London County.....	177
Tolland County.....	6
Windham County.....	1
Lethargic encephalitis.....	2
Measles:	
Groton.....	8
Hartford.....	69
New Haven.....	29
Stamford.....	27
Scattering.....	40
Mumps.....	28
Ophthalmia neonatorum.....	1
Pneumonia (lobar).....	105
Scarlet fever:	
Bridgeport.....	15
New Canaan.....	9
New Haven.....	10
Waterbury.....	16
Scattering.....	36
Smallpox:	
Bridgeport.....	10
Scattering.....	13
Tetanus.....	1
Tuberculosis (all forms).....	31
Typhoid fever.....	3
Whooping cough.....	19

DELAWARE.

Chicken pox.....	3
Diphtheria.....	3
Influenza.....	2
Measles.....	3
Mumps.....	1
Pneumonia.....	1
Scarlet fever:	
Wilmington.....	63
Scattering.....	15
Tuberculosis.....	4

FLORIDA.

Cerebrospinal meningitis.....	1
Diphtheria.....	14
Influenza.....	72
Malaria.....	4
Pneumonia.....	5
Smallpox.....	10
Typhoid fever.....	12

GEORGIA.

Chicken pox.....	29
Diphtheria.....	29
Hookworm disease.....	5
Influenza.....	149
Malaria.....	10
Measles.....	8
Mumps.....	2
Paratyphoid fever.....	1
Pneumonia.....	13
Scarlet fever.....	7
Septic sore throat.....	1
Smallpox.....	16

GEORGIA—continued.

	Cases.
Tetanus.....	1
Tuberculosis (pulmonary).....	3
Typhoid fever.....	6
Whooping cough.....	17

ILLINOIS.

Cerebrospinal meningitis:	
Chicago.....	5
Rockford.....	1
Diphtheria:	
Chicago.....	157
Scattering.....	109
Influenza:	
Chicago.....	251
Scattering.....	484
Lethargic encephalitis:	
Chicago.....	1
Olney.....	1
Pneumonia:	
Chicago.....	504
Scattering.....	215
Poliomyelitis:	
Chicago.....	1
Lincoln.....	1
Scott County—Bluffs Precinct.....	1
Whiteside County—Fenton Township...	1
Scarlet fever:	
Chicago.....	120
Sheffield.....	10
Scattering.....	144
Smallpox:	
Peoria.....	14
Scattering.....	44
Typhoid fever.....	12
Whooping cough.....	112

INDIANA.

Cerebrospinal meningitis:	
White County.....	1
Diphtheria.....	71
Rabies in animal:	
Floyd County.....	1
Scarlet fever.....	92
Smallpox.....	25
Typhoid fever.....	7

IOWA.

Diphtheria.....	26
Scarlet fever.....	70
Smallpox.....	52

KANSAS.

Cerebrospinal meningitis.....	3
Chicken pox.....	77
Diphtheria.....	66
Influenza.....	557
Measles.....	8
Mumps.....	13
Pneumonia.....	112
Scarlet fever.....	96
Smallpox.....	40
Tetanus.....	1
Tuberculosis.....	30
Typhoid fever.....	2
Whooping cough.....	12

LOUISIANA.

	Cases.
Cerebrospinal meningitis.....	1
Diphtheria.....	13
Influenza.....	1,608
Poliomyelitis.....	1
Smallpox.....	6
Typhoid fever.....	8

MAINE.

Cerebrospinal meningitis.....	1
Chicken pox.....	24
Diphtheria.....	15
Influenza.....	352
Measles.....	46
Pneumonia.....	35
Scarlet fever.....	52
Smallpox.....	2
Tuberculosis.....	10
Whooping cough.....	2

MARYLAND.¹

Chicken pox.....	81
Diphtheria.....	44
German measles.....	11
Influenza.....	814
Lethargic encephalitis.....	4
Measles.....	210
Mumps.....	145
Ophthalmia neonatorum.....	2
Pneumonia (all forms).....	249
Scarlet fever.....	117
Septic sore throat.....	4
Trachoma.....	1
Tuberculosis.....	52
Typhoid fever.....	3
Vincent's angina.....	1
Whooping cough.....	23

MASSACHUSETTS.

Cerebrospinal meningitis.....	3
Chicken pox.....	115
Conjunctivitis (suppurative).....	13
Diphtheria.....	147
German measles.....	19
Influenza.....	521
Lethargic encephalitis.....	7
Malaria.....	2
Measles.....	580
Mumps.....	140
Ophthalmia neonatorum.....	23
Pellagra.....	1
Pneumonia (lobar).....	284
Poliomyelitis.....	1
Scarlet fever.....	249
Septic sore throat.....	6
Trachoma.....	3
Tuberculosis.....	162
Typhoid fever.....	5
Whooping cough.....	112

MINNESOTA.

Chicken pox.....	9
Diphtheria.....	55
Influenza.....	209
Measles.....	44
Pneumonia.....	5

MINNESOTA—continued.

	Cases.
Scarlet fever.....	172
Smallpox.....	41
Tuberculosis.....	32
Typhoid fever.....	3
Whooping cough.....	3

MISSISSIPPI.

Cerebrospinal meningitis.....	1
Diphtheria.....	7
Scarlet fever.....	14
Smallpox.....	26
Typhoid fever.....	6

MISSOURI.

Cerebrospinal meningitis.....	1
Chicken pox.....	30
Diphtheria.....	64
Epidemic sore throat.....	20
Influenza.....	279
Measles.....	2
Mumps.....	8
Pneumonia.....	101
Scarlet fever.....	44
Smallpox.....	23
Trachoma.....	51
Tuberculosis.....	40
Typhoid fever.....	5
Whooping cough.....	1

MONTANA.

Diphtheria.....	12
Influenza.....	263
Scarlet fever.....	29
Smallpox.....	17

NEBRASKA.

Chicken pox.....	22
Diphtheria.....	24
Influenza.....	119
Measles:	
Fremont.....	20
Grand Island.....	11
Hastings.....	23
Lincoln.....	23
Omaha.....	22
Scattering.....	19
Mumps.....	26
Pneumonia.....	7
Scarlet fever:	
Cedar County.....	19
Franklin County.....	10
Grand Island.....	12
Hartington.....	29
Scattering.....	57
Septic sore throat.....	1
Smallpox:	
York County.....	8
Scattering.....	28
Tuberculosis.....	1
Typhoid fever.....	2

NEW JERSEY.

Chicken pox.....	123
Diphtheria.....	124
Influenza.....	221

¹ Week ended Friday.

NEW JERSEY—continued.

	Cases.
Measles.....	354
Paratyphoid fever.....	1
Pneumonia.....	236
Scarlet fever.....	304
Smallpox.....	2
Trichinosis.....	1
Typhoid fever.....	8
Whooping cough.....	97

NEW MEXICO.

Chicken pox.....	5
Diphtheria.....	24
Influenza.....	209
Measles.....	1
Mumps.....	7
Pneumonia.....	27
Scarlet fever:	
Albuquerque.....	10
Scattering.....	3
Smallpox.....	2
Whooping cough.....	23

NEW YORK,

(Exclusive of New York City.)

Diphtheria.....	151
Influenza.....	1,973
Lethargic encephalitis.....	1
Measles.....	294
Pneumonia.....	662
Scarlet fever.....	330
Smallpox.....	1
Typhoid fever.....	14
Whooping cough.....	148

NORTH CAROLINA.

Cerebrospinal meningitis.....	1
Chicken pox.....	167
Diphtheria.....	43
German measles.....	2
Measles.....	19
Scarlet fever.....	27
Septic sore throat.....	6
Smallpox.....	96
Typhoid fever.....	5
Whooping cough.....	127

OREGON.

Chicken pox.....	12
Diphtheria.....	13
Influenza.....	250
Measles.....	1
Mumps.....	7
Pneumonia.....	123
Scarlet fever.....	15
Smallpox:	
Multnomah County.....	8
Portland.....	20
Scattering.....	5
Tuberculosis.....	12
Typhoid fever.....	2
Whooping cough.....	2

1 Deaths.

SOUTH DAKOTA.

	Cases.
Chicken pox.....	4
Diphtheria.....	16
Influenza.....	11
Measles.....	4
Pneumonia.....	17
Scarlet fever.....	23
Smallpox.....	30
Trachoma.....	1
Tuberculosis.....	2
Whooping cough.....	1

TEXAS.

Diphtheria.....	31
Influenza.....	1,181
Measles.....	63
Pneumonia.....	157
Smallpox.....	94
Typhoid fever.....	6

VERMONT.

Chicken pox.....	34
Diphtheria.....	3
Influenza.....	15
Measles.....	8
Mumps.....	17
Pneumonia.....	13
Scarlet fever.....	30
Typhoid fever.....	1
Whooping cough.....	15

VIRGINIA.

Smallpox:	
Bedford County.....	2

WASHINGTON.

Chicken pox.....	46
Diphtheria.....	14
German measles.....	2
Influenza.....	81
Measles.....	3
Mumps.....	87
Pneumonia.....	11
Scarlet fever.....	32
Smallpox:	
Spokane.....	11
Tacoma.....	17
Scattering.....	28
Tuberculosis.....	63
Typhoid fever.....	5
Whooping cough.....	20

WEST VIRGINIA.

Diphtheria.....	8
Influenza:	
Harrison County.....	128
Scattering.....	50
Scarlet fever.....	8
Typhoid fever.....	1

WISCONSIN.

Milwaukee:	
Cerebrospinal meningitis.....	3
Chicken pox.....	45
Diphtheria.....	14
German measles.....	4

WISCONSIN—continued.

Milwaukee—Continued.	Cases.
Measles.....	2
Pneumonia.....	21
Scarlet fever.....	10
Smallpox.....	4
Tuberculosis.....	15
Typhoid fever.....	2
Whooping cough.....	39
Scattering:	
Cerebrospinal meningitis.....	3
Chicken pox.....	91

WISCONSIN—continued.

Scattering—Continued.	Cases.
Diphtheria.....	72
German measles.....	10
Influenza.....	321
Measles.....	11
Pneumonia.....	3
Scarlet fever.....	106
Smallpox.....	43
Tuberculosis.....	26
Typhoid fever.....	3
Whooping cough.....	27

Delayed Reports for Week Ended Mar. 4, 1922.

DISTRICT OF COLUMBIA.

	Cases.
Chicken pox.....	43
Diphtheria.....	17
Influenza.....	9
Measles.....	8
Scarlet fever.....	11
Smallpox.....	2
Tuberculosis.....	32
Typhoid fever.....	2
Whooping cough.....	2

KENTUCKY.

Cerebrospinal meningitis—Scott County.....	1
Chicken pox.....	17
Diphtheria:	
Jefferson County.....	11
Scattering.....	17
Influenza:	
Allen County.....	34
Ballard County.....	73
Butler County.....	16
Caldwell County.....	25
Christian County.....	58
Franklin County.....	97
Graves County.....	20
Henry County.....	82
Jefferson County.....	35
Logan County.....	113

KENTUCKY—continued.

Influenza—Continued.	Cases.
Lyon County.....	45
Madison County.....	129
Pendleton County.....	90
Rowan County.....	34
Scott County.....	40
Todd County.....	53
Woodford County.....	52
Scattering.....	92
Malaria.....	1
Measles:	
Franklin County.....	30
Fulton County.....	35
Jefferson County.....	53
Scattering.....	7
Mumps.....	5
Pneumonia.....	119
Scarlet fever:	
Henry County.....	9
Scattering.....	15
Septic sore throat.....	1
Smallpox.....	5
Tonsillitis.....	1
Trachoma.....	1
Tuberculosis.....	54
Typhoid fever.....	1
Whooping cough.....	5

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Polomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
Arizona (January, 1922).....	.....	16	.....	.....	2	.....	.....	26	36	8
Florida (February, 1922).....	.....	83	291	18	31	2	1	17	36	50
Hawaii (January, 1922).....	2	22	19	.....	19	.....	.....	7	.....	23
Massachusetts (February, 1922).....	8	790	5,222	2	2,062	.....	4	951	.....	31
New Mexico (December, 1921).....	.....	135	.....	.....	8	.....	1	42	10	33

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922.

ANTHRAX.

City.	Cases.	Deaths.
New York: New York.....	1	
Pennsylvania: Philadelphia.....	1	

BERIBERI.

