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## POLIOMYELITIS IN THE UNITED STATES

In June, 1927, reports from California showed more than the usual seasonal rise in the number of cases of poliomyelitis. Early in July a number of cases of this disease were reported in New Mexico. Later, other States reported local epidemics or a general increased prevalence of the disease. Illinois, Ohio, Massachusetts, Pennsylvania, and New York City are among the other localities most affected.

A comparison of the weekly telegraphic reports from States for the 10 weeks ended September 10, 1927, with the corresponding reports for the years 1925 and 1926 shows that the total number of cases reported for the period in 1927 was almost the same as the number for the corresponding period in 1925, but the figures were nearly three times those for the same period of 1926. Reports for the week ended September 17, 1927, however, show about five times as many cases as for the corresponding period of 1926 and somewhat more than twice as many as in 1925. The following are among the States reporting an increase in the number of cases for the week ended September 24, 1927: Illinois, Kansas, Maine, Michigan, Missouri, and Texas. Among the States showing a decrease in the number of cases for the week are California, Connecticut, New Jersey, New York, and Pennsylvania. The telegraphic reports from States for the week ended September 24 will be found on page 2402.

## A STUDY OF THE PELLAGRA-PREVENTIVE ACTION OF THE COWPEA (VIGNA SINENSIS) AND OF COMMERCIAL WHEAT GERM

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In the present communication we desire to report the results of a study of pellagra prevention with cowpeas and with commercial wheat germ. This study was carried out, as were our previous studies of single foods (1) (2) (3), at the Georgia State Sanitarium, to the trustees, superintendent, officers, and staff of which we have become increasingly indebted for the valuable cooperation which has been extended us now for a period of over 10 years.

## COWPEAS

Early in the course of our study of pellagra, one of us (J. G.) was led to interpret certain epidemiological observations as indicative of the value of the legumes as pellagra preventives. In 1918 and 1919, utilizing the exceptionally favorable clinical opportunities for the study of the prevention of pellagra afforded by the Georgia State Sanitarium, Goldberger and Tanner (1) carried out some tests of soy beans and of cowpeas (*Vigna sinensis*) the results of which appeared to indicate that these legumes possessed little, if any, pellagra-preventive value.

The results of some of our more recent studies (2) (3) (4) have led us provisionally to conclude that all foods known to contain the so-called vitamin B<sup>1</sup> contain the pellagra-preventing factor P-P. This conclusion would seem to be negatived by the results of the above-mentioned pellagra-preventive tests of soy beans and cowpeas, since dried legumes are generally considered to be good sources of vitamin B. In considering this apparent inconsistency in the light of some of our more recent experiences, notably with the tomato (3), it seemed to us probable that the preventive failure of the soy bean and of the cowpea was due to the use of insufficient quantities, even though the quantities actually used were quite liberal. This and the importance of the dried legumes as food made it seem worth while to study the pellagra-preventive potency of at least one of them again. Accordingly, we began such a study about the middle of July, 1926, the results of which we now desire to report.

In this study we used the cowpea, the variety known as the California black-eyed pea. We did so principally because we had worked with it in the study above referred to, and because it is very commonly used as a food by the rural population of our Southern States, among whom pellagra is endemic.

In the study carried out during 1919 (1) the daily ration of cowpeas was 200 grams (7 ounces). In that test the cowpeas were administered in the form of a purée and were the only known possible source of the pellagra-preventing factor in the diet, with the exception of such, probably entirely negligible, amount as may have been present in the daily ration of 4 grams of lemon juice.

In the present instance we planned to give our patients the cowpea ration as a part of a more conventionally constituted diet and with as little disarrangement of the latter as possible, especially with respect to such of the other components as might possibly contain the P-P factor. To accomplish this we deemed it impracticable to add more than 150 grams (5 ounces) of cowpeas to the basic diet. This is much less than was given in the original study. We thought, however, that some such reduction might be made to compensate for the P-P that might already be present in the corn meal, flour,

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<sup>1</sup> In the present communication the term "vitamin B" or "water-soluble B" is used to designate the mixture of substances with antineuritic and growth-promoting properties.

cowpeas, and rice, and that was known to be in the tomato juice (3) of the diet to which the cowpeas were now to be added and still keep the level of P-P in the diet thus constituted at or, it was hoped, even raise it above, that of the cowpea purée supplied in 1919. As thus constituted the composition of the diet is shown in Tables 1 and 2.

