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OUTBREAK OF GASTROENTERITIS AND TYPHOID FEVER CAUSED BY POLLUTION OF PUBLIC WATER SUPPLY AT SCHENECTADY, N. Y.¹

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In the spring of 1920 the engineering division of the New York State Department of Health was called upon to investigate an epidemic of gastroenteritis, followed by an outbreak of typhoid fever, in the city of Schenectady, N. Y., which occurred subsequently to the gross pollution of the public water supply of the city by the water of the Mohawk River. The results of the investigation, as outlined below, are interesting because of the clearly defined manner in which the effects follow the cause, and also because they illustrate how easily the trouble could have been avoided by the careful supervision of the waterworks and how the effects might have been mitigated had the first warnings been heeded.²

The matter was first brought to the attention of the Division of Sanitary Engineering on March 20, 1920, when information was received that on March 15 and a few days following, the number of cases of gastroenteric disturbances in the city had greatly increased above the number normally occurring; and that this increase had followed a noticeable turbidity in the water, which had been greatest on the night of March 13 and during March 14 and had gradually disappeared after the latter date. Although the information was not received until several days after the incidence of the largest number of cases, an engineer from the engineering division was at once sent to investigate the condition of the water supply to determine whether or not it had been, or was, such as would be likely to cause the disturbances reported. On the date of the first inspection, March 20, 1920, the water was clear and colorless, and it was

¹ A résumé of reports made by the author to the New York State Department of Health.

² EDITORIAL NOTE.—In a brief article in Public Health Reports for January 30, 1920, entitled "Water-Borne Typhoid and Spring Freshets," attention was called to the necessity for exercising especial care in safeguarding water supplies during the winter and early spring months, and numerous instances were cited of outbreaks of typhoid fever during these seasons. In that article it was stated: "So far as water-borne typhoid infection is concerned, now is the time for health officers to be especially alert. Many of the well-known extensive water-borne epidemics of typhoid fever have occurred during the winter and early spring, being associated in the majority of instances with extensive rains and freshets which washed infected material into the water supply."

The present account of the outbreak at Schenectady, N. Y., teaches a very valuable lesson in this problem and adds an additional note of warning to all health officers to be on guard for potentially dangerous water supplies.

therefore necessary to depend largely on what could be learned from the officials and residents of the city for information regarding its alleged unsatisfactory condition. Most of the residents interviewed confirmed the statement above regarding the marked turbidity of the water and the gastroenteric disturbances which followed. The city officials stated that so far as they knew the turbidity was not very noticeable, and that it consisted of fine sand in the water, owing probably to the disturbed condition of the ground water flow caused by the recent thaws and the high water in the river. They also stated that the city chemist and the city bacteriologist had both recently examined the water and reported that it was perfectly safe for consumption without treatment. At the plant, little could be learned except that the water had risen very high in the wells on the 13th and 14th of the month. The man in charge of the plant stated that he had noticed a little turbidity in the water, but that he had not thought it of any importance and could not remember on exactly which dates it had occurred. He insisted that the turbidity had been due to the low vacuum on the pump suction and the higher pumping rate. This rate, however, was estimated to be only about 10 per cent above the average.

Samples of the water for bacterial and chemical examination were taken at several points by the department engineer and carried immediately to the laboratory for examination. At the end of one day, inoculations for the determination of the presence of *B. coli* indicated the probability of the presence of those organisms in all the samples, and in as small a quantity as $\frac{1}{10}$ c. c. in one sample. It was also noted that the chlorine content of the chemical sample was about twice that of the content of the samples previously taken. These results, together with the fact that the explanation given by the attendant in charge of the waterworks as to the reason for the turbidity in the water, seemed inadequate to the engineer making the investigation, made it appear advisable that a thorough inspection of the plant and wells should be made. This inspection was made on March 24. The results of the examination can be clearly explained only by a detailed description of the arrangement of the pumping station, the wells, and the connecting pipes.

The water supply of the city of Schenectady is obtained from three dug wells at the waterworks pumping station, located about $2\frac{1}{2}$ miles west of the city on a flat piece of land lying between the south bank of the Mohawk River and the hills which rise abruptly from the plain about 1,000 feet south of the river. Wash borings made a short time before the investigation indicate that the soil in the vicinity of the waterworks consists of clayey loam from the surface to a depth of 12 feet, the lower 2 feet containing considerable gravel; from a depth of 12 feet to the depth of 60 feet, a sharp coarse sand mixed with gravel containing a considerable proportion of stones

several inches across; and below 60 feet, an impervious clay. Whereas the surface of the ground is practically level, the surface of the impervious stratum beneath the gravel appears to slope gently toward the wells from three directions and away from the wells or toward the river, in the fourth, or northerly direction. The wells extend through the upper 12 feet of loam into the gravel stratum from which they receive their water. They are arranged in a line parallel to the river and about 400 feet from it. A highway leading into Schenectady, and the Erie Canal, both parallel to the Mohawk River, lie between the wells and the river, the canal being the nearer to the stream.

Well No. 1, the oldest and most westerly of the three, is 60 feet long, 8 feet wide, and about 42 feet deep. The walls, of masonry and of considerable thickness, are built of large cut stones, the lower courses apparently having been laid without mortar. The roof is formed by a well-constructed arch about 22 feet below the surface of the ground. Near the center, a short section of the well extends to a point within a few feet of the surface of the ground, and a man-hole in the roof of this section gives access to the well for inspection. The bottom of the well is the gravel encountered at that depth when the well was dug. At the time of the inspection the water in the well was clear and colorless. The walls and roof of the central section were wet, but there were apparently no material leaks. The places where the old suction, described below, from the pump house to the river, had passed through the walls of the well were visible, but the patches which closed the openings originally occupied by the pipes were apparently tight. Open joints between the stones forming the walls of the well were clearly visible below the water line.

Wells No. 2 and No. 3 are circular in form, 42 feet in diameter, and about 40 feet deep. The walls are of concrete, and the roofs are apparently made of reinforced concrete supported on steel beams which span from the walls to the Phoenix columns set in the centers of the wells. As in the case of well No. 1, the bottoms are formed by the natural gravel. These two wells were, at the time of the inspection, in an entirely satisfactory condition. The three wells are connected by cast-iron siphons said to be 16 inches in diameter, one between well No. 1 and well No. 2, and the other between well No. 2 and well No. 3, arranged to allow the water to flow from one well to the other. The pump suction connects to wells No. 1 and No. 2. As near as could be learned from the available records the level of the water in the wells, with the pumps running, is usually about 210 feet above mean tide, and that in the river is 2 feet higher, or about 212 feet above mean tide. At times, however, the water rises as much as 20 feet above these levels.

The pumping station stands about 30 feet south of well No. 1 and at the time of the investigation housed three motor-driven vertical two-stage centrifugal pumps which lift the water from the wells and discharge it into the city mains and the 20,000,000-gallon storage reservoir. The suctions of these pumps connect to a 36-inch header, the west end of which extends into well No. 1 and the east end into well No. 2. Apparently the valves on the suction lines are generally left open so that the pumps draw from both well No. 1 and well No. 2. The water from well No. 3 can only reach the suction pipes by first passing through the siphon from that well to well No. 2.

Originally, the pump house now in use contained two large steam-driven reciprocating pumps which were connected to well No. 1 and were also provided with two 24-inch suctions extending to the Mohawk River. These two suctions passed out through the wall of the basement of the pump house about 18 feet below the surface of the ground, extended through two converging pipe galleries to well No. 1, crossed through the raised central section of that well, mentioned above, and continued in two parallel pipe galleries to a manhole at the road about 30 feet north of the well. From this point the pipes extended through the ground without galleries to the river. The galleries are about 6 feet across and 8 feet high. The walls and arched roofs are constructed of brick. The galleries are not paved, the bottom being formed by the gravel encountered in excavating them. Two manholes, one on the south side of well No. 1 and the other at the side of the road about 30 feet north of the well, afford access to the galleries. The suction pipes had been removed from the galleries, and the holes through the walls of the well and through the wall of the basement of the pump house had been sealed with concrete and brick. The portions of the pipes from the gallery to the river still remained in place. One of these pipes, the westerly one, was sealed with concrete. The other pipe, the easterly one, was apparently open from the river to the gallery.

The existence of these galleries and the fact that they could be reached by manholes, the covers of which were made visible by the melting of the snow, became known to the engineers from the Division of Sanitary Engineering of the State Department of Health on March 24, and they were immediately inspected. The galleries between the well and the road had apparently been full of water carrying considerable suspended matter a short time previous to the inspection. The bottoms were covered with a slimy deposit of black silt to a depth of from one-half inch to 2 inches, and the upper surfaces of all projections of the brick work to a height of about 8 feet above the bottom of the gallery were likewise covered with a deposit of the same material, the quantity of deposit being less on the higher projections. The deposit of

sediment was practically uniform over the bottom of the galleries, except at points in both galleries about 10 feet from the north wall of the well. Here, in each gallery, there were several holes from 6 to 10 inches across on the top and extending from 1 foot to 2 feet down into the gravel in which the stones were perfectly clean, as if a swift stream had passed down through the coarse gravel at these points and carried with it all the silt and fine material. The general arrange-

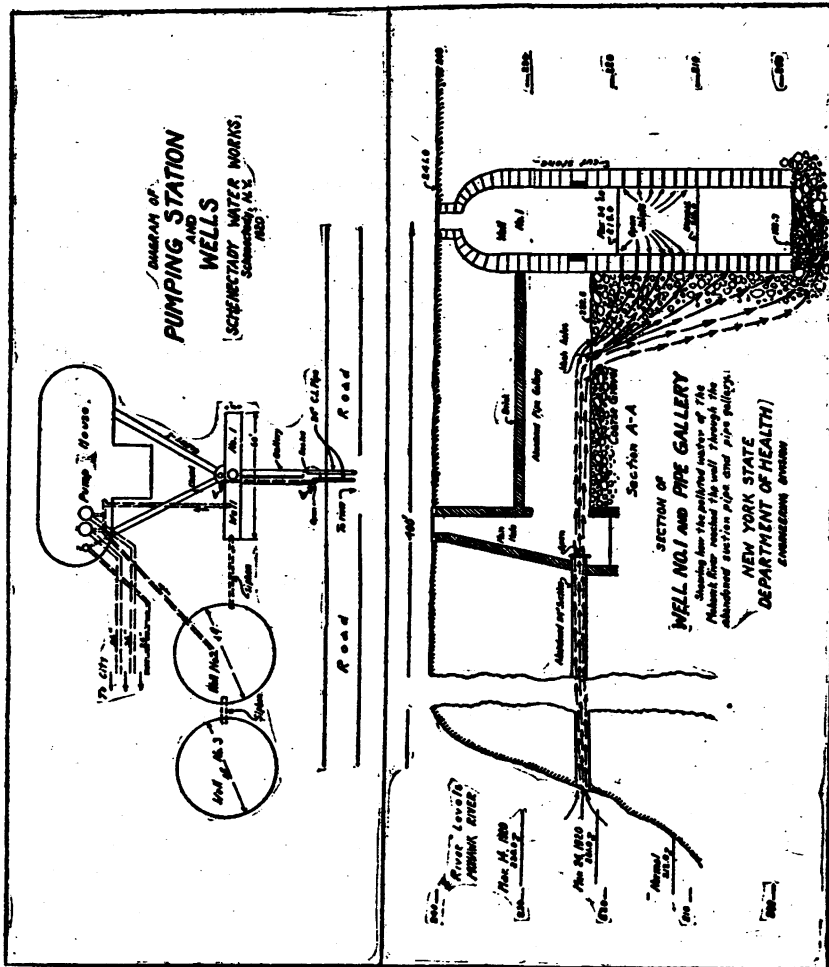


FIG. 1.

ment of the wells and pumping station, together with a section through the galleries and suction lines, giving the relative elevation of the galleries and the water in the river and wells at different times, is shown in the accompanying drawing. (Fig. 1.)

The elevation of the bottom of the galleries is approximately 222.5 feet above mean sea level, or about 10.5 feet above the normal river level. An examination of the records of the river elevations kept by the lock tender at Barge Canal Lock No. 8, about a quarter

of a mile west of the pumping station, revealed the fact that the river had risen from an elevation of about 214 feet at noon on March 13 to 228 feet at midnight on that date, over one-half of the rise, 9 feet, occurring between 2 and 3 o'clock. The river reached its maximum elevation of about 230 feet at 4 p. m. on March 14; and after that time the elevation gradually fell, reaching 224 feet on the 20th and 222 feet on the 21st of the month. The elevation of the water in the wells, figured from the record of the vacuum on the pump suction, rose more slowly than that of the water in the river, the maximum rate of the rise being about 1 foot per hour. The river elevation was, therefore, for a considerable time, several feet above the elevation of the water in the wells. On the afternoon of the 13th this difference varied from 6 feet at noon to about 14½ feet at 3 p. m., dropping again to 7 feet at midnight. During the entire day of the 14th the elevation of the river was a little over 6 feet above the elevation of the water in the wells, and from that date on gradually decreased, the difference on the 20th being only about 9 inches.

Compared with the elevation of the bottom of the pipe gallery, these figures indicate that the river surface was above the floor of the gallery from 3 o'clock on the afternoon of March 13 until March 20, and that during the afternoon of the 13th and during the 14th the river surface was between 6 and 8 feet above the bottom of the gallery while the water in the well remained below the bottom of the gallery.

Apparently, therefore, from the 13th to the 20th of March there was nothing to prevent the polluted water of the Mohawk River from flowing from the river to the galleries through the open 24-inch suction line, then along the galleries and, as indicated above, down through the wash holes a few feet from well No. 1, and through a few feet of coarse gravel into the well either by way of the joints in the stonework or up through the open bottom. The largest rate of flow into the well by this means would, of course, have occurred on the 13th and 14th of the month, when the difference in elevation between the surface of the river and the surface of the water in the well was greatest, and would have gradually decreased as the difference in elevation became less. This is in general accordance with the evidence as to the turbidity in the city water, which is said to have been the greatest on the night of the 13th and during the 14th, gradually becoming less during the week and finally disappearing about the 19th or 20th.

The possibility of the pollution of the city water supply by the river water could have been prevented had the waterworks officials been familiar with the piping at the station, given due attention to the elevations of the river, and stopped using the water from well

No. 1 when the water of the river rose so high as to endanger the quality of the water from that well. This could have easily been done by closing a valve and breaking the seal of a siphon. Even if they had not observed the river elevation, the turbidity of the water which they noticed should have warned them that some unsatisfactory condition existed which they should have taken immediate steps to correct.

The open suction line and the probability of its being the cause of gross pollution of the water was at once pointed out to the superintendent of water of the city, and he immediately had the open pipe sealed. A report on the conditions was sent to the city authorities

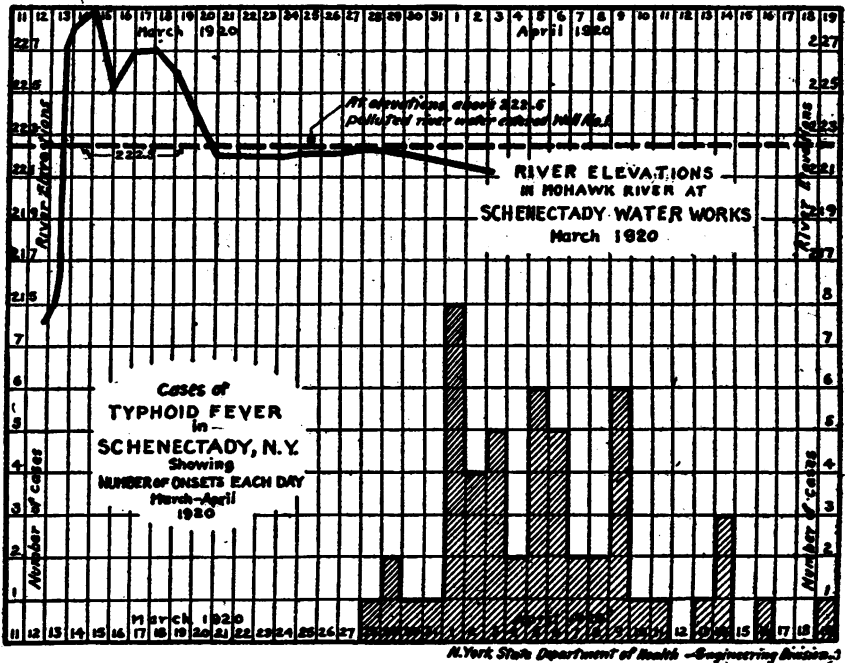


FIG. 2.

shortly afterwards, in which it was recommended that the possibility of further pollution of the water from this source be prevented by the removal of part of the suctions between the well and the river. This recommendation was also carried out by the city authorities. The removal of the possibility of further pollution did not, of course, prevent the damage done by the gross pollution and infection of the water between March 13 and March 19. An epidemic of gastroenteritis disturbances occurred on March 15 and lasted for several days. On March 28, 15 days after the first pollution of the water, or 10 days after the day on which the inflow of polluted water into the river ceased, one case of typhoid was reported. Others followed. On April 1 the onsets of eight cases occurred, and for the

next week the number of onsets ranged from two to six, the number gradually decreasing. The last case was reported as occurring on the 19th. In all there were 53 cases, 3 of which terminated fatally. The majority of the cases occurred about two weeks after the pollution of the well by the contaminated water of the river.

BIOLOGICAL INVESTIGATION OF CALIFORNIA RICE FIELDS RELATIVE TO MOSQUITO BREEDING.

PROGRESS REPORT.

By W. C. PURDY, Special (Plankton) Expert, United States Public Health Service.

During 1918, an investigation carried on by the writer in Arkansas¹ during the entire rice-growing season furnished the following data:

1. *Anopheles* mosquitoes (*A. quadrimaculatus*) breed in moderate abundance within the rice fields, as well as in ditches and puddles outside the rice fields.

2. *Culex* breeds in about the same numbers as *Anopheles*, both inside and outside the rice fields.

3. Certain enemies of mosquito larvæ (aquatic beetles and their larvæ) are about as numerous on the rice fields as mosquito larvæ themselves.

4. Top-feeding minnows (*Gambusia*) placed in the rice fields at the rate of 1,400 per acre constitute a check, but not a control, of mosquito production.

5. Oil-soaked sawdust sown broadcast in the rice when the plants are well grown works no injury to the crop and produces an oil film that kills practically all larvæ.

During the rice season of 1919, a similar investigation² was carried out in the rice-growing region of northern California. The scope of the work was extended to include (1) examination for mosquito larvæ; (2) a general survey of the larval food supply; (3) the number and kinds of larval enemies; (4) the relative abundance and kinds of algæ present; (5) adult mosquitoes. These were collected weekly from beneath a long, low, concrete bridge near an ideal breeding place.

The outstanding objects of the investigation were as follows:

1. To ascertain the comparative amount of breeding, especially of *Anopheles*, in the rice fields as compared with simultaneous breeding in seepage puddles, drainage ditches, or other nonrice-field water capable of being treated or the collection of which is preventable.

¹ Under administrative authority of Assistant Epidemiologist J. C. Geiger. See Jour. Am. Med. Ass'n, Mar. 15, 1919.

² Planned in detail by the writer and carried out under his personal supervision. Administrative authority, J. C. Geiger, until Sept. 1; assistant in field work, L. D. Mars, until Aug. 15, 1919.

2. To ascertain the approximate amounts of food (for mosquito larvæ) which was available in the several environments being studied.

3. To ascertain similarly the comparative numbers and kinds of aquatic beetles, bugs, insect larvæ, and fish present, especially those forms of life that are known to prey, to a considerable extent, on mosquito larvæ.

4. To correlate, if possible, the number of mosquito larvæ found in a given environment with the larval food supply available, and also with the larval enemies present.

As a corollary to the item last stated, it became necessary to note such conditions as would afford to mosquito larvæ protection and hiding places from their enemies. Emergent plants, mats of algæ, and drift or floatage are included in this list.

A further factor with probable relation to the available food supply was encountered about mid-season. This was the appearance on the rice fields of very thin, but persistent, films covering practically the entire water surface. These films were therefore studied with a view to ascertaining their probable effect on surface-feeding larvæ, such as *Anopheles*.

It was the intention to continue the studies of experimental control of breeding in rice fields, and nine plots of rice were accordingly isolated by levees in order that the remedial agents found effective in Arkansas might be further tried out. However, failure of mosquitoes to breed in rice fields made it impossible to continue the study of remedial measures.

Methods.

Counts of mosquito larvæ are based on 14 dips with a dipper holding 400 c. c. These dips were well distributed throughout the puddle, ditch, or plot examined. In the rice plots and rice field 7 dips were taken along the levee and 7 were taken in mid-field. The temperature of the water was taken.

A composite sample for plankton examination was secured by pouring a small portion of the above 14 dips into the plankton bottle. This sample was taken to the laboratory and examined.

Larger forms of life, such as beetles, insect larvæ, and water-bugs, were at first noted by observation only, and their relative numbers expressed as "few," "moderate number," or "many." More accurate records were desirable, however, so the observation method was replaced by another which consisted of taking 28 dips of about 400 c. c. each, and pouring this water into a small muslin bag suspended from the collector's arm. This secured the beetles, insect larvæ, algæ, etc., from about 3 gallons of water. The catch

was taken to the laboratory, examined, and usually preserved for possible further reference.

Since the amount of plankton sample was 112 c. c., it will be noted that the relative volumes of water examined for plankton, for mosquito larvæ, and for beetles and larger life were 112 c. c., 5,600 c. c., and 11,200 c. c., respectively, or in the proportion of 1, 50, and 100.

Findings.

1. Mosquitoes breed only in very small numbers within the rice-fields examined.

This statement is based on 120 examinations, of 14 dips each, made on 9 rice plots of one-fifth acre each, and on a large rice field adjoining. Examinations began late in June, after water had been on the fields about 10 days, and continued until the latter part of September, when the fields were drained. The 120 examinations netted only 127 larvæ; about half of these being *Anopheles*.

2. Mosquitoes breed in moderate numbers in a long roadside puddle, the water of which seeps directly from the canal which, a hundred yards farther on, furnishes water to the rice fields examined.

Twelve examinations were made, extending throughout the rice-growing season. The total number of larvæ taken was 59, of which 30 were *Anopheles*.

3. Mosquitoes breed in large numbers in small natural drainage ditches which meander across the nearly level valley.

Twenty-six examinations were made in two such ditches during the rice-growing period. The total number of larvæ was 1,144, of which 724 were *Anopheles*.

4. Examination of plankton samples showed that approximately equal quantities of larval food were available in all three situations—the rice fields, the seepage puddle, and the natural ditches.

Thirty samples from the rice fields showed an average content of 124 parts per million (by volume) of larval food; eleven samples from the seepage puddle gave an average of 138 parts per million; twenty-one samples from the natural ditches averaged 119 parts per million.

5. Collections of the larger organisms showed that larval enemies were less numerous in rice fields, where mosquito larvæ were so few, than they were in either the seepage puddle or the natural ditches, where mosquito larvæ were relatively numerous.

Twenty-nine collections made in rice fields yielded an average of 5 known larval enemies; eleven collections from the seepage puddle averaged 12 enemies; and 20 collections from the two natural ditches gave an average of 16 enemies.

6. Blue-green algæ were present in large quantities in the rice fields. These algæ were less abundant in the seepage puddle. The natural drainage ditches contained large amounts of green algæ, with relatively small amounts of the blue-greens.

7. In the latter part of July, light films appeared on the rice fields, covering practically the entire surface. These films persisted for the remainder of the season. The seepage puddle had a somewhat similar history as to the films. No films were observed on the water of the natural ditches.

8. The water on the rice fields was practically stagnant, and after midseason apparently acquired a degree of foulness which was due in all probability to the gradual decay of the large amount of blue-green algæ present. Water in the roadside seepage puddle showed very similar conditions. Water in the natural ditches, on the other hand, appeared to be in fresher condition throughout the season.

9. Temperatures of the water were practically identical in rice fields, seepage puddle, and natural ditches throughout the season.

Discussion.

LACK OF BREEDING IN THE RICE FIELDS.