California: San Francisco.....	1	1
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CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 25, 1922.		City.	Median for previous years.	Week ended Feb. 25, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
California: San Francisco.....	1	1		New Jersey: Garfield.....	0	1	
Connecticut: Bridgeport.....	0	3		New York: Auburn.....	0	1	
New Haven.....	0	3	1	New York: New York.....	7	6	8
Illinois: Peoria.....	0		1	North Carolina: Rocky Mount.....	0		1
Maryland: Baltimore.....	0	1		Pennsylvania: Philadelphia.....	3	3	1
Massachusetts: Arlington.....	0	1	1	Tennessee: Knoxville.....		1	
Leominster.....	0	1		West Virginia: Huntington.....	0		1
Michigan: Alpena.....		1		Wisconsin: Eau Claire.....	0	1	
Detroit.....	0	1					

DIPHTHERIA.

See p. 664; also Telegraphic weekly reports from States, p. 651, and Monthly summaries by States, p. 655.

INFLUENZA.

City.	Cases.		Deaths, week ended Feb. 25, 1922.	City.	Cases.		Deaths, week ended Feb. 25, 1922.
	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.			Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	
Alabama: Birmingham.....		3	3	California—Continued. Riverside.....		23	
Arkansas: Fort Smith.....		2		Sacramento.....	11	88	3
Little Rock.....	1	39		San Diego.....	2	236	3
North Little Rock.....		3		San Francisco.....	22	987	51
California: Alameda.....	4	117		Santa Ana.....		161	
Bakersfield.....	1		1	Santa Barbara.....		13	
Berkeley.....		671	4	Santa Cruz.....		96	1
Eureka.....		38		Vallejo.....		50	
Long Beach.....		57		Colorado: Denver.....			2
Los Angeles.....	5	3,651	29	Pueblo.....			1
Oakland.....		242	4	Connecticut: Bridgeport.....		58	5
Passadena.....		308		Bristol.....		8	

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

INFLUENZA—Continued.

City.	Cases.		Deaths, week ended Feb. 25, 1922.	City.	Cases.		Deaths, week ended Feb. 25, 1922.
	Week ended Feb. 26 1921.	Week ended Feb. 25, 1922.			Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	
Connecticut—Continued.				Massachusetts—Contd.			
Hartford.....		23	1	Haverhill.....	1	63	2
Manchester.....	1	1		Holyoke.....		3	
Meriden.....		48		Lawrence.....		1	
Milford.....		2	1	Leominster.....		4	
New Britain.....	11			Lowell.....		44	
New Haven.....		9	13	Lynn.....	1	12	2
Norwich.....		4		Malden.....		5	
Stonington.....		25		Melrose.....		3	2
Waterbury.....		7		Newton.....		5	
District of Columbia:				Peabody.....		1	
Washington.....	1	7	4	Quincy.....		8	
Florida:				Saugus.....		41	1
Tampa.....		7		Somerville.....		33	
Georgia:				Southbridge.....		19	
Atlanta.....	4	14	4	Springfield.....	3	3	
Savannah.....		3	3	Wakefield.....	1	1	
Valdosta.....			1	Waltham.....		11	
Illinois:				Webster.....		1	
Aurora.....		2	1	Westfield.....		1	1
Champaign.....		3		Woburn.....			1
Chicago.....	13	707	22	Worcester.....	9	73	
Cicero.....		14		Michigan:			
Decatur.....		7		Detroit.....	3	100	6
East St. Louis.....		30	3	Flint.....		2	
Freeport.....		1		Kalamazoo.....		2	
La Salle.....		2		Pontiac.....		1	
Oak Park.....		10		Minnesota:			
Rock Island.....		4		Duluth.....		9	
Springfield.....		2	1	Minneapolis.....		6	1
Indiana:				St. Paul.....	4	4	1
Indianapolis.....			10	Missouri:			
Kokomo.....			4	Kansas City.....	7	21	28
La Fayette.....		12		St. Joseph.....		7	
Logansport.....		2		St. Louis.....	1	49	5
Mishawaka.....		1		Montana:			
Terre Haute.....		1		Great Falls.....		3	
Kansas:				Missoula.....	2	166	
Coffeyville.....	2			Nevada:			
Kansas City.....		5		Reno.....		26	
Lawrence.....		11		New Hampshire:			
Salina.....		2		Manchester.....		3	7
Wichita.....		17	1	New Jersey:			
Kentucky:				Asbury Park.....		1	
Louisville.....	1	65	1	Bavonne.....		2	
Owensboro.....		10		Belleville.....	2		
Louisiana:				Bloomfield.....		4	
Baton Rouge.....	2			East Orange.....		4	
New Orleans.....		72	6	Garfield.....		13	
Maine:				Harrison.....	1		
Auburn.....		2		Jersey City.....	1	6	
Bath.....		2		Kearny.....	1	36	
Biddeford.....		9		Montclair.....		15	
Lewiston.....			1	Morristown.....		4	
Portland.....		12		Newark.....	17	5	
Sanford.....		32		Orange.....		5	
Maryland:				Passaic.....	1	48	
Baltimore.....	152	234	4	Paterson.....		45	
Cumberland.....	2	22		Plainfield.....	2		
Massachusetts:				Trenton.....	1	20	14
Arlington.....		6		West Hoboken.....			1
Attleboro.....		27		West Orange.....		20	
Belmont.....		4		New Mexico:			
Beverly.....		1		Albuquerque.....		115	
Boston.....	3	353	10	New York:			
Braintree.....		26		Albany.....	1	138	
Brookline.....		7		Auburn.....		1	
Cambridge.....	1	122	1	Binghamton.....	1	20	
Chelsea.....		6	1	Buffalo.....		10	2
Clinton.....		3	1	Hornell.....		2	
Easthampton.....		2		Ithaca.....		5	
Everett.....	1	96		Jamestown.....	1	43	
Fall River.....		61	8	Middletown.....		49	
Frammingham.....		14		Mount Vernon.....	3	40	2

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

INFLUENZA—Continued.

City.	Cases.		Deaths, week ended Feb. 25, 1922.	City.	Cases.		Deaths, week ended Feb. 25, 1922.
	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.			Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	
New York—Continued.				Rhode Island:			
New York.....	102	1,312	105	Providence.....		59	7
Niagara Falls.....		1		South Carolina:			
Peekskill.....		67		Charleston.....		4	1
Port Chester.....		2		Tennessee:			
Poughkeepsie.....		7		Memphis.....			1
Saratoga Springs.....	1	11		Texas:			
Schenectady.....		24		Austin.....			1
White Plains.....	1			Beaumont.....		3	
Yonkers.....			1	Dallas.....	6	27	
North Carolina:				Fort Worth.....		1	1
Durham.....			1	Utah:			
Raleigh.....			2	Salt Lake City.....		8	2
Winston-Salem.....			3	Virginia:			
North Dakota:				Danville.....		14	
Grand Forks.....		16		Norfolk.....		93	3
Ohio:				Petersburg.....		18	1
Akron.....		11		Richmond.....		1	4
Ashtabula.....		1		Roanoke.....	9	25	
Barberton.....		1		Washington:			
Cambridge.....		4	1	Walla Walla.....			
Cincinnati.....		21	27	West Virginia:			
Cleveland.....	6	141	8	Bluefield.....			1
Columbus.....			2	Charleston.....		1	
Dayton.....	1	1		Clarksburg.....		9	
East Cleveland.....		4		Fairmont.....	2	31	
Hamilton.....		4	1	Huntington.....		1	
Newark.....		3		Wisconsin:			
Toledo.....		77	3	Fond du Lac.....		5	2
Oklahoma:				Kenosha.....		1	
Muskogee.....	2			Madison.....		5	
Oklahoma.....			1	Milwaukee.....		1	
Oregon:				Wyoming:			
Portland.....		19	15	Casper.....		20	1
Pennsylvania:				Cheyenne.....		4	
Philadelphia.....	9	77	21				

LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Massachusetts:		
San Francisco.....		1	Framingham.....		1
Connecticut:			Nebraska:		
Meriden.....	1		Omaha.....	1	1
Kansas:			Wisconsin:		
Topeka.....	1		Milwaukee.....	3	

MALARIA.

Alabama:			Massachusetts:		
Tuscaloosa.....	3		Westfield.....	1	
Arkansas:			Texas:		
Little Rock.....	1		Dallas.....	1	
California:					
Los Angeles.....	1				

MEASLES.

See p. 664; also Telegraphic weekly reports from States, p. 651, and Monthly summaries by States, p. 655.

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			South Carolina:		
Anniston.....	1		Charleston.....		2
Mobile.....		1			
Georgia:					
Atlanta.....		2			

PNEUMONIA (ALL FORMS).

Alabama:			Rhode Island:		
Birmingham.....		11	Rock Island.....		3
Montgomery.....		3	Springfield.....	4	2
Arizona:			Indiana:		
Tucson.....		2	East Chicago.....		7
Arkansas:			Evansville.....		6
Fort Smith.....		4	Fort Wayne.....		3
California:			Frankfort.....	1	
Alameda.....		2	Gary.....		11
Bakersfield.....		2	Hammond.....		4
Berkeley.....	6	2	Huntington.....		1
Long Beach.....		2	Indianapolis.....		28
Los Angeles.....	107	50	Muncie.....		3
Oakland.....	15	8	Newcastle.....		1
Pasadena.....	3	4	Terre Haute.....		5
Sacramento.....	11	6	Iowa:		
San Bernardino.....		1	Burlington.....	3	1
San Diego.....	6	5	Muscataine.....	1	
San Francisco.....		28	Kansas:		
Santa Ana.....		2	Atchison.....	1	
Santa Barbara.....	1		Coffeyville.....	5	
Santa Cruz.....	1		Fort Scott.....		2
Vallejo.....		1	Hutchinson.....	2	
Colorado:			Kansas City.....	27	
Denver.....		20	Lawrence.....		1
Pueblo.....		1	Parsons.....		1
Connecticut:			Topeka.....	11	2
Bridgeport.....		14	Wichita.....	10	6
Bristol.....	3		Kentucky:		
Derby.....		1	Covington.....		8
Hartford.....	9	3	Cwensboro.....	1	
Manchester.....	2		Louisiana:		
Millford.....	1		New Orleans.....	15	1
New Haven.....		17	Maine:		
New London.....		1	Auburn.....		3
Norwalk.....		2	Bangor.....	3	
Waterbury.....	12	11	Biddeford.....		3
Delaware:			Lewiston.....		8
Wilmington.....		8	Portland.....	6	4
District of Columbia:			Sanford.....	1	
Washington.....		22	Maryland:		
Georgia:			Baltimore.....	87	36
Atlanta.....		12	Cumberland.....		2
Augusta.....	2		Massachusetts:		
Macon.....	2		Arlington.....	2	
Rome.....	9		Belmont.....		1
Savannah.....		3	Beverly.....		2
Idaho:			Boston.....		73
Pocatello.....		2	Braintree.....		2
Illinois:			Brookline.....	2	1
Alton.....	3	1	Cambridge.....	11	8
Aurora.....	4		Chelsea.....	10	
Bloomington.....		2	Clinton.....	3	
Chicago.....	418	72	Everett.....	5	3
Cicero.....	9	3	Fall River.....	17	14
Decatur.....		2	Frammingham.....		4
East St. Louis.....	15	2	Gardner.....	1	
Evanston.....	7		Haverhill.....	4	1
Freeport.....		1	Holyoke.....	5	2
Galesburg.....		3	Lawrence.....	3	1
Jacksonville.....		3	Leominster.....		3
Kewanee.....		1	Lowell.....	5	13
La Salle.....		3	Lynn.....		2
Mattoon.....	6	1	Malden.....	4	2
Oak Park.....	5	2	Medford.....		1
Peoria.....		4	Melrose.....	3	1
Quincy.....		1	Methuen.....		1
			New Bedford.....		8