TABLE 1.—*Approximate composition*<sup>1</sup> of a cowpea-supplemented diet offered daily to each of a group of colored insane female pellagrins during the period July 15, 1926, to February 28, 1927

(Total calories, 2,184)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbo- hydrate
BASIC				
Corn meal <sup>2</sup> .....	Grams 200	Grams 16.8	Grams 9.4	Grams 148.0
Wheat flour.....	76	8.7	.8	57.1
Cowpeas ( <i>Vigna sinensis</i> ) <sup>3</sup> .....	28	6.0	.4	17.0
Rice.....	14	1.1		11.1
Lard.....	42		42.0	
Tomato juice <sup>4</sup> .....	130			
SUPPLEMENTAL				
Cowpeas ( <i>Vigna sinensis</i> ) <sup>3</sup> .....	150	32.1	2.1	91.2
Cod-liver oil.....	15		15.0	
Calcium carbonate.....	3			
Sirup iodide of iron (U. S. P.) (2 drops).				
Dilute hydrochloric acid (U. S. P.) (90 drops).				
Total nutrients.....		64.7	69.7	324.4
Nutrients per 1,000 calories.....		29.5	31.7	148.0

<sup>1</sup> Factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1906.

<sup>2</sup> Whole maize meal, sifted in kitchen and made into corn bread and "mush."

<sup>3</sup> The variety known as the California black-eyed pea. Ground into a coarse meal and boiled.

<sup>4</sup> Pressed through a cloth from canned tomatoes.

TABLE 2.—*Approximate composition*<sup>1</sup> of a cowpea-supplemented diet offered daily to each of a group of colored insane female pellagrins during the period February 28 to July 15, 1927

(Total calories, 2,174)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbo- hydrate
BASIC				
Corn meal <sup>2</sup> .....	Grams 270	Grams 22.7	Grams 12.7	Grams 199.8
Wheat flour.....	14	1.6	.1	10.5
Cowpeas ( <i>Vigna sinensis</i> ) <sup>3</sup> .....	28	6.0	.4	17.0
Lard.....	42		42.0	
Tomato juice <sup>4</sup> .....	130			
SUPPLEMENTAL				
Cowpeas ( <i>Vigna sinensis</i> ) <sup>3</sup> .....	150	32.1	2.1	91.2
Cod-liver oil.....	15		15.0	
Calcium carbonate.....	3			
Sirup iodide of iron (U. S. P.) (2 drops).				
Dilute hydrochloric acid (U. S. P.) (90 drops).				
Total nutrients.....		62.4	72.3	318.5
Nutrients per 1,000 calories.....		28.7	33.3	148.8

<sup>1</sup> Factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1906.

<sup>2</sup> Whole maize meal sifted in the kitchen and made into corn bread and "mush"

<sup>3</sup> The variety known as the California black-eyed pea.

<sup>4</sup> Pressed through a cloth from canned tomatoes.

A total of 22 colored insane patients came under observation for pellagra prevention with the cowpea diet. One of these patients died of an intercurrent condition at the end of about five months; the others continued under observation for one year or until evidence of active pellagra developed requiring other treatment. During this period 2 of the 21 patients developed definite recurrences. In one of these the dermatitis made its first appearance about April 17, 1927, and in the other about April 25, 1927, or in both at the end of about nine months of the cowpea treatment. A third patient developed a mild stomatitis, with no dermal lesions, during April, 1927, which, however, subsided spontaneously without interfering with her food taking. Her appetite was excellent throughout to the end of the period (one year) of observation. The patients presenting the dermal recurrences had also had good appetites throughout and had consumed virtually all of the cowpeas offered.