Practical absence of mosquito-breeding in the rice fields studied in California is doubtless the most noteworthy finding of our investigation thus far. At present no adequate explanation is available for these negative results, especially when similar investigations have shown positive results from Arkansas rice fields. Pending the outcome of certain field tests about to be carried out relative to the possible cause of these negative results, it may be well to state the following facts:

(1) Blue-green algæ are very abundant in the California fields studied, and green algæ are relatively scarce. In Arkansas fields green algæ predominate, but the growth is not very heavy as a rule.

(2) In the California fields studied, surface films appeared about July 20 and persisted for the remainder of the season. Such films were not observed on the Arkansas fields at any time during the season. The frequent heavy rains would probably prevent their formation, even if other conditions were favorable.

(3) Weather conditions differ. In California there is no rain, as a rule, during the entire rice season, while in Arkansas rains are frequent and heavy during this period, sometimes adding, within 36 hours, an inch or more to the depth of water in the rice fields.

(4) The water in the California fields is practically stagnant and to a considerable degree impure for the latter two-thirds of the rice season. This is apparently due (a) to its cost and consequent retention on the fields for practically the entire rice season (escaping meantime chiefly by evaporation), until the fields are drained for harvest; (b) to the decay of the heavy growth of blue-green algæ, with no movement of water to remove the products of decay; and (c) to lack of rain, which further conduces to the concentration of products of decomposition and to general stagnation.

On the other hand, Arkansas fields, watered from wells, are (a) subject to more change of the water content, occasional partial drainage being the frequent practice; also (b) there is less algal growth to decay and more opportunity for removal of products of decay. Finally, (c) frequent heavy rains freshen the water perceptibly.

THE SURFACE FILMS.

The surface films are largely biological in their composition, being composed of various minute algæ (chiefly unicellular, but also the minute beginnings of several of the filamentous algæ), many diatoms,

frequent rhizopods, especially *Arcella* and *Diffugia*, and a sprinkling of various protozoa and rotifers. Small growths of *Anthophysa* are sometimes quite abundant in these films. Stained specimens of intact films show bacteria in large numbers. Finally, a yellowish-brown flaky material of unknown origin usually occupies all otherwise vacant spaces and seems to bind the whole together, to some extent.

The common "water bloom," composed chiefly of *Euglena*, was observed on portions of the fields early in the season (June) and the first persistent films (July 18 to 30) contained large numbers of *Euglena*. This organism then practically disappeared from the films.

Anopheles larvæ introduced into these later films (in September) seemed to experience no discomfort for several days. They lay immediately beneath the film, with their breathing tube apparently breaking or penetrating it, thus securing air. It is possible that the food supply furnished by this film was not entirely suitable, for most of the larvæ gradually disappeared, only a very small percentage of them reaching the imago stage.

THE FOOD OF MOSQUITO LARVÆ.

Recent work by Dr. Metz³ shows that Anopheles larvæ will thrive on nonliving organic food of various kinds, mainly of vegetable origin. Observations by various workers agree generally that the larvæ are mainly surface feeders; that in feeding they produce with their mouth-brushes a current of water, which, passing into the mouth cavity, carries with it the various particles of food, which are then collected at the beginning of the gullet and swallowed. Miss Cora A. Smith (Psyche, 1914, Vol. XXI, pp. 1-19) notes that larvæ flourished in a pool containing dead leaves, but the water was clear, with no algæ or other material which might be regarded as the source of larval food.

The observations of the writer in his official capacity⁴ may be of interest in this matter. In examining water to ascertain the content of minute (microscopic) plants and animals collectively termed the plankton, it has repeatedly been noted that water which appeared practically clear to the unaided eye contained so many microscopic organisms, especially diatoms, that the filters used for securing these organisms were speedily clogged. While this is by no means always the case, yet it seems plain that we can not judge by the apparent clearness of the water alone, whether larval food is abundant or scarce. As a convenient means of demonstrating the fact just

³ Observations on the Food of Anopheles Larvæ. Reprint No. 549 from Public Health Reports, Aug. 8, 1919.

⁴ Plankton Expert, United States Public Health Service.

stated, it is suggested that *Anopheles* larvæ be placed in a watch-glass of apparently clear but unfiltered water (as from a ditch or puddle), and the feeding process of the larvæ observed under low magnification. It will be seen that visible masses of food accumulate in the semitransparent "throat" of the larva, and are swallowed at the rate of 7 to 10 times per minute, although inspection with the unaided eye would seem to indicate that no food is present in the water.

A second matter of importance is the fact that such organisms as have considerable power of swimming are able to resist the current set up by the mouth-brushes of the larva, and thus escape. The writer has repeatedly observed that larval stages (naupleii) of *Cyclops* or other crustacea were always able to escape, as were also certain of the more active rotifers and ciliates. The organisms mentioned were *small* enough to serve as food for the larva, but their activity saved them from this fate. In general, it may be stated that any sufficiently minute, freely-floating object or weakly-swimming organism that comes within the current of water produced by the larval mouth-brushes will be included in the larval diet.⁵

Examination (by the writer) of the contents of the food canal of several larvæ shows striking agreement with the above proposition. In every case the food tract was packed with the remains of various organisms, all of which were recognized as forms either without power of locomotion or with very limited powers. In no case was an organism found which, in life, was known to possess such power of locomotion as is exhibited by the more active rotifers, ciliates, and crustacea. Some masses of inert matter and detritus were present also.

A study of Table II is worth while in this connection. Most of the organisms listed were easily recognizable. Doubtless other less resistant organisms had been digested. There were masses of material in all the food tracts examined which could not be identified. Even with this drawback, however, the list of recognizable forms is a fairly long one, and will serve to emphasize the fact noted by many observers, viz., that the larva is an omnivorous and heavy feeder.

It would seem well-nigh impossible to control production of *Anopheles* by any practicable treatment of the larval food supply, inasmuch as this food is made up of a great variety of microscopic organisms, both plant and animal. Moreover, if the organisms be killed or removed, the nonliving organic detritus will still suffice for the larval food supply, as Dr. Metz has shown in the publication cited.

⁵ Particles of carmine, administered by the writer, have been swallowed, have traversed the larval alimentary tract, and have been ejected at the anus 31 minutes and 45 minutes, respectively, after having been swallowed.

TABLE I.—Averages (monthly and seasonal) of weekly examinations of rice field, seepage puddle, and natural ditches during rice season, June 15 to Oct. 1, 1920 (California).

Source of samples.	Month.	Temperature of water (C.).	Larval food (Plankton): Parts per million (by volume) in 1 c. c. of water.	Larval enemies in 25 dips of 400 c. c. each.	Mosquito larvae in 14 dips of 400 c. c. each.		
					Anopheles.	Culex.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rice field and rice plots...	June.....	23	107	10	.....	1	1
Do.....	July.....	21	106	5	.....	1	1
Do.....	August.....	20	137	6	.....	1	1
Do.....	September.....	16	137	3	1½	.....	1½
Examinations made.....	.....	.....	30	29	120	.....	.....
Seasonal average per examination.....	.....	.....	124	5	½	½	1
Seepage puddle.....	June.....	22	127	14	9	2	11
Do.....	July.....	21	113	12	1	7	8
Do.....	August.....	21	144	14	3	.....	3
Do.....	September.....	16	160	10	5	4	9
Examinations made.....	.....	.....	11	11	12	.....	.....
Seasonal average per examination.....	.....	.....	138	12	2½	2½	5
Natural ditches.....	June.....	22	135	13	12	10	22
Do.....	July.....	19	116	20	16	7	23
Do.....	August.....	20	91	18	25	13	38
Do.....	September.....	16	151	10	58	38	96
Examinations made.....	.....	.....	21	20	26	.....	.....
Seasonal average per examination.....	.....	.....	119	16	28	16	44

NOTE.—See Charts I to VI, inclusive.

TABLE II.—Contents of food tracts of four anopheles larvæ.

No.	Length of larva (inch).	Plants.								Animals.								Melts, fragments, scales, etc.	
		Diatoma.	Protozoous.	Staurostium.	Scenedesmus.	Spores.	Conifer pollen.	Fungus.	Alga filaments (length).	Areolla.	Difflugia.	Chlamydomonas.	Trachelomonas.	Volvox.	Tintinnus.	Halteria.	Rotifers.	Unidentified.	
1	40	.....	5	.....	19	.....	mm.	.....	.....	33	4	10	.....	6	.....	.....	.....	.....	(1)
2	27	24	8	.....	13	.....	5.1	.....	.....	9	6	.....	.....	.....	.....	.....	.....	.....	5
3	29	28	1	.....	728	.....	10.3	2	.....	7	.....	10	.....	5	.....	.....	10	.....	.....
4	.....	.....	.....	.....	(?)	.....	2	1	4.4	6	3	.....	8	20	.....	.....	9	11	.....
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

1 Many wing scales present.

2 Culex larva, taken from water in a tub. Its food tract was packed with *Scenedesmus*. Practically no other organisms were present.

We thus know from the observation of the feeding habits, from dissection of several larvæ, and from a knowledge of the organisms that constitute the microscopic plankton, (1) that the *Anopheles* larva secures its food by producing with its mouth-brushes a minute but rapid current of water which passes within the mouthparts of the larva; (2) that this current carries into the mouth any sufficiently minute particles of matter which are held in suspension in the water; (3) that freely-floating organisms, both plant and animal, are similarly drawn into the mouth by this current, with the exception, of certain organisms which, by vigorous swimming, are able to withstand this current; and (4) that the larva has, so far as present knowledge goes, no power of selection of its food other than to reject such fragments as are too large.

Keeping the above points in mind we have made an effort to approximate the amount of larval food available in different waters where breeding of mosquitoes might be expected, or was actually in progress. This was done in the hope of determining, if possible, some basic facts relative to the amount and kinds of food required by the larvæ, in order that measures for control of breeding by reducing the food supply might be considered, or the impracticability of such measures pointed out.

The plankton catches from representative composite samples of water were examined under the microscope and five fields were counted and the results expressed in cubic standard units per 1 cubic centimeter of water. (A cubic standard unit is a cube, the edge of which is 20 microns long.)

The minute detritus present in each field was similarly measured. This procedure placed all organisms, large and small, and all minute detritus, on the same volumetric basis. These plankton examinations were made at weekly or 10-day intervals throughout the season of each environment studied.

The total volume of those organisms that were suitable for larval food was now obtained by simply adding the results obtained by examining the five fields. (This did not include such organisms as were too large, or such as had vigorous powers of swimming.) To this was added three-fourths of the volume of minute detritus present in these same fields. This was thought to be a very conservative figure in as much as the feeding larva takes in practically everything that comes within the reach of the current produced by its mouth-brushes. The total, expressed in cubic standard units, was then reduced to parts per million (by volume) and is thus stated in Table I.

We are thus enabled to estimate with a fair degree of accuracy the available food supply for larvæ in the several environments studied. While the values for single examinations (not given in this brief report) fluctuate considerably, owing to the sudden growth of some particular group of organisms, or their equally sudden subsidence,

it is significant that the average results for the season and for the three environments are very similar in values. It would seem to follow, therefore, that the wide variations in larvæ production noted in these three situations during the season can not be explained on the basis of differences in larval food supply.

ENEMIES OF MOSQUITO LARVÆ.

These may be classed as follows, in the order of their observed efficiency in devouring mosquito larvæ: (1) Top-feeding minnows; (2) larvæ of Dytiscid beetles; (3) the smaller adult beetles of the Dytiscid group; (4) damsel-fly larvæ and nymphs; (5) water boatmen and back-swimmers; and (6) *Hydrophilus* larvæ.

It should be understood that this classification is based on somewhat limited observation, and that further investigation may result in changing the order given or in adding to the list.

It is to be noted, further, that these predacious organisms do not limit their depredations to mosquito larvæ. They prey on other organisms, and on one another to some extent. It follows that their abundance or scarcity in a given environment does not necessarily mean that mosquito larvæ will be few or many, unless other available food be absent—a condition which is practically impossible under natural conditions. It is nevertheless true that an excessive number of known enemies (such as fish) may be introduced into a given pond or water body with good results as regards the decrease in mosquito larvæ and in other fish foods as well. Moreover, these good results are dependent in no small degree upon the absence of such amounts of drift, débris, emergent plants, and mats of algæ as would furnish effective hiding places for the larvæ.

In the three situations studied, top-feeding minnows were absent. (Minnows, *Gambusia*, were numerous in Arkansas rice fields). The other enemies named were present in California waters in varying numbers throughout the season. In the table given (Table I) the kinds of enemies are not named, but it may be here stated that damsel-fly larvæ and small beetles were numerically predominant.

Attention is directed to the fact that comparable examinations in the three environments showed, throughout the season, that the situation furnishing the smallest number of larvæ (the rice fields) showed the presence of only one-third the average number of enemies that was found in the situation furnishing the largest number of larvæ (the ditches). This is precisely opposite to what we would expect if these larval enemies were to be regarded as an index of the amount of mosquito breeding. Evidently the larval counts obtained can not be explained on the basis of depredations made by the enemies found to be present in the respective environments.

On inspection of Charts I to VI (plotted from data in Table I) it will be noted that all three environments show an increase of breeding in

September (Chart I), but that there is no proportional increase of larval food in this month (Chart II). There is, however, a considerable but not proportional decrease of enemies, which doubtless has its effect in materially increasing the larval output. It is to be noted, however, that both puddle and rice fields show a heavy decrease of larvæ in August (Chart I) for which the very slight increase in enemies (Chart III) seems to be inadequate explanation.

The environment exhibiting unimpaired natural conditions presents also (Chart VI) the most consistent data attending the larval history. Chart VI shows that the increase of larvæ in August was attended by some decrease in larval enemies, though there was a decrease of larval food also, the latter seemingly inconsistent. In September, however, increase in larvæ is attended by fairly proportional increase of food and decrease of enemies.

IMAGO COLLECTIONS.

Collections of adult mosquitoes were made nearly every week, and were continued throughout the winter, which season is very mild in this portion of California, the temperature rarely reaching the freezing point. All collections were made over a definite area on the under-surface of a low concrete bridge that spanned a broad, grassy, natural drainage ditch, which formed an ideal breeding place. No other suitable shelters for mosquitoes were to be found within three-fourths of a mile, except similar bridges a quarter mile distant. All mosquitoes were identified by Prof. S. B. Freeborn, entomologist of the University of California, either personally or under his direction. Mr. L. D. Mars assisted in making identifications.

These collections, begun in June, 1919, and still going on at this writing (May, 1920), may be briefly summarized as follows:

(1) *Anopheles occidentalis* was found in every collection except two—January 23 and April 17. In 30 of the 42 collections recorded, this species outnumbered the combined totals of all other mosquitoes taken. In 5 collections males outnumbered females. Males were present in every collection until November 19. On and after this date no males were found throughout the winter and spring until April 27, 1920, when 2 males were taken. The largest catch of *A. occidentalis*, numbering 794 males and 952 females—a total of 1,746—was made on September 25, 1919. In the latter part of November and during December and January very few were to be found, the number varying from 1 to 8 (except Jan. 23, when none was present). About February, 1 the numbers increased, as many as 24 (all females) being taken in one catch. Numbers again decreased in March and April.

(2) The only other anopheline found in numbers was *A. pseudo-punctipennis*. This appeared in July collections, and in two catches

CHART I.- MOSQUITO LARVAE PER EXAMINATION. MONTHLY AVERAGES.

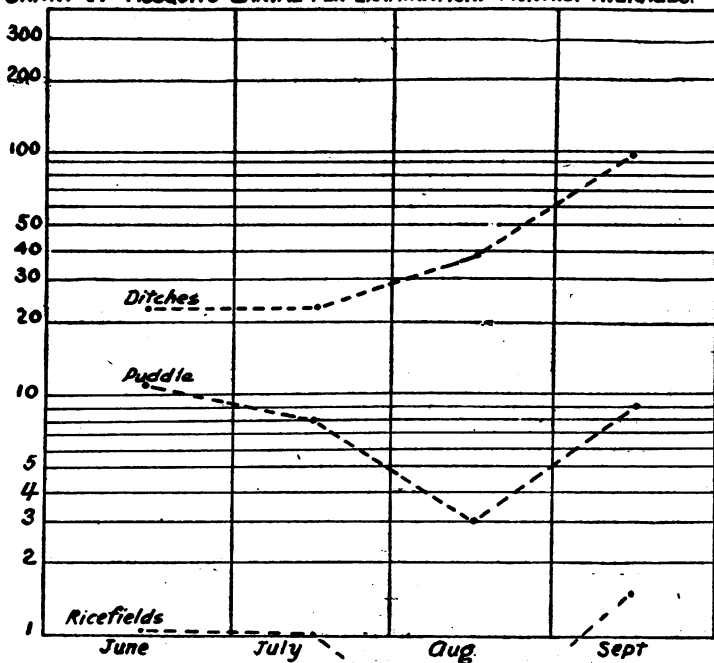
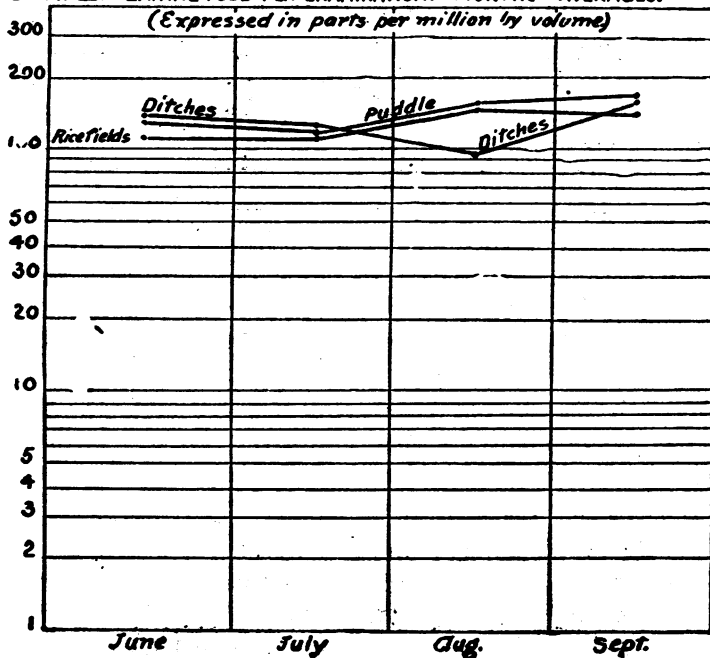


CHART II:- LARVAL FOOD PER EXAMINATION. MONTHLY AVERAGES.

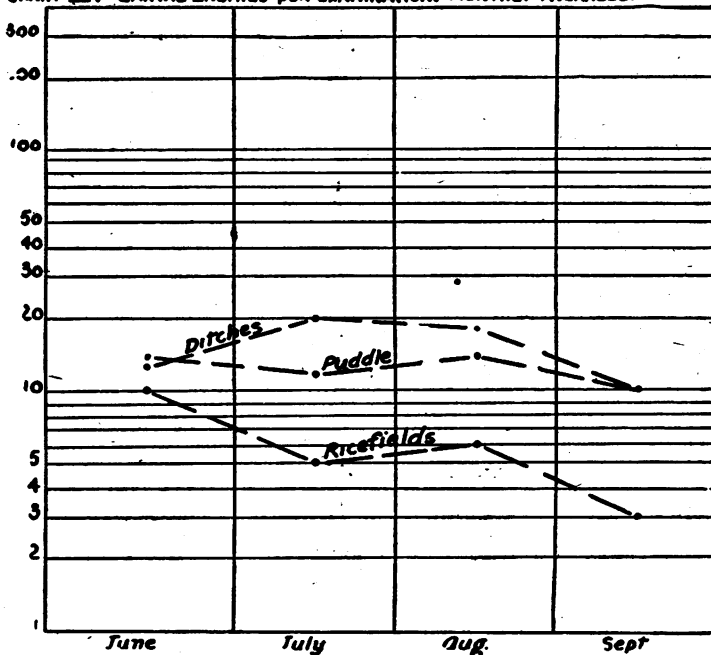
(Expressed in parts per million by volume)



during this month outnumbered *A. occidentalis*. However, *pseudopunctipennis* occurred in only 15 of the 42 collections recorded, none being found after October 8, except a single specimen (female) on December 6, and February 13, respectively. A single specimen of *A. punctipennis* (female) was found April 27, 1920.

(3) The most prevalent culicines were *C. tarsalis* and *Aedes currei*. The former was fairly abundant from June to October and outnumbered *A. occidentalis* in 7 collections in July and August. It was found occasionally during November to April, but always in very small numbers. *Aedes currei* occurred in moderate numbers during June to October, but was absent during November to April, except a single specimen taken November 12. *Culiseta incidens* appeared in small numbers in 10 collections, *Aedes varipalpus* in 6, *Culiseta*

Chart III.—LARVAL ENEMIES PER EXAMINATION. MONTHLY AVERAGES.



inornatus in 3, and *Culex erythrorhox* and *stigmatosoma* in a single collection each. The average number per collection of these 5 varieties combined was less than 3.

Summary.

Investigations on one California rice ranch and on near-by waters, carried on during the season of 1919, would seem to indicate:

(1) That breeding of mosquitoes (both *Anopheles* and *Culex*) is practically absent from the rice fields themselves, but that moderate or heavy production is going on meantime in near-by seepage puddles and natural drainage ditches. The season's investigation shows that for 1 mosquito produced by the rice fields the seepage puddle produces 5 and the natural ditches 44.

CHART IV:- MONTHLY AVERAGES PER EXAMINATION IN RICEFIELDS.

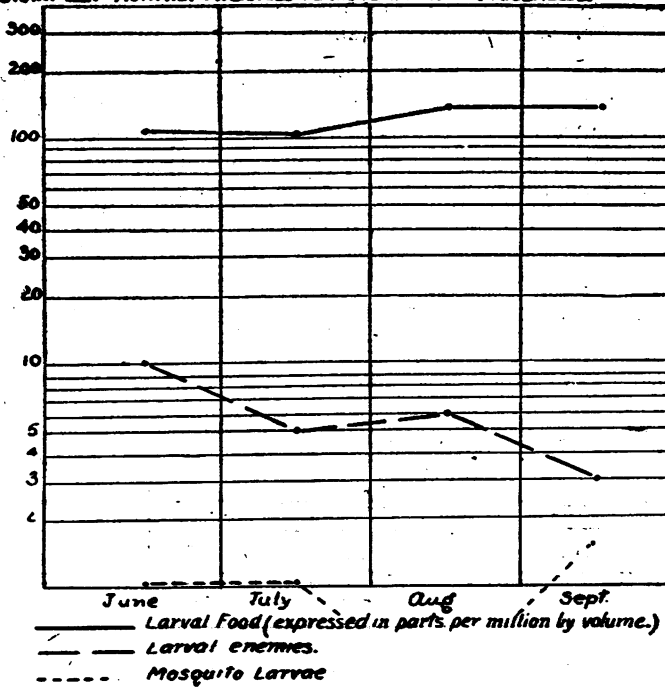
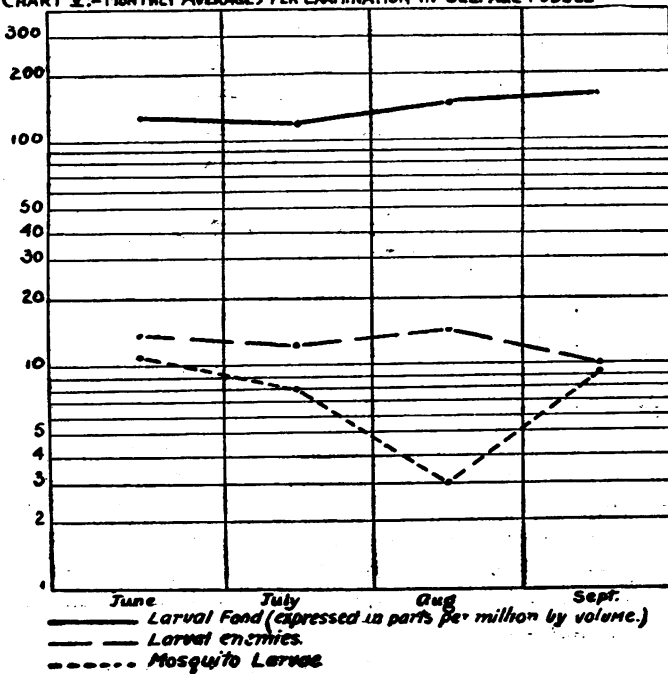


CHART V:- MONTHLY AVERAGES PER EXAMINATION IN SEEPAGE PUDDLE

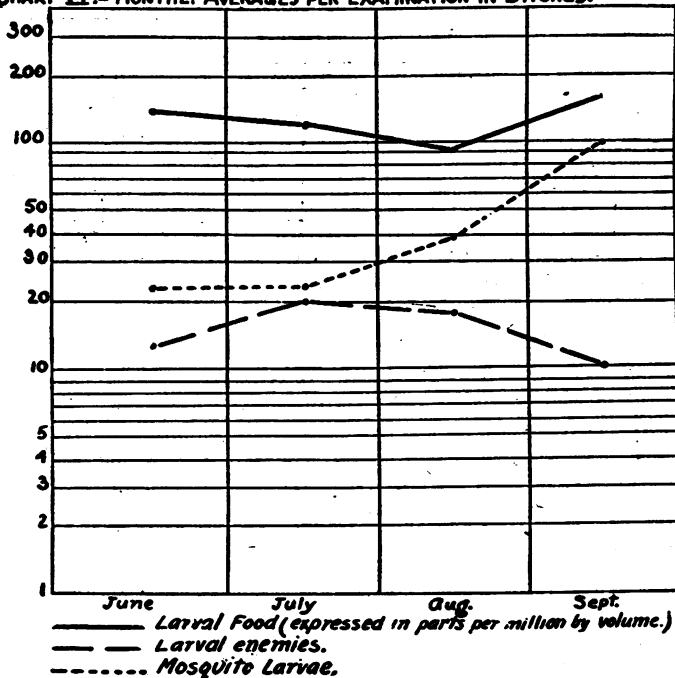


(2) That the larval food supply, being about equal in quantity and comparable in kind in rice fields, in puddle, and in ditches, is evidently not responsible for the great discrepancy in numbers of larvæ.