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Massachusetts—Contd.			New York—Continued.		
Newton.....		2	Geneva.....		2
North Adams.....		2	Hudson.....	2	1
Peabody.....	2		Ithaca.....	2	
Pittsfield.....		1	Jamestown.....	10	4
Plymouth.....		1	Lackawanna.....	13	1
Quincy.....	9	4	Little Falls.....		1
Saugus.....		1	Lockport.....	1	
Somerville.....	9	6	Middletown.....		1
Springfield.....	7	4	Mount Vernon.....	20	5
Taunton.....		5	New York.....	987	443
Wakefield.....	2		Niagara Falls.....	10	5
Watertown.....	2	1	Ogdensburg.....		1
Westfield.....	4	2	Olean.....		1
Woburn.....		2	Peekskill.....	3	1
Worcester.....	19	15	Port Chester.....	6	2
Michigan:			Poughkeepsie.....		
Ann Arbor.....	3		Rochester.....	48	11
Battle Creek.....	1		Rome.....		2
Detroit.....	217	65	Saratoga Springs.....	3	2
Flint.....		3	Schenectady.....	10	2
Grand Rapids.....	5	2	Troy.....	6	1
Kalamazoo.....	3	2	Watertown.....	2	1
Pontiac.....	1		Watervliet.....		1
Port Huron.....	2	1	White Plains.....	11	1
Minnesota:			Yonkers.....		
Duluth.....	5	4	North Carolina:		
Minneapolis.....		7	Charlotte.....		4
Rochester.....	1		Durham.....		1
St. Paul.....		4	Raleigh.....		1
Missouri:			Salisbury.....		
Kansas City.....	75	43	Wilmington.....	4	2
St. Joseph.....		12	Winston-Salem.....		5
Springfield.....		1	Ohio:		
Montana:			Akron.....		
Billings.....		1	Alliance.....	16	
Great Falls.....	3	2	Astabula.....		1
Missoula.....		1	Barberton.....		1
Nebraska:			Cambridge.....		
Lincoln.....		4	Canton.....	4	3
Omaha.....		17	Cincinnati.....		6
Nevada:			Cleveland.....		
Reno.....	4		Columbus.....		27
New Hampshire:			Columbus.....		
Berlin.....		1	Dayton.....	2	9
Manchester.....		3	East Cleveland.....	1	
New Jersey:			Elyria.....		
Asbury Park.....	2		Hamilton.....	5	3
Atlantic City.....		5	Kenmore.....	1	
Bayonne.....	6		Lancaster.....		1
Bloomfield.....	2		Lorain.....		1
Clifton.....	4	3	Mansfield.....	2	
East Orange.....	9	2	Middletown.....		1
Elizabeth.....		10	Newark.....		2
Englewood.....		1	Norwood.....	2	2
Garfield.....	4		Sandusky.....		1
Hackensack.....	9	6	Springfield.....		3
Hoboken.....		7	Toledo.....		3
Jersey City.....	11		Youngstown.....		8
Kearny.....	7	2	Zanesville.....	5	3
Montclair.....	4		Oklahoma:		
Morristown.....		3	Oklahoma.....		
Orange.....	12	3	Oklahoma.....		
Passaic.....	10	2	Oregon:		
Paterson.....	28		Portland.....		
Perth Amboy.....		4	Portland.....		
Phillipsburg.....		1	Pennsylvania:		
Plainfield.....	5		Philadelphia.....		
Summit.....	1		Philadelphia.....		
Trenton.....	15	10	Philadelphia.....		
Union.....	1		Philadelphia.....		
West Hoboken.....		4	Philadelphia.....		
West New York.....	3		Philadelphia.....		
West Orange.....	9	3	Philadelphia.....		
New Mexico:			Rhode Island:		
Albuquerque.....	3		Cranston.....		
New York:			Pawtucket.....		
Albany.....	33		Providence.....		
Auburn.....	4	2	South Carolina:		
Binghamton.....	7		Charleston.....		
Buffalo.....	33	18	Tennessee:		
			Memphis.....		
			Texas:		
			Austin.....		
			Beaumont.....		
			Corpus Christi.....		
			Dallas.....		
			Fort Worth.....		
			Houston.....		
			Waco.....		

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Utah:			West Virginia—Contd.		
Salt Lake City.....		8	Huntington.....		4
Vermont:			Parkersburg.....		1
Rutland.....		2	Wheeling.....		6
Virginia:			Wisconsin:		
Alexandria.....	2		Fond du Lac.....	1	
Lynchburg.....		1	Janesville.....		1
Norfolk.....		11	Kenosha.....		2
Petersburg.....		1	Milwaukee.....	8	
Portsmouth.....		5	Wyoming:		
Richmond.....		17	Casper.....	2	
Roanoke.....	4	2	Cheyenne.....		3
West Virginia:					
Charleston.....		1			
Clarksburg.....		3			

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 25, 1922.		City.	Median for previous years.	Week ended Feb. 25, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Connecticut:				New Jersey:			
New Haven.....	0	1		Garfield.....			3
Georgia:				New York:			
Augusta.....		1		New York.....	1	3	2
Illinois:				Ohio:			
Centralia.....		1		Hamilton.....	0	1	
Maryland:				Pennsylvania:			
Baltimore.....	0	2		Norristown.....	0	1	
Cumberland.....	0		1	Philadelphia.....	0	2	
Massachusetts:				Rhode Island:			
Worcester.....	0	2		Providence.....	0	1	1

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
Georgia:		New Jersey:	
Savannah.....	1	Morristown.....	1
Massachusetts:		Plainfield.....	1
Holyoke.....	2	Virginia:	
Missouri:		Petersburg.....	1
Kansas City.....	1		

SCARLET FEVER.

See p. 664; also Telegraphic weekly reports from States, p. 651, and Monthly summaries by States, p. 655.

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922 -Continued.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 25, 1922.		City.	Median for previous years.	Week ended Feb. 25, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Nebraska:			
Birmingham.....	6	2		Omaha.....	15	1	
Mobile.....	1	8	1	North Dakota:			
California:				Grand Forks.....	5	1	
Bakersfield.....	0	2		Ohio:			
Berkeley.....	0	3		Cincinnati.....	1	2	
Long Beach.....	2	1		Dayton.....	0	3	
Los Angeles.....	4	1		Findlay.....	0	1	
Oakland.....	0	1		Fremont.....	0	3	
San Francisco.....	5	6		Hamilton.....	2	1	
Colorado:				New Philadelphia.....	0	12	
Denver.....	11	7	5	Springfield.....	0	10	
Connecticut:				Toledo.....	1	6	
Bridgeport.....	0	10		Oklahoma:			
Fairfield.....		2		Oklahoma.....	2	2	
District of Columbia:				Oregon:			
Washington.....	0	3		Portland.....	5	26	
Georgia:				Pennsylvania:			
Macon.....	3	2		Harrisburg.....	0	1	
Illinois:				Jeanette.....	0	1	
Chicago.....	5	3	2	Meadville.....	0	3	
Peoria.....	1	21		Philadelphia.....	0	1	
Indiana:				South Dakota:			
Bloomington.....	0	3		Sioux Falls.....	1	1	
Indianapolis.....	6	1		Tennessee:			
Iowa:				Memphis.....	1	1	
Burlington.....	0	9		Texas:			
Clinton.....	0	1		Dallas.....	25	5	
Council Bluffs.....	1	1		Fort Worth.....	0	3	1
Muscatine.....	0	3		Houston.....	0	1	
Sioux City.....	5	1		Utah:			
Kansas:				Salt Lake City.....	10	3	
Hutchinson.....	2	2		Virginia:			
Kansas City.....	1	3		Parville.....	0	1	
Topeka.....	1	1		Washington:			
Wichita.....	4	4		Aberdeen.....	1	2	
Kentucky:				Bellingham.....	1	1	
Louisville.....	1	3		Spokane.....	27	11	
Michigan:				Tacoma.....	0	5	
Ann Arbor.....	1	1		Yakima.....	5	1	
Detroit.....	4	4		West Virginia:			
Flint.....	2	1		Bluefield.....	3	1	
Minnesota:				Wisconsin:			
Duluth.....	2	1		Kenosha.....	0	2	
Hibbing.....	0	1		Manitowoc.....	0	2	
Minneapolis.....	35	13		Marinette.....	0	1	
Rochester.....	4	6		Milwaukee.....	3	6	
St. Paul.....	7	14		Racine.....	0	1	
Missouri:				Superior.....	0	5	
Kansas City.....	2	4	4	Waukesha.....	2	2	
St. Louis.....	6	1		Wausau.....	0	2	
Montana:				West Allis.....		1	
Great Falls.....	1	8					

TETANUS.

City.	Cases.	Deaths.
Illinois:		
Chicago.....	1	
Pennsylvania:		
Philadelphia.....	1	1

TUBERCULOSIS.

See p. 664; also Telegraphic weekly reports from States, p. 651.

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Feb. 25, 1922.		City.	Median for previous years.	Week ended Feb. 25, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Minnesota:			
Birmingham.....	1	1		Minneapolis.....	2	1	
Mobile.....	0	1		St. Paul.....	0		1
Arkansas:				Virginia.....	0	1	
Little Rock.....	0	1		Missouri:			
California:				St. Louis.....	2	3	1
Oakland.....	0	3		New Jersey:			
Colorado:				Atlantic City.....	1	1	
Denver.....	0	1		New York:			
Delaware:				Binghamton.....	0	1	
Wilmington.....	0	2		Buffalo.....	0	2	1
District of Columbia:				New York.....	8	1	1
Washington.....	0	1		Rochester.....	1	1	
Florida:				Troy.....	0	1	
Tampa.....		6		Watertown.....	0	2	
Georgia:				Ohio:			
Atlanta.....	0		1	Cincinnati.....	0	1	
Macon.....	0	2		Cleveland.....	2	1	
Rome.....	0	1		Fremont.....	0	2	
Illinois:				Oregon:			
Chicago.....	3	1		Portland.....	0	1	
Indiana:				Pennsylvania:			
Hammond.....	0		1	Connellsville.....	0	1	
Indianapolis.....	0	1	1	Norristown.....	0	1	
Logansport.....	0	1		Philadelphia.....	7	1	
Kansas:				Pittston.....	0	1	
Kansas City.....	0	1		Tennessee:			
Kentucky:				Memphis.....	0	1	
Louisville.....	0		1	Texas:			
Louisiana:				Austin.....	0		1
New Orleans.....	0	1		Galveston.....	0	4	
Maryland:				Houston.....	0		1
Baltimore.....	5	1	1	Virginia:			
Massachusetts:				Petersburg.....	0	1	
Boston.....	3	2		Washington:			
Northampton.....	0	13		Seattle.....	0	1	
Michigan:				Tacoma.....	0	1	
Battle Creek.....	0	1		Wisconsin:			
Detroit.....	3	1		Marinette.....	0	1	
Flint.....	0	1	1	Milwaukee.....	1	1	
				Oshkosh.....	0	1	

TYPHUS FEVER.

City.	Cases.	Deaths.
Colorado:		
Pueblo.....	1	

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922 - Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston.....	17, 734								2	2
Birmingham.....	173, 270	50	1		1			3		
Mobile.....	60, 151	22	4	1		1				
Montgomery.....	43, 464	12	2						1	
Tuscaloosa.....	11, 996		1							
Arizona:										
Tucson.....	20, 292	14		1						8
Arkansas:										
Fort Smith.....	28, 811	13								1
Little Rock.....	64, 997		1							
North Little Rock.....	14, 048						1			
California:										
Alameda.....	23, 806	10		1			12			
Bakersfield.....	11, 033	11			1					1
Berkeley.....	55, 886	18	9	1	1		5			
Eureka.....	12, 923	3	7							
Long Beach.....	55, 593	21	8						1	1
Los Angeles.....	576, 673	263	32		6		29		79	23
Oakland.....	216, 361	69	17	2	1		9		2	8
Pasadena.....	45, 354	13	1				1		3	
Richmond.....	16, 843	2	1							
Riverside.....	19, 341	8			1				1	
Sacramento.....	65, 857	31	1		1		7		4	2
San Bernardino.....	18, 721	8								2
San Diego.....	74, 683	29	2				6		2	
San Francisco.....	508, 410	260	39	1	3		15		33	21
Santa Ana.....	15, 485	6					1			
Santa Barbara.....	19, 441	6								
Santa Cruz.....	10, 917	7					1			
Vallejo.....	21, 107	6								
Colorado:										
Denver.....	256, 369	106	8		1		5			13
Greeley.....	10, 883	0								
Pueblo.....	42, 908	9	7	2						1
Connecticut:										
Bridgeport.....	143, 533	51	11	1	7	1	12	1		4
Bristol.....	20, 620	10	1				1		1	
Derby.....	11, 233	2								
Fairfield (town).....	11, 475	1			1		3			
Greenwich (town).....	22, 123		4		3				1	
Hartford.....	138, 086	51	7		50		4		8	1
Manchester (town).....	18, 370	7					1			
Meridan (city).....	29, 842						2		1	
Milford (town).....	10, 193	4	2		1		2			
New Haven.....	162, 519	71	2		21	1	14		8	3
New London.....	25, 683	7	1		4				1	
Norwalk.....	27, 700	15								
Norwich (city).....	22, 304	4			3		1			
Stonington (town).....	10, 236	2	4							
Waterbury.....	91, 410	30	5				12	1	4	1
Delaware:										
Wilmington.....	110, 168	37	2		4		50			2
District of Columbia:										
Washington.....	437, 571	148	18	3	10		12		33	7
Florida:										
Tampa.....	51, 252	13	3						2	2
Georgia:										
Albany.....	11, 555		1							
Atlanta.....	200, 616	73	4				5		4	9
Augusta.....	52, 548		1						1	
Brunswick.....	14, 413	0								
Macon.....	52, 995				15		4			
Rome.....	13, 252		5							
Savannah.....	83, 252	38					4	1		5
Valdosta.....	10, 783	1	1							
Idaho:										
Pocatello.....	15, 001	7		1						
Illinois:										
Alton.....	24, 682	4	2							
Aurora.....	36, 397	9	1		21				1	1
Bloomington.....	28, 725	11					2			
Blue Island.....	11, 424	6	2							
Centralia.....	12, 491	5	1							