It is clear that 150 grams of cowpeas (in conjunction with the other components of the diet) were insufficient to prevent completely the recurrence of pellagra. It must be noted, however, that the interval (nine months) before the development of the recurrences was considerably longer than has ordinarily been the case in our experience. Furthermore, the development of but two or certainly not more than three cases in a group of 21 patients during a period of one year is decidedly less than we should ordinarily expect. Our experience with this class of patients has led us to expect a recurrence rate of fully 40 to 50 per cent within three to seven or eight months in the absence of an adequate preventive. The long interval (nine months) before the recurrence and the relatively low recurrence rate (15 per cent) would therefore seem to indicate that the cowpea-supplemented diet had had a decidedly beneficial, even though not a fully preventive, effect. We may conclude, therefore, that the pellagra-preventing factor (P-P) is present in the cowpea, but in a relatively small amount.

*Discussion.*—The result of the study outlined in the foregoing would seem to differ appreciably from that of the study carried out in 1919. In the present study evidence of a preventive effect is recognizable, whereas in the study of 1919 no preventive effect could be vouched for. This difference in results may be explained, however, by the difference in the character of the test diets to which reference has already been made. In the 1919 study 200 grams of cowpeas supplied virtually all of the pellagra preventive present in the diet, whereas in the present study the cowpeas (178 grams in all) were combined with other foods, some of which (tomatoes) certainly, and others (corn meal, etc.) very probably, contained more or less of the pellagra preventive. There is, of course, no basis for definitely

deciding (other than the physiological reaction) how the total amount of pellagra preventive (P-P) yielded by these combined sources compares with that yielded by the 200 grams of cowpeas alone. Notwithstanding this, however, it seems to us quite probable that the 200 grams of corn meal and 130 grams of tomato juice (not counting the wheat flour and rice—highly milled products) more than compensate for the difference in P-P content represented by 22 grams of cowpeas and 4 grams of lemon juice. Viewed thus, it seems quite probable that the P-P content of the diet in the present study exceeded that of the 1919 study and satisfactorily explains the difference in the results under consideration.

In our earlier studies of single foods we had in mind primarily the effectiveness of the food studied as a practical preventive when given in what would be conventionally considered a "liberal" allowance. If complete protection was not afforded, we were disposed to interpret this as indicating a complete lack of preventive action. Our more recent studies have impressed us with the vital importance of the quantitative factor. The result of the present study adds emphasis to this and clearly indicates not only that the pellagra-preventive failure of the soy bean in the 1919 study is in itself inconclusive but makes it probable that this bean actually does possess pellagra-preventive potency, even if, as in the case of the cowpea, of a relatively low order.

#### WHEAT GERM

In the course of our study of black tongue of dogs we were led to test the preventive potency of wheat, and thus we found that this cereal, particularly the germ, contains the black-tongue-preventing factor (5). Since we had provisionally concluded that black tongue of dogs is the analogue of pellagra in man (2), the favorable indications afforded by the study of wheat germ in the canine disease at once suggested the desirability of studying its preventive action in human pellagra. We have carried out such a study, the results of which we now wish to report.

This study was begun July 20, 1926, virtually at the same time as was that of cowpeas. The wheat germ was a commercial product secured from a large flour mill in five successive batches during the progress of the study. The allowance decided upon was 150 grams per patient per day, or the same as that of cowpeas in the study of that legume. The wheat germ was boiled with a portion of the other cereals of the diet, and a third of the daily allowance was served as a part of each of the three daily meals. The composition of the wheat-germ-supplemented diet is shown in Tables 3 and 4.

TABLE 3.—Approximate composition<sup>1</sup> of a wheat-germ-supplemented diet offered daily to each of a group of white insane female pellagrins during the period July 20, 1926, to January 12, 1927

(Total calories, 2,093)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbo- hydrate
<b>BASIC</b>				
	<i>Grams</i>	<i>Grams</i>	<i>Grams</i>	<i>Grams</i>
Corn meal <sup>2</sup> .....	200	16.8	9.4	148.0
Wheat flour.....	62	7.1	.6	46.6
Cowpeas <sup>3</sup> .....	28	6.0	.4	17.0
Rice.....	14	1.1		11.1
Lard.....	31		31.0	
Tomato juice <sup>4</sup> .....	130			
<b>SUPPLEMENTAL</b>				
Wheat germ <sup>5</sup> .....	150	35.9	14.1	77.3
Cod-liver oil.....	14		14.0	
Calcium carbonate.....	3			
Sirup iodide of iron (U. S. P.) (2 drops).....				
Dilute hydrochloric acid (U. S. P.) (90 drops).....				
Total nutrients.....		66.9	69.5	300.0
Nutrients per 1,000 calories.....		31.9	33.1	142.9

<sup>1</sup> Except for wheat germ, factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1906.