(3) That the discrepancy is not entirely due to activity of larval enemies, because these are most numerous where larvæ are most abundant, and least numerous where larvæ are practically absent.

(4) That heavy growth of blue-green algæ and the presence of surface films on rice fields constitute the most noticeable differences between these nonbreeding places, the rice fields, and the heavily breeding places, the ditches, where films are absent and blue-green algæ are not abundant.

CHART VI.—MONTHLY AVERAGES PER EXAMINATION IN DITCHES.



(5) That the seepage puddle repeated, on a larger scale, the fluctuations of the rice fields in numbers of larvæ, in food content, and in number of enemies.

(6) That it is apparently out of the question to control mosquito production in natural uncared-for waters, including rice fields, by attempting to diminish the larval food supply, or by the introduction of natural enemies, with the exception of certain fish.

(7) That the natural mechanism of control as found in the California fields seems to be concerned, in part at least, with the general condition of stagnation, the large amount of blue-green algæ, and the biological surface films. These conditions prevailed on the rice fields from July 20 (about) to the latter part of September.

(8) That the conditions just stated fail to account for the negative results obtained during June and part of July.

(9) That collections of imagoes show *A. occidentalis* (thought to be an efficient vector of malaria) to be present throughout the year and to be present very abundantly in August and September. Males probably do not live through the winter, for none could be found from November 19 to April 27.

Recommendations.

It is urged that the negative results from California rice fields be confirmed or disproved by further investigation which shall be made on four or five fields in different parts of the State.

It is further recommended that intensive studies be made of certain biological, chemical, and physical conditions that obtain in a nonbreeding field, to determine, if possible, the reason for the negative results.

TRAVELING PUBLICITY CAMPAIGNS IN HEALTH WORK.

The old-time peddler with his pack of goods for sale and the patent-medicine man with his shows and illustrated lectures of misinformation and his dubious wares are forms of publicity campaigns long familiar in rural districts. The modern educational tour on wheels carries facts and instruction in this same very effective manner directly to the people; and many State health departments have found that such traveling campaigns, with their exhibits and lectures, afford a valuable means of carrying on public-health work.

The activities of these modern peddlers have been described in a book recently issued by the Russell Sage Foundation, "Traveling Publicity Campaigns—Educational Tours of Railroad Trains and Motor Vehicles."¹ The book deals with the use of traveling publicity campaigns by many National and State Government bureaus and by private organizations. Its purpose and scope are set forth in the following paragraph contained in the introduction:

"Believing that this method of promoting social programs will continue to be employed, whatever the type of vehicle used to convey travelers and their outfits, we have gathered information about a number of campaigns and offer it here, together with comments and suggestions, for the benefit of those who may be considering the method for the first time or who have tried it and wish to compare their experiences with those of others. The descriptions and suggestions are drawn from accounts of about 75 tours of trains, trucks, trolley cars, and other vehicles, obtained from printed reports, articles, letters, replies to questionnaires, and interviews, as well as from the observations and experience of the writer."

The information contained may be of value to health organizations intending to make use of this educational method in their public-health work.

¹ Traveling Publicity Campaigns—Educational Tours of Railroad Trains and Motor Vehicles. By Mary Swain Routzahn, xi+151 pp. Wm. F. Tell Co., Philadelphia.

DEATHS DURING WEEK ENDED OCT. 16, 1920.

[From the "Weekly Health Index," Oct. 19, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Oct. 16, 1920, infant mortality (per cent), annual death rate, and comparison with corresponding week of preceding years.

City.	Population Jan. 1, 1920, subject to revision.	Week ended Oct. 16, 1920.		Average annual death rate per 1,000. ²	Per cent of deaths under 1 year.	
		Total deaths.	Death rate. ¹		Week ended Oct. 16, 1920.	Previous year or years. ³
Akron, Ohio.....	208,435	31	7.8	* 8.2	19.4	* 13.2
Albany, N. Y.....	113,344	38	17.5	C 13.9	7.9	C 10.0
Atlanta, Ga.....	200,616	63	16.4	C 14.2	9.5	C 9.4
Baltimore, Md.....	733,826	183	13.0	A 14.9	16.4	A 19.3
Birmingham, Ala.....	178,270	49	14.3	A 15.6	18.4	A 17.4
Boston, Mass.....	747,923	184	12.8	A 15.2	20.1	A 17.8
Bridgeport, Conn.....	143,152	31	11.3	A 10.9	19.4	A 24.2
Buffalo, N. Y.....	506,775	115	11.8	C 12.6	27.0	C 26.4
Cambridge, Mass.....	109,456	35	16.7	A 13.6	20.0	A 18.1
Chicago, Ill.....	2,701,705	516	10.0	A 12.6	19.6	A 18.0
Cincinnati, Ohio.....	401,247	131	17.0	C 10.3	16.8	C 11.4
Cleveland, Ohio.....	796,836	166	10.9	C 10.4	18.7	C 19.2
Columbus, Ohio.....	237,031	47	10.3	C 11.4	12.8	C 13.7
Dallas, Tex.....	158,976	42	13.8	A 10.2	7.1	A 8.0
Dayton, Ohio.....	153,830	23	7.8	C 6.9	8.7	C 20.0
Denver, Colo.....	256,491	61	12.4	A 13.0	6.6	.....
Detroit, Mich.....	993,739	197	10.3	.....	25.9	.....
Fall River, Mass.....	120,485	24	10.4	C 13.0	20.8	C 26.7
Grand Rapids, Mich.....	137,634	21	8.0	C 9.9	14.3	C 7.7
Hartford, Conn.....	138,036	21	7.9	.....	38.1	.....
Indianapolis, Ind.....	314,194	76	12.6	C 10.9	14.5	C 24.6
Kansas City, Kans.....	101,177	11	5.7	.....	0	.....
Kansas City, Mo.....	324,410	67	10.8	C 11.4	23.9	C 18.6
Los Angeles, Calif.....	576,673	145	13.1	A 12.5	13.1	A 9.7
Lowell, Mass.....	112,479	22	14.8	A 15.2	28.1	A 31.6
Memphis, Tenn.....	162,351	49	15.7	C 22.7	14.3	C 8.6
Milwaukee, Wis.....	457,147	74	8.4	A 11.1	14.9	A 21.7
Minneapolis, Minn.....	380,582	65	8.9	C 8.7	16.9	C 14.3
Nashville, Tenn.....	118,342	40	17.6	C 12.8	17.5	C 18.8
Newark, N. J.....	414,216	98	12.3	C 10.3	21.4	C 22.2
New Bedford, Mass.....	121,217	23	9.9	A 14.7	21.7	A 34.0
New Haven, Conn.....	162,519	35	11.2	C 11.0	11.4	C 11.8
New Orleans, La.....	387,219	88	11.9	A 18.3	12.5	A 14.4
New York, N. Y.....	5,629,048	1,080	10.0	C 9.6	15.7	C 16.3
Norfolk, Va.....	115,777	20	9.0	.....	20.0	.....
Oakland, Calif.....	216,361	37	8.9	A 9.3	5.4	A 10.4
Omaha, Nebr.....	191,601	32	8.7	C 8.0	12.5	C 10.3
Philadelphia, Pa.....	1,823,158	419	12.0	* 14.1	17.4	* 14.1
Pittsburgh, Pa.....	588,193	147	13.0	C 10.9	16.3	C 13.9
Portland, Ore.....	258,288	49	9.9	C 10.8	8.2	C 13.2
Providence, R. I.....	237,595	62	13.6	C 11.4	25.8	C 9.6
Richmond, Va.....	171,667	54	16.4	C 11.4	22.2	C 10.8
Rochester, N. Y.....	285,750	59	10.4	C 10.2	11.9	C 17.5
St. Louis, Mo.....	772,897	187	12.6	C 11.7	9.1	C 19.7
St. Paul, Minn.....	234,680	39	8.7	C 8.5	7.7	C 15.8
Salt Lake City, Utah.....	118,110	25	11.0	A 10.3	16.0	.....
San Francisco, Calif.....	506,676	107	11.0	C 12.8	3.7	C 8.1
Seattle, Wash.....	315,652	49	8.1	A 8.4	6.1	A 11.1
Spokane, Wash.....	104,204	20	10.0	C 8.5	0	C 11.8
Springfield, Mass.....	129,338	39	15.7	.....	7.7	.....
Syracuse, N. Y.....	171,647	36	10.9	C 12.3	19.4	C 2.5
Toledo, Ohio.....	243,164	58	12.4	A 14.8	13.8	A 17.6
Trenton, N. J.....	119,289	42	18.4	A 15.8	16.7	A 20.4
Washington, D. C.....	437,571	89	10.6	A 14.2	13.5	A 12.9
Wilmington, Del.....	110,168	21	9.9	C 9.1	33.3	.....
Worcester, Mass.....	179,754	39	11.3	C 10.8	10.3	C 16.2
Yonkers, N. Y.....	100,176	24	12.5	A 13.2	20.8	A 17.4
Youngstown, Ohio.....	132,358	31	12.2	.....	22.6	.....

¹ Annual rates per 1,000 population.

² "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1919.

³ Data are based on statistics of 1915, 1916, and 1917.

Summary of information received by telegraph from industrial insurance companies for week ended Oct. 16, 1920.

Policies in force.....	44,567,459
Number of death claims.....	6,641
Death claims per 1,000 policies in force, annual rate.....	7.8

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 Oct. 23, 1920.

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

ALABAMA.	Cases.	CONNECTICUT—continued	Cases.
Cerebrospinal meningitis.....	1	Diphtheria:	
Diphtheria.....	84	Bridgeport.....	11
Hookworm.....	39	Greenwich.....	12
Malaria.....	19	Hartford.....	11
Scarlet fever.....	28	New Britain.....	9
Smallpox.....	10	New Haven.....	13
Tuberculosis.....	14	Scattering.....	38
Typhoid fever.....	23	Influenza.....	2
Whooping cough.....	11	Malaria.....	1
		Measles:	
ARKANSAS.		Putnam (city).....	38
Chicken pox.....	8	Scattering.....	22
Diphtheria.....	70	Mumps.....	18
Hookworm.....	3	Pneumonia (lobar).....	12
Influenza.....	20	Polio-myelitis.....	1
Malaria.....	314	Scarlet fever:	
Measles.....	30	Milford.....	9
Ophthalmia neonatorum.....	1	New Haven.....	16
Pellagra.....	6	Scattering.....	37
Scarlet fever.....	40	Tetanus.....	2
Smallpox.....	1	Tuberculosis (all forms).....	29
Trachoma.....	2	Typhoid fever.....	6
Tuberculosis.....	14	Whooping cough.....	42
Typhoid fever.....	24		
Whooping cough.....	37	DELAWARE.	
CALIFORNIA.		Anthrax—Lewes.....	2
Leprosy—Santa Paula.....	1	Diphtheria.....	8
Polio-myelitis.....	3	Influenza.....	2
Smallpox:		Measles.....	2
Fort Bragg.....	10	Scarlet fever:	
Fresno County.....	8	Wilmington.....	8
San Luis Obispo.....	7	Scattering.....	5
Woodland.....	7	Tuberculosis.....	1
Scattering.....	71	Typhoid fever.....	8
Typhoid fever:		Whooping cough.....	2
Susanville.....	20	FLORIDA.	
Scattering.....	19	Diphtheria.....	11
CONNECTICUT.		Influenza.....	10
Cerebrospinal meningitis.....	3	Malaria.....	43
Chicken pox.....	16	Scarlet fever.....	4
		Smallpox.....	2
		Typhoid fever.....	4

GEORGIA.		Cases.	IOWA.		Cases.
Cerebrospinal meningitis.....	1		Diphtheria.....		39
Chicken pox.....	5		Polioomyelitis:		
Dengue.....	48		Cherokee County.....		1
Diphtheria.....	53		Galva.....		1
Dysentery (bacillary).....	1		Ireton.....		1
Hookworm.....	6		Paulina.....		1
Influenza.....	18		Scarlet fever.....		75
Malaria.....	94		Smallpox.....		84
Measles.....	3				
Paratyphoid fever.....	2				
Pneumonia.....	4				
Scarlet fever.....	27				
Septic sore throat.....	6				
Smallpox.....	13				
Tetanus.....	1				
Tuberculosis (pulmonary).....	15				
Typhoid fever.....	36				
Whooping cough.....	9				
ILLINOIS.			KANSAS.		
Cerebrospinal meningitis:			Chicken pox.....		12
Douglas County—			Diphtheria.....		287
Tuscola Township.....		1	German measles.....		10
Macoupin County—			Influenza.....		15
Stamton Township.....		1	Lethargic encephalitis.....		1
Diphtheria:			Measles.....		43
Chicago.....		267	Mumps.....		7
Moline.....		10	Ophthalmia neonatorum.....		1
Odin.....		9	Pneumonia.....		9
Panama.....		9	Polioomyelitis.....		2
Scattering.....		108	Scarlet fever.....		171
Influenza:			Smallpox.....		41
Chicago.....		16	Tetanus.....		1
Scattering.....		1	Trachoma.....		4
Pneumonia:			Tuberculosis.....		31
Chicago.....		80	Typhoid fever.....		31
Scattering.....		9	Whooping cough.....		25
Polioomyelitis:					
Aurora.....		1			
Chicago.....		6			
Chicago Heights.....		2			
Hoopeston.....		1			
Macoupin County—					
Barr Township.....		1			
Scarlet fever:					
Chicago.....		126			
Rockford.....		8			
Springfield.....		17			
Urbana.....		8			
Scattering.....		76			
Smallpox:					
Rockford.....		17			
Scattering.....		33			
Typhoid fever:					
Chicago.....		12			
Scattering.....		33			
INDIANA.			LOUISIANA.		
Cerebrospinal meningitis—Delaware County..		1	Diphtheria.....		15
Diphtheria.....		57	Scarlet fever.....		10
Polioomyelitis—Scott County.....		1	Smallpox.....		6
Scarlet fever.....		147	Typhoid fever.....		15
Smallpox.....		57			
Typhoid fever.....		39			
			MAINE.		
			Anthrax.....		1
			Cerebrospinal meningitis.....		1
			Chicken pox.....		1
			Diphtheria.....		32
			German measles.....		2
			Influenza.....		1
			Measles.....		64
			Mumps.....		7
			Polioomyelitis:		
			Bangor.....		1
			Fairfield.....		1
			Hermon.....		1
			Masardis.....		1
			Mount Desert.....		1
			Tremont.....		1
			Waterville.....		2
			Scarlet fever.....		24
			Smallpox.....		3
			Tuberculosis.....		21
			Typhoid fever.....		23
			Whooping cough.....		48
			MARYLAND. ¹		
			Cerebrospinal meningitis.....		1
			Chicken pox.....		17
			Diphtheria.....		85
			Dysentery.....		3
			Influenza.....		40
			Malaria.....		5
			Measles.....		14
			Mumps.....		4

Week ended Friday.

MARYLAND—continued.		Cases.	NEW MEXICO—continued.		Cases.
Pneumonia (all forms).....	39		Measles.....	3	
Poliomyelitis.....	1		Mumps.....	3	
Scarlet fever.....	62		Pneumonia.....	5	
Septic sore throat.....	2		Scarlet fever.....	8	
Tetanus.....	1		Smallpox.....	2	
Tuberculosis.....	72		Trachoma.....	1	
Typhoid fever.....	39		Tuberculosis.....	61	
Whooping cough.....	69		Typhoid fever.....	7	
MASSACHUSETTS.			Whooping cough.....	4	
Anthrax.....	1		NEW YORK.		
Cerebrospinal meningitis.....	1		(Exclusive of New York City.)		
Chicken pox.....	78		Cerebrospinal meningitis—Buffalo.....	1	
Conjunctivitis (suppurative).....	12		Diphtheria.....	252	
Diphtheria.....	198		Influenza.....	21	
Influenza.....	10		Lethargic encephalitis.....	2	
Malaria.....	1		Measles.....	302	
Measles.....	201		Pneumonia.....	128	
Mumps.....	26		Scarlet fever.....	153	
Ophthalmia neonatorum.....	23		Typhoid fever.....	42	
Pellagra.....	1		Whooping cough.....	244	
Pneumonia (lobar).....	50		NORTH CAROLINA.		
Poliomyelitis.....	40		Cerebrospinal meningitis.....	1	
Scarlet fever.....	180		Chicken pox.....	28	
Septic sore throat.....	3		Diphtheria.....	225	
Trachoma.....	3		German measles.....	4	
Tuberculosis (all forms).....	186		Measles.....	14	
Typhoid fever.....	24		Scarlet fever.....	88	
Whooping cough.....	98		Septic sore throat.....	4	
MINNESOTA.			Smallpox.....	1	
Poliomyelitis.....	4		Typhoid fever.....	45	
Smallpox.....	9		Whooping cough.....	128	
MISSISSIPPI.			SOUTH DAKOTA.		
Diphtheria.....	52		Chicken pox.....	1	
Scarlet fever.....	39		Diphtheria.....	25	
Smallpox.....	37		Influenza.....	5	
Typhoid fever.....	6		Measles.....	27	
MONTANA.			Poliomyelitis.....	1	
Diphtheria.....	5		Scarlet fever.....	19	
Poliomyelitis—Hamilton.....	2		Smallpox.....	5	
Scarlet fever.....	36		Typhoid fever.....	3	
Smallpox.....	13		Whooping cough.....	14	
Typhoid fever.....	4		TEXAS.		
NEBRASKA.			Chicken pox.....	3	
Chicken pox.....	9		Diphtheria.....	41	
Diphtheria:			Plague (bubonic)—Galveston.....	2	
Omaha.....	26		Scarlet fever.....	12	
Scattering.....	10		Smallpox.....	2	
Measles.....	8		Tuberculosis.....	12	
Mumps.....	1		Typhoid fever.....	10	
Poliomyelitis—Nebraska County.....	1		Whooping cough.....	13	
Scarlet fever.....	27		VERMONT.		
Smallpox.....	31		Cerebrospinal meningitis.....	1	
Tuberculosis.....	3		Chicken pox.....	23	
Typhoid fever.....	6		Diphtheria.....	10	
Whooping cough.....	1		Influenza.....	1	
NEW JERSEY.			Measles.....	13	
Influenza.....	14		Mumps.....	9	
Pneumonia.....	58		Pneumonia.....	6	
NEW MEXICO.			Poliomyelitis.....	1	
Conjunctivitis.....	1		Scarlet fever.....	5	
Diphtheria.....	42		Smallpox.....	9	
Influenza.....	8		Typhoid fever.....	7	
Malta fever.....	1		Whooping cough.....	34	

VIRGINIA.		Cases.	WISCONSIN.		Cases.
Polio-myelitis—Alleghany County.....		2	Milwaukee:		
Smallpox—Rockingham County.....		1	Cerebrospinal meningitis.....		2
WASHINGTON.			Chicken pox.....		9
Chicken pox.....		29	Diphtheria.....		67
Diphtheria.....		29	Measles.....		5
German measles.....		1	Scarlet fever.....		21
Measles.....		14	Smallpox.....		38
Mumps.....		3	Tuberculosis.....		9
Scarlet fever.....		28	Typhoid fever.....		1
Smallpox.....		31	Whooping cough.....		6
Tuberculosis.....		8	Scattering:		
Typhoid fever.....		7	Cerebrospinal meningitis.....		1
Whooping cough.....		6	Chicken pox.....		54
WEST VIRGINIA.			Diphtheria.....		80
Diphtheria:			Influenza.....		3
Wheeling.....		9	Measles.....		83
Scattering.....		23	Polio-myelitis.....		4
Measles.....		6	Scarlet fever.....		106
Scarlet fever.....		22	Smallpox.....		46
Typhoid fever.....		8	Tuberculosis.....		13
			Typhoid fever.....		15
			Whooping cough.....		135

Kentucky Report for Week Ended Oct. 16, 1920.

		Cases.			Cases.
Chicken pox.....		7	Mumps.....		6
Diphtheria:			Pneumonia.....		19
Christian County.....		8	Paratyphoid fever.....		3
Jefferson County.....		14	Scarlet fever.....		72
Logan County.....		11	Septic sore throat.....		8
McLean County.....		10	Smallpox.....		20
Muhlenberg County.....		8	Tonsillitis.....		7
Scattering.....		86	Trachoma.....		15
Dysentery.....		4	Tuberculosis.....		13
Influenza.....		21	Typhoid fever.....		68
Malaria.....		4	Whooping cough.....		18
Measles.....		17			

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
<i>September, 1920.</i>										
Alabama.....	3	197	3	185	9	8	1	82	8	193
Arkansas.....	3	187	36	2,011	19	52	1	78	26	216
Idaho.....		19			14			8	61	10
Louisiana.....	3	44	4	750	28	9	1	20	37	115
Maryland.....		144	56	33	60	2	6	126	2	217
Michigan.....		644			106		10	522	124	165
Minnesota.....	1	255	2	1	9		18	153	177	77
Montana.....		16	2		202		8	27	30	42
New Jersey.....	16	365	23	4	62		13	172		122
New York.....	29	1,021	80		507		40	486	17	580
Rhode Island.....	1	69	3	2	33		7	47		16
South Dakota.....		16			7			27	15	2

RECIPROCAL NOTIFICATION.

Minnesota—September, 1920.