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois—Continued.										
Champaign	15, 873				1		1			
Chicago	2, 701, 705	731	156	16	238	4	127	2	198	42
Chicago Heights	19, 653	6								
Cicero	44, 995	14	4		4		3			1
Decatur	43, 818	11	1				1			
East St. Louis	68, 740	11							2	2
Elgin	27, 454	7								1
Evanston	37, 215	10	1		1		8			
Freeport	19, 669	8					1			1
Galesburg	23, 834	7	1				3		1	
Jacksonville	15, 713	15	4				1			1
Kewanee	16, 026	5	1				3			
La Salle	13, 050	4					1			
Mattoon	18, 552	6	1				1			
Oak Park	39, 830	14	1		6		1		1	
Peoria	76, 121	20	2				3			
Quincy	35, 978	9	2				1	1	2	
Rock Island	35, 177	7					1		4	2
Springfield	59, 183	18			1		2			
Indiana:										
Anderson	29, 767	5	2				5			
Bloomington	11, 595	4	1							
Clinton	10, 962	5					1			
Crawfordsville	10, 139	1					2			
East Chicago	35, 967	13	6	1					1	
Evansville	85, 264	18	1				2			
Fort Wayne	88, 549	18	6				4			
Frankfort	11, 585	3			1				2	
Gary	55, 378	22	2							2
Hammond	36, 004	19	3		5		2		1	
Huntington	14, 000	8	1	1			5			
Indianapolis	314, 194	128	15		39		9		8	8
Kokomo	30, 067	10					4			2
La Fayette	22, 486	10							1	
Logansport	21, 626	6	3		3					
Mishawaka	15, 195	2							1	
Munice	36, 624	15	1	1						1
Newcastle	14, 458	4								
South Bend	79, 983	12	1		1				3	
Terre Haute	66, 083	17	1	1	1		8	1		1
Iowa:										
Burlington	24, 057	5								
Cedar Rapids	45, 566						1			
Clinton	24, 151	1	4	1			1			
Council Bluffs	36, 162	10	2							
Davenport	56, 727		1		2		1			
Dubuque	39, 141		1	1			6			
Marshalltown	15, 731						4			
Mason City	20, 065	3	1							
Muscatine	16, 068	6					1			
Ottumwa	23, 003		3				2			
St. Louis City	71, 227		9				1			
Waterloo	36, 230		1		1		3			
Kansas:										
Atchison	12, 630						2			
Coffeyville	13, 452	3					2			
Fort Scott	10, 693	8	1							1
Hutchinson	23, 283		2				1			
Kansas City	101, 177		1				3		1	
Lawrence	12, 456	6			1		1			
Leavenworth	16, 912		1				2			
Parsons	16, 028	8					1			
Salina	15, 085	5	3				3			
Topeka	50, 022	13	5						2	
Wichita	72, 128	39	1	1			3		3	2
Kentucky:										
Covington	57, 121	19			17					3
Louisville	234, 891	118	10		86	2	3		24	7
Owensboro	17, 424		2						1	
Paducah	34, 735						4			
Louisiana:										
New Orleans	387, 219	131	14		1		8		28	22

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922 - Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine:										
Auburn	16,985	9					4			
Bangor	25,978	2							2	
Bath	14,731	2								1
Biddeford	18,008	12								
Lewiston	31,791	16							1	
Portland	69,272	14	5	1			24			2
Sanford	10,691	1								
Maryland:										
Baltimore	733,826	246	38	1	122	1	53		14	30
Cumberland	29,837	12	1				1			
Massachusetts:										
Adams	12,967	4	1				1			
Amesbury	10,036	4			2					
Arlington	18,665	3					1			
Attleboro	19,731	9								
Belmont	10,749	3				2			1	
Beverly	22,561	7	1		1		2			
Boston	748,060	327	77	3	152	2	43	4	39	16
Braintree	10,580	5			1		1			
Brookline	37,748	13	2		1		2		1	
Cambridge	109,694	41	6	1	44		13			4
Chelsea	43,184	22	1		1		1			1
Chicopee	36,214	8	5	2			1		2	1
Clinton	12,979	2	1							
Danvers	11,108		2		2					
Dedham	10,792	2								
Easthampton	11,261								1	
Everett	40,120	12	1		16		3			1
Fall River	120,455	59	4	1		1	4		1	4
Frammingham	17,033	11								
Gardner	16,971	7	1				2			
Greenfield	15,462	2			10					
Haverhill	53,884	73	7						3	1
Holyoke	60,203	21	1		8		1			4
Lawrence	94,270	36	1		19				1	
Leominster	19,744	6	2				1		2	
Lowell	112,479	46	4	2	1				2	2
Lynn	99,148	27	9				4		3	
Malden	49,103	15	7		10		4		2	
Medford	39,038	7								1
Melrose	18,204	7	1				2		2	
Methuen	15,189	3			17					1
New Bedford	121,217	42	11	2	1		12		5	2
Newburyport	15,618	5								
Newton	46,054	17	1		1		3		1	
North Adams	22,282	11								
Northampton	21,951	11							1	
Peabody	19,552	7	1		14		3		1	
Pittsfield	41,751	7			1		1			1
Plymouth	13,045	2								
Quincy	47,876	10					6		4	1
Saugus	10,874	3	1						2	
Somerville	93,091	44	8		44		2			1
Southbridge	14,245	5							3	2
Springfield	129,563	37	7	1	6		9			2
Taunton	37,137	20	2	1			1			
Wakefield	13,025	3								
Waltham	30,915	13	1		70		3		1	2
Watertown	21,457	4	1							
Webster	13,258	4								
West Springfield	13,443	2								
Westfield	18,604	14			11				2	1
Winthrop	15,455	4								
Woburn	16,574	9								
Worcester	179,754	65		1	7					5
Michigan:										
Alpena	11,101						5			
Ann Arbor	19,516	17	2				2			
Battle Creek	36,164		1		5		3			
Benton Harbor	12,233				2					
Detroit	983,739	279	59	7	294	3	75		53	16
Flint	91,599	21	7				4			1
Grand Rapids	137,634	34	3		1		6		4	

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.										
Holland.....	12, 166	3	3	1	1	2				
Kalamazoo.....	45, 858	15	7			35			6	
Marquette.....	12, 718	3				1			1	
Pontiac.....	34, 273	8	1		24	1			1	
Port Huron.....	25, 944	4				4				
Sault Ste. Marie.....	12, 036	5				4				
Minnesota:										
Austin.....	10, 118	4								
Duluth.....	98, 917	23				3			4	2
Faribault.....	11, 059	1	1							
Hibbing.....	15, 059					1			1	
Mankato.....	12, 469					4				
Minneapolis.....	389, 552	35	18		30	45	2		11	11
Rochester.....	13, 722	14				1				3
St. Paul.....	234, 595	68	6		3	29	2		12	7
Missouri:										
Kansas City.....	324, 410	170	3		1	3			9	6
St. Joseph.....	77, 939	45	2		1	6				3
St. Louis.....	772, 897	265	60	2	1	15			45	14
Springfield.....	39, 631	16								
Montana:										
Anaconda.....	11, 668									1
Billings.....	15, 100	3	1						1	1
Great Falls.....	24, 121	7	11	1	1	4			1	
Missoula.....	12, 668	7							1	
Nebraska:										
Lincoln.....	54, 934	17	1		6	2				1
Omaha.....	191, 601	62	1		19	4				1
Nevada:										
Reno.....	12, 016	2							1	1
New Hampshire:										
Berlin.....	16, 104	3								
Concord.....	22, 167	9	1						1	
Dover.....	13, 029	4			15					
Keene.....	11, 210	4							2	
Manchester.....	78, 384	25	9		18	3				1
New Jersey:										
Asbury Park.....	12, 400	1			1				1	
Atlantic City.....	50, 682	11				1			2	
Bayonne.....	76, 754		1		4				2	
Belleville.....	15, 660					2				
Bloomfield.....	22, 019		1		9	1			1	
Clifton.....	26, 470	5	2			6				
East Orange.....	50, 710	12	4		1	9				
Elizabeth.....	95, 682		5		2	18			1	
Englewood.....	11, 627	6				4				
Garfield.....	19, 331	4							1	
Hackensack.....	17, 667	6				3				
Harrison.....	15, 721		1			1				
Hoboken.....	68, 166	20	1	2	3	3			2	
Jersey City.....	297, 864		28		51	24			16	
Kearny.....	26, 724	10			1	4			1	
Montclair.....	28, 810	3				4			2	
Morristown.....	12, 548	7		1		1				
Orange.....	33, 268	7				5				
Passaic.....	63, 824	22	3			10	1		2	2
Paterson.....	135, 866		5		63	8			5	
Perth Amboy.....	41, 707	10	10	1	11	2			1	
Phillipsburg.....	16, 923	4								
Plainfield.....	27, 700	3	1		2	3			1	1
Rahway.....	11, 042	6	1			2				
Summit.....	10, 174	1				1				1
Trenton.....	119, 289	56				3			3	2
Union.....	20, 651					2				
West Hoboken.....	40, 068	10	1			4				
West New York.....	29, 926	6	1		3	2	1		2	
West Orange.....	15, 573	8				3				
New Mexico:										
Albuquerque.....	15, 157	14	5	2		7			3	5
New York:										
Albany.....	113, 344		7		14	1			2	
Auburn.....	36, 192	12	1			2			2	
Binghamton.....	66, 800	21	1			15				

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922 - Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York—Continued.										
Buffalo.....	506,778	147	25	3	2		37	1	12	5
Geneva.....	14,648	5								
Mornell.....	15,025	7			3					2
Hudson.....	11,745	3						3		
Ithaca.....	17,004	4		1						
Jamestown.....	38,917	16			15		3		3	
Lehawanna.....	17,918	5					8		2	
Little Falls.....	13,029	4								
Lockport.....	21,308	3					1			
Middletown.....	18,420	2			2		2		1	
Mount Vernon.....	42,726	13			2		9		1	
Newburgh.....	30,366	17							1	3
New York.....	5,621,151	1,688	199	26	1,325	17	339	19	1,968	1,115
Niagara Falls.....	50,760	12			3		16	1	1	1
North Tonawanda.....	15,482	7								
Ogdensburg.....	14,609	6								
Olean.....	20,506	15		2			3			1
Peekskill.....	15,968	3							1	
Port Chester.....	16,573	8		1			1		4	
Poughkeepsie.....	35,000	12			50					
Rochester.....	295,750	81	8	1	1		1		14	4
Rome.....	26,941	8	2		17		1			2
Saratoga Springs.....	13,181	6					1		1	
Schenectady.....	88,723	29	7				7		6	
Troy.....	72,013	29	2		1		1		3	4
Watertown.....	31,285	11					3		1	1
Watervliet.....	16,073	3								
White Plains.....	21,031	6	1		47		3		1	
Yonkers.....	100,226	26	1		5		10			1
North Carolina:										
Charlotte.....	46,338	20					1		4	
Durham.....	21,719	6							4	1
Greensboro.....	19,861	2								1
Raleigh.....	24,418	11	1						2	1
Rocky Mount.....	12,742	7								
Salisbury.....	13,884	6								
Wilmington.....	33,372	14								
Winston-Salem.....	48,395	19					2		2	
North Dakota:										
Fargo.....	21,961	0					3			
Ohio:										
Akron.....	208,435	44	8		19		12			
Alliance.....	21,603	7	1							
Ashtabula.....	22,062	8							1	
Barberton.....	18,811	4					1		2	1
Bucyrus.....	10,425	4	2							
Cambridge.....	13,104		1						1	1
Canton.....	87,091	27	2		11		5			
Cincinnati.....	401,247	171	9		71		8		11	16
Cleveland.....	796,536	252	22	5	102	1	70	2	49	14
Columbus.....	237,031	81	7	1	1		3		5	7
Coshocton.....	10,847		1							
Dayton.....	152,559	45	4		2		3		1	
East Cleveland.....	27,292	3			1		2			
Elyria.....	20,474	9					1		2	
Findlay.....	17,021	5			1				1	
Fremont.....	12,468	5							1	
Hamilton.....	39,675	19					2		1	1
Kenmore.....	12,683		2				1			
Lancaster.....	14,706	5								
Lorain.....	37,295				2		1		1	
Mansfield.....	27,824	11	1				3			
Marion.....	27,891		3				2			
Martins Ferry.....	11,634	2								
Middletown.....	23,594	6							3	1
Newark.....	26,718	11	2				1			1
New Philadelphia.....	10,718		1				1			
Niles.....	13,080	3					4			
Norwood.....	24,966	5	3				3		1	
Salem.....	10,305	3					3			
Sandusky.....	22,897	9					2			1