<sup>2</sup> Whole maize meal, sifted in kitchen and made into corn bread and "mush."

<sup>3</sup> The variety known as the California black-eyed pea.

<sup>4</sup> Pressed through a cloth from canned tomatoes.

<sup>5</sup> Commercial wheat germ. Average of analyses of 5 samples made in division of chemistry of Hygienic Laboratory: Moisture, 10.9; protein (N×5.7), 23.9; fat, 9.4; ash 4.3; carbohydrate (by diff.) 51.5

TABLE 4.—Approximate composition<sup>1</sup> of a wheat germ-supplemented diet offered daily to each of a group of white insane female pellagrins during the period January 12, 1927, to July 20, 1927

(Total calories, 2,242)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbo- hydrate
<b>BASIC</b>				
	<i>Grams</i>	<i>Grams</i>	<i>Grams</i>	<i>Grams</i>
Corn meal <sup>2</sup> .....	200	16.8	9.4	148.0
Grits (granular corn meal).....	28	2.6	.5	21.1
Wheat flour.....	62	7.1	.6	46.6
Cowpeas <sup>3</sup> .....	28	6.0	.4	17.0
Rice.....	28	2.2	.1	22.1
Lard.....	31		31.0	
Tomato juice <sup>4</sup> .....	130			
<b>SUPPLEMENTAL</b>				
Wheat germ <sup>5</sup> .....	150	35.9	14.1	77.3
Cod-liver oil.....	14		14	
Calcium carbonate.....	3			
Sirup iodide of iron (U. S. P.) (2 drops).....				
Dilute hydrochloric acid (U. S. P.) (90 drops).....				
Total nutrients.....		70.6	70.1	332.1
Nutrients per 1,000 calories.....		31.5	31.3	148.2

<sup>1</sup> Except for wheat germ, factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1906.

<sup>2</sup> Whole maize meal, sifted in kitchen and made into corn bread and "mush."

<sup>3</sup> The variety known as the California black-eyed pea.

<sup>4</sup> Pressed through a cloth from canned tomatoes.

<sup>5</sup> Commercial wheat germ. Average of analyses of 5 samples made in division of chemistry of Hygienic Laboratory: Moisture, 10.9; protein (N×5.7), 23.9; fat, 9.4; ash, 4.3; carbohydrate (by diff.), 51.5

A total of 34 white female insane patients came under observation for pellagra-preventive treatment with this diet. Of this group, 6 patients were under observation for periods too brief to justify their consideration in the present connection. One was under continuous observation for a year, but her treatment was suspended during a period of two and one-half months because of an intercurrent pulmonary condition requiring a different diet. This patient is of interest in the present connection, however, since she developed, at the end of about three months, a roughened condition of the skin of the forehead and nose that was suggestive of and may possibly have been pellagra. The condition was not sufficiently characterized to enable us to make a diagnosis. The remaining 27 patients were under continuous treatment and observation for a full year. None of these presented any evidence even suggestive of pellagra, although four of them had a record of 2 attacks of the disease, three of 3 attacks, five of 4 attacks, one of 6 attacks, and one of 9 attacks. Thus considering the patient presenting the suspicious but uncertain skin lesions as a case of pellagra, we had at most one recurrent attack among 28 patients during a period of 12 months. Since in the light of repeated experience it seems to us safe to state that in the absence of the wheat germ or other equivalent preventive food upward of 40 or 50 per cent of them would have suffered a recurrence within a period of from three to seven or eight months, the development of, at most, one case under the circumstances mentioned would seem convincing evidence of the preventive action of the wheat germ and thus of the presence of the pellagra-preventive factor in commercial wheat germ.