Cases of communicable diseases referred during September, 1920, to other State health departments by Department of Health of the State of Minnesota.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Malaria: Minneapolis, Hennepin County.	Crescent City, Putnam County, Fla.	Patient taken ill while passing through Minneapolis to western State.
Tuberculosis: Mayo Clinic, Rochester, Olmsted County.	Little Rock, Pulaski County, Ark.	
Do.	Fort Smith, Sebastian County, Ark.	2 cases—1 moderately advanced, 1 apparently arrested.
Do.	West Colorado Springs, El Paso County, Colo.	
Do.	Cairo, Alexander County, Ill.	
Do.	Rock Island, Rock Island County, Ill.	
Do.	Peoria, Peoria County, Ill.	
Do.	Chicago, Cook County, Ill.	
Do.	Rock Falls, Whiteside County, Ill.	
Do.	Kokomo, Howard County, Ind.	
Do.	Marengo, Crawford County, Ind.	
Do.	Manilla, Crawford County, Iowa.	
Do.	General delivery, Manning, Carroll County, Iowa.	
Do.	Council Bluffs, Pottawattamie County, Iowa.	
Do.	Lake City, Calhoun County, Iowa.	
Do.	Fort Dodge, Webster County, Iowa.	
Do.	Creston, Union County, Iowa.	
Do.	Havensville, Pottawattamie County, Kans.	
Do.	Jackson, Hinds County, Miss.	
Do.	Kansas City, Jackson County, Mo.	
Do.	Warsaw, Benton County, Mo.	
Do.	Helena, Lewis and Clark County, Mont.	
Do.	Butte, Silver Bow County, Mont.	
Do.	Savage, Richland County, Mont.	
Do.	Gallup, McKinley County, N. Mex.	
Do.	Minto, Walsh County, N. Dak.	
Do.	Arnegard, route 3, McKenzie County, N. Dak.	
Do.	New Leipzig, Grant County, N. Dak.	
Do.	Jamestown, route 1, Stutsman County, N. Dak.	
Do.	Ambrose, Divide County, N. Dak.	
Do.	Maddock, Benson County, N. Dak.	
Do.	Tulsa, Tulsa County, Okla.	
Do.	Kittanning, Armstrong County, Pa.	
Do.	Ganeva, Miner County, S. Dak.	
Do.	Turton, Spink County, S. Dak.	
Do.	Alcester, Union County, S. Dak.	
Do.	Mission Hills, Yankton County, S. Dak.	
Do.	Gallatin, Sumner County, Tenn.	
Do.	Ranger, Rastland County, Tex.	
Do.	Houston, Harris County, Tex.	
Do.	Taylor, Jackson County, Wis.	
Do.	Milwaukee, Milwaukee County, Wis.	
Do.	Manitowoc, Manitowoc County, Wis.	
Do.	Fortonville, Outagamie County, Wis.	
Do.	Chippewa Falls, Chippewa County, Wis.	
Do.	Parkman, Sheridan County, Wyo.	
Do.	Sault Ste. Marie, Ontario, Canada.	
Do.	Cabri, Saskatchewan, Canada.	
Do.	Sifton, Manitoba, Canada.	
Do.	Winnipeg, Manitoba, Canada.	
Pokegama Sanitarium, Pokegama, Pine County.	Calmar, Winneshiek County, Iowa.	
Do.	Jamestown, Stutsman County, N. Dak.	
Do.	Mitchell, Davison County, S. Dak.	
Do.	Decorah, Winneshiek County, Iowa.	
Thomas Hospital, Minneapolis, Hennepin County.	Anaconda, Deer Lodge County, Mont.	
Do.	Belt, Cascade County, Mont.	
Do.	Jamestown, Stutsman County, N. Dak.	
Do.	Galesburg, Traill County, N. Dak.	
Do.	Lankin, Walsh County, N. Dak.	
Do.	Colome, Tripp County, S. Dak.	
City and County Hospital, St. Paul, Ramsey County.	Morristown, Corson County, S. Dak.	
Oronoco Sanitarium, Rochester, Olmsted County.	Fallon, Prairie County, Mont.	

RECIPROCAL NOTIFICATION—Continued.**Minnesota—September, 1920—Continued.**

Cases of communicable diseases referred during September, 1920, to other State health departments by Department of Health of the State of Minnesota—Continued.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Tuberculosis—Contd.		
Ottertail County Sanitarium, Battle Lake, Ottertail County.	Wahpeton, Richland County, N. Dak.	
Deerwood Sanitarium, Deerwood, Crow Wing County.	Fargo, Cass County, N. Dak.	
Minneapolis, Hennepin County.	Silver Lake Township, Worth County, Iowa....	Specimen sent in by Dr. B. Odegard, Albert Lea, to Minnesota State Board of Health: positive.
Do.	Fargo, Cass County, N. Dak.	Specimen sent in by Dr. O. J. Hagen, Moorhead, to State Board of Health of Minnesota; positive.

ANTHRAX.

California, Georgia, Louisiana, and New York.

During September, 1920, one case of anthrax was reported in Louisiana, and three cases were reported in New York. During the week ended October 9, 1920, one case was reported at San Francisco, Calif., and one at Rome, Ga.

BOTULISM.

Oakland, Calif.

Under date of October 20, 1920, five cases of botulism, with three deaths, were reported from Oakland, Calif. The poisoning was stated to have resulted from the eating of canned spinach.

CEREBROSPINAL MENINGITIS.

State Reports for September, 1920.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		New Jersey—Continued.	
Jefferson County.....	3	Middlesex County.....	1
Arkansas:		Passaic County.....	1
Faulkner County.....	1	Union County.....	6
Lonoke County.....	1	Total.....	16
Mississippi County.....	1	New York:	
Total.....	3	Albany County—	
Louisiana:		Albany.....	1
Caddo Parish.....	1	Erie County—	
Lafayette Parish.....	1	Lackawanna.....	2
Rapides Parish.....	1	New York.....	23
Total.....	3	Niagara County—	
Minnesota:		Lockport.....	1
Washington County—		Orange County—	
Forest Lake.....	1	Port Jervis.....	1
New Jersey:		Tioga County—	
Bergen County.....	1	Barton (town).....	1
Essex County.....	2	Total.....	29
Hudson County.....	3	Rhode Island:	
Mercer County.....	2	Providence County—	
		Providence.....	1

CEREBROSPINAL MENINGITIS—Continued.**City Reports for Week Ended Oct. 9, 1920.**

The column headed "Average cases" gives the average number of cases reported during the corresponding week of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	1920		Place.	Average cases.	1920	
		Cases.	Deaths.			Cases.	Deaths.
California:				Missouri:			
Long Beach.....	0	1	1	Jefferson City.....			1
Los Angeles.....	(¹)	1	.....	Kansas City.....	(¹)	1	.....
Pasadena.....	0	1	1	New Jersey:			
Redlands.....		1	1	East Orange.....	0	1	1
Connecticut:				Elizabeth.....	0	2	1
New London.....	0	1	.....	Trenton.....	0	.....	1
Illinois:				New York:			
Chicago.....	3	4	.....	New York.....	3	4	.....
Kewanee.....		1	1	Oregon:			
Kansas:				Portland.....	(¹)	.....	1
Coffeyville.....	0	1	.....	Pennsylvania:			
Topeka.....	0	1	.....	New Castle.....	(¹)	2	.....
Massachusetts:				Philadelphia.....	(¹)	2	1
Lynn.....	(¹)	1	1	Texas:			
Newton.....	0	1	.....	Dallas.....	0	1	.....

¹ Average less than 1.

DIPHTHERIA.

See Telegraphic weekly reports from States, p. 2572; Monthly summaries by States p. 2575; and Weekly reports from cities, p. 2595.

INFLUENZA.**State Reports for September, 1920.**

Place.	New cases reported.	Place.	New cases reported.
Arkansas:		Maryland—Continued.	
Faulkner County.....	4	Dorchester County—	
Jackson County.....	3	Cambridge.....	5
Logan County.....	4	Church Creek.....	1
Perry County.....	6	Frederick County—	
Pike County.....	1	Mount Pleasant, R. D.....	2
Pulaski County.....	1	Talbot County—	
Saline County.....	6	Easton.....	1
Scott County.....	2	Washington County—	
Sebastian County.....	8	Hancock.....	5
Woodruff County.....	1	Hancock, R. D.....	1
Total.....	36	Big Pool, R. D.....	1
Maryland:		Wicomico County—	
Allegany County—		Sharptown.....	1
Cumberland.....	6	Worcester County—	
McCoole.....	1	Kleij Grange, R. D.....	1
Anne Arundel County—		Total.....	56
Annapolis.....	2	Minnesota:	
Waterbury.....	1	Hennepin County—	
Millersville.....	1	Minneapolis.....	2
Baltimore.....	15	New Jersey:	
Baltimore County—		Bergen County.....	1
Relay.....	1	Burlington County.....	1
Carroll County—		Essex County.....	9
Westminster.....	4	Hudson County.....	6
Warfieldsburg.....	1	Mercer County.....	2
Gamber.....	2	Monmouth County.....	1
Snydersburg.....	1	Passaic County.....	1
Hampstead, R. D.....	1	Union County.....	2
Charles County—		Total.....	23
White Plains, R. D.....	1		
Tompkinsville.....	1		

INFLUENZA—Continued.

City Reports for Week Ended Oct. 9, 1920.

Place.	Cases	Deaths.	Place.	Cases.	Deaths.
Arkansas:			New Jersey:		
North Little Rock.....	2	.....	Newark.....	2	.....
California:			New York:		
San Francisco.....	3	2	Binghamton.....	2	.....
Georgia:			Cohoes.....	1	.....
Atlanta.....	2	.....	Jamestown.....	1	.....
Rome.....	5	.....	New York.....	12	3
Illinois:			North Tonawanda.....	5	.....
Chicago.....	14	3	Troy.....	1	.....
Rockford.....	2	.....	Ohio:		
Maryland:			Cincinnati.....	1	.....
Baltimore.....	7	.....	Oregon:		
Massachusetts:			Eugene.....	1	.....
Boston.....	4	.....	Pennsylvania:		
Haverhill.....	1	.....	Philadelphia.....	2	2
Montana:			Texas:		
Great Falls.....	1	.....	Dallas.....	3	.....
New Hampshire:			Washington:		
Nashua.....	1	.....	Seattle.....	1	.....

LETHARGIC ENCEPHALITIS.

Louisiana, Maryland, New York, and Texas.

During September, 1920, 2 cases of lethargic encephalitis were reported in Louisiana, 2 in Maryland, and 32 in New York. During the week ended October 9, 1920, 1 case was reported at Galveston, Tex.

MALARIA.

State Reports for September, 1920.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Arkansas—Continued.	
Autauga County.....	7	Franklin County.....	32
Bullock County.....	7	Greene County.....	25
Calhoun County.....	1	Hempstead County.....	65
Clark County.....	4	Hot Spring County.....	10
Colbert County.....	1	Howard County.....	22
Cosa County.....	3	Independence County.....	5
Dallas County.....	5	Isard County.....	14
Etowah County.....	2	Jackson County.....	35
Hale County.....	7	Jefferson County.....	31
Jefferson County.....	9	Lafayette County.....	19
Lowndes County.....	2	Lawrence County.....	2
Madison County.....	4	Lee County.....	102
Marengo County.....	18	Lincoln County.....	8
Marion County.....	12	Logan County.....	29
Mobile County.....	2	Lonoke County.....	4
Pike County.....	1	Miller County.....	16
Shelby County.....	1	Mississippi County.....	28
Sumpter County.....	33	Monroe County.....	14
Talladega County.....	15	Onacha County.....	80
Washington County.....	36	Perry County.....	10
Wilcox County.....	9	Pike County.....	12
Total.....	185	Prairie County.....	15
Arkansas:		Pulaski County.....	67
Arkansas County.....	20	Saline County.....	53
Ashley County.....	188	Scott County.....	34
Benton County.....	2	Sebastian County.....	59
Bradley County.....	90	Sevier County.....	70
Calhoun County.....	22	St. Francis County.....	59
Chicot County.....	66	Union County.....	362
Clay County.....	18	Van Buren County.....	5
Conway County.....	4	Washington County.....	3
Craighead County.....	6	White County.....	42
Crawford County.....	3	Woodruff County.....	20
Drew County.....	120	Total.....	2,011
Faulkner County.....	64		

MALARIA—Continued.

State Reports for September, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
Louisiana:		Maryland:	
Allen Parish.....	3	Baltimore.....	2
Assumption Parish.....	8	Baltimore County—	
Avoyelles Parish.....	5	Crowdenton.....	1
Bienvenue Parish.....	3	Calvert County—	
Caddo Parish.....	131	Lower Marlboro.....	1
Calcasieu Parish.....	15	Stoakley.....	2
Caldwell Parish.....	13	Caroline County—	
Catahoula Parish.....	100	Two Johns.....	1
Claiborne Parish.....	3	Charles County—	
Concordia Parish.....	9	Indianhead.....	1
De Soto Parish.....	28	Victoria, R. D.....	1
East Carroll Parish.....	44	Port Tobacco, R. D.....	1
East Feliciana Parish.....	11	Pomfret.....	1
Evangeline Parish.....	2	Dorchester County—	
Grant Parish.....	40	Toddville.....	1
Iberia Parish.....	9	Lakesville.....	5
Lafayette Parish.....	16	Prince Georges County—	
La Salle Parish.....	1	Hyattsville.....	1
Livingston Parish.....	14	Somerset County—	
Morehouse Parish.....	74	Chance.....	3
Natchitoches Parish.....	8	Monie.....	1
Orleans Parish.....	8	St. Marys County—	
Plaquemines Parish.....	9	Pearson, R. D.....	1
Rapides Parish.....	9	California, R. D.....	2
Red River Parish.....	5	St. Marys, R. D.....	1
Richland Parish.....	10	Wicomico County—	
St. Charles Parish.....	5	Fruitland.....	1
St. James Parish.....	1	Salisbury.....	4
St. Landry Parish.....	50	Wetipquin.....	1
St. Martin Parish.....	17	Worcester County—	
St. Mary Parish.....	26	Pocomoke City.....	1
St. Tammany Parish.....	5	Total.....	33
Tangipahoa Parish.....	2		
Terrebonne Parish.....	1	Minnesota:	
Vermilion Parish.....	3	Hennepin County—	
Vernon Parish.....	1	Minneapolis.....	1
Washington Parish.....	7	New Jersey:	
Webster Parish.....	21	Essex County.....	2
West Feliciana Parish.....	30	Somerset County.....	1
Winn Parish.....	3	Union County.....	1
Total.....	750	Total.....	4
		Rhode Island:	
		Providence.....	2

City Reports for Week Ended Oct. 9, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Arkansas:			Louisiana—Continued.		
Hot Springs.....	2		New Orleans.....	3	1
Little Rock.....	7		Massachusetts:		
California:			Boston.....	2	
Oakland.....	1		Fall River.....	1	
Sacramento.....	1		New Jersey:		
Georgia:			Paterson.....	1	
Atlanta.....	5		Trenton.....	3	
Brunswick.....	1		South Carolina:		
Rome.....	2		Charleston.....		2
Savannah.....	5	4	Texas:		
Illinois:			Dallas.....	52	
Chicago.....	1		Waco.....		1
East St. Louis.....		1	Virginia:		
Louisiana:			Petersburg.....	1	
Alexandria.....	11		Richmond.....	1	
Baton Rouge.....	3				

MEASLES.

See Telegraphic weekly reports from States, p. 2572; Monthly summaries by States, p. 2575; and Weekly reports from cities, p. 2595.

PELLAGRA.**State Reports for September, 1920.**

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Arkansas—Continued.	
Talledega County.....	8	White County.....	2
Arkansas:		Woodruff County.....	1
Ashley County.....	7	Total.....	52
Bradley County.....	1	Louisiana:	
Calhoun County.....	1	Concordia Parish.....	1
Conway County.....	3	De Soto Parish.....	1
Craighead County.....	2	East Carroll Parish.....	1
Drew County.....	3	Orleans Parish.....	4
Faulkner County.....	3	Rapides Parish.....	1
Jackson County.....	2	St. Martin Parish.....	1
Lee County.....	1	Total.....	9
Madison County.....	2	Maryland:	
Miller County.....	2	Anne Arundel County—	
Mississippi County.....	1	Mayo.....	1
Ouachita County.....	4	Prince Georges County—	
Perry County.....	1	College Park.....	1
Pulaski County.....	1	Total.....	2
Saline County.....	2		
Scott County.....	1		
Union County.....	9		

City Reports for Week Ended Oct. 9, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Tennessee:		
Birmingham.....		1	Nashville.....	1	1
Louisiana:			Texas:		
Baton Rouge.....	1		Corpus Christi.....		1
North Carolina:			Dallas.....		1
Raleigh.....		1			

PLAGUE.**Human Cases of Plague Reported.**

Place.	Period covered.	Cases.	Deaths.	Remarks.
Florida:	1920.			
Pensacola.....	May 31 to Aug. 31.....	10	4	
	Sept. 1 to Oct. 23.....	0	0	
Louisiana:	1919.			
New Orleans.....	Oct. 22 to Dec. 31.....	12	4	
	1920.			
	Jan. 1 to Apr. 30.....	0	0	
	May 1 to Aug. 31.....	7	3	
	Sept. 1 to Oct. 23.....	0	0	
Texas:				
Beaumont.....	June 19 to Aug. 20.....	14	5	
	Aug. 21 to Oct. 23.....	0	0	
Galveston.....	June 8 to Oct. 4.....	14	9	
	Oct. 5 to 8.....	0	0	
	Oct. 9.....	1	1	
	Oct. 10 to 19.....	0	0	
	Oct. 20.....	1	0	
Port Arthur.....	July 7.....	1	1	From Galveston.

PLAGUE—Continued.
Plague-Infected Rodents.

Place.	Period covered.	Rodents found plague infected.
Florida:	1920.	
Pensacola.....	June 28 to Sept. 19.....	31
	Sept. 20 to Oct. 23.....	0
Louisiana:	1919.	
New Orleans.....	Nov. 1 to Dec. 31.....	276
	1920.	
	Jan. 1 to July 31.....	285
	Aug. 1 to Sept. 11.....	0
	Sept. 12 to 25.....	2
	Sept. 26 to Oct. 23.....	0
Texas:		
Beaumont.....	July 1 to Sept. 19.....	122
	Sept. 20 to Oct. 23.....	0
	Oct. 25.....	11
Galveston.....	June 21 to Sept. 17.....	56
	Sept. 18 to Oct. 14.....	0
	Oct. 15.....	1
	Oct. 16 to 20.....	0
	Oct. 21.....	1
Port Arthur.....	Oct. 25.....	1

1 6 miles out on road to Port Arthur.

PNEUMONIA (ALL FORMS).

City Reports for Week Ended Oct. 9, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Indiana:		
Birmingham.....		1	Bedford.....		2
Mobile.....		3	Hammond.....		1
Montgomery.....		1	Indianapolis.....		1
Arkansas:			Kokomo.....		1
North Little Rock.....	2		La Fayette.....		1
California:			Logansport.....		2
Berkeley.....		1	Terre Haute.....		1
Long Beach.....	1	1	Iowa:		
Los Angeles.....	12	11	Mason City.....		1
Oakland.....	1	6	Kansas:		
Pasadena.....	1		Kansas City.....	3	
Sacramento.....		1	Topeka.....	2	
San Francisco.....	9	4	Kentucky:		
Colorado:			Covington.....		1
Colorado Springs.....		2	Lexington.....		1
Denver.....		6	Louisville.....		1
Pueblo.....		1	Louisiana:		
Connecticut:			Alexandria.....		1
Bridgeport.....	3		Baton Rouge.....	2	
Hartford.....		2	New Orleans.....		3
Meriden.....	1	1	Maine:		
New Haven.....		4	Biddeford.....	1	
New London.....		1	Maryland:		
Delaware:			Baltimore.....	7	7
Wilmington.....		1	Cumberland.....		1
District of Columbia:			Massachusetts:		
Washington.....		13	Boston.....	14	14
Georgia:			Cambridge.....	6	2
Atlanta.....		7	Clinton.....	2	2
Rome.....	1		Everett.....	1	
Savannah.....		2	Fall River.....	1	
Illinois:			Lawrence.....	2	
Aurora.....	1		Lowell.....	2	3
Chicago.....	64	18	Malden.....	3	1
Danville.....	2		Melrose.....	1	
Decatur.....		2	New Bedford.....		5
East St. Louis.....		2	Quincy.....	1	
Freeport.....		1	Somerville.....	1	1
Oak Park.....	1		Springfield.....	2	1
Rockford.....	1	2	Taunton.....	2	1
Rock Island.....	1	1	Westfield.....	1	
Springfield.....		2	Worcester.....	4	3

PNEUMONIA (ALL FORMS)—Continued.

City Reports for Week Ended Oct. 9, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Michigan:			New York—Continued.		
Ann Arbor.....		1	New York.....	92	70
Grand Rapids.....	2	1	Niagara Falls.....		2
Kalamazoo.....	2	1	Poughkeepsie.....	1	
Minnesota:			Rochester.....	3	2
Hibbing.....	1		Saratoga Springs.....		1
Minneapolis.....		3	Syracuse.....	6	2
St. Paul.....		3	Troy.....	2	
Missouri:			Yonkers.....	5	5
Kansas City.....		1	North Carolina:		
Montana:			Charlotte.....		2
Butte.....		1	Raleigh.....		1
Great Falls.....	1		Wilmington.....		1
Nebraska:			Ohio:		
Fremont.....		1	Akron.....	1	
Lincoln.....	1	1	Canton.....		1
Omaha.....		3	Cincinnati.....		1
Nevada:			Cleveland.....	9	11
Reno.....	3		Columbus.....		2
New Hampshire:			Lancaster.....		1
Manchester.....	1	1	Toledo.....		3
New Jersey:			Pennsylvania:		
Atlantic City.....	2	2	Philadelphia.....	28	13
Bloomfield.....	1		Rhode Island:		
East Orange.....		1	Pawtucket.....		2
Hackensack.....		1	Providence.....	1	3
Harrison.....	1		South Carolina:		
Hoboken.....		1	Charleston.....		6
Jersey City.....	1		Tennessee:		
Montclair.....	1	1	Nashville.....		1
Passaic.....	2	1	Texas:		
Paterson.....	4		Beaumont.....		1
Perth Amboy.....		1	Dallas.....	3	1
Plainfield.....	1	2	Waco.....		3
Trenton.....	4	2	Utah:		
New York:			Salt Lake City.....		3
Albany.....	2		Virginia:		
Binghamton.....	5	1	Danville.....		1
Buffalo.....	17	7	Norfolk.....	2	
Cohoes.....	1		Richmond.....		6
Elmira.....	2		Roanoke.....	2	
Glens Falls.....		1	West Virginia:		
Jamestown.....	1	1	Huntington.....		1
Lockport.....	1		Wisconsin:		
Mount Vernon.....		1	Milwaukee.....		3

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for September, 1920.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Michigan:	
Mobile County.....	1	Calhoun County.....	1
Arkansas:		Clinton County.....	1
Woodruff County.....	1	Genesee County.....	3
Louisiana:		Kent County.....	2
East Baton Rouge Parish.....	1	Lapeer County.....	1
Maryland:		St. Clair County.....	1
Baltimore.....	3	Wayne County.....	1
Washington County—		Total.....	10
Williamsport.....	1	Minnesota:	
Big Pool.....	1	Cottonwood County—	
Hagerstown.....	1	Amo Township.....	1
Total.....	6	Crow Wing County—	
		Crosby.....	1
		Cuyuna.....	1

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

State Reports for September, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
Minnesota—Continued.		New Jersey—Continued.	
Douglas County—		Hudson County.....	1
Osakis.....	1	Union County.....	2
Faribault County—		Total.....	13
Bricelyn.....	1	New York:	
Brush Creek Township.....	1	Albany County—	
Kittson County—		Bethlehem (town).....	1
Lancaster.....	1	Nassau County—	
Nobles County—		Floral Park.....	1
Grand Prairie Township.....	1	New York.....	30
Ottertail County—		Oneida County—	
Folden Township.....	1	Utica.....	1
Leaf Mountain Township.....	1	Orange County—	
Ramsey County—		Newburgh.....	1
St. Paul.....	5	Putnam County—	
Sherburne County—		Phillipstown (town).....	1
St. Cloud (R. D.).....	1	Rensselaer County—	
Stearns County—		Troy.....	1
Brooken.....	1	Pittstown (town).....	1
Washington County—		Ulster County—	
Forest Lake (R. D.).....	1	Marbletown (town).....	1
Total.....	18	New Paltz (town).....	1
Montana:		Westchester County—	
Deer Lodge County—		Briarcliff Manor.....	1
Anaconda.....	1	Total.....	40
Phillips County—		Rhode Island:	
Saco.....	2	Newport County—	
Ravalli County—		Newport.....	1
Hamilton.....	2	Providence County—	
Stevensville (R.D.).....	1	Cranston.....	2
Total.....	6	Pawtucket.....	1
New Jersey:		Providence.....	3
Bergen County.....	1	Total.....	7
Essex County.....	9		

City Reports for Week Ended Oct. 9, 1920.