1 Pulmonary tuberculosis only.

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio—Continued.										
Springfield.....	60,840	14	1				1		1	1
Steubenville.....	28,508	10	2				1			
Tiffin.....	14,375	2								
Toledo.....	248,108	61	13	1	8		7		8	8
Youngstown.....	132,358	47	5		4	1	8		3	
Zanesville.....	29,569	16	2				3			2
Oklahoma:										
Oklahoma.....	91,258	29	3		1		4			3
Tulsa.....	72,075		1		9		1			
Oregon:										
Portland.....	258,288	86	17		3		11		3	5
Pennsylvania:										
Allentown.....	73,502		4							
Altoona.....	60,331						3			
Berwick.....	12,181				24					
Bethlehem.....	50,358		3		1		5			
Braddock.....	20,879								2	
Bradford.....	15,525				1					
Butler.....	23,778		1				1			
Chester.....	58,086				2		5		3	
Dickson City.....	11,049		2							
Dubois.....	18,681		1				1			
Easton.....	33,813		1							
Erie.....	93,372		3		3		1		2	
Farrell.....	15,588				1					
Harrisburg.....	75,917		2				3			
Hazleton.....	32,277				10		1			
Jeannette.....	10,627		2							
Johnstown.....	67,327		1		5		4		2	
Lancaster.....	53,150		3		2		9		1	
Lebanon.....	24,643		1		1		1		1	
McKeesport.....	45,975		1		1					
McKees Rocks.....	16,713		1							
Mahanoy City.....	15,599		1							
Meadville.....	14,568		1							
Monessen.....	18,179				1		4		1	
Mount Carmel.....	17,469		1							
Nanticoke.....	22,614				2					
New Kensington.....	11,967				1		1			
Norristown.....	32,319		1		1		5		2	
North Braddock.....	14,928						2		1	
Oil City.....	21,274		1				2			
Olyphant.....	10,236								1	
Philadelphia.....	1,823,158	618	90	12	27		138	6	70	40
Pittsburgh.....	588,193		17		47		31		14	
Plymouth.....	16,500		1		5				1	
Pottstown.....	17,431						5			
Pottsville.....	21,876				7		1			
Reading.....	107,784		8		1		4			
Scranton.....	137,783		5		3					
Shamokin.....	21,204		1		2					
Shenandoah.....	24,726		1		2		1			
Steelton.....	13,428		1							
Sunbury.....	15,721				6					
Tamaqua.....	12,363		3		9					
Uniontown.....	15,692		1		2		6			
Washington.....	21,480				10				1	
West Chester.....	11,717						1			
Wilkes-Barre.....	73,833		4		16				1	
Wilkesburg.....	24,403		1				1			
Williamsport.....	36,198				5		3			
Woodlawn.....	12,495		1				1			
York.....	47,512		4						1	
Rhode Island:										
Cranston.....	29,407	6			2					
Cumberland (town).....	10,077	1					1			
Newport.....	30,255	11	1				4	1		
Pawtucket.....	64,248	23	2							
Providence.....	237,595	113	4				3			5
South Carolina:										
Charleston.....	67,957	28							1	4
Columbia.....	37,524		1				1			

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922—Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
South Dakota:										
Sioux Falls.....	25, 176	5	2		4		5			
Tennessee:										
Chattanooga.....	57, 895					2				
Knoxville.....	77, 818				5	1				
Memphis.....	162, 351	67	4			2		18	8	
Texas:										
Austin.....	34, 876	55								3
Beaumont.....	40, 422	10								
Corpus Christi.....	10, 522	4						1		1
Dallas.....	158, 976	47	2		73	4		2		3
Fort Worth.....	106, 482	33	4		1	2		3		3
Galveston.....	44, 255	6								
Houston.....	138, 076	37	2			1				3
Waco.....	38, 500	29	2							
Utah:										
Salt Lake City.....	118, 110	40	5		1	3		1		2
Vermont:										
Barre.....	10, 008					3				
Burlington.....	22, 779	10			1	8		2		
Rutland.....	14, 954	5								2
Virginia:										
Alexandria.....	18, 060	10						1		1
Danville.....	21, 539	7	3		1			1		1
Lynchburg.....	29, 956	5	4			5		2		1
Norfolk.....	115, 777	1	1	1						9
Petersburg.....	31, 002	9	1		1	1		2		1
Portsmouth.....	54, 387	15				3				2
Richmond.....	171, 667	79	7		16	2		6		3
Roanoke.....	50, 842	16	4			3				1
Washington:										
Bellingham.....	25, 570					1				
Seattle.....	315, 652		5		1	7				
Spokane.....	104, 437		1			4				
Tacoma.....	96, 965		5							
Walla Walla.....	15, 503		1			2		1		
West Virginia:										
Bluefield.....	15, 282	4	1			1				
Charleston.....	39, 608	15								1
Clarksburg.....	27, 569	7	3		1	1				
Fairmont.....	17, 851		4			1				
Huntington.....	50, 177	28								2
Martinsburg.....	12, 515		1		15					
Morgantown.....	12, 127			1		2				
Moundsville.....	10, 669	4			10	2				
Parkersburg.....	20, 050	6								
Wheeling.....	54, 322	22	1		1	1				2
Wisconsin:										
Ashland.....	11, 334					1				
Beloit.....	21, 284	2				2		2		
Bau Claire.....	20, 880		1							
Fond du Lac.....	23, 427	7	1					1		
Janesville.....	18, 293	5	4			1				
Kenosha.....	40, 472	7	8		1	1				
La Crosse.....	30, 363					3		2		
Madison.....	38, 378				1	2				
Marinette.....	13, 610					1				
Millwaukee.....	457, 147		10		1	18		12		
Oshkosh.....	33, 162	11	1			1		1		1
Racine.....	58, 593	10	3			10		3		1
Sheboygan.....	30, 955		1							
Stevens Point.....	11, 371		2							
Superior.....	39, 624	7	2			5				
Wausau.....	12, 558		1			7				
Wausau.....	18, 661				1					
West Allis.....	13, 765									6
Wyoming:										
Casper.....	11, 447	5								
Cheyenne.....	13, 829	7			2					

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "Tango Maru"—At Thursday Island—From Kobe and Ports.

On December 31, 1921, the steamship *Tango Maru* arrived at Thursday Island, Queensland, Australia, from Kobe via Nagasaki, Hongkong, Manila, and Zamboanga, with a case of plague on board in the person of a third-class passenger who had boarded the vessel at Hongkong, December 20, 1921, and reported sick December 22, 1921. The *Tango Maru* left Kobe December 13, 1921. At Hongkong 40 passengers were taken on, including the patient subsequently landed at Thursday Island.

AUSTRALIA.

Plague—Queensland.

Bundaberg.—During the week ended March 11, 1922, one case of plague was reported at Bundaberg, Queensland, Australia.

The following is a summary of recent reports of plague in Queensland:

Brisbane.—Week ended December 31, 1921, two fatal cases; week ended January 7, 1922, four cases, and four cases reported during the previous week confirmed; week ended January 21, 1922, two cases; week ended January 28, one case previously reported, confirmed. Total number of cases reported from August 22, 1921, 55, with 28 deaths.

Cairns.—Week ended January 7, 1922, one death.

Townsville.—Two weeks ended January 14, 1922, two fatal cases. Total cases to date, 32; deaths, 21.

Plague Rats and Sentinel Guinea Pigs.

The finding of plague-infected animals in Australia has been reported as follows:

New South Wales—Sydney.—Week ended January 21, 1922, one plague rat found.

Queensland—Brisbane.—Week ended December 31, 1921, one rat; January 1 to 21, 1922, nine rats; week ended December 31, 1921, two plague-infected sentinel guinea pigs; week ended January 28, 1922, one plague-infected sentinel guinea pig reported found.

Cairns.—Week ended December 31, 1921, one plague rat.

Hinchinbrook (Ingham).—January 1-14, 1922, two plague rats.

BRAZIL.

Campaign Against Tuberculosis.

By legislative-decree of December 28, 1921, the Brazilian Congress authorized the Government to establish sanitariums for the treatment of tuberculosis in or near the Federal district and at other points in the interior, preference being given to those States in which the endemic coefficient of tuberculosis is highest. In the extension of these sanitariums, arrangements will be made with State governments for a division of expense. The institutions will be supported by an appropriation to be voted annually by the National Congress. Each sanitarium is to be provided with at least 100 beds. A section will be reserved for pay patients.

The Government is also authorized to assist with loans three private institutions of the same type and capacity which shall have begun to be built within one year after the promulgation of the law and which are completed within two years. The institutions will be required to build especially for the treatment of tuberculosis, on plans conforming with the requirements of the national department of health.

CANADA.

Communicable Diseases—Ontario—December, 1921.

The following table shows the number of cases of communicable diseases occurring in the Province of Ontario, Canada, during the month of December, 1921, as compared with the number reported for the corresponding month of the year 1920. The number of deaths from these diseases is also shown. Population, estimated, 2,523,200.

Disease.	December, 1921.		December, 1920.	
	Cases.	Deaths.	Cases.	Deaths.
Cerebrospinal meningitis.....	5	3	7	7
Diphtheria.....	743	60	778	74
Influenza.....	4	4	45	12
Measles.....	94	2	973	7
Pneumonia.....		215		242
Poliomyelitis (infantile paralysis).....	1	0	7	3
Scarlet fever.....	600	16	711	17
Smallpox.....	128	0	555	5
Tuberculosis.....	174	139	161	114
Typhoid fever.....	28	5	59	25
Whooping cough.....	95	9	335	16

CHINA.

Smallpox—Shanghai.

Under date of January 26, 1922, smallpox conditions at Shanghai, China, were reported to be still serious.¹

¹ Public Health Reports, Feb. 17, 1922, p. 377.

CUBA.

Communicable Diseases—Provinces.

Communicable diseases have been notified in the Republic of Cuba as follows:

Provinces.

NEW CASES REPORTED JAN. 1-10, 1922.

Province.	Chick- en pox.	Diph- theria.	Infan- tile te- tanus.	Ma- laria.	Meas- les.	Para- typhoid fever.	Folio- myeli- tis (in- fantile paraly- sis).	Scarlet fever.	Small- pox.	Ty- phoid fever.
Camaguey.....		1		19			1		22	3
Habana.....	3	3		20	1	1		10		19
Matanzas.....	2	2	1			1				3
Oriente.....	6			64		6			69	1
Pinar del Rio.....		1		4						4
Santa Clara.....	10	1		1	1	1		1		4
Total.....	21	8	1	108	2	9	1	11	91	34

NEW CASES REPORTED JAN. 11-31, 1922.

Camaguey.....	9			48					70	4
Habana.....	16	10		50	4	2	2	32	1	26
Matanzas.....	7	2	2	5						11
Oriente.....	13	8	1	190		9		1	94	12
Pinar del Rio.....		2		10		3				3
Santa Clara.....	16	1		4		1	2	1	1	8
Total.....	61	23	3	307	4	15	4	34	166	64

MALTA.

Communicable Diseases—Year Ended March 31, 1921.

The report of the public-health department of the Island of Malta, for the year ended March 31, 1921, shows 651 cases of Mediterranean, Malta, or undulant fever, 248 cases of scarlet fever, 302 cases of tuberculosis, pulmonary, and 517 cases of typhoid fever. The total number of deaths reported for the period was 4,584, in a population of 226,224.

Mediterranean, or Malta, fever (also called undulant fever) continues to play an important rôle in morbidity in Malta, and constant efforts are made to combat the disease. Warnings to the public to boil all goats' milk before using are periodically issued. During the year under report, 5,729 goats were examined and an average of 6.9 per cent of these were found infected. Vaccination of goats against the fever has been carried on in the island but with negative results.

RUSSIA.

Typhus Fever—Saratov District.