*Discussion.*—The demonstration that wheat germ contains the pellagra preventive (P-P) is of interest from several points of view. It is of interest in the first place in that it is in harmony with certain of our previously recorded results (2) tending to show that the substances possessing black tongue-preventive potency are also preventives of pellagra, and thus constitutes additional evidence of the soundness of our working hypothesis that black tongue of dogs is the analogue of pellagra in man (2). In this connection it may be noted that since wheat germ is one of the substances known to contain the so-called vitamin B, the demonstration that it contains the pellagra preventive is in harmony with and strengthens the view, referred to in the preceding section of this report, that substances containing the so-called vitamin B contain factor P-P.

It is of interest furthermore in that it enables us to make a direct comparison of the pellagra-preventive potency of the germ with that of the cowpeas. The daily allowance of the wheat germ was, as already remarked, the same as that of the cowpeas and, as may be

seen by comparing Tables 1 and 2 with Tables 3 and 4, the basic portion of the diet in the two studies was roughly similar. The results recorded in the foregoing indicate, however, that the wheat germ-supplemented diet was appreciably more effective so that it may be concluded that the wheat germ was, gram for gram, somewhat richer in factor P-P than was the cowpea. How much richer it is impossible to say. The demonstration is of interest finally in that it suggests the advantage of including in the dietary, particularly of those in the area of pellagra endemicity, certain of the milling products of wheat, wheat middling for example, which normally contain a considerable percentage of the germ and some of the bran.

In closing it may perhaps be well to remark that since our study was made with commercial wheat germ which contains some bran the results herein reported may, strictly speaking, have been due to either one or, more probably, to the combined action of both of these parts of the wheat kernel.

#### SUMMARY AND CONCLUSIONS

1. The pellagra-preventive action of the cowpea (*Vigna sinensis*) and of commercial wheat germ have been studied.

2. The pellagra-preventive factor (P-P) is present in the cowpea (and probably in the soy bean) but in relatively small amounts.

3. The pellagra-preventive factor (P-P) is present in commercial wheat germ.

4. Commercial wheat germ is probably somewhat richer in factor P-P than is the cowpea.

5. It would be advantageous to include in the dietary, particularly of those in the area of pellagra endemicity, milling products of wheat containing as high a percentage as practicable of the germ and the bran.

6. Added strength is furnished the view that foods known to contain the so-called vitamin B contain the P-P factor.

7. The experience with wheat germ constitutes evidence of the soundness of the hypothesis that black tongue of dogs is the analogue of pellagra in man.

#### REFERENCES

- (1) Goldberger and Tanner: A study of the pellagra-preventive action of dried beans, casein, dried milk, and brewers' yeast, with a consideration of the essential preventive factors involved. Pub. Health Rep., U. S. Pub. Health Serv., Wash., D. C., vol. 40, January 9, 1925, pp. 54-80.
- (2) Goldberger, Wheeler, Lillie, and Rogers: A further study of butter, fresh beef, and yeast as pellagra preventives with consideration of the relation of factor P-P of pellagra (and black tongue of dogs) to vitamin B. Pub. Health Rep., U. S. Pub. Health Serv., Wash., D. C., vol. 41, February 19, 1926, pp. 297-318.



- (3) **Goldberger and Wheeler:** A study of the pellagra-preventive action of the tomato, carrot, and rutabaga turnip. Pub. Health Rep., U. S. Pub. Health Serv., Wash., D. C., vol. 42, May 13, 1927, pp. 1299-1306.
- (4) **Goldberger and Lillie:** A note on an experimental pellagra-like condition in the albino rat. Pub. Health Rep., U. S. Pub. Health Serv., Wash., D. C., vol. 41, May 28, 1926, pp. 1025-1029.
- (5) **Goldberger and Wheeler:** Unpublished data.