The column headed "Average cases" gives the average number of cases reported during the corresponding week of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	1920.		Place.	Average cases.	1920.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Massachusetts—Con.			
Los Angeles.....	(1)	2		Medford.....	0	1	
San Francisco.....	0	1		Salem.....		1	
Colorado:				Somerville.....	1	2	1
Pueblo.....		1		Michigan:			
Illinois:				Battle Creek.....	0	1	
Chicago Heights.....		2		Flint.....	0	3	1
Chicago.....	2	4		Missouri:			
Indiana:				St. Louis.....	(1)	4	1
La Fayette.....		1		New Jersey:			
Iowa:				Montclair.....	(1)	1	
Iowa City.....		2		New York:			
Kansas:				New York.....	3	15	6
Wichita.....	0	1		Yonkers.....	(1)	2	1
Massachusetts:				Ohio:			
Boston.....	1	11	1	Akron.....	0	1	
Cambridge.....	2	6		Cleveland.....	2		1
Clinton.....	0	1		Pennsylvania:			
Danvers.....		1	1	Erie.....	1	1	
Dedham.....	0	1		Rhode Island:			
Fall River.....	0	1		Newport.....	0	1	
Haverhill.....	0	8	1	Pawtucket.....	0	2	
Lowell.....	(1)	2	2	Wisconsin:			
Lynn.....	(1)	1		La Crosse.....	0	1	

¹ Average less than 1. ² Excluding 1916 and 1917, epidemic years. ³ Excluding 1916, an epidemic year.

SCARLET FEVER.

See Telegraphic weekly reports from States, p. 2572; Monthly summaries by States, p. 2575; and Weekly reports from cities, p. 2595.

SMALLPOX.

State Reports for September, 1920—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
Maryland:						
Garrett County—						
Crellin, R. D.....	2				2	
Minnesota:						
Beltrami County—						
Bemidji.....	1				1	
Benton County—						
Sauk Rapids.....	2				2	
Carlton County—						
Split Rock Township.....	1				1	
Carver County—						
Victoria.....	1				1	
Chippewa County—						
Granite Falls Township.....	2				2	
Dakota County—						
Eureka Township.....	1			1		
South St. Paul.....	6				6	
Douglas County—						
Holmes City Township.....	1				1	
Salem Township.....	1				1	
Faribault County—						
Winnebago Township.....	1				1	
Freeborn County—						
Albert Lea.....	14			2	12	
Alden.....	1				1	
Bancroft Township.....	1				1	
Hennepin County—						
Greenwood Township.....	1				1	
Minneapolis.....	71		2	3	26	40
Jackson County—						
Hunter Township.....	1				1	
Kanabec County—						
Mora.....	1				1	
Kandiyohi County—						
Willmar.....	6				6	
Meeker County—						
Forest Prairie Township..	1				1	
Mille Lacs County—						
Borgholm Township.....	1				1	
Milaca.....	5				5	
Nicollet County—						
Lafayette.....	1				1	
Norman County—						
Halstad.....	1				1	
Olmsted County—						
Rochester.....	4				4	
Pine County—						
Henriette.....	2				2	
Pipestone County—						
Pipestone.....	1				1	
Polk County—						
Crookston.....	3				3	
Hubbard Township.....	2				2	
Vineland Township.....	2				2	
Ramsey County—						
St. Paul.....	19				19	
White Bear.....	2				2	
Rice County—						
Faribault.....	1			1		
Northfield.....	1				1	
St. Louis County—						
Duluth.....	4		2	1	1	
Scott County—						
Shakopee.....	1				1	

SMALLPOX—Continued.

State Reports for September, 1920—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Vaccinated within 7 years preceding attack.	Last vaccinated more than 7 years preceding attack.	Never successfully vaccinated.	History not obtained or uncertain.
Minnesota—Continued.						
Steele County—						
Owatonna.....	1				1	
Wabasha County—						
Lake City.....	2			1	1	
Watowgan County—						
Madelia Township.....	3			3		
Riverdale Township.....	1				1	
Winona County—						
Winona.....	3				3	
Yellow Medicine County—						
Granite Falls.....	2				2	
Blue Earth County—						
Danville Township.....	1				1	
Total.....	177		4	12	121	40
Montana:						
Custer County—						
Miles City.....	2				2	
Fergus County—						
Denton.....	1			1		
Hill County—						
Havre.....	7				7	
Missoula County—						
Milltown.....	2				2	
Missoula (3 R. D.).....	10				10	
Moiese.....	1				1	
Park County—						
Livingston.....	1				1	
Roosevelt County—						
Culbertson.....	1				1	
Froid.....	1				1	
Silver Bow County—						
Butte.....	2					2
Yellowstone County—						
Billings.....	2				2	
Total.....	30			1	27	2
New York:						
Chemung County—						
Elmira.....	9			2	7	
Southport (town).....	1				1	
Erie County—						
Tonawanda.....	1				1	
Herkimer County—						
Middleville.....	4				4	
New York.....	1					1
Niagara County—						
La Salle.....	1				1	
Total.....	17			2	14	1

SMALLPOX—Continued.
State Reports for September, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Louisiana—Continued.		
Baldwin County.....	1		East Feliciana Parish.....	1	
Calhoun County.....	1		Iberia Parish.....	1	
Jefferson County.....	2		Lincoln Parish.....	4	
Mobile County.....	4		Orleans Parish.....	9	
Total.....	8		Rapides Parish.....	2	
			West Carroll Parish.....	5	
Arkansas:			Total.....	37	
Logan County.....	3				
Marion County.....	2		Michigan:		
Miller County.....	1		Barry County.....	2	
Mississippi County.....	4		Berrien County.....	6	
Pope County.....	1		Calhoun County.....	4	
Sebastian County.....	2		Charlevoix County.....	1	
Washington County.....	13		Dickinson County.....	3	
Total.....	26		Eaton County.....	1	
			Genesee County.....	12	
Idaho:			Gogebic County.....	4	
Ada County.....	2		Houghton County.....	19	
Boise.....	7		Huron County.....	1	
Meridian.....	1		Ingham County.....	2	
Bannock County—			Isabella County.....	5	
Pocatello.....	4		Jackson County.....	1	
Camas County—			Leelanau County.....	7	
Fairfield.....	2		Livingston County.....	1	
Franklin County—			Marquette County.....	4	
Preston.....	3		Menominee County.....	2	
Fremont County—			Oakland County.....	4	
St. Anthony.....	2		Ontonagon County.....	1	
Jerome County.....	2		Osceola County.....	1	
Latah County.....	7		Saginaw County.....	1	
Moscow.....	6		Sanilac County.....	9	
Nez Perce County—			Schoolcraft County.....	2	
Lapwai.....	6		St. Clair County.....	2	
Lewiston.....	6		Wayne County.....	29	
Washington County.....	7		Total.....	124	
Weiser.....	6				
Total.....	61		South Dakota:		
			Beadle County.....	3	
Louisiana:			Charles Mix County.....	4	
Assumption Parish.....	2		Davison County.....	2	
Bienville Parish.....	1		Deuel County.....	1	
Caddo Parish.....	6		Gregory County.....	2	
Claiborne Parish.....	2		Minnehaha County.....	2	
Concordia Parish.....	2		Tripp County.....	1	
East Baton Rouge Parish.....	1		Total.....	15	
East Carroll Parish.....	1				

SMALLPOX—Continued.

City Reports for Week Ended Oct. 9, 1920.

The column headed "Average cases" gives the average number of cases reported during the corresponding week of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	1920		Place.	Average cases.	1920	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Minnesota:			
Birmingham.....	(1)	1	.....	Duluth.....	0	1	.....
California:				Minneapolis.....	4	13	.....
Fresno.....	(1)	1	.....	St. Paul.....	4	7	.....
Oakland.....	(1)	4	.....	Virginia.....		1	.....
Pasadena.....	0	1	.....	Missouri:			
Sacramento.....	(1)	1	.....	Independence.....	0	3	.....
San Diego.....	(1)	2	.....	Kansas City.....	3	3	.....
San Francisco.....	2	4	.....	St. Joseph.....	1	1	.....
Colorado:				Montana:			
Denver.....	2	2	.....	Butte.....	3	2	.....
Pueblo.....	0	1	.....	Missoula.....	0	6	.....
Georgia:				Nebraska:			
Atlanta.....	1	1	.....	Lincoln.....	(1)	1	.....
Idaho:				Omaha.....	4	3	.....
Boise.....	4	2	.....	North Carolina:			
Illinois:				Winston-Salem.....	(1)	2	.....
Bloomington.....		17	.....	North Dakota:			
Chicago.....	1	2	.....	Fargo.....	0	2	.....
East St. Louis.....	0	1	.....	Ohio:			
Galesburg.....	0	2	.....	Akron.....	0	2	.....
Granite City.....		2	.....	Canton.....	0	1	.....
Rockford.....	0	3	.....	Cincinnati.....	1	2	.....
Rock Island.....	0	1	.....	East Cleveland.....	0	1	.....
Indiana:				Lima.....	0	20	.....
Elkhart.....		1	.....	Middletown.....	0	1	.....
Hammond.....	0	1	.....	Tiffin.....	0	2	.....
Huntington.....		2	.....	Oregon:			
Indianapolis.....	6	2	.....	Portland.....	3	17	.....
Kokomo.....	1	1	.....	Texas:			
South Bend.....	0	3	.....	Galveston.....	0	1	.....
Iowa:				Utah:			
Cedar Rapids.....	0	1	.....	Salt Lake City.....	(1)	6	.....
Council Bluffs.....	0	1	.....	Vermont:			
Des Moines.....	(1)	2	.....	Rutland.....	0	1	.....
Dubuque.....	0	4	.....	Washington:			
Sioux City.....	(1)	1	.....	Seattle.....	2	5	.....
Kansas:				Spokane.....	4	6	.....
Parsons.....	2	1	.....	Wisconsin:			
Wichita.....	(1)	2	.....	Ashland.....		1	.....
Kentucky:				Green Bay.....	1	2	.....
Louisville.....	0	3	.....	La Crosse.....	(1)	7	.....
Louisiana:				Milwaukee.....	(1)	0	.....
New Orleans.....	(1)	2	1	Sheboygan.....	0	3	.....
Michigan:				Superior.....	0	4	.....
Flint.....	0	9	.....			

¹ Average less than 1.

TETANUS.

City Reports for Week Ended Oct. 9, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Georgia:			Maryland:		
Savannah.....		2	Baltimore.....		1
Idaho:			Massachusetts:		
Boise.....	1	.....	Boston.....		1
Illinois:			Missouri:		
Chicago.....	1	.....	Kansas City.....	2	1
East St. Louis.....		1	New York:		
Indiana:			Binghamton.....	1	1
Fort Wayne.....		1	New York.....	1	1
Louisiana:					
New Orleans.....	3	.....		

TRICHINOSIS.

New Jersey—September, 1920.

During the month of September, 1920, one case of trichinosis was reported in New Jersey.

TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 2572, and Weekly reports from cities, p. 2595.

TYPHOID FEVER.

State Reports for September, 1920.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Arkansas—Continued.	
Baldwin County.....	2	Lincoln County.....	3
Barbour County.....	5	Logan County.....	9
Bullock County.....	3	Lonoke County.....	4
Butler County.....	7	Madison County.....	1
Calhoun County.....	3	Mississippi County.....	7
Cherokee County.....	3	Monroe County.....	1
Clarke County.....	1	Pulaski County.....	9
Coffee County.....	9	Saline County.....	17
Conecuh County.....	2	Scott County.....	1
Coosa County.....	1	Sebastian County.....	32
Covington County.....	1	Sevier County.....	5
Crenshaw County.....	2	St. Francis County.....	5
Dallas County.....	4	Union County.....	19
DeKalb County.....	3	Van Buren County.....	1
Escambia County.....	1	Washington County.....	15
Etowah County.....	3	White County.....	11
Henry County.....	1	Total.....	216
Jackson County.....	2		
Jefferson County.....	32	Idaho:	
Lauderdale County.....	7	Ada County.....	1
Lowndes County.....	2	Boise.....	1
Madison County.....	18	Bingham County.....	
Marion County.....	2	Aberdeen.....	1
Mobile County.....	11	Bonner County.....	
Monroe County.....	1	Laclede.....	1
Montgomery County.....	3	Canyon County.....	
Morgan County.....	6	Nampa.....	1
Pike County.....	6	Franklin County.....	
Russell County.....	1	Preston.....	1
Sumter County.....	2	Kootenai County.....	
Talladega County.....	10	Spirit Lake.....	1
Tallapoosa County.....	2	Lewis County.....	
Tuscaloosa County.....	14	Nepesee.....	1
Walker County.....	15	Minidoka County.....	
Washington County.....	1	Burly.....	1
Wilcox County.....	6	Washington County.....	
Winston County.....	1	Weiser.....	1
Total.....	193	Total.....	10
Arkansas:		Louisiana:	
Arkansas County.....	2	Allen Parish.....	2
Benton County.....	13	Assumption Parish.....	1
Chicot County.....	1	Avoynes Parish.....	3
Clay County.....	6	Beauregard Parish.....	3
Cleburne County.....	1	Bossier Parish.....	2
Columbia County.....	1	Caddo Parish.....	20
Conway County.....	4	Claiborne Parish.....	9
Craighead County.....	6	Concordia Parish.....	1
Drew County.....	12	East Baton Rouge Parish.....	3
Faulkner County.....	2	East Feliciana.....	4
Franklin County.....	5	Evangeline Parish.....	2
Garland County.....	1	Franklin Parish.....	3
Greene County.....	8	Grant Parish.....	1
Hempstead County.....	2	Iberia Parish.....	1
Hot Springs County.....	4	Iberville Parish.....	1
Independence County.....	2	Jackson Parish.....	1
Izard County.....	5	Jefferson Parish.....	1
Jackson County.....	1		

TYPHOID FEVER—Continued.

State Reports for September, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
Louisiana—Continued.		Maryland—Continued.	
Lafayette Parish.....	5	Harford County—	
Lincoln Parish.....	3	Kalina.....	3
Natchitoches Parish.....	1	Havre de Grace.....	1
Orleans Parish.....	19	Perryman.....	1
Plaquemines Parish.....	1	Forest Hill.....	2
Pointe Coupee Parish.....	1	Howard County—	
Rapides Parish.....	3	Elk Ridge.....	1
Red River Parish.....	1	Laurel, R. D.....	1
Richland Parish.....	1	Cooksville.....	1
St. James Parish.....	2	Kent County—	
St. Landry Parish.....	1	Massey.....	3
St. Mary Parish.....	1	Chestertown.....	1
St. Tammany Parish.....	2	Chestertown, R. D.....	1
Terrebonne Parish.....	5	Millington.....	1
Union Parish.....	3	Millington, R. D.....	3
Vermilion Parish.....	1	Pomona, R. D.....	1
Vernon Parish.....	6	Montgomery County—	
Washington Parish.....	1	Purduum, R. D.....	1
Total.....	115	Poolesville.....	1
Maryland:		Rockville.....	2
Baltimore.....	69	Rockville, R. D.....	1
Allegheny County—		Barnesville.....	2
Cumberland.....	6	Gaithersburg.....	1
Ellerslie.....	1	Quince Orchard, R. D.....	1
Anne Arundel County—		Derwood.....	1
Annapolis.....	3	Brookeville.....	1
Laurel, R. D.....	4	Dawsonville, R. D.....	1
Baltimore County—		Takoma Park.....	1
Shawna, R. D.....	1	Sellman.....	1
Owings Mills.....	2	Emery Grove.....	1
Baldwin.....	1	Prince Georges County—	
Towson.....	1	Hyattsville.....	7
Walkers Switch, R. D.....	1	Croom, R. D.....	1
Rossville.....	1	Laurel.....	1
Summerfield, R. D.....	1	Mitchellville.....	1
Reisterstown.....	3	Capitol Heights.....	1
Calvert County—		Bowie.....	1
Port Republic.....	1	Queen Annes County—	
Chaney, R. D.....	1	McGinis Corner.....	1
Caroline County—		Queenstown, R. D.....	2
Marydel.....	2	Crumpton, R. D.....	1
Federalburg.....	1	Carmichael, R. D.....	1
Greensboro.....	1	Queenstown.....	1
Henderson, R. D.....	1	Centerville.....	1
Goldsboro.....	2	Fords Store, R. D.....	1
Two Johns.....	1	Somerset County—	
Goldsboro, R. D.....	1	Princess Anne, R. D.....	1
Ridgely.....	1	Champ.....	1
Carroll County—		Westover.....	1
Fatapsco, R. D.....	3	Marion.....	1
Westminster.....	1	St. Marys County—	
Ayondale, R. D.....	2	Trent Hall, R. D.....	1
Middleburg, R. D.....	1	Red Gate.....	1
Mt. Airy.....	1	Talbot County—	
Cecil County—		Easton.....	2
Union Hospital.....	4	Washington County—	
Iron Hill Station, R. D.....	1	Hancock.....	2
Elk Mills.....	1	Hagerstown.....	3
Dorchester County—		Williamsport, R. D.....	1
Hurlock, R. D.....	1	Hancock, R. D.....	1
Cornersville.....	1	Rohrer'sville.....	1
Frederick County—		Wicomico County—	
Mount Tabor.....	1	Sharptown.....	1
Brunswick.....	1	Bivalve.....	1
Frederick.....	1	Salisbury, R. D.....	2
Wolfsville, R. D.....	2	Worcester County—	
Knoxville.....	1	Stockton.....	1
Kempton, R. D.....	1	Berlin.....	1
Woodsboro.....	1	Ocean City.....	2
Creagerstown.....	1	Snow Hill.....	2
Garrett County—		Total.....	217
Vindex.....	1	Michigan:	
Dodson.....	2	Arenac County.....	1
Kitzmiller.....	1	Bay County.....	4
Oakland.....	1	Benzie County.....	1

TYPHOID FEVER—Continued.

State Reports for September, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
Michigan—Continued.		Minnesota—Continued.	
Berrien County.....	5	Ottertail County.....	
Calhoun County.....	1	Fergus Falls.....	3
Cass County.....	1	Richville.....	2
Chippewa County.....	1	Buse Township.....	1
Crawford County.....	1	Pipestone County.....	
Eaton County.....	3	Woodstock.....	1
Emmet County.....	2	Polk County.....	
Genesee County.....	25	Crookston.....	1
Grand Traverse County.....	2	Euclid Township.....	1
Gratiot County.....	1	Ramsey County.....	
Hillsdale County.....	1	St. Paul.....	15
Ingham County.....	6	Redwood County.....	
Ionia County.....	1	Sanborn.....	1
Iosco County.....	1	Rice County.....	
Isabella County.....	2	Nerstrand.....	1
Jackson County.....	4	St. Louis County.....	
Kalamazoo County.....	2	Duluth.....	3
Kent County.....	6	Hibbing.....	1
Lapeer County.....	1	Stuntz Township.....	1
Lenawee County.....	8	White Township.....	1
Manistee County.....	1	Scott County.....	
Mason County.....	2	New Market Township.....	1
Menominee County.....	1	Stearns County.....	
Monroe County.....	2	New Munich.....	1
Montmorency County.....	1	Traverse County.....	
Muskegon County.....	2	Wheaton.....	1
Oakland County.....	8	Wadena County.....	
Oceana County.....	1	Wadena.....	1
Ontonagon County.....	1	Washington County.....	
Osceola County.....	1	Newport.....	1
Presque Isle County.....	7	Winona County.....	
Saginaw County.....	5	Winona.....	1
Shiawassee County.....	1	Wright County.....	
St. Clair County.....	2	Maple Lake.....	1
St. Joseph County.....	1	Yellow Medicine County.....	
Washtenaw County.....	7	Canby.....	4
Wayne County.....	42		
Total.....	165	Total.....	77
Minnesota:		Montana:	
Becker County.....	1	Cascade County.....	
Audubon.....	1	Cascade.....	3
Detroit.....	3	Great Falls.....	4
Beltrami County.....		Custer County.....	
Baudette.....	1	Crow Rock.....	1
Turtle River.....	1	Miles City.....	1
Durand Township.....	1	Dawson County.....	
Lakewood Township.....	1	Glendive.....	2
Brown County.....		Fergus County.....	
New Ulm.....	1	Lewistown.....	1
Crow Wing County.....		Flathead County.....	
Brainerd.....	1	Kalispell.....	1
Crosby.....	1	Polson.....	1
Dakota County.....		Garfield County.....	
South St. Paul.....	2	Jordan.....	1
Goodhue County.....		Hill County.....	
Red Wing.....	1	Hayre.....	10
Cherry Grove Township.....	1	Jefferson County.....	
Hennepin County.....		Whitehall.....	1
Minneapolis.....	8	Lincoln County.....	
Tonka Bay.....	1	Libby.....	2
Houston County.....		Missoula County.....	
Spring Grove.....	1	Missoula.....	2
Kittson County.....		Sanders County.....	
St. Vincent.....	1	Camas.....	1
Koochiching County.....		Thompson Falls.....	1
International Falls.....	1	Silver Bow County.....	
South International Falls.....	1	Butte (2 B. D.).....	6
Lac qui Parle County.....		Treasure County.....	
Dawson.....	2	Hyskam.....	1
LeSueur County.....		Valley County.....	
New Prague.....	1	Glasgow.....	1
McLeod County.....		Yellowstone County.....	
Hutchinson.....	1	Billings.....	2
Mower County.....			
Austin.....	1	Total.....	42
Olmsted County.....			
Rochester.....	1		

TYPHOID FEVER—Continued.

State Reports for September, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
New Jersey:		New York—Continued.	
Atlantic County.....	8	Fulton County.....	
Bergen County.....	5	Gloversville.....	2
Burlington County.....	9	Broadalbin (town).....	1
Camden County.....	8	Ephratah (town).....	2
Cape May County.....	2	Genesee County—	
Cumberland County.....	5	Corfu.....	5
Essex County.....	23	Greene County—	
Gloucester County.....	2	Cairo (town).....	1
Hudson County.....	23	Coxsackie (town).....	1
Hunterdon County.....	2	Greenville (town).....	1
Mercer County.....	2	Herkimer County—	
Middlesex County.....	4	Fairfield (town).....	1
Monmouth County.....	3	Ilion.....	3
Morris County.....	3	Russia (town).....	2
Passaic County.....	6	Jefferson County—	
Salem County.....	6	Watertown.....	3
Union County.....	11	Theresa.....	1
Total.....	122	Wilna (town).....	1
New York:		Lewis County—	
Albany County—		Osceola (town).....	1
Albany.....	11	Madison County—	
Cohoes.....	1	Brookfield (town).....	1
Watervliet.....	2	Eaton (town).....	1
Bethlehem (town).....	2	Hamilton.....	1
Ravena.....	1	Madison (town).....	1
New Scotland (town).....	1	Smithfield (town).....	1
Allegany County—		Monroe County—	
Friendship.....	1	Rochester.....	3
Wellsville (town).....	2	Irondequoit (town).....	4
Broome County—		Mendon (town).....	1
Binghamton.....	4	Rush (town).....	1
Whitney Point.....	1	Brockport.....	1
Cattaraugus County—		Montgomery County—	
Olean.....	2	Amsterdam.....	2
Cayuga County—		Nassau County—	
Auburn.....	1	Hempstead (town).....	1
Port Byron.....	1	North Hempstead (town).....	1
Sennett (town).....	1	New York City.....	196
Chautauqua County—		Niagara County—	
Jamestown.....	2	Lockport.....	1
Arkwright (town).....	1	Niagara Falls.....	1
Chemung County—		North Tonawanda.....	3
Elmira.....	5	Hartland (town).....	2
Southport (town).....	1	Oneida County—	
Chenango County—		Rome.....	2
Norwich.....	1	Kirkland (town).....	3
Lincklaen (town).....	1	Onondaga County—	
Clinton County—		Syracuse.....	25
Saranac (town).....	1	Solvay.....	1
Columbia County—		Cicero (town).....	1
Chatham.....	15	La Fayette (town).....	1
Claverack (town).....	1	Lysander (town).....	1
Copake (town).....	2	Minoa.....	1
Ghent (town).....	1	Marcellus (town).....	1
Cortland County—		Onondaga (town).....	2
Lapeer (town).....	2	State Institute for Feeble Mind- ed Children.....	1
Delaware County—		Ontario County—	
Colchester (town).....	1	Geneva.....	2
Dutchess County—		Shortsville.....	1
Beacon.....	1	Orange County—	
Amenia (town).....	1	Middletown.....	1
Erie County—		Newburgh.....	3
Buffalo.....	12	Goshen.....	2
Tonawanda.....	4	Walden.....	1
Williamsville.....	1	Oswego County—	
East Aurora.....	1	Oswego.....	1
Tonawanda (town).....	1	Hastings (town).....	1
Essex County—		Palermo (town).....	1
Schroon (town).....	1	Otsego County—	
Ticonderoga.....	1	Oneonta (town).....	1
Franklin County—		Otego (town).....	1
Burke (town).....	1	Rensselaer County—	
Fort Covington (town).....	1	Rensselaer.....	2
Westville (town).....	1	Brunswick.....	1
		Schodack.....	1

TYPHOID FEVER—Continued.