Under date of January 31, 1922, typhus fever was stated to be gaining greatly in the district of Saratov, eastern Russia. In the town of Markstadt, in the German Communes, there were reported

present in hospitals and childrens' homes, 94 cases during the month of September, 1921, 172 cases in October, 797 cases in November, and 924 cases in December. The mortality was stated to be about 10 per cent.

SWEDEN.

Influenza—Goteborg.¹

Influenza has been reported at Goteborg, Sweden, as follows: Week ended February 4, 1922, 649 cases with 7 deaths; week ended February 11, 1922, 873 cases with 11 deaths. (Population, census of Dec. 31, 1921, 228,053.)

UNION OF SOUTH AFRICA.

Smallpox—Typhus Fever—November, 1921.²

During the month of November, 1921, smallpox and typhus fever were reported in the Union of South Africa as follows:

Smallpox.—Among the colored population, 216 cases with 5 deaths. These were distributed as follows: Cape Province, 17 cases with 1 death; Natal, 170 cases with 4 deaths; Orange Free State, 7 cases; Transvaal, 22 cases. Among white inhabitants 8 cases were reported.

Typhus fever.—Among the colored population, 573 cases with 79 deaths. These were distributed as follows: Cape Province, 473 cases with 70 deaths; Natal, 55 cases with 7 deaths; Orange Free State, 41 cases with 1 death; Transvaal, 4 cases with 1 death. Among the white population 7 cases with 1 death were reported, occurring in the Cape Province.

VIRGIN ISLANDS.

Contagious Diseases—January, 1922.

The occurrence of contagious diseases in the Virgin Islands during the month of January, 1922, has been reported as follows:

Island and disease.	Cases.	Remarks.
In St. Thomas and St. John:		
Chancroid.....	1	
Chicken pox.....	1	
Gonococcus.....	5	3 imported.
Measles.....	93	65 St. John.
Syphilis.....	2	1 imported.
In St. Croix:		
Dengue.....	4	
Dysentery.....	1	Entamebic.
Filariasis.....	8	
Gonococcus.....	3	
Malaria.....	1	Aestivo-autumnal.
Mumps.....	2	
Schistomiasis.....	1	
Syphilis.....	6	
Trachoma.....	28	
Tuberculosis.....	4	Chronic pulmonary.

¹ Public Health Reports, Mar. 3, 1922, p. 516.

² Public Health Reports, Oct. 21, 1921, p. 2651; Nov. 18, 1921, p. 2865; and Dec. 16, 1921, p. 3114.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.Reports Received During Week Ended Mar. 17, 1922.¹**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila.....	Jan. 15-21.....	16	8	
Provinces— Bulacan.....	Dec. 25-31.....	1		

PLAGUE.

Australia:				
New South Wales— Sydney.....	Jan. 1-7.....			Jan. 15-21, 1922, one plague rat found.
Queensland— Brisbane.....	Dec. 25-31.....		2	Aug. 22, 1921-Jan. 23, 1922: Cases, 55; deaths, 28. Dec. 25, 1921-Jan. 23, 1922: 10 infected rats and 3 infected sentinel guinea pigs.
Do.....	Jan. 1-7.....	4		Also 4 cases reported previous week, confirmed.
Do.....	Jan. 15-21.....	2		
Do.....	Jan. 22-28.....			1 case reported previous week confirmed.
Bundaberg.....	Mar. 5-11.....	1		
Cairns.....	Jan. 1-7.....		1	Dec. 25-31, 1921: 1 plague rat found.
Hinchinbrook (Ingham).....				Jan. 1-14, 1922: 2 plague rats found.
Townsville.....	Jan. 1-14.....		2	To Jan. 14, 1922: Cases, 32; deaths, 21.
Ceylon:				
Colombo.....	Jan. 15-21.....	3	4	1 plague rat.
China:				
Hongkong.....	Jan. 15-23.....	6	3	
India:				
Karachi.....	Jan. 22-28.....	5	5	Jan. 8-14, 1922: Cases, 1,609; deaths, 1,233.
Indo-China:				
Saigon.....				City and district, Dec. 18-24, 1921: Three plague rats. City and district, Jan. 8-14, 1922: 1 plague rat.
Siam:				
Bangkok.....	Dec. 25-31.....	1		
On vessel:				
Steamship Tango Maru.....	Dec. 31.....	1		At Thursday Island quarantine, Australia, from Kobe, via Nagasaki, Hongkong, Manila, and Zamboanga.

SMALLPOX.

Canada.....				
New Brunswick— Charlo.....	Feb. 19-25.....	2		Dec. 1-31, 1921: Cases, 128. 20 miles from Campbellton.
Chile:				
Talcahuano.....	Jan. 22-28.....	1		
China:				
Hongkong.....	Jan. 15-23.....	3	2	Cases, foreign (pop. 24,000). Deaths, native (pop. 790,000). Jan. 1-31, 1922: Cases, 257.
Shanghai.....	Jan. 23-Feb. 5.....	6	37	
Cuba.....				
Haiti:				
Cape Haitien.....	Feb. 12-18.....	6		
Indo-China:				
Saigon.....	Dec. 18-24.....	1	1	City and district.
Do.....	Jan. 8-14.....	1	1	
Mexico:				
San Luis Potosi.....	Feb. 19-25.....		3	

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

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

Reports Received During Week Ended Mar. 17, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa.....				Nov. 1-30, 1921: Cases, 216; deaths, 5 (colored). White, 8 cases.
Cape Province.....				Nov. 1-30, 1921: Cases, 17; deaths, 1 (colored).
Natal.....				Nov. 1-30, 1921: Cases, 170; deaths, 4 (colored).
Orange Free State.....				Nov. 1-30, 1921: Cases, 7 (colored).
Transvaal.....				Nov. 1-30, 1921: Cases, 23 (colored). Among white population, 8 cases, State not designated.

TYPHUS FEVER.

China: Harbin.....	Jan. 9-22.....	12		
Mexico: San Luis Potosi.....	Feb. 19-25.....		1	
Russia: Saratov District— Markstadt.....				Sept. 1-Dec. 31, 1921: Cases, 1,987; mortality, about 10 per cent; hospital cases.
Union of South Africa.....				Nov. 1-30, 1921: Cases, 573; deaths, 79 (colored). White, 7 cases, 1 death.
Cape Province.....				Nov. 1-30, 1921: Cases, 473; deaths, 70 (colored). Among white population, 7 cases, 1 death.
Natal.....				Nov. 1-30, 1921: Cases, 55; deaths, 7 (colored).
Orange Free State.....				Nov. 1-30, 1921: Cases, 41; deaths, 1 (colored).
Transvaal.....				Nov. 1-30, 1921: Cases, 4; deaths, 1 (colored).

Reports Received from Dec. 31, 1921, to Mar. 10, 1922.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India.....				Oct. 2-Nov. 26, 1921: Deaths, 30,372.
Bombay.....	Oct. 30-Nov. 5.....	1		
Calcutta.....	Oct. 23-Dec. 31.....	71	60	
Do.....	Jan. 1-21.....	34	29	
Karachi.....	Nov. 6-12.....		1	
Madras.....	Dec. 11-31.....	4	1	
Do.....	Jan. 1-21.....	9	6	
Rangoon.....	Oct. 1-Dec. 31.....	30	24	
Do.....	Jan. 1-14.....	5	3	
Indo-China: Saigon.....	Nov. 6-12.....	1	1	
Java: West Java— Batavia.....	Nov. 1-7.....	2	2	At Lebak.
Philippine Islands: Manila.....	Nov. 13-Dec. 31.....	49	18	
Do.....	Jan. 1-14.....	45	13	
Provinces— Pampanga.....	Dec. 25-31.....	1		
Zambales.....	Dec. 11-31.....	31	18	
Poland.....				Aug. 14-Sept. 10, 1921. Cases, 4; deaths, 1.
Russia: Kharkoff.....	Jan. 28.....			Present.
Kieff.....	Dec. 15-Jan. 11.....	259		

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				
Latvia—				
Riga.....				At quarantine station in October, 1921: One case.
Odessa.....	Jan. 28.....			Present.
Siam:				
Bangkok.....	Oct. 23-Dec. 21.....	8	4	

PLAGUE.

Asia Minor:				
Smyrna.....	Nov. 27-Dec. 3....	1	1	
Australia:				
New South Wales—				
Sydney.....	do.....	2	1	Dec. 7-13: 4 plague rats.
Do.....	Jan. 29-Feb. 25....	4		
Queensland—				
Brisbane.....	Oct. 30-Dec. 24....	27	18	Total, Aug. 22-Dec. 24, 1921: Cases, 39; deaths, 25. Total infected rats, 53.
Do.....	Jan. 21-28.....	3		
Cairns.....	Oct. 30-Dec. 10....	6	3	Plague rats: 8.
Cooktown.....	Oct. 30-Nov. 5.....	1		Pestis minor.
Ingham.....				Nov. 6-Dec. 24, 1921: Plague rats, 14.
Inisfail.....				Nov. 27-Dec. 3, 1921: 1 plague rat.
Ipswich.....	Dec. 11-17.....	1	1	
Port Douglas.....	Nov. 13-19.....	1	1	
Townsville.....	Nov. 20-Dec. 3....	2	2	Total cases, 27; deaths, 18.
Azores:				
Islands—				
Fayal.....	Jan. 16-22.....	2	2	Nov. 27-Dec. 31, 1921: Cases, 23; deaths, 9. Jan. 1-21, 1922: Cases, 13; deaths, 8.
St. Michael.....				3 miles from port.
Arrifes.....	Dec. 25-31.....	1	1	
Do.....	Jan. 1-7.....	1		
Fenaes d'Ajuda.....	Nov. 27-Dec. 3....			Present. 6 miles from port.
Do.....	Jan. 15-21.....	3	2	
Ribeira Grande.....	Nov. 13-Dec. 10....	19	8	9 miles from port.
Do.....	Jan. 8-14.....	9	6	
Livramento.....	Dec. 4-10.....	2		Vicinity of Ponta Delgada.
Ponta Delgada.....	do.....	1		
Brazil:				
Bahia.....	Oct. 30-Dec. 31....	13	12	
Do.....	Jan. 1-7.....	2	2	
British East Africa:				
Uganda.....	Aug. 1-Oct. 31....	90	61	Reports of inspectors, deaths, 343; reports of chiefs, deaths, 651.
Ceylon:				
Colombo.....	Oct. 30-Dec. 31....	13	10	Oct. 30-Dec. 24, 1921: Rodent plague, 6.
Do.....	Jan. 1-14.....	7	7	Infected rats, 7.
China:				
Hongkong.....	Nov. 20-Dec. 17....	6		
Do.....	Jan. 1-14.....	6	4	
Ecuador:				
Guayaquil.....	Nov. 16-Dec. 31....	18	6	Rats examined, 2,958; found infected, 90. Total, July-Dec. 15, 1921: Cases, 28. Jan. 1-31, 1922: Rats examined, 6,200; found infected, 153.
Do.....	Jan. 1-31.....	20	9	Jan. 1-Dec. 31, 1921: Cases, 356; deaths, 153. Jan. 1-Feb. 2, 1922: Cases, 12, deaths, 6.
Egypt:				
City—				
Alexandria.....	Dec. 5-30.....	7	2	
Do.....	Jan. 17-24.....	3	2	
Port Said.....	Dec. 20.....	1		
Suez.....	Nov. 22-Dec. 31....	16	9	
Do.....	Jan. 2-29.....	4	2	
Province—				
Girgeh.....	Jan. 12.....	1		Septicemic.
Keneh.....	Dec. 1.....	1	1	Do.
Do.....	Jan. 21-26.....	2	1	1 case septicemic.