## HEALTH CONDITIONS AND STUDENT WELFARE WORK AMONG GERMAN UNIVERSITY STUDENTS

A decree of the ministry of education of the State of Baden, Germany, dated December 4, 1924, requires that periodical medical examinations be given to the students in all public educational institutions in the State, for the purpose of providing information regarding health conditions, to facilitate the giving of proper and timely medical advice to students, to discover and to remove or ameliorate physical defects, and to combat the diseases found among the various student bodies. According to the American consul at Stuttgart, who has supplied the information, the system is at present fully operative only in Karlsruhe, having not yet been completely put in operation in the other two large Baden university centers of Freiburg and Heidelberg. It is stated that the improvement in health conditions noted recently among German university students is largely the result of the physical examinations and welfare work.

*Heidelberg.*—A large percentage of German students, both male and female, take an active part in sports or gymnastic exercises. The obligatory medical examinations of the students at Heidelberg in the summer of 1926 showed a considerable improvement in the health of the student body, especially among the women, who are said to consider a regular program of physical exercise a normal part of their student activities and are generally more faithful to the régime than are the men.

Among the diseases and physical defects found in the 719 students (584 males, 135 females) were the following:

	Number	Per cent
Tuberculosis (pulmonary)-----	3	0.4
Rheumatism-----	2	.3
Chronic catarrh-----	6	.8
Disorders of the eye (myopia, hyperopia)-----	49	6.0
Conjunctivitis-----	2	.3
Enlarged thyroid:		
Slight-----	83	12.3
Moderate-----	25	3.4
Marked-----	2	.3
Rhachitic teeth-----	14	2.0
Curvature of spine-----	47	6.5
Flat foot-----	154	21.4

A comparatively high percentage of female students (15.8 per cent) were found to have enlarged thyroid glands. Many of the cases came from North Germany. These students were given prophylactic treatments. Two new cases of pulmonary tuberculosis were discovered, and both students were sent to a sanatorium for special treatment.

*Karlsruhe Superior Schools.*—Of 410 students (391 males, 19 females) examined in the Karlsruhe Superior Schools, 225, or 62.4 per cent, were found to be free from all diseases and notable physical defects. In the remaining 37.6 per cent, the following were among the conditions found:

	Number	Per cent of total examined
Curvature of spine.....	35	8.5
Flat foot.....	70	17.0
Enlarged thyroid:		
Slight.....	116	28.0
Moderate and marked.....	10	2.4
Exophthalmic (Graves's sign).....	1	.2
Organic heart disease.....	5	1.2
Functional heart disorders (6 stated to be caused by nicotine)....	17	4.1
Pulmonary tuberculosis.....	3	.7
Diseases of the kidneys.....	3	.7

It is stated that some of the cases of curvature of the spine are the result of undernourishment during the war years and that others are the result of bad posture in the primary and secondary schools.

The students with enlarged thyroids are designated the "victims of regional conditions," the cause being positively traced to the lack of iodine in the diet in the locality from which these students came. The German housewives in that region have begun the use of iodized salt.

Following the examinations, one student was sent to a tuberculosis sanatorium and five students found underdeveloped or undernourished were placed under the charge of the students' social welfare committee for guidance.

In the State of Wurttemberg the University of Tuebingen has an insurance feature which is operative from the date of matriculation. This provides for financial relief in case of sickness, and a medical examination is required. The Technical College of Stuttgart, while not having the insurance system, requires that each student submit to a medical examination when he matriculates.

## THE SUDAN AND THE BELGIAN CONGO BECOME MEMBERS OF THE INTERNATIONAL OFFICE

The Bulletin Mensuel for June, 1927, published by the Office International d'Hygiène publique, makes the following announcement of the adherence of the Governments of the Sudan and the Belgian Congo to the agreement of December 9, 1907, establishing the International Office:

1. In a communication dated December 9, 1926, addressed to the Government of Italy, in accordance with the provision of article 6 (of the arrangement of December 9, 1907), the Sudan Government adheres to the convention and places itself, for sharing the expenses of the office, in the fifth class, as provided for in article 11 of the organic by-laws.

2. On March 21, 1927, the Belgian Government, in accordance with the provisions of article 6, notified the Italian Government of the adherence of the Belgian Congo to the convention. The Belgian Congo places itself, for participation in the expenses of the office, in the fourth class, as provided for in article 11 of the organic by-laws.