State Reports for September, 1920—Continued.

Place.	New cases reported.	Place.	New cases reported.
New York—Continued.		New York—Continued.	
Rockland County—		Ulster County—	
Orangetown (town).....	1	Kingston.....	1
Nyack.....	1	Olive (town).....	1
St. Lawrence County—		Rochester (town).....	1
Canton (town).....	1	Saugerties (town).....	1
Richville.....	1	Wavering (town).....	1
Gouverneur (town).....	1	Washington County—	
Massena.....	2	Greenrich.....	3
Piercefield.....	26	Westchester County—	
Saratoga County—		White Plains.....	1
Saratoga Springs.....	1	Mount Vernon.....	1
Mechanicville.....	7	New Rochelle.....	1
Schenectady County—		Ossining.....	3
Schenectady.....	3	Port Chester.....	1
Glenville (town).....	3	Yonkers.....	3
Niskayuna (town).....	1	Bedford (town).....	1
Seneca County—		Bronxville.....	1
Fayette (town).....	1	Yates County—	
Waterloo.....	2	Jerusalem (town).....	1
Seneca Falls.....	96	Milo (town).....	1
Steuben County—		Dresden.....	1
Bath (town).....	1	Total.....	580
Bath.....	1	Rhode Island:	
Pulteney (town).....	1	Newport County—	
Suffolk County—		Newport.....	1
Babylon (town).....	1	Kent County—	
Huntington (town).....	1	Warwick.....	1
Sullivan County—		Providence County—	
Delaware (town).....	1	Providence.....	12
Highland (town).....	1	Woonsocket.....	2
Liberty (town).....	1	Total.....	16
Rockland (town).....	1	South Dakota:	
Tioga County—		Dewey County.....	1
Waverly.....	1	Yankton County.....	1
Nichols.....	1	Total.....	2
Owego.....	3		
Tompkins County—			
Ithaca.....	1		

City Reports for Week Ended Oct. 9, 1920.

The column headed "Average cases" gives the average number of cases reported during the corresponding week of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	1920		Place.	Average cases.	1920	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				District of Columbia:			
Birmingham.....	13	1	2	Washington.....	12	10	1
Arkansas:				Georgia:			
Fort Smith.....	0	4	.....	Atlanta.....	3	2	1
Hot Springs.....	.....	2	.....	Rome.....	1	2	.....
Little Rock.....	2	1	.....	Savannah.....	0	1	.....
California:				Illinois:			
Los Angeles.....	4	3	.....	Cairo.....	(1)	.....	1
Oakland.....	3	3	2	Chicago.....	17	9	1
Riverside.....	0	.....	1	Decatur.....	0	1	.....
Sacramento.....	1	2	.....	East St. Louis.....	0	.....	1
Colorado:				Evanston.....	(1)	1	.....
Denver.....	3	5	.....	Quincy.....	0	1	.....
Connecticut:				Indiana:			
Hartford.....	2	3	.....	East Chicago.....	(1)	.....	1
New Britain.....	(1)	1	.....	Elkhart.....	.....	1	.....
New Haven.....	2	3	.....	Fort Wayne.....	1	3	.....
Norwalk.....	0	1	.....	Hammond.....	0	3	1
Stamford.....	0	1	.....	Indianapolis.....	9	4	.....
Delaware:				Muncie.....	1	1	.....
Wilmington.....	4	2	.....	Terre Haute.....	0	3	1

¹ Average less than 1.

TYPHOID FEVER—Continued.

City Reports for Week Ended Oct. 9, 1920—Continued.

Place.	Average cases.	1920		Place.	Average cases.	1920	
		Cases.	Deaths.			Cases.	Deaths.
Iowa:				North Carolina:			
Cedar Rapids.....	1	3	.....	Durham.....	2	1	.....
Mason City.....	0	.....	1	Winston-Salem.....	3	4	.....
Kansas:				Ohio:			
Atchison.....	0	1	.....	Akron.....	6	2	.....
Kansas City.....	1	1	.....	Barberton.....	.....	1	.....
Topeka.....	3	2	2	Cincinnati.....	5	1	1
Wichita.....	4	3	1	Cleveland.....	7	2	1
Kentucky:				Columbus.....	2	1	.....
Louisville.....	5	9	2	Lima.....	2	2	.....
Louisiana:				Toledo.....	5	4	.....
Alexandria.....	.....	.....	1	Oklahoma:			
Baton Rouge.....	1	2	.....	Oklahoma City.....	1	2	1
New Orleans.....	7	3	.....	Oregon:			
Maryland:				Portland.....	2	2	.....
Baltimore.....	21	10	1	Salem.....	0	4	.....
Cumberland.....	1	1	.....	Pennsylvania:			
Massachusetts:				Bethlehem.....	(¹)	1	.....
Beverly.....	3	1	.....	Braddock.....	(¹)	1	.....
Boston.....	10	2	.....	Butler.....	(¹)	1	.....
Danvers.....	0	1	.....	Carnegie.....	(¹)	1	.....
Everett.....	(¹)	1	.....	Chester.....	2	1	.....
Fall River.....	6	8	1	Johnstown.....	5	2	.....
Greenfield.....	0	1	.....	McKeesport.....	1	2	.....
Lawrence.....	1	5	1	New Castle.....	1	1	.....
New Bedford.....	2	1	.....	North Braddock.....	0	1	.....
Northampton.....	0	1	.....	Philadelphia.....	32	12	3
Somerville.....	(¹)	1	1	Uniontown.....	1	2	.....
Taunton.....	(¹)	1	.....	Washington.....	2	2	.....
Worcester.....	2	1	.....	Wilkes-Barre.....	3	1	.....
Michigan:				Rhode Island:			
Ann Arbor.....	2	3	.....	Providence.....	3	1	.....
Flint.....	9	1	.....	South Carolina:			
Grand Rapids.....	3	1	.....	Charleston.....	(¹)	3	.....
Marquette.....	(¹)	1	.....	Tennessee:			
Port Huron.....	.....	1	.....	Nashville.....	7	4	.....
Minnesota:				Texas:			
Minneapolis.....	4	2	.....	Beaumont.....	0	1	.....
St. Paul.....	2	3	.....	Dallas.....	1	5	.....
Missouri:				Waco.....	(¹)	1	2
St. Louis.....	16	6	.....	Utah:			
Nebraska:				Salt Lake City.....	4	3	1
Omaha.....	2	2	.....	Virginia:			
New Hampshire:				Lynchburg.....	2	1	.....
Berlin.....	0	1	.....	Norfolk.....	5	1	.....
Nashua.....	0	1	1	Petersburg.....	0	4	.....
New Jersey:				Richmond.....	2	6	.....
Atlantic City.....	1	1	.....	Washington:			
Jersey City.....	2	2	.....	Seattle.....	3	2	.....
Montclair.....	0	2	.....	Spokane.....	2	2	.....
Nowark.....	5	3	.....	Tacoma.....	1	1	.....
Plainfield.....	(¹)	1	.....	Walla Walla.....	(¹)	1	.....
Trenton.....	1	1	1	Yakima.....	3	2	.....
New York:				West Virginia:			
Albany.....	1	2	.....	Charleston.....	2	1	.....
Buffalo.....	5	1	1	Huntington.....	.....	1	.....
New York.....	66	38	3	Wisconsin:			
Rochester.....	4	1	.....	Superior.....	(¹)	2	1
Syracuse.....	3	13	.....			

¹ Average less than 1.

TYPHUS FEVER.

Maryland and Michigan—September, 1920.

During September, 1920, one case of typhus fever was reported in Maryland, and two cases were reported in Michigan.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Oct. 9, 1920.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass.	14,406	0			2					
Akron, Ohio.	93,604	34	5				5		1	
Alameda, Calif.	28,433	4	6							
Albany, N. Y.	166,632		2		3				10	
Alexandria, La.	16,232	6								
Allentown, Pa.	65,109		4		3					
Alton, Ill.	23,783	8	2	2	1				1	
Altoona, Pa.	59,712		3							
Amesbury, Mass.	10,200	2								
Anaconda, Mont.	10,631	0					1			
Ann Arbor, Mich.	15,041	15	1							1
Anniston, Ala.	14,326		5				2		1	
Appleton, Wis.	18,005						1			
Arlington, Mass.	13,073	3			1		4		1	
Asbury Park, N. J.	14,629	3	1							
Ashtabula, Ohio.	22,008	4								
Atlanta, Ga.	196,144	62	8		1		6		3	3
Atlantic City, N. J.	53,515	8			1		1		1	1
Attleboro, Mass.	19,776	2			1				1	
Auburn, Me.	13,607	2								
Auburn, N. Y.	37,823	9	2							
Aurora, Ill.	34,795	6								
Baltimore, Md.	594,637	168	20	1	3		10		28	18
Bangor, Me.	26,958				1				1	
Barberton, Ohio.	14,187	1								
Baton Rouge, La.	17,544	4					2		2	
Battle Creek, Mich.	30,159		6				1			
Bayonne, N. J.	72,204		8				3		1	
Beaumont, Tex.	28,851	8								
Beaver Falls, Pa.	13,749		2				1			
Bedford, Ind.	10,613	4					3	1		
Bellefonte, N. J.	12,797		4							
Benton Harbor, Mich.	11,099	6	6	1			1			
Berkeley, Calif.	60,427	10	1				6		1	
Berlin, N. H.	13,892	1			3					
Bethlehem, Pa.	14,353		1				2			
Beverly, Mass.	22,128	3								
Biddeford, Me.	17,760				4					
Billings, Mont.	13,123	2			19					
Binghamton, N. Y.	54,864	19			10		5	1		
Birmingham, Ala.	189,716	37	13		1		1		10	3
Bloomfield, N. J.	19,013	4	2							
Bloomington, Ill.	27,462	4	2				2			1
Bloomington, Ind.	11,661	2								
Bluefield, W. Va.	16,123		4				3			
Boise, Idaho.	35,951	7	3							
Boston, Mass.	767,813	172	32		10		19	1	71	11
Braddock, Pa.	22,060		3							
Bradford, Pa.	14,544				5		2			
Brazil, Ind.	10,772	1								
Bridgeport, Conn.	124,724	30	6				2		1	4
Brookline, Mass.	33,526	10					2			
Brunswick, Ga.	10,984	1							1	
Buffalo, N. Y.	475,781	121	63	11	31		9		22	7
Burlington, Iowa.	25,144		4							1
Burlington, Vt.	21,802	4					4			1
Butler, Pa.	28,677		4				2			
Butte, Mont.	44,057	12	1		72		1			1
Cadillac, Mich.	10,158	2							1	
Cairo, Ill.	15,995	6								
Cambridge, Mass.	114,293	24	3				4		8	4
Canton, Ill.	13,774	3								

1 Population Apr. 15, 1910.

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

City Reports for Week Ended Oct. 9, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Canton, Ohio.....	62,566	16	4	1					1	2
Carbondale, Pa.....	19,597		2							
Carnegie, Pa.....	11,963		2							
Cedar Rapids, Iowa.....	38,033		4				1			
Charleston, S. C.....	61,041	18	6							1
Charleston, W. Va.....	31,060		1							
Charlotte, N. C.....	40,759	7	2		3				1	
Chelsea, Mass.....	46,405	9	2		4				4	
Chester, Pa.....	41,857		1		2				1	
Cheyenne, Wyo.....	11,320	1					1			
Chicago Heights, Ill.....	22,863	5	3				4			
Chicago, Ill.....	2,547,201	541	134	11	16	1	90	4	166	46
Chicopee, Mass.....	29,950	6	4							
Cincinnati, Ohio.....	414,248	111	16	3	1		7		13	12
Cleveland, Ohio.....	692,259	164	40	2	3		38	1	23	10
Clinton, Mass.....	13,075	5			10				1	1
Coatesville, Pa.....	14,998		2							
Coffeyville, Kans.....	18,331	5	3							
Cohoes, N. Y.....	25,292	6			3					1
Colorado Springs, Colo.....	38,965	10	1				3			
Columbia, S. C.....	33,165		4				1			
Columbus, Ohio.....	220,135	61	12				2		6	3
Concord, N. H.....	22,858	13								
Corpus Christi, Tex.....	10,789	6								1
Council Bluffs, Iowa.....	31,838	5					3			
Covington, Ky.....	59,623	12	1				1			2
Cranston, R. I.....	26,773	3	1							
Cumberland, Md.....	26,686	14	1	1						
Dallas, Tex.....	129,738	28	21	1			4		3	2
Danvers, Mass.....	10,037								3	
Danville, Ill.....	32,969	9								
Danville, Va.....	20,183	1	6				2			
Dayton, Ohio.....	128,939		7				4		1	
Decatur, Ill.....	41,483	12	5							
Denver, Colo.....	268,439	64	22	3	2		4			15
Des Moines, Iowa.....	104,052		9		1		5			
Dover, N. H.....	13,276	4								
Dubuque, Iowa.....	40,096		2				5			
Duluth, Minn.....	97,077	14	3				3		1	
Dunmore, Pa.....	21,286		1							
Duquesne, Pa.....	20,644				5					
Durham, N. C.....	26,160	11	5				1			1
East Chicago, Ind.....	30,286	11		1						
East Orange, N. J.....	43,761	8	1						1	
East Providence, R. I.....	18,485						2			
East St. Louis, Ill.....	77,312	20	4				2			2
Eau Claire, Wis.....	18,867						1			
Elgin, Ill.....	28,562	5	3				3			
Elizabeth, N. J.....	88,930		6		2		2		4	1
Elkhart, Ind.....	22,273	6					5		2	
Elmira, N. Y.....	38,272	17			2				1	1
Elwood, Ind.....	11,023	4								
Englewood, N. J.....	12,603	3								
Erie, Pa.....	76,592		13		1		17		2	
Eugene, Oreg.....	14,257	5	1		1					
Eureka, Calif.....	15,142	6	1				1			
Evanston, Ill.....	29,304	7	10		2					
Everett, Mass.....	40,160	4					1		3	
Fairmont, W. Va.....	16,111		1							
Fall River, Mass.....	129,828	37	6		2				5	4
Fargo, N. Dak.....	17,872	3					1			
Farrell, Pa.....	10,190		1		1		1			
Findlay, Ohio.....	14,858	2								
Flint, Mich.....	57,386	16	14	1			15			
Fond du Lac, Wis.....	21,486		4							
Fort Scott, Kans.....	10,564	4	11							
Fort Smith, Ark.....	29,390		3				3			
Fort Wayne, Ind.....	78,014	21	3	1			1			1
Fort Worth, Tex.....	108,597		4		1		1			
Freeport, Ill.....	19,844	7								

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Oct. 9, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Fremont, Nebr.....	10,080	1								
Fremont, Ohio.....	11,034	1								
Fresno, Calif.....	36,314	21	3						2	1
Galesburg, Ill.....	24,629	7	1				4		1	
Galveston, Tex.....	42,650	8					2			
Gardner, Mass.....	17,534	3							3	
Gary, Ind.....	56,000	5	12				3			
Geneva, N. Y.....	13,915	3					6			
Glens Falls, N. Y.....	17,160	3								
Gloucester City, N. J.....	11,375		1						1	
Grand Rapids, Mich.....	132,861	26	14		1		5		5	
Granite City, Ill.....	15,890	2								1
Great Falls, Mont.....	13,948	2					2			
Greely, Colo.....	11,942	1								
Green Bay, Wis.....	30,017				20		3			
Greenfield, Mass.....	12,251	6	3				1		1	
Greensboro, N. C.....	20,171	9								
Greensburg, Pa.....	13,881		1				1			
Greenwich, Conn.....	19,694	2	6							
Hackensack, N. J.....	17,412	10	1						2	
Hammond, Ind.....	27,016	6					5			
Harrisburg, Pa.....	73,276		4		1		1			
Harrison, N. J.....	17,345								1	
Hartford, Conn.....	112,831	45	15				5			2
Haverhill, Mass.....	49,180	13	3				1			3
Hazleton, Pa.....	28,981						2			
Highland Park, Mich.....	33,859	5	1							
Hoboken, N. J.....	78,324	11	1				2		1	1
Holland, Mich.....	13,459	4	3							1
Holyoke, Mass.....	66,503	7					1		1	
Hoquiam, Wash.....	12,230		1							
Hot Springs, Ark.....	17,690	10	1							2
Huntington, Ind.....	10,982	3	1							
Huntington, W. Va.....	47,686	16	6							1
Independence, Mo.....	11,964	5	1							
Indianapolis, Ind.....	283,622	55	13	1	5		6		18	3
Ironton, Ohio.....	14,079	5							1	
Ironwood, Mich.....	15,085	0			1		2			
Irvinton, N. J.....	16,710				1		1			
Ishpeming, Mich.....	112,448	3					1			
Ithaca, N. Y.....	16,017	3							1	
Jamestown, N. Y.....	37,431	11	6						1	
Janesville, Wis.....	14,411						1			
Jefferson City, Mo.....	13,712	5								
Jersey City, N. J.....	312,557		14				1		8	
Johnstown, Pa.....	70,437		7		1				1	
Joplin, Mo.....	33,400		3							
Kalamazoo, Mich.....	50,408	26	2				2		2	3
Kansas City, Kans.....	102,096		8		2		5		1	
Kansas City, Mo.....	305,816	64	15		4		16		10	8
Kearny, N. H.....	24,325	3			1					
Keene, N. H.....	10,725	2							1	
Kenosha, Wis.....	32,853		1		1					
Kewanee, Ill.....	13,607	8								
Knoxville, Tenn.....	59,112		7	1			2	1	1	1
Kokomo, Ind.....	21,629	10							1	
La Crosse, Wis.....	31,833						3			
La Fayette, Ind.....	21,481	4								
Lancaster, Ohio.....	16,086		1							
Lancaster, Pa.....	51,437		9							
Laurel, Miss.....	12,313		1							
Lawrence, Kans.....	13,477	3								
Lawrence, Mass.....	102,923	20	2				4		2	2
Leavenworth, Kans.....	19,363	5					5			
Lebanon, Pa.....	20,947		1						2	
Leominster, Mass.....	21,365	3	2						1	
Lexington, Ky.....	41,697	19								
Lima, Ohio.....	37,145	5	2	1			1			1
Lincoln, Nebr.....	46,957	11					1			1
Little Rock, Ark.....	58,716		2		7		2		2	

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Oct. 9, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Lockport, N. Y.	20,028	4					1			
Logansport, Ind.	21,338	12					2			1
Long Beach, Calif.	29,163	13	1						3	1
Lorain, Ohio	38,266		8				3			
Los Angeles, Calif.	535,485	190	64	1	21		9		35	10
Louisville, Ky.	243,808	69	9				3		7	7
Lowell, Mass.	114,366	38	1	1	31	1	3			
Ludington, Mich.	10,566	2							1	
Lynchburg, Va.	33,497	8		1					1	1
Lynn, Mass.	104,534	12	2				4		1	4
McKeesport, Pa.	48,280		2				2			
McKees Rocks, Pa.	20,796						1			
Madison, Wis.	31,315		2							
Malden, Mass.	52,243	8	4				2		2	
Manchester, Conn.	15,889	0							1	
Manchester, N. H.	79,607	17	7	2	1		1		5	
Manitowoc, Wis.	13,931		1				5			
Marikato, Minn.	110,365	1								
Marquette, Mich.	14,610								2	
Marion, Ind.	19,923	5	4				4			1
Marquette, Mich.	12,555	7								
Marshalltown, Iowa	14,519		2							
Martinsburg, W. Va.	12,984		3							
Mason City, Iowa	14,938	7		1			4			
Medford, Mass.	26,684	9							4	
Melrose, Mass.	17,724	1								
Meriden, Conn.	29,431		3				2			
Methuen, Mass.	14,320	2	6		1					
Middletown, N. Y.	15,690				3		3			
Middletown, Ohio	16,384	6	2	1			1			2
Milwaukee, Wis.	445,006	78	41	2	6		26	1	15	8
Minneapolis, Minn.	372,448	51	12		1		18	1	14	5
Mishawaka, Ind.	17,063	1							1	
Missoula, Mont.	19,075	3								
Mobile, Ala.	59,294	19	3							2
Monaca, Pa.	23,070						1			
Montclair, N. J.	27,067	9			5				2	1
Montgomery, Ala.	44,939	10	2		3		1		1	1
Morristown, N. J.	13,410	4	1							
Moundsville, W. Va.	11,513	3					2			
Mount Vernon, N. Y.	37,994	9	7	2			3		2	1
Muskegon, Ind.	25,653	11	3				3		1	
Muscatine, Iowa	17,713	6								1
Nashua, N. H.	27,541	9							5	1
Nashville, Tenn.	115,136	34	16	1			4		2	1
Newark, N. J.	418,789	89	19	2	6	1	9		37	13
New Bedford, Mass.	121,622	32	9	1	1		3	1	6	
New Britain, Conn.	55,285	19	1		1		2			1
New Brunswick, N. J.	25,855	7					2		2	
Newburyport, Mass.	15,391	2								
New Castle, Ind.	14,144		1				1			
New Haven, Conn.	152,275	32	9				13		17	5
New London, Conn.	21,199		1				5			
New Orleans, La.	377,010	106	3		3		11		14	13
New Philadelphia, Ohio	19,133		1							
Newport, R. I.	30,585	8	1							1
Newton, Mass.	44,343	2	3		13					
New York, N. Y.	5,727,492	1,806	164	9	25	3	61	2	403	190
Niagara Falls, N. Y.	38,466	12	8		2		9		2	2
Norfolk, Va.	91,148		5		2					
Norristown, Pa.	31,969		5				2			
Northampton, Mass.	20,008	6	2				2			
North Attleboro, Mass.	11,243	0								
North Braddock, Pa.	15,694		2				1			
North Little Rock, Ark.	15,515	5	1						1	1
North Tonawanda, N. Y.	14,066	5					1			1
Norwalk, Conn.	27,332	3	1	1					1	
Norwich, Conn.	21,922	4					1			1
Norwood, Ohio	23,269	3							1	1
Oakland, Calif.	206,405	26	10	2	1		1			2

¹ Population Apr. 15, 1910.

² Pulmonary tuberculosis only.