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Preveza.....	Feb. 8.....			Outbreak. Port on the Ionian Sea.
India:				
Bombay.....	Oct. 23-Dec. 24.....	7	6	Oct. 23-Dec. 31, 1921: Cases, 8,690; deaths, 6,458 (Reports, weeks ended Dec. 3 and 17, 1921, missing). Jan. 1-7, 1922: Cases, 1,944; deaths, 1,518.
Do.....	Jan. 1-7.....	1	1	
Karachi.....	Nov. 6-Dec. 31.....	5	5	
Do.....	Jan. 1-14.....	3	1	
Madras.....	Dec. 11-17.....	1		
Madras Presidency.....	Nov. 13-Dec. 31.....	2,047	1,438	
Do.....	Jan. 1-21.....	771	542	
Rangoon.....	Oct. 1-Dec. 31.....	139	129	
Do.....	Jan. 1-14.....	38	36	
Indo-China:				
Saigon.....				Nov. 6-Dec. 10, 1921: Rodent plague, 7.
Italy:				
Catania.....	Nov. 27.....	1	1	Total, Oct. 16-Nov. 27, 1921: Cases, 8 (of which 1 doubtful); deaths, 5.
Naples (Province)— Torre Annunziata.....	Oct. 22-Dec. 27.....	2		17 miles from city of Naples.
Venice.....	Oct. 27.....	1		
Java:				
East Java— Soerabaya.....	Oct. 30-Dec. 10.....	11	12	Islands of Java and Madoera, Nov. 1-30, 1921; deaths, 763.
Madagascar:				
Tananarive.....	Feb. 4.....			Present.
Mauritius (Island): Port Louis.....	Oct. 29-Nov. 30.....	159	101	Plague-infected rats, 176; plague-infected cats, 36. (Corrected report).
Mesopotamia:				
Bagdad.....	Oct. 1-31.....	1	1	
Mexico:				
Tampico.....				Dec. 18-31, 1921: Infected rodents found, 5; total, Jan. 1-Dec. 31, 1921, infected rodents, 322; Jan. 1-Feb. 18, 1922, 9 plague-infected rodents.
Vera Cruz.....				One infected rodent caught Dec. 5, 1921.
Peru.....				Nov. 17-Dec. 31, 1921: Cases, 94; deaths, 35. Occurring in Callao, Huacho, Huaras, Lima, Magdalena Vieja, Paifa, Salaverry, and Secura. Jan. 1-15, 1922: Cases, 28; deaths, 12. (Corrected report.)
Localities—				
Bambamarca.....	Jan. 15.....			Present. Rural.
Calao.....	do.....	2		Rural. Year, 1921: Deaths, 30.
Cutervo.....	do.....	1		Rural.
Guadaupe.....	do.....	6	2	
Huacho.....	do.....	1		
Huaral.....	do.....	2		
Jayanca.....	do.....			Present.
Lima.....	do.....	2		In district, 2 cases; 1 death.
Payta.....	do.....	11	8	
San Pedro.....	do.....	1		
Sulana.....	do.....		1	
Portugal:				
Lisbon.....	Dec. 15.....	1	1	
Portuguese West Africa:				
Angola—				
Loanda.....	Oct. 9-Nov. 5.....		2	
Rhodes (Island) (Aegean Sea).....	Oct. 13.....	3	1	
Siam:				
Bangkok.....	Oct. 23-Dec. 17.....	6	6	
Straits Settlements:				
Singapore.....	Nov. 6-Dec. 31.....	3	3	
Syria:				
Beirut.....	Oct. 9-Nov. 20.....	10	4	
Turkey:				
Constantinople.....	Jan. 1-7.....	1		

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa: Orange Free State— Bothaville.....	Nov. 19.....			Plague-infected mouse found. In native herd boy.
Hoopstad.....	Dec. 4-10.....	1		
On vessel: S. S. Polycarp.....	Feb. 3.....	1		At Para, Brazil, from Ceara, via Manaos, Maranham, and Para for New York.

SMALLPOX.

Arabia: Aden.....	Dec. 25-31.....		1	
Do.....	Jan. 8-14.....		1	
Asia Minor: Smyrna.....	Jan. 15-21.....	1		In district.
Bolivia: La Paz.....	Aug. 1-Oct. 31.....	42	28	
Brazil: Bahia.....	Nov. 6-Dec. 17.....	4		
Rio de Janeiro.....	Nov. 13-Dec. 31.....	13	2	
Do.....	Jan. 1-21.....	8	1	
Sao Paulo.....	Oct. 31-Dec. 25.....	11		
Do.....	Dec. 26-Jan. 1.....	1		
British East Africa: Uganda.....	Aug. 1-Sept. 30.....	7		Reports of inspectors; cases, 4.
Canada: British Columbia— Vancouver.....	Dec. 25-31.....	3		
Do.....	Jan. 29-Feb. 4.....	1		
Manitoba.....				Year 1921: Cases, 71.
Winnipeg.....	Nov. 20-Dec. 3.....	2		
New Brunswick— Charlotte County.....				Dec. 17, 1921: 31 cases previously reported, occurring at Ander- sonville and Blacks Harbor.
St. Stephen.....	Dec. 11-17.....	2		Dec. 18-24, 1921: Cases, 3. Dec. 25-31, 1921: Cases, 2.
Restigouche County.....	Dec. 11-31.....	3		
Do.....	Feb. 12-18.....	2		
York County.....	Dec. 11-17.....	1		
Do.....	Jan. 29-Feb. 4.....	1		
Ontario— Fort William and Port Arthur.....	Jan. 1-21.....	3		
Hamilton.....	Jan. 22-28.....	3		
Kingston.....	Jan. 17-Feb. 11.....	5		Jan. 16-20, 1922: Two cases re- ported.
Niagara Falls.....	Dec. 11-24.....	2		
Do.....	Jan. 15-Feb. 18.....	20		
North Bay.....	Feb. 12-18.....	1		
Ottawa.....	Dec. 11-24.....	17		
Do.....	Jan. 1-Feb. 25.....	26		
Sault Ste. Marie.....	Jan. 15-21.....	1		
Toronto.....	Dec. 11-24.....	4		
Do.....	Jan. 1-Feb. 18.....	43		
Windsor.....	Jan. 8-14.....	1		
Quebec— Montreal.....	Dec. 11-24.....	1		
Saskatchewan— Regina.....	Jan. 1-21.....	3		
Saskatoon.....	Dec. 1-18.....	6		
Do.....	Feb. 5-9.....	2		
Canal Zone: Ancon.....				Admitted to hospital by transfer from Panama, Nov. 30, 1921, 1 case. Arrived on sailing vessel from a village on south coast.
Ceylon: Colombo.....	Nov. 27-Dec. 3.....	1		Port case.
Chile: Concepcion.....	Nov. 23-Dec. 26.....		25	Nov. 15-21, 1921: Diffused in southern Provinces; not epi- demic.
Do.....	Dec. 27-Jan. 16.....		11	Nov. 15-21, 1921: Present. In vicinity, at Hualqui, cases, 32; deaths, 5. Dec. 4-17, 1921: Present.

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile—Continued.				
Coronel.....	Nov. 15-Dec. 17.....	.....	.....	Present.
Curanilahue.....	Nov. 15-21.....	4.....	.....
Talcahuano.....	Nov. 15-Dec. 24.....	6.....	.....
Do.....	Jan. 8-21.....	.....	.....	Do.
Temuco.....	Nov. 15-21.....	9.....	.....
Valparaiso.....	Oct. 23-Dec. 31.....	.....	94.....	
Do.....	Jan. 1-21.....	.....	39.....	
China:				
Amoy.....	Nov. 16-Dec. 31.....	.....	7.....	Nov. 23-29, 1921: Present.
Do.....	Jan. 1-14.....	.....	3.....	
Antung.....	Nov. 28-Dec. 18.....	4.....	1.....	
Canton.....	Dec. 1-31.....	.....	.....	Present.
Chungking.....	Nov. 6-Dec. 31.....	.....	.....	Do.
Do.....	Jan. 1-7.....	.....	.....	Do.
Foochow.....	Nov. 6-Dec. 31.....	.....	.....	Do.
Do.....	Jan. 1-14.....	.....	.....	Do.
Hankow.....	Nov. 13-Dec. 31.....	.....	.....	Do.
Do.....	Jan. 1-21.....	2.....	.....
Harbin.....	Nov. 14-Dec. 11.....	5.....	.....
Do.....	Dec. 26-Jan. 1.....	2.....	.....
Hongkong.....	Dec. 3-31.....	5.....	.....
Do.....	Jan. 1-14.....	3.....	1.....	
Mukden.....	Nov. 20-Dec. 31.....	.....	.....	Do.
Do.....	Jan. 15-21.....	.....	.....	Do.
Nanking.....	Nov. 20-Dec. 17.....	.....	.....	Do.
Shanghai.....	Oct. 31-Dec. 31.....	67.....	194.....	Cases, foreign: Deaths, Chinese and foreign. Jan. 14, 1922: Conditions serious.
Do.....	Jan. 2-22.....	22.....	114.....	Cases, foreign: Deaths, native. Jan. 14, 1922: Seriously prevalent.
Tientsin.....	Dec. 11-17.....	2.....	.....	In Mission Hospital.
Tsingtau.....	Jan. 1-15.....	5.....	4.....	
Chosen (Korea):				
Fusan.....	Dec. 1-31.....	3.....	1.....	
Colombia:				
Cartagena.....	Nov. 22-28.....	.....	1.....	
Cuba:				
Antilla.....	Dec. 12-31.....	3.....	.....	Dec. 4-31, 1921: Cases, 361.
Do.....	Jan. 8-Feb. 4.....	13.....	1.....	At Preston.
Cienfuegos.....	Jan. 22-28.....	1.....	.....	From outside city limits.
Santiago.....	Jan. 1-31.....	5.....	.....
Czechoslovakia:				
Prague.....	Dec. 18-24.....	.....	42.....	
Dominican Republic				
Puerta Plata.....	Jan. 13.....	100.....	5.....	In district, widely diffused with 1,000 estimated cases with 100 deaths.
San Pedro de Macoris.....	Nov. 20-Dec. 31.....	31.....	1.....	Estimate of about 500 cases of smallpox in the district of Macoris; of this amount 50 within the city limits.
Do.....	Jan. 14-Feb. 4.....	122.....	.....	In district 401 cases estimated. Dec. 17-24, 1921: Present in vicinity. Jan. 9-16, 1922: In surrounding country, 1,745 cases (estimated).
Santo Domingo.....	Nov. 15-Dec. 5.....	.....	.....	Dec. 27, 1921-Jan. 2, 1922: Cases, 2.
Fiume.....				
Ecuador:				
Guayaquil.....	Nov. 16-Dec. 31.....	7.....	.....	And vicinity.
Do.....	Jan. 1-15.....	1.....	.....
Egypt:				
Alexandria.....	Nov. 26-Dec. 2.....	1.....	1.....	
Cairo.....	Nov. 26-Dec. 2.....	2.....	.....
Port Said.....	Dec. 20-26.....	1.....	.....
Do.....	Jan. 22-28.....	1.....	.....
Finland.....				
Great Britain:				
Manchester.....	Jan. 1-7.....	4.....	.....	Nov. 16-30, 1921: 1 case.
Nottingham.....	Dec. 4-31.....	18.....	.....
Do.....	Jan. 8-28.....	3.....	.....
Swansea.....	Jan. 17-23.....	2.....	.....	Imported on vessel from Persian Gulf.

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Haiti				Jan. 22-28, 1922: A few cases.
Cape Haitien.....	Dec. 11-24.....	8		
Do.....	Jan. 1-Feb. 11.....	15	1	
Port au Prince.....	Dec. 11-31.....			Present.
Do.....	Jan. 15-21.....	2		
India				Oct. 2-8, 1921: Deaths, 28. Oct. 23-Nov. 19, 1921: Deaths, 266.
Bombay.....	Oct. 23-Dec. 31.....	3	2	
Do.....	Jan. 1-7.....	1		
Calcutta.....	Nov. 13-Dec. 31.....	37	28	
Do.....	Jan. 1-21.....	21	19	
Karachi.....	Nov. 11-Dec. 31.....	28	9	
Do.....	Jan. 1-21.....	17	9	
Madras.....	Nov. 13-Dec. 31.....	183	59	
Do.....	Jan. 1-21.....	167	66	
Rangoon.....	Oct. 1-Dec. 31.....	6		
Italy:				
Genoa.....	Nov. 10-20.....	1		
Messina—				
Messina.....	Nov. 28-Dec. 4.....	1		
Pettineo.....	Nov. 14-Dec. 4.....	2		
Venice.....	Jan. 30-Feb. 5.....	2		
Japan:				
Kobe.....	Jan. 23-29.....	3	1	
Taiwan Island.....	Dec. 1-20.....	2	1	
Yokohama.....	Jan. 9-21.....	3		
Java:				
West Java—				
Bandoeng.....	Nov. 18-Dec. 8.....	2		
Batavia.....	Nov. 18-Dec. 22.....	11	9	City and Province.
Do.....	Dec. 30-Jan. 5.....	1	2	In Province: Cases, 6; deaths, 3.
Buitenzorg.....	Nov. 25-Dec. 8.....	7		13 cases, with 3 deaths, not locally stated.
Krawang.....	Nov. 18-24.....	1		
Lebak.....	Nov. 18-Dec. 8.....	7	4	
Pen leglang.....	Nov. 25-Dec. 1.....	1		
Tangerang.....	Nov. 18-Dec. 8.....	5	1	
Liberia:				
Grand Bassa County.....	Nov. 30.....			Present at Lower Buchanan.
Mesopotamia:				
Bagdad.....	Oct. 1-Nov. 30.....	117	50	Epidemic with high mortality in November, 1921.
Mexico:				
Chihuahua.....	Dec. 5-11.....		1	
Do.....	Jan. 23-29.....		1	
Guadalajara.....	Nov. 1-Dec. 31.....	6		
Do.....	Jan. 1-31.....	11	2	
Mexico City.....	Nov. 20-Dec. 31.....	64		Including municipalities in Federal District.
Do.....	Jan. 1-7.....	16		Do.
Saltillo.....	Jan. 29-Feb. 4.....		1	From San Salvador, Zacatecas.
San Luis Potosi.....	Dec. 18-24.....		2	
Do.....	Jan. 8-Feb. 18.....		6	
Torreon.....	Dec. 1-31.....	134		
Do.....	Jan. 1-31.....		78	
Newfoundland:				
St. Johns.....	Feb. 4-10.....	1		
Palestine:				
Jerusalem.....	Jan. 10-30.....	22		
Panama:				
Bocas del Toro Province—				
Sursuba.....	Jan. 18-Feb. 8.....	11		Village 24 miles from Almirante.
Chiriqui Province.....	Dec. 22.....			Present.
Do.....	Jan. 26.....			Present with center of prevalence at Bosquete Bajo.
Panama.....	Dec. 14.....	1		On Dec. 21, 1921: 1 additional case from country district of Sabanas, admitted to hospital. Total admissions, Jan. 1-Dec. 21, 1921, 207.
Peru:				
Lima.....	Nov. 1-Dec. 31.....		3	
Poland.....				Aug. 14-Dec. 3, 1921: Cases, 494; deaths, 112. Exclusive of Brest-Litovsk, Minsk, and Wilno districts.
Portugal:				
Lisboh.....	Nov. 13-Dec. 31.....	48	12	
Do.....	Jan. 1-28.....	46	1	

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portuguese East Africa: Lourenco Marques.....	Oct. 1-Nov. 5....	2	4	
Portuguese West Africa: Angola— Loanda.....	Oct. 9-Dec. 31....		7	
Rumania: Bucharest.....	Nov. 1-30.....	23		
Russia: Esthonia.....	Oct. 1-Dec. 31....	38		
Latvia.....	Oct. 1-Nov. 30....	55		
Serbia: Belgrade.....	Oct. 2-Nov. 26....	16	4	
Siam: Bangkok.....	Oct. 23-Nov. 5....	1		
Spain: Barcelona.....	Jan. 8-14.....		1	
Huelva.....	Oct. 1-Nov. 30....		2	
Malaga.....	Nov. 1-Dec. 31....		60	
Seville.....	Nov. 16-Dec. 31....		7	
Do.....	Jan. 8-28.....		5	
Valencia.....	Jan. 22-28.....	1		
Straits Settlements: Singapore.....	Nov. 6-Dec. 24....	49	13	
Do.....	Jan. 1-7.....	8	4	
Switzerland: Glarus, Canton.....	Dec. 10.....			Epidemic.
Zurich.....	do.....	2		In vicinity.
Syria: Adana.....	Dec. 18-24.....			Present.
Do.....	Jan. 1-14.....			Do.
Aleppo.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-Feb. 4....			Do.
Alexandretta.....	do.....			Do.
Beirut.....	Oct. 9-Nov. 13....	5	2	
Do.....	Jan. 8-28.....	8		
Cilicia.....	Jan. 8-Feb. 4....			Do.
Diarbekir.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-Feb. 4....			Do.
Mersina.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-7.....			Do.
Urfa.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-Feb. 4....			Do.
Tunis: Tunis.....	Nov. 26-Dec. 23....	17	15	
Do.....	Jan. 1-Feb. 4....	4	5	
Turkey: Constantinople.....	Nov. 27-Dec. 24....	20	4	
Do.....	Jan. 15-28.....	16	5	
Union of South Africa: Cape Province.....	Nov. 5-Dec. 31....			Outbreaks.
Do.....	Jan. 8-14.....			Do.
Natal.....	do.....			Do.
Orange Free State.....	Oct. 23-Dec. 24....			Do.
Southern Rhodesia.....	Dec. 29-Jan. 18....	16		
Transvaal.....	Oct. 23-Dec. 31....			Do.
Do.....	Jan. 1-14.....			Do.
Johannesburg District..	Dec. 1-31.....	1		
Do.....	Jan. 1-7.....			Do.
Yugoslavia: Bosnia Herzegovina.....	July 3-9.....	2		July 3-30, 1921: Cases, 37.
Croatia Slavonia.....	do.....	1		
Dalmatia.....	do.....	1		
Serbia.....	do.....	3		
Slavonia.....	do.....	1		
Voivodina.....	do.....	3		
On vessel: S. S. West O'Rowa.....	Jan. 5-8.....	3	1	At Kobe, Japan, from Shanghai, China.
S. S. —.....	Jan. 17-23.....	2		At Swansea, Wales, from Persian Gulf.

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	Nov. 1—Dec. 31.....	3		
Do.....	Jan. 11—20.....	1		
Oran.....	Dec. 21—31.....	1		
Do.....	Jan. 1—10.....		1	
Asia Minor:				
Brousa.....	Jan. 15—21.....	1		
Austria:				
Vienna.....	Dec. 4—31.....	10		
Do.....	Jan. 1—21.....	4	1	
Bolivia:				
La Paz.....	Aug. 1—Oct. 31.....	83	65	
Bulgaria:				
Sofia.....	Dec. 18—24.....	1		
Chile:				
Concepcion.....	Nov. 22—Dec. 26.....		3	
Do.....	Jan. 3—16.....		2	
Valparaiso.....	Oct. 23—Nov. 26.....		6	
Do.....	Jan. 1—7.....		1	
China:				
Antung.....	Dec. 26—Jan. 1.....	1		
Harbin.....	Nov. 7—Dec. 25.....	12		
Do.....	Dec. 26—Jan. 8.....	4		Jan. 23, 1922: Reported extending from Soviet Russia, along railway line to maritime provinces.
Egypt:				
Alexandria.....	Nov. 19—Dec. 31.....	3	1	
Do.....	Jan. 15—28.....	9	1	
Cairo.....	Oct. 1—Dec. 9.....	11	7	
Port Said.....	Jan. 22—28.....	1		
Germany:				
Breslau.....	Dec. 25—31.....	2	1	
Do.....	Jan. 1—15.....	37	4	
Hamburg.....	Dec. 11—17.....	4		
Great Britain:				
Glasgow.....	Dec. 25—31.....	1		
Italy:				
Palermo.....	Jan. 15—28.....	3	1	
Mesopotamia:				
Bagdad.....	Oct. 1—Nov. 30.....	2	9	
Mexico:				
Mexico City.....	Nov. 20—Dec. 31.....	242		Including municipalities in Federal District.
Do.....	Jan. 1—7.....	42		Do.
San Luis Potosi.....	Dec. 18—24.....		1	Dec. 25—31, 1921: Present.
Do.....	Jan. 8—Feb. 11.....			Present.
Palestine:				
Jerusalem.....	Dec. 27—Jan. 16.....	5		
Poland:				
District—				
Bialystok.....	Nov. 20—Dec. 10.....	116	3	Aug. 14—Nov. 5, 1921: Cases, 2,399; deaths, 173. Nov. 6—Dec. 3, 1921: Cases, 1,512; deaths, 105. Exclusive of Brest-Litovsk, Minsk, and Wilno districts. Nov. 20—Dec. 10, 1921: Cases, 1,162; deaths, 89.
Galicia—				
Lemberg.....	Jan. 3.....	229		
Kielce.....	Nov. 20—Dec. 10.....	31	8	
Krakow.....	do.....	45	6	
Lodz.....	do.....	67		
Lublin.....	do.....	59		
Lwow.....	do.....	121	16	
Nowogrod.....	do.....	249	15	
Polesia.....	do.....	83	5	
Stanislawow.....	do.....	88	8	
Tarnopol.....	do.....	86	17	
Volhynia.....	do.....	89	4	
Warsaw.....	do.....	81	2	
Warsaw City.....	do.....	47	5	
Do.....	Jan. 11.....	50		
Portugal:				
Oporto.....	Jan. 8—Feb. 11.....	6	2	
Rumania:				
Bucharest.....	Nov. 1—30.....	3		
Chisinau.....	do.....	7		
Russia:				
Esthonia.....	Oct. 1—Dec. 31.....	53		Nov. 28—Dec. 10, 1921: In Soviet Russia, cases, 7,681.
Latvia.....	do.....	127		
Libau.....	Jan. 15—Feb. 1.....	4		
Perm.....	Nov. 23—Dec. 10.....	1,408		Oct. 1—31, 1921: Cases, 559; Nov. 1—30, 1921: Cases, 2,389.

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

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Serbia:				
Belgrade.....	Oct. 2-Nov. 26....	3	2	
Siberia.....				Jan. 23, 1922: Present in western districts. Epidemic.
Chita.....	Dec. 26.....			
Turkey:				
Constantinople.....	Nov. 20-Dec. 31.....	19		
Do.....	Jan. 1-28.....	30		
Union of South Africa:				
Cape Province.....				Oct. 23-Dec. 24, 1921: Outbreaks. Jan. 1-14, 1922: Outbreaks.
Do.....				One death in European at Jansenville, Dec. 6, 1921.
East London.....	Oct. 30-Dec. 24....	3		Outbreaks. Stated to be prevalent only in Newcastle District.
Natal.....	Nov. 5-Dec. 17.....			Outbreaks.
Orange Free State.....	Nov. 13-Dec. 31.....			Do.
Do.....	Jan. 1-14.....			Do.
Transvaal.....	Jan. 8-14.....			Do.
Johannesburg District..	Jan. 12-18.....	26	4	
Venezuela:				
Maracaibo.....	Dec. 20-26.....		1	
Yugoslavia.....				July 3-30, 1922: Cases, 13.
Bosnia Herzegovina.....	July 3-9.....	1		
Croatia—				
Zagreb.....	Jan. 1-14.....	2		
Montenegro.....	July 3-9.....	2		

YELLOW FEVER.

Mexico.....				Year 1921: Cases, 115; deaths, 53.
Colima (State).....				Year 1921: Cases, 7; deaths, 4.
Colima.....	Oct. 27.....	4	3	
Manzanillo.....	Aug. 21.....	3	1	
Jalisco (State).....				Year 1921: Cases, 13; deaths, 7.
Guadalajara.....	Nov. 1-30.....	1	1	Imported.
Puerta Vallarta (Las Penas).....	Oct. 5-Dec. 17.....	13	5	
Tomla.....	Aug. 31.....	1	1	
Quintana Roo (Territory)—Payo Obispo.....	Aug. 8.....	1	1	
Sinaloa (State).....				Year 1921: Cases, 18; deaths, 9.
Culliacan.....	Sept. 17.....	4	1	
Guamuchil.....	Oct. 10.....	1	1	Imported.
Mazatlan.....	Aug. 21.....	1	1	
Palmar de los Leales.....	Sept. 30.....	12	7	
Tamaulipas (State).....				Year 1921: Cases, 1; deaths, 1.
Tampico.....	Jan. 11.....	1	1	
Vera Cruz (State).....				Year 1921: Cases, 75; deaths, 31.
Alamo.....	June 21.....	4	1	Oil camp.
Alvarado.....	July 3.....	1	1	
Barra de Penn.....	July 18.....	1	1	
Cordoba.....	Sept. 22.....	5	3	
Cosamaloapam.....	July 18.....	14	6	
Nogales.....	Oct. 28.....	1	1	
Orizaba.....	do.....	1	1	
Papantla.....	Jan. 14.....	6	3	
Providencia.....	Oct. 28.....	3	3	
Purga.....	Feb. 7.....	1	1	
Rancho de Santa Rosa.....	Oct. 8.....	2	2	
Rancho "El Jaguey".....	Sept. 14.....	2	2	
San Pablo (Papantla).....	Sept. 12.....	1	1	
San Ildefonso.....	Oct. 17.....	2	2	
Tierra Blanca.....	Sept. 24-Nov. 12.....	4	3	
Tlacoalpan.....	Sept. 14.....	1	1	
Tuxpam.....	Jan. 3.....	8	2	
Vera Cruz.....	Jan. 15.....	18	7	Two of these cases imported. Dec. 20-26, 1921: Cases, 1; deaths, 1. Imported.