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

City Reports for Week Ended Oct. 9, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oak Park, Ill.	27,816	11					2		5	
Ogdensburg, N. Y.	16,845	10								
Oklahoma City, Okla.	97,588	18	14				1			1
Olean, N. Y.	16,927	4								
Omaha, Nebr.	177,777	35	27	3			2			
Orange, Conn.	14,393	2								
Orange, N. J.	33,636	8							1	
Oshkosh, Wis.	36,549						3		2	
Paducah, Ky.	25,178		9				1			
Parkersburg, W. Va.	21,059	4	1							1
Parsons, Kans.	15,952		5							
Pasadena, Calif.	49,620	12							1	2
Passaic, N. J.	74,478	9	3		5					
Paterson, N. J.	140,512		4		1		2		8	
Pawtucket, R. I.	60,666	10			1					
Peekskill, N. Y.	19,034	7								
Pekin, Ill.	10,973		2							
Peoria, Ill.	72,184	13	1		1		15			2
Perth Amboy, N. J.	42,646	8	1				5			
Petersburg, Va.	25,817	10	11						2	1
Philadelphia, Pa.	1,735,514	366	44	2	4		49		70	39
Phillipsburg, N. J.	15,879	8								
Pittsburgh, Pa.	586,196		25		10		36		14	
Pittsfield, Mass.	39,678	10	1		22		1		1	2
Plainfield, N. J.	24,330	11	2		1		1		1	
Plymouth, Mass.	14,001	4								
Plymouth, Pa.	19,439		1				1			
Pontiac, Mich.	18,006	16	2				1			
Port Chester, N. Y.	16,727	3							1	
Port Huron, Mich.	18,863	6	1	1			1			
Portland, Me.	64,720	24			7					1
Portland, Oreg.	308,399	46	5	1	6		6		8	4
Pottsville, Pa.	22,717		4							
Poughkeepsie, N. Y.	30,786	10	1						1	
Providence, R. I.	259,895	51	19		3		3			2
Pueblo, Colo.	56,084	15	7			1				1
Quincy, Ill.	36,832	6					1			2
Quincy, Mass.	39,022	9	4							
Racine, Wis.	47,465		1				4		1	
Rahway, N. J.	10,361	0								
Raleigh, N. C.	20,274	17	2	1			3		2	4
Reading, Pa.	111,607		3		1		2			
Redlands, Calif.	14,573	2			2		1			
Reno, Nev.	15,514	1	1				2			
Richmond, Ind.	25,080	7								
Richmond, Va.	158,702	60	53	2			2		13	5
Riverside, Calif.	20,496	4	1							
Roanoke, Va.	46,282	14	5		2		1			1
Rochester, N. Y.	264,714	58	42	1	1		6		14	4
Rockford, Ill.	56,739	17	2		1		6			1
Rock Island, Ill.	29,452	10					1		1	1
Rocky Mount, N. C.	12,673	8								1
Rome, Ga.	15,607						1		1	
Rome, N. Y.	24,259		1		17				1	
Rutland, Vt.	15,038	6								1
Sacramento, Calif.	68,984	17	3				2		2	3
St. Joseph, Mo.	86,498	18	5		2		5			
St. Louis, Mo.	768,630	167	97	6			18		23	13
St. Paul, Minn.	252,465	50	18	2			11		11	2
Salem, Mass.	49,346	9	5							1
Salem, Oreg.	21,274	2								1
Salt Lake City, Utah.	121,623	39	4		16		1		1	1
San Angelo, Tex.	10,321	15								1
San Bernardino, Calif.	17,616	3								
San Diego, Calif.	56,412	22			1		3		3	2
Sandusky, Ohio.	20,226	7								
San Francisco, Calif.	471,023	129	25	1	1		5		17	10
Santa Cruz, Calif.	15,150	1								
Saratoga Springs, N. Y.	13,839	2							1	
Sault Ste. Marie, Mich.	14,130	1			1		7			

1 Population Apr. 15, 1910.

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

City Reports for Week Ended Oct. 9, 1920—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Savannah, Ga.	69,250	43	1				1			4
Schenectady, N. Y.	103,774	9	2		2				1	
Scranton, Pa.	149,541		4				5		3	
Seattle, Wash.	366,445		5		2		5			
Sheboygan, Wis.	28,907		3				1			
Shenandoah, Pa.	29,753		4				1			
Sioux City, Iowa.	58,568		1				2			
Sioux Falls, S. Dak.	16,887	2					4			
Somerville, Mass.	88,618	20					2		5	1
South Bend, Ind.	70,967	10	2				1		3	2
Southbridge, Mass.	14,465	6	1				1		3	
Spokane, Wash.	157,656						2			
Springfield, Ill.	62,623	11	1		1		13			
Springfield, Mass.	108,668	21	1				7		5	
Springfield, Ohio.	52,296	18	1		2		1			2
Steubenville, Ohio.	28,259	7			1				1	
Stillwater, Minn.	10,198	0			1					
Stockton, Calif.	36,209	8	1							
Superior, Wis.	47,167	7	6					1		
Syracuse, N. Y.	158,559	47	13		2		6		3	2
Tacoma, Wash.	117,446		4				2			
Taunton, Mass.	36,610	12	3				6		1	1
Terre Haute, Ind.	67,361	17	4	1						1
Tiffin, Ohio.	12,962	5								
Toledo, Ohio.	202,010	63	46				15		5	6
Topeka, Kans.	49,538	9			5		5		4	1
Traverse City, Mich.	14,090	5					1		1	
Trenton, N. J.	113,974	46	7						2	2
Triadelphia, Colo.	14,413	1	2		8					
Troy, N. Y.	78,094	12	3		1				2	2
Tucson, Ariz.	17,324	9		2						3
Tuscaloosa, Ala.	10,824		3							
Union, N. J.	25,370		2				1		1	
Uniontown, Pa.	21,600						1			
Vallejo, Calif.	13,803	3	1				1			
Vancouver, Wash.	13,805						2			
Virginia, Minn.	15,964						1			
Waco, Tex.	34,015	12								
Waltham, Mass.	31,011	9	2		26					
Warren, Pa.	15,063						9			
Washington, D. C.	369,282	101	13	2	2		10		21	11
Washington, Pa.	22,076		2		19				1	
Watertown, Mass.	15,183	2	1						3	
Wausau, Wis.	19,666	2					1		1	
West Chester, Pa.	13,403		3							
Westfield, Mass.	18,769	5								2
West Hoboken, N. J.	44,386	1	4						1	
West Orange, N. J.	13,964	2								1
Wheeling, W. Va.	43,657	12	5	1			4		1	2
White Plains, N. Y.	23,331	3	1				1			
Wichita, Kans.	73,597	26	8				9			1
Wilkes-Barre, Pa.	78,334		5		2		2		1	
Wilmington, Del.	95,369	18	7	1			1	1		1
Wilmington, N. C.	30,400	9	1							
Winona, Minn.	18,583						3			
Winston-Salem, N. C.	33,136	11	5	1			1		2	2
Winthrop, Mass.	13,105						2			
Woburn, Mass.	16,076	2								
Worcester, Mass.	168,108	53	3		3		4		7	5
Yakima, Wash.	22,058						1			
Yonkers, N. Y.	108,066	13	11		1				1	
York, Pa.	52,770		1							2
Zanesville, Ohio.	31,320	7								2

¹ Population Apr. 15, 1916.

FOREIGN AND INSULAR.

YELLOW FEVER ON VESSEL.

Steamship *Yumuri*—At Campeche, Mexico.

On October 13, 1920, a fatal case of yellow fever was reported at Campeche, State of Yucatan, Mexico. The case arrived at Campeche on the steamship *Yumuri* which left Vera Cruz October 1, 1920.

AUSTRALIA.

Campaign Against Hookworm Infection.

Under date of August 24, 1920, a vigorous campaign against hookworm infection was stated to be in progress in Australia. The most important aspects of the work were stated to be in Queensland and Papua (New Guinea) among natives. In the Mackay and Carmilla districts in the northeastern section of Queensland, out of 1,433 natives examined 216 were found to be infected, and in the Ingham and Townsville districts in the same section, out of 1,592 natives examined 182 were found infected.

CHINA.

Influenza—Hongkong—August, 1920.

Influenza was reported present at Hongkong, China, during the week ended August 28, 1920, with three fatalities.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Oct. 1-10, 1920.		Remain- ing under treatment Oct. 10, 1920.	Disease.	Oct. 1-10, 1920.		Remain- ing under treatment Oct. 10, 1920.
	New cases.	Deaths.			New cases.	Deaths.	
Diphtheria.....	8	1	4	Scarlet fever.....	2	.....	2
Leprosy.....	.....	.....	11	Smallpox.....	1	.....	1
Malaria.....	21	.....	167	Typhoid fever.....	19	2	57
Measles.....	5	.....	2				

¹ From the interior, 49.

² From abroad, 1.

³ From the interior, 24; from abroad, 1.

INDIA.

Influenza—Rangoon—July, 1920.

During the month of July, 1920, 74 fatal cases of influenza were notified at Rangoon, India. (Population, officially estimated, 330,360.)

INDO-CHINA.

Cholera—Plague—Smallpox—January–March, 1920.

During the period January to March, 1920, inclusive, cholera, plague, and smallpox were reported in Indo-China as follows:

JANUARY, 1920.

Cholera.—Forty cases with 24 fatalities, occurring in the Provinces of Cambodia and Cochin-China, as against 320 cases with 224 fatalities in January, 1919, and 89 cases with 52 fatalities in December, 1919.

Plague.—Forty-two cases with 40 fatalities, occurring in the Provinces of Anam, Cambodia, Cochin-China, and Kwang-Chow-Wan; in January, 1919, 59 cases with 57 fatalities; and in December, 1919, 44 cases with 35 fatalities.

Smallpox.—Cases, 410, with 101 fatalities, occurring in the Provinces of Anam, Cambodia, Cochin-China, Laos, and Tonkin. In January, 1919, 275 cases with 94 fatalities were reported, and in December, 1919, 185 cases with 47 fatalities.

FEBRUARY, 1920.

Cholera.—Twenty-five cases with 15 fatalities, occurring in the Provinces of Cambodia and Cochin-China; in February, 1919, 306 cases with 204 fatalities.

Plague.—Forty-one cases with 36 fatalities, occurring in the Provinces of Anam and Cambodia; in February, 1919, 68 cases with 65 fatalities.

Smallpox.—Cases, 625 (8 foreign) with 119 fatalities, distributed in the Provinces of Anam, Cambodia, Cochin-China, and Tonkin; in February, 1919, 456 cases (2 foreign) with 146 fatalities.

MARCH, 1920.

Cholera.—Fifty-two cases with 30 fatalities, occurring in the Provinces of Cambodia and Cochin-China; in March, 1919, 530 cases (1 fatal case foreign) with 368 fatalities.

Plague.—Cases, 79, with 70 fatalities, occurring in the Provinces of Anam, Cambodia, and Cochin-China; March, 1919, 86 cases with 77 fatalities.

Smallpox.—Cases, 782 (foreign, 3 cases), with 114 fatalities, occurring in the Provinces of Anam, Cambodia, Cochin-China, Kwang-Chow-Wan, and Tonkin; in March, 1919, 505 cases (5 foreign) with 191 fatalities.

Influenza—January–March, 1920.

Influenza was reported present in Indo-China in January, 1920, with 126 cases, occurring in the Provinces of Anam, Cochin-China, and Tonkin; in January, 1919, there were reported 10,709 cases with 4,420 fatalities. In February, 1920, 150 cases with 20 fatalities were reported in Anam, Cochin-China, and Tonkin, as against 10,117 cases with 3,885 fatalities reported in February, 1919. In March, 1920, more severe prevalence was reported, 939 cases with 128 fatalities being notified. The occurrence was distributed in the Provinces of Anam, Cambodia, Cochin-China, Kwang-Chow-Wan, and Tonkin. In March, 1919, a total of 5,284 cases with 4,303 fatalities was reported.

Rat Destruction—January–March, 1920.

Destruction of rats was carried out in the Provinces of Anam, Cambodia, Cochin-China, and Tonkin, with a total of 7,246 rats destroyed in January, 13,504 rats in February, and 10,170 rats in March, 1920.

JAMAICA.**Infectious Disease Reported Present.¹**

The epidemic of alastrim, or Kaffir pox, previously reported as present in the island of Jamaica, has continued to be reported. During the week ended October 2, 1920, 492 cases were stated to be present in the island.

STRAITS SETTLEMENTS.**Mosquito Destruction—Singapore.**

In August, 1920, a campaign of antimosquito work was reported organized at Singapore, Straits Settlements, having for its object the total elimination of the mosquito in Singapore and the Straits Settlements generally. The proposed work will include house-to-house visitation for the purpose of locating and destroying the numerous breeding areas that exist in that locality, and later, draining, filling, embanking, canalization, and other measures. Progress is stated to have been made in destruction of the malaria-bearing mosquito. It is desired to complete the destruction of the *Stegomyia fasciata*.

UNION OF SOUTH AFRICA.**Influenza—Cape Town—June–July, 1920.**

Influenza was reported present at Cape Town, Union of South Africa, during the five weeks ended July 30, 1920, with 5 fatalities. The number of cases was not reported.

¹ Public Health Reports, Sept. 3, 1920, p. 2132; Sept. 24, 1920, p. 2298; Oct. 15, 1920, p. 2491.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.**Reports Received During Week Ended Oct. 29, 1920.¹****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Canton.....	Aug. 1-31.....	4	3	
Changsha.....	Sept. 5-18.....	19	4	
Chungking.....	Sept. 5-11.....		265	
Nanking.....	Aug. 30.....			Several cases reported at Nanking University. Reported prevalent among Chinese.
Chosen:				
Chemulpo.....	Sept. 17-23.....	4	2	
Fusan.....	.....do.....		217	
Seoul.....	.....do.....	78	68	
India:				
Calcutta.....	Aug. 29-Sept. 4....	6	6	
Rangoon.....	.....			July 1-31, 1920: Cases, 18; deaths, 16. 13 imported.
Indo-China.....				Jan. 1-31, 1920: Cases, 40; deaths, 24. Feb. 1-29, 1920: Cases, 25; deaths, 15. Mar. 1-31, 1920: Cases, 52; deaths, 30.
Saigon.....	Aug. 23-Sept. 5....	1	1	
Japan:				
Kobe.....	Sept. 10-23.....	33	30	
Straits Settlements:				
Singapore.....	Aug. 22-Sept. 14....	8	9	
Sumatra:				
Medan.....	Aug. 20-Sept. 3....	1	1	On local steamship. From Singapore.
On vessel:				
Steamship.....	Aug. 20-Sept. 3....	1	1	At Medan, Island of Sumatra. From Singapore.

PLAGUE.

Azores—				
St. Michaels.....	Oct. 4-20.....	35	12	
Ceylon:				
Colombo.....	Aug. 22-Sept. 4....	5	4	
China:				
Amoy.....	Sept. 5-11.....		1	
India:				
Madras Presidency.....	Sept. 5-11.....	553	388	Aug. 22-28, 1920: Cases, 2,286; deaths, 1,504.
Indo-China.....				Jan. 1-31, 1920: Cases, 42; deaths, 40. Feb. 1-29, 1920: Cases, 41; deaths, 36. Mar. 1-31, 1920: Cases, 79; deaths, 70.
Java:				
East Java—				
Surabaya.....	Aug. 5-11.....	2	2	

SMALLPOX.

Austria.....				June 27-July 10, 1920: Cases, 22.
Canada:				
Alberta—				
Calgary.....	Oct. 3-9.....	1		
Ontario—				
Hamilton.....	Oct. 10-16.....	1		
Prince Edward Island—				
Charlottetown.....	Oct. 7-13.....	1		
Ceylon:				
Colombo.....	Aug. 29-Sept. 4....	8		
China:				
Amoy.....	Sept. 5-11.....		2	
Chungking.....	.....do.....			Present.
Foochow.....	.....do.....			Do.
Chosen:				
Chemulpo.....	July 1-31.....	18	8	
Fusan.....	.....do.....	1	1	
Seoul.....	.....do.....	15	6	
Germany.....				July 11-24, 1920: Cases, 26; deaths, 6. Additional cases, June 13-July 10, 24; deaths, 2.

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

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

City Reports for Week Ended Oct. 29, 1920—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Glasgow.....	Sept. 19-Oct. 2....	9	3	
India:				
Madras.....	Sept. 5-11.....	4	3	
Rangoon.....	.....			July 1-31, 1920: Cases, 22; deaths, 4.
Indo-China:				Jan. 1-31, 1920: Cases, 410; deaths, 101. Feb. 1-29, 1920: Cases, 625; deaths, 119. Mar. 1-31, 1920: Cases, 782; deaths, 114.
Saigon.....	Aug. 23-Sept. 5....	1	1	
Italy:				
Palermo.....	Sept. 10-16.....	56	10	
Java:				
West Java.....	.....			Aug. 20-26, 1920; Cases, 3; deaths, 2.
Batavia.....	Aug. 20-26.....	2	1	
Mexico:				
San Luis Potosi.....	Oct. 3-9.....		1	
New Zealand:				
Dunedin.....	Aug. 10-23.....	7		
Portugal:				
Lisbon.....	Sept. 5-11.....		1	
Russia:				
Riga.....	Aug. 15-23.....	1		
Spain:				
Vigo.....	Sept. 26-Oct. 2....		1	
Tunis:				
Tunis.....	Sept. 20-26.....		4	

TYPHUS FEVER.

Belgium:				
Ghent.....	Sept. 19-25.....	4		
Chile:				
Concepcion.....	Sept. 1-13.....		3	
Santiago.....	Sept. 10.....	186		
Valparaiso.....	Sept. 5-11.....	41	7	
Germany.....	.....			July 11-24, 1920: Cases, 2. Additional cases, June 18-July 10, 16.
Great Britain:				
Dublin.....	Oct. 16-22.....	17		
Greece:				
Saloniki.....	Aug. 30-Sept. 12..	14	8	
Hungary.....	.....			May 24-30, 1920: Cases, 4.
Russia:				
Latvia—				
Riga.....	Aug. 15-Sept. 7....	23		
Siberia—				
Vladivostok.....	Aug. 1-31.....	20	2	

YELLOW FEVER.

Mexico:				
Sinaloa, State—				
Culiacan.....	Oct. 16.....			Present.
Mazatlan.....	Oct. 13.....	1	1	
San Blas.....	Sept. 13.....	1		
Sonora, State—				
Empalme.....	Oct. 12.....	1	1	
Yucatan, State—				
Campeche.....	Oct. 13.....	1	1	In sailor from s. s. Yumuri. The vessel left Vera Cruz Oct. 1 for Campeche and New Orleans.
Hunucma.....	Oct. 11.....	1		Interior of State. Case occurred in military garrison.
Salvador.....	Aug. 22-Sept. 11..	3	1	
On vessel:				
S. S. Yumuri.....	Oct. 13.....	1	1	At Campeche. Vessel from Vera Cruz, Oct. 1, 1920.

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

Reports Received from June 26 to Oct. 22, 1920.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Rio de Janeiro.....	June 27-July 3.....		1	
China:				
Amoy.....	June 20-Aug. 14.....		12	
Antung.....	Aug. 9-15.....	1	1	
Canton.....	July 1-31.....	1	1	
Changsha.....	Aug. 22-Sept. 4.....	118	46	Aug. 15-21: Present.
Chungking.....	May 16-24.....		1,319	
Do.....	June 6-Aug. 28.....		5,057	
Foochow.....	July 11-24.....			Present.
Hankow.....	July 4-17.....	12	5	
Harbin.....				Year 1919: Cases, 603. On East-
Hongkong.....	Aug. 8-14.....	1	1	ern Chinese R. R. line. At
Shanghai.....	Aug. 2-29.....	1	6	other stations, same line, 190
				cases.
Chosen (Korea).....				Sept. 8, 1920: Cases, 13,000; deaths,
Chemulpo.....	Aug. 1-Sept. 16.....	11	9	5,000 (estimated).
Chinnampo.....	Aug. 1-26.....	34	23	
Fusan.....	Aug. 1-Sept. 16.....	662	273	
Gonsan.....	Aug. 27-Sept. 2.....	1		
Mokpo.....	Aug. 1-Sept. 9.....	26	15	
Seoul.....	Aug. 1-Sept. 16.....	925	645	
Greece:				
Patras.....	July 26-Aug. 1.....			Present in surrounding country.
Zante.....	Aug. 2-8.....			Present.
India:				
Bombay.....	May 2-June 26.....	85	36	Apr. 11-May 22, 1920: Deaths,
Do.....	June 27-Aug. 21.....	89	57	7,549. May 30-June 26, 1920:
Calcutta.....	May 2-June 24.....	439	423	Deaths, 3,710. June 27-July 10,
Do.....	July 18-Aug. 21.....	138	133	1920: Deaths, 1,711.
Madras.....	May 2-June 26.....	20	13	
Do.....	July 11-Aug. 14.....	8	1	
Rangoon.....	June 27-July 4.....	21	16	
Indo-China:				
Saigon.....	Apr. 26-June 13.....	130	94	Report for May 9 not received.
Do.....	July 26-Aug. 15.....	8	4	
Japan:				
Kobe.....	June 14-27.....	36	24	Kobe, June 6-13, 34 cases. Moji,
Do.....	June 28-Aug. 30.....	375	193	June 6-12, 10 cases. Kochi,
Nagasaki.....	June 21-27.....	7		June 6-12, 1 case. Hiroshima,
Do.....	June 28-July 18.....	34	13	June 6-12, 6 cases.
Osaka.....	do.....			
Taiwan Island.....	May 22-June 20.....	60	33	
Do.....	July 11-Aug. 20.....	645	62	
Java:				
West Java—				
Batavia.....	Apr. 30-June 3.....	6	2	June 4-17: Present.
Do.....	June 25-Aug. 12.....	3		
Philippine Islands:				
Manila.....	May 9-June 26.....	5	1	May 9-June 26, 1920: Cases, 16;
Do.....	June 27-July 10.....	3		deaths, 12. June 27-July 17,
Provinces—				1920: Cases, 63; deaths, 31.
Albay.....	May 9-15.....	2	1	July 25-31: Cases, 57; deaths, 48.
Batangas.....	June 27-July 3.....	1		
Bohol.....	do.....	1	1	
Cagayan.....	May 9-June 26.....	11	19	
Do.....	June 27-July 10.....	35	9	
Iloilo.....	June 27-July 17.....	3		
Isabela.....	July 11-31.....	13	14	
Laguna.....	July 4-10.....	8		
Misamis.....	July 11-17.....	4	2	
Nueva Viscaya.....	July 25-31.....	49	42	
Pangasinan.....	July 4-17.....	6	4	
Russia:				
Sebastopol (district).....	June 20.....			Reported prevalent in southern
Simferopol.....				Russia, June 4, 1920.
				Reported increasing.
				Jan.-June, 1920: Cases, 1,262;
				deaths, 584. South Russia,
				Government of Tauride.
				Province of Lithuania.
Siam:				
Bangkok.....	Apr. 25-June 26.....	542	343	
Do.....	June 26-Aug. 7.....	46	18	
Straits Settlements:				
Singapore.....	July 15-Aug. 7.....	16	14	

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Turkey:				
Amassia.....	Dec. 24.....	1	.....	Asiatic Turkey.
Kaiseri.....	Dec. 22.....	1	.....	Do.
Karassi.....	Jan. 3.....	1	.....	Do.
Mamuret-ul-Aziz.....	Dec. 31.....	1	1	Do.
Panderma.....	Dec.-Jan.....	16	6	
Rodosto.....	Dec. 29.....	1	.....	European Turkey.
Smyrna.....	Dec. 22.....	3	2	Asiatic Turkey.
On vessel:				
S. S. Keketticut.....	Aug. 2.....	1	.....	U. S. S.; at Shanghai.

PLAGUE.

Azores:					
St. Michaels.....					Oct. 4, 1920: 5 suspect cases isolated vicinity of Ponta Delgada. On Oct. 7, 1920, 14 cases with 6 fatalities reported.
Brazil:					
Bahia.....	Apr. 25-May 22...	10	10		
Do.....	June 27-Oct. 28...	10	5		
Pernambuco.....	May 3-9.....	1	1		
Do.....	June 28-Aug. 15...	32	16		
Porto Alegre.....	June 27-Aug. 21...		2		
British East Africa:					Apr. 1-30, 1920: Cases, 22; deaths 9.
Kisumu.....	Apr. 25-June 26...	14	12		
Do.....	July 11-Aug. 14...	4	4		
Mombasa.....	Apr. 25-June 26...	104	39		
Do.....	June 27-July 31...	68	34		
Nairobi.....	Apr. 25-June 10...	14	8		
Ceylon:					
Colombo.....	May 25-June 12...	7	2		
Do.....	June 27-Aug. 28...	13	14		
Chile.....					Mar. 1-May 31, 1920: Cases, 15; deaths, 2. Plague reported in Departments of Tacna and Tarata.
Antofagasta.....	May 17-June 20...	5	.....		Mar. 1-May 31, 1920: Cases, 7; deaths, 1.
Do.....	July 5-11.....	1	.....	
Iquique.....	Mar. 1-May 31...	8	1		
China:					
Amoy.....	June 20-Aug. 14...		6		
Hongkong.....	Apr. 4-June 26...	90	70		
Do.....	June 27-Aug. 21...	26	23		
Ecuador:					
Guayaquil.....	Aug. 16-Sept. 15...	7	.....	
Egypt:					Jan. 1-Sept. 9, 1920: Cases, 413; deaths, 240.
Cities—					
Alexandria.....	June 18-Aug. 12...	10	7		
Port Said.....	Aug. 2-16.....	2	.....	
Suez.....	May 13-June 8...	12	6		3 cases pneumonic.
Do.....	July 3-Aug. 4.....	4	3		
Provinces—					
Assiout.....	May 15-June 5...	7	4		
Do.....	July 2-14.....	6	.....	
Beni-Souef.....	July 7-10.....	2	1		
Fayoum.....	June 5.....	1	.....	
Garbieh.....	.....do.....	1	.....	
Do.....	July 1-Sept. 7...	18	13		
Keneh.....	May 18.....	1	.....	
Mariut.....	May 18-June 8...	19	22		
Do.....	July 3-9.....	1	2		
Minieh.....	May 15.....	2	1		Septicemic.
Do.....	July 13.....	1	.....	
Fiume.....	Sept. 21.....	4	2		
Great Britain:					
Liverpool.....	June 20-26.....	1	1		

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Athens.....	Aug. 19-Oct. 14...	3	2	
Chios.....	Oct. 14.....	1	1	
Dante.....	July 22.....	2	3	
Kavalla.....	July 5-Aug. 21.....	3	3	
Nauplia.....	Aug. 21.....	2	1	Present, Sept. 9.
Piræus.....	June 29-Sept. 20.....	12	1	
Saloniki.....	Sept. 25-Oct. 8.....	3	3	
Zante.....				Do.
India:				Apr. 18-June 26, 1920: Cases, 12,476; deaths, 9,961. June 27-Aug. 21, 1920: Cases, 9,205; deaths, 7,901.
Bombay.....	Apr. 18-June 26.....	170	135	
Do.....	June 27-Aug. 21.....	34	31	
Calcutta.....	May 2-June 12.....	26	19	
Karachi.....	May 9-Aug. 21.....	66	59	
Madras Presidency.....	May 9-Sept. 4.....	5,176	3,775	
Rangoon.....	Apr. 25-June 26.....	120	120	
Do.....	June 27-Aug. 7.....	157	136	
Indo-China:				
Saigon.....	May 10-June 13.....	9	2	
Do.....	July 26-Aug. 15.....	5	4	
Italy:				
Catania.....	June 22-July 3.....	3	2	
Java:				Apr. 23-May 5, 1920: Cases, 7; deaths, 7. Apr. 15-June 16, 1920: Cases, 8; deaths, 8. Surabaya Residency.
East Java.....				
West Java—Batavia.....	July 22-Aug. 8.....	9	9	
Mesopotamia:				
Bagdad.....	June 1-30.....	6	3	
Mexico:				
Tampico.....	July 26-Sept. 27.....	4	3	
Vera Cruz.....	June 14-20.....	11	1	May 29-July 24, 1920: Cases, 49; deaths, 29. Corrected statement: From outbreak in May to July 20, 1920—cases, 58; deaths, 36.
Do.....	July 18-24.....	2	2	Mar. 1-31, 1920: Cases, 46; deaths, 29. Apr. 1-30, 1920: Cases, 36; deaths, 13. In coastal departments.
Peru:				
Callao.....	Mar. 1-31.....	6	3	
Do.....	Apr. 1-30.....	9	4	
Lima (city).....	Mar. 1-31.....	5	3	
Do.....	Apr. 1-30.....	4	4	
Lima (country).....	Mar. 1-31.....	1	1	
Do.....	Apr. 1-30.....	1	9	
Mollendo.....	Mar. 1-31.....	13	2	
Paita.....	do.....	5	2	
Do.....	Apr. 1-30.....	2	3	
Salaverry.....	Mar. 1-31.....	4	3	
Do.....	Apr. 1-30.....	1	1	
San Pedro.....	do.....	6	1	
Trujillo-Salaverry.....	May 31-June 29.....	3	2	
Do.....	Aug. 30-Sept. 5.....	1	1	
Russia:				
Batum.....	Sept. 28.....			Prevalent.
Siam:				
Bangkok.....	Apr. 25-June 5.....	8	5	
Do.....	June 28-July 17.....	5	2	
Straits Settlements:				
Singapore.....	Apr. 25-June 19.....	14	13	
Do.....	July 11-Aug. 7.....	3	3	
Syria:				
Beirut.....	June 30.....			Present.
Turkey:				
Constantinople.....	July 25-Aug. 21.....	7	6	
Uruguay:				
Montevideo.....	June 1-30.....	1	1	

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Departments—				
Algiers.....	May 11-Aug. 31.....	51	.....	City of Algiers, Apr. 1-30, 1920: One case, July 1-Aug. 31, 1920: Cases, 4; deaths, 2.
Constantine.....	June 1-Aug. 31.....	18	.....
Cran.....	May 11-Aug. 31.....	168	.....
Austria.....				May 30-June 26, 1920: Cases, 27.
Vienna.....	May 30-June 26.....	1	.....
Azores:				
Ponta Delgada.....	July 17-Aug. 20.....	7	.....	From Madeira.
St. Michaels.....	Aug. 21-27.....	1	.....
Bolivia:				
La Paz.....	May 2-31.....	6	8	
Do.....	Aug. 1-31.....	3	1	
Brazil:				
Bahia.....	Apr. 25-June 26.....	5	5	
Do.....	June 27-Aug. 21.....	20	2	
Pernambuco.....	Mar. 29-June 27.....	114	3	
Do.....	June 30-Aug. 15.....	112	2	
Rio de Janeiro.....	Apr. 11-June 26.....	431	6	
Do.....	June 27-Aug. 21.....	45	9	
Santos.....	Mar. 24-28.....	1	.....
Sao Paulo.....	June 21-27.....	.....	1	
Do.....	June 27-Aug. 8.....	.....	2	
British East Africa.....				Mar. 1-31, 1920: Cases, 107; Apr. 1-30, 1920: Cases, 60. Reported by native inspectors.
Mombasa.....	May 2-22.....	2	1	
Do.....	July 11-17.....	3	.....
Nairobi.....	May 23-June 26.....	11	1	
Do.....	Aug. 1-7.....	4	.....
Bulgaria:				
Sofia.....	July 11-17.....	1	.....
Canada:				
Alberta—				
Calgary.....	June 3-9.....	1	.....
Do.....	July 4-Aug. 7.....	5	.....
British Columbia—				
Vancouver.....	May 16-Aug. 28.....	4	.....
Manitoba—				
Winnipeg.....	May 29-June 5.....	3	.....
Do.....	Aug. 8-21.....	2	.....
New Brunswick—				
Bonaventure and Gaspé Counties.....	Aug. 1-31.....	1	.....
Carleton County.....	Sept. 19-25.....	1	.....
Gloucester County.....	May 31-June 26.....	5	.....
Do.....	Sept. 19-25.....	2	.....
Queens County.....	July 4-Aug. 21.....	7	.....
Restigouche County.....				Sept. 26-Oct. 2, 1920: Cases, 1.
Campbellton.....	July 1-31.....	7	.....
Nova Scotia—				
Halifax.....	do.....	2	.....
Sydney.....	May 31-June 26.....	2	.....
Ontario—				
Cornwall.....	June 25-30.....	2	.....
Fort William and Port Arthur.....	July 11-Oct. 2.....	4	.....
Hamilton.....	June 13-Aug. 25.....	7	.....
Kingston.....	May 31-June 19.....	4	.....
North Bay.....	June 23-29.....	1	.....
Do.....	July 11-Oct. 9.....	6	.....
Ottawa.....	June 6-26.....	32	.....
Do.....	June 27-Oct. 9.....	64	.....
Peterborough.....	Apr. 18-July 31.....	33	1	
Prescott.....	July 11-17.....	1	.....	Present at Cardinal and Brockville.
Do.....	Aug. 1-14.....	.....	.....
Toronto.....	June 6-19.....	13	.....
Do.....	June 26-Sept. 25.....	26	.....
Windsor.....	Aug. 22-Sept. 11.....	5	.....
Prince Edward Island—				
Charlotte Town.....	Aug. 12-18.....	1	.....
Quebec—				
Montreal.....	June 13-19.....	1	.....
Do.....	July 4-Aug. 7.....	4	.....
Quebec.....	June 27-Oct. 2.....	9	.....
Saskatchewan—				
Moose Jaw.....	June 26-30.....	6	.....
Do.....	July 25-Sept. 25.....	3	.....
Regina.....	June 26-30.....	1	.....
Saskatoon.....	Sept. 5-23.....	3	.....

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	May 9-June 5....	2		
Chile:				
Antofagasta.....	May 17-23.....			1 case in interior.
China:				
Amoy.....	May 2-Aug. 7....	4	12	
Antung.....	May 9-June 13...	3	3	
Do.....	June 21-27.....	1		
Chungking.....	May 2-June 9....			Present.
Do.....	July 11-Aug. 28...			Do.
Foochow.....	May 9-29.....			Do.
Do.....	July 21-Sept. 4...			Do.
Hankow.....	June 20-25.....	2		
Harbin.....				
Hongkong.....	Apr. 4-June 26...	19	15	Year, 1919; Cases, 79. On East-
Do.....	June 27-July 17...	2	2	ern Chinese R. R. line. At
Mukden.....	July 19-Aug. 21...			other stations, 109 cases.
Nanking.....	May 9-June 5....			Present.
Do.....	July 4-Sept. 11...			Do.
Tientsin.....	May 25-31.....	2		Do.
Do.....	June 13-19.....	2		
Tsinanfu.....	May 9-15.....	1		
Chosen (Korea):				
Chemulpo.....	Mar. 1-June 30...	69	40	
Fusan.....	do.....	24	6	
Seoul.....	do.....	358	86	
Colombia:				
Barranquilla.....	May 16-July 3....			Epidemic.
Santa Marta.....	May 31-Sept. 18...			Present.
Cuba:				
Antilla.....	Aug. 21-Sept. 13...	2		
Habana.....	July 4.....	1		From steamship Frank Hennis
				from Jamaica. Arrived Santi-
				ago June 30, 1920.
Matanzas.....	Aug. 15-21.....	1	1	In vicinity, at Aguacate, Aug.
				1-7, 1920; Cases, 12.
Cyprus.....				August, 1919; Cases, 242; deaths,
				54.
Czechoslovakia:				
Moravia.....	Feb. 1-28.....	68		
Danzig.....	June 20-July 17...	9	2	
Egypt:				
Alexandria.....	May 14-June 29...	53	19	
Do.....	June 25-Aug. 26...	11	3	
Cairo.....	Apr. 2-June 24...	62	23	
Do.....	July 2-8.....	1		
Port Said.....	Apr. 2-June 24...	22	8	
Do.....	July 2-15.....	2	1	
France:				
Brest.....	May 15-31.....	1		
Cette.....	June 24-30.....		1	
Nice.....	June 1-30.....		1	
Paris.....	May 1-10.....	3		
Germany.....				Feb. 22-June 12, 1920: Cases, 720.
Great Britain:				
Edinburgh.....	Aug. 29-Sept. 4....	7	1	
Glasgow.....	May 25-June 26...	136	22	
Do.....	July 4-Sept. 18...	160	43	
Liverpool.....	July 18-Sept. 11...	2		
London.....	June 13-July 19...	14		
Manchester.....	Aug. 22-23.....	5		
Greece:				
Saloniki.....	May 31-June 27...	4	1	
Do.....	July 25-Aug. 15...	1	1	
Haiti:				
Port au Prince.....	Sept. 22.....	5		
India.....				Apr. 11-May 22, 1920: Deaths,
				7,743. May 30-June 26, 1920:
				Deaths, 3,561.
Bombay.....	Apr. 26-June 26...	103	45	May 9-15, 1920: Cases, 26; deaths,
				11.
Do.....	June 27-Aug. 14...	45	9	
Calcutta.....	May 2-June 12...	101	93	
Do.....	July 18-Aug. 21...	8	8	
Karachi.....	May 9-June 26...	15	12	
Do.....	June 27-July 10...	7	4	

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India—Continued.				
Madras.....	May 9-June 26.....	27	15	
Do.....	June 27-Oct. 4.....	34	9	
Rangoon.....	Apr. 25-June 26.....	85	14	
Do.....	June 27-Aug. 7.....	30	5	
Indo-China:				
Saigon.....	May 10-14.....	7	2	
Do.....	June 7-13.....	5	1	
Italy:				
Catania.....	July 12-Sept. 19.....	89	.....	City and Province. Sept. 13-19: 43 cases in district.
Genoa.....	May 17-23.....	12	.....	In Province.
Do.....	June 14-27.....	30	.....
Do.....	June 28-July 4.....	3	.....
Messina.....	May 10-June 27.....	7	1	Province, May 10-June 27: Cases, 188; deaths, 27.
Do.....	June 28-Sept. 4.....	11	3	Province: Cases, 8; deaths, 3.
Milan.....	Mar. 1-May 31.....	28	5	
Naples.....	May 23-June 20.....	7	3	
Palermo.....	May 11-Sept. 9.....	110	19	
Turin.....	June 28-July 4.....	1	.....
Jamaica:				
Kingston.....	July 22.....	.....	.....	Present.
Japan:				
Kobe.....	May 9-June 27.....	10	5	
Do.....	June 28-July 15.....	7	2	
Taiwan Island.....	May 1-June 20.....	40	11	
Do.....	June 21-July 20.....	14	8	
Tokyo.....	Apr. 21-May 10.....	5	4	
Java:				
West Java.....	.....	.....	.....	Apr. 16-June 21, 1920: Cases, 56; deaths, 10. June 25-Aug. 19, 1920: Cases, 50; deaths, 8.
Batavia.....	Apr. 16-June 17.....	94	35	
Do.....	July 9-29.....	4	1	Feb. 1-June 23, 1920: Cases, 2,519; deaths, 561.
Jugo-Slavia.				
Madeira:				
Funchal.....	June 20-24.....	.....	3	
Do.....	July 18-24.....	.....	.....	Present. Sept. 12-18, 1 case.
Malta.....	May 1-June 30.....	.....	3	
Manchuria:				
Mukden.....	May 2-8.....	.....	.....
Mesopotamia:				
Bagdad.....	July 1-31.....	1	.....
Mexico:				
Ciudad Juarez.....	Aug. 2-8.....	1	.....
Guadalajara.....	May 1-31.....	1	.....
Do.....	July 1-31.....	3	.....
Laredo.....	July 30.....	2	.....
Mazatlan.....	May 19-25.....	.....	1	
Salina Cruz.....	June 1-30.....	5	3	
Do.....	Aug. 1-31.....	1	1	
San Luis Potosi.....	May 31-June 6.....	.....	1	
Do.....	June 23-Oct. 2.....	.....	9	
Tampico.....	July 1-31.....	.....	5	
Newfoundland:				
Broad Cove.....	Sept. 4-10.....	1	.....
Ladle Cove.....	Sept. 11-17.....	6	.....
St. John's.....	June 5-11.....	3	.....
Shoal Harbor.....	July 10-16.....	7	.....
Poland:				
Minsk District.....	Jan. 1-31.....	1,052	228	
Porto Rico:				
Caguas.....	Aug. 9-15.....	1	.....
Portugal:				
Lisbon.....	May 16-June 23.....	.....	8	
Do.....	June 27-Aug. 14.....	.....	11	
Russia:				
Riga.....	Aug. 1-7.....	1	.....
Vladivostok.....	Jan. 1-June 30.....	252	78	May, 1920: Cases, 5. June, 1920: Cases, 7.
Do.....	July 1-31.....	2	.....
Spain:				
Barcelona.....	May 19-June 12.....	.....	4	
Do.....	June 18-Sept. 8.....	.....	15	
Corunna.....	July 16-29.....	.....	1	
Orense, Province.....	Sept. 6.....	.....	.....	Present.

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain—Continued.				
Valencia.....	May 23-June 26...	15	3	
Do.....	July 4-Sept. 4....	9	3	
Vigo.....	May 31-June 26....	4		
Do.....	July 18-Sept. 11....	7		
Switzerland:				
Geneva.....	May 9-15.....	7		
Syria:				
Aleppo.....	Aug. 29-Sept. 4....			In city and in Armenian orphanage.
Tunis:				
Tunis.....	May 25-June 27....	6	5	
Do.....	June 28-Sept. 19....	38	10	
Turkey:				
Constantinople.....	May 16-June 19....	7		
Do.....	June 20-Aug. 28....	12		
Union of South Africa:				
Johannesburg.....	May 1-31.....	23		
Do.....	July 1-31.....	15		
On vessel:				
S. S. Henry R. Mallory.....	Oct. 2.....	1		At Habana from Spanish ports. Vessel left Vigo, Spain, Sept. 19.

TYPHUS FEVER.

Algeria:				
Departments—				
Algiers.....	May 11-Aug. 31....	44		
Constantine.....	May 21-Aug. 31....	20		
Oran.....	May 11-Aug. 31....	352		
Austria				
Vienna.....	Feb. 15-June 26....	65		Feb. 15-June 26, 1920: Cases, 67.
Belgium:				
Ghent.....	Sept. 11-18.....	2	1	
Bolivia:				
La Paz.....	May 2-31.....		5	
Brazil:				
Ceara.....	Apr. 25-June 12....		4	
Do.....	July 11-24.....		2	
Bulgaria:				
Sofia.....	June 20-25.....	2		
Chile				
Antofagasta.....	July 5-11.....			Mar. 1-June 30, 1920: Cases, 1,338; deaths, 244.
Caleta Coloso.....	May 10-16.....		2	Present.
Concepcion.....	Mar. 8-June 28....	31	39	
Do.....	June 29-Aug. 23....		8	
Coquimbo.....	Aug. 8-15.....	1		
Santiago.....	Mar. 1-June 30....	470	86	
Valparaiso.....	May 2-Sept. 24....		92	
China:				
Antung.....	July 12-Sept. 5....	13		Report week ended July 31, 1920, not received.
Eastern Chinese Railway.....	Aug. 9-15.....	4		At stations on line.
Harbin.....				On Eastern Chinese Railroad Line. Year 1919: Cases, 301. At other stations on line, 789 cases.
Chosen (Korea):				
Chemulpo.....	June 1-30.....	3		
Seoul.....	Mar. 1-Apr. 30....	4	1	
Czechoslovakia.				
Leipnik.....	Feb. 22-28.....	1		Feb. 1-28, 1920: Cases, 88; deaths, 7.
Danzig.....	June 20-26.....	1		Quarantine station.
Do.....	July 25-31.....	1	1	Feb. 27-Mar. 27, 1920: Cases, 16.
Egypt:				
Alexandria.....	May 7-June 24....	338	86	
Do.....	June 25-Sept. 9....	141	62	
Cairo.....	Apr. 2-June 24....	867	370	
Do.....	July 9-15.....	34	23	
Port Said.....	Apr. 9-June 24....	112	53	

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany.....				Feb. 22-Mar. 27, 1920: Cases, 23. Among troops, 4; among persons from Poland, 8. Mar. 28. June 26, 1920: Cases, 96.
Great Britain:				
Dublin.....	May 23-June 19...	3	1	
Dundee.....	July 4-10.....	1		
Glasgow.....	May 30-June 5.....		1	
Queenstown.....	Aug. 1-7.....	1		
Greece:				
Athens.....	June 27-July 21.....		5	
Drama.....	July 12-18.....	1		
Patras.....	June 29-July 4.....		1	
Piræus.....	June 29-July 5.....		1	
Saloniki.....	Apr. 12-27.....	384	42	
Do.....	June 28-Aug. 29.....	114	38	
Guatemala:				
Guatemala City.....	Aug. 9-15.....		1	
Hungary.....				Jan. 19-May 29, 1920: Cases, 50.
Budapest.....	Jan. 10-May 23.....	27		
Italy:				
Catania.....	July 10-17.....	3		
Trieste.....	May 16-22.....	5		
Do.....	June 13-Sept. 21.....	159	13	
Japan:				
Kobe.....	Aug. 17-23.....	7		
Nagasaki.....	May 25-30.....	1		
Do.....	June 21-27.....	1		
Jugo-Slavia.....				Feb. 1-June 23, 1920: Cases, 691; deaths, 92.
Java:				
East Java—				
Surabaya.....	June 10-16.....	1		
West Java—				
Batavia.....	May 28-June 30.....	5	1	
Mexico:				
Chihuahua.....	May 31-June 6.....		1	
Nogales.....	Aug. 9-14.....	2		
San Luis Potosi.....	June 8-July 8.....			
Do.....	July 2-Aug. 15.....		2	
Poland.....				Present. Sept. 19: Present. Jan. 1-Mar. 31, 1920: Cases, 87,910; deaths, 19,733.
Warsaw.....				Jan. 1-Feb. 29, 1920: Cases, 911; deaths, 117. Mar. 14-Apr. 10, 1920: Cases, 181; deaths, 23.
Serbia.....				
Portugal:				
Oporto.....	Apr. 4-June 24.....	15	6	
Do.....	Aug. 1-14.....	3		
Russia:				
Riga.....	June 25-July 1.....	20		
Simferopol.....				Jan.-June, 1920: Cases, 3,955; deaths, 500.
Vilna.....	Sept. 28.....	35		
Vladivostok.....	May 1-21.....	22	2	
Do.....	July 1-31.....	16	2	Jan. 1-Apr. 30, 1920: Cases, 1,264; deaths, 144.
Spain:				
Barcelona.....	July 9-15.....		1	
Madrid.....	June 1-30.....		1	
Switzerland:				
Geneva.....	June 28-July 4.....	1		
Tunis:				
Tunis.....	May 24-June 27.....	36	18	
Do.....	July 6-Aug. 31.....	1	1	
Turkey:				
Constantinople.....	May 16-June 12.....	27		
Do.....	June 19-Sept. 18.....	18		
Venezuela:				
Maracaibo.....	July 21-27.....		1	

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

Reports Received from June 26 to Oct. 22, 1920—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	May 23-June 19...	1	.....
Colombia:				
Buenaventura.....	June 3.....	1	1	
Guatemala:				
Los Amates.....	Aug. 5-Sept. 1.....	10	3	Aug. 17: Present at several localities Aug. 5-23, 1920: Cases, 8; deaths, 6.
Quirigua.....	Aug. 9-15.....	.....	.....	Present.
Virginia.....	Sept. 10.....	1	.....	Station on railway from Puerto Barrios to Guatemala City, 45 miles from Puerto Barrios.
Mexico:				
Guaymas.....	Oct. 12.....	.....	1	Previously reported, 2 deaths; later information shows 1 death.
Progreso.....	July 30.....	21	.....
Do.....	Aug. 4-18.....	4	2	July 30-Aug. 18, 1920: Cases, 5; deaths, 3.
Puerto Mexico.....	Aug. 24-27.....	1	1	Case arrived Aug. 23 on S. S. Melchor Ocampo, from Progreso. Previously reported, P. H. R., Sept. 10, 1920.
Tampico.....	Sept. 17.....	1	.....	Stated to have arrived from Tuxpam..
Do.....	Sept. 21-27.....	2	1	
Tuxpam.....	Sept. 1.....	.....	2	Aug. 26, Sept. 1, 1920: Cases, 5; deaths, 5.
Vera Cruz.....	June 22.....	.....	2	
Do.....	July 19-Oct. 17.....	68	46	
Do.....	Sept. 26.....	1	1	In Dr. Hedrick, U. S. Public Health Service.
Yucatan (State)—				
Hocoba.....	Sept. 8.....	8	.....	In interior.
Hunucma.....	.....do.....	1	1	Do.
Sotuta.....	.....do.....	1	1	Do.
Peru				Mar. 1-31, 1920: Cases, 128; Apr. 1-20, 1920: Cases, 64.
Callao.....	Apr. 1-30.....	1	.....	At quarantine station. From s. s. Huallaga.
Catacaos.....	Mar. 1-31.....	14	.....
Do.....	Apr. 1-30.....	2	.....
La Huaca.....	Mar. 1-31.....	9	.....
Do.....	Apr. 1-30.....	5	.....
Morropón.....	.....do.....	37	.....
Mumuela.....	Mar. 1-31.....	12	.....
Paita.....	.....do.....	81	.....
Do.....	Apr. 1-30.....	14	.....
Piura.....	Mar. 1-31.....	1	.....
Doa.....	Apr. 1-30.....	4	.....
Salitral.....	Mar. 1-31.....	2	.....
Sullana.....	.....do.....	9	.....
Do.....	Apr. 1-30.....	1	.....
Salvador				Sept. 12-18, 1920: 1 case.
Armenia.....	June 20-26.....	1	1	
San Salvador.....	Aug. 1-21.....	6	2	Fatal cases were in Europeans.
Sonsonate.....	May 22-June 24.....	49	17	
On vessels:				
S. S. Haraldshaug.....	Sept. 28.....	1	.....	At Pensacola, Fla. From Puerto Barrios, Tampico, and Vera Cruz.
S. S. Soestdijk.....	Sept. 11.....	1	1	At Quarantine, La.