Twelve nations ratified the agreement of December 9, 1907, creating the International Office d'Hygiène publique, but there are now 46 countries (including dominions, colonies, and protectorates) participating in the work of the office. These countries are as follows:

Algeria.	Monaco (Principality of).
Argentine Republic.	Morocco.
Australia.	Netherlands.
Belgium.	Netherlands Indies.
Belgian Congo.	New Zealand.
Bolivia.	Norway.
Brazil.	Persia.
British India.	Peru.
Bulgaria.	Poland.
Canada.	Portugal.
Chile.	Rumania.
Czechoslovakia.	Serbs, Croats, and Slovenes (Kingdom of).
Denmark.	Spain.
Egypt.	Sweden.
France.	Switzerland.
French Africa.	Sudan.
French Indo-China.	Tunis.
Great Britain.	Turkey.
Greece.	Union of Socialist Soviet Republics.
Italy.	Union of South Africa.
Japan.	United States of America.
Luxemburg (Grand Duchy of).	Uruguay.
Madagascar.	
Mexico.	

## DEATH RATES IN A GROUP OF INSURED PERSONS

### Rates for Principal Causes of Death for July, 1927

The accompanying table is taken from the Statistical Bulletin for August, 1927, published by the Metropolitan Life Insurance Co., and presents the mortality experience of the industrial department of the company for July, 1927, as compared with that for June, and for July, 1926. The rates are based on a strength of approximately 18,000,000 insured persons in the United States and Canada.

July was the seventh successive month of 1927 to register improved health conditions, as compared with the corresponding month of 1926, the death rate for July of this year being 7.8 per 1,000, as compared with 8.4 last year, a decline of 7.1 per cent. July also showed the usual seasonal drop from the death rate for the preceding month (9.2).

Each of the diseases the deaths from which are of major numerical importance registered declines from the rates for last year. Tuberculosis declined from 99.6 to 90.5 per 100,000, or 9.1 per cent; cancer from 70.1 to 65.6, or 6.4 per cent; cerebral hemorrhage from 48.9 to 46.8 or 4.3 per cent; organic heart disease from 119 to 111.5, or 6.3 per cent; pneumonia from 48.8 to 43.4, or 11.1 per cent; and Bright's disease from 62.1 to 60.3, or 2.9 per cent.

On the other hand, of the diseases listed in the accompanying table, the only ones to show higher death rates than those recorded in July of last year are typhoid fever, diphtheria, respiratory conditions other than pneumonia, and diabetes which registered a very slight increase. The increase in typhoid fever mortality is stated to be due in large part to the deaths of policyholders in the Province of Quebec, Canada. As has been the case every month so far this year, diphtheria registered a higher death rate than in the corresponding month of 1926. However, the mortality from this disease is lower this year than in any prior year except 1926, and the slight rise this year is considered an interruption that was sometime to be expected in such a remarkable decline as that which has taken place in the diphtheria death rate in recent years. Such a check occurred last year in the decline in the death rate for tuberculosis; but this check has been followed in 1927 by a more pronounced drop than ever.

Automobile fatalities again increase, the death rate for this cause being 19.7 for July, 1927, as compared with 17.5 for July last year.

Death rates (annual basis) for principal causes per 100,000 lives exposed, June and July, 1927, and July and year, 1926

[Industrial department, Metropolitan Life Insurance Co.]

Causes of death	Rate per 100,000 lives exposed <sup>1</sup>			
	July, 1927	June, 1927	July, 1926	Year 1926
Total, all causes.....	780.0	923.2	835.5	945.6
Typhoid fever.....	5.1	6.1	3.2	4.2
Measles.....	2.7	5.7	6.7	10.2
Scarlet fever.....	2.1	3.5	2.6	3.4
Whooping cough.....	6.1	6.9	8.8	9.6
Diphtheria.....	7.8	10.4	5.9	9.7
Influenza.....	6.2	12.0	9.4	31.1
Tuberculosis (all forms).....	90.5	99.8	99.6	99.0
Tuberculosis of respiratory system.....	78.8	80.9	85.7	86.7
Cancer.....	65.6	74.0	70.1	73.7
Diabetes mellitus.....	13.7	16.9	13.3	16.7
Cerebral hemorrhage.....	46.3	57.5	48.9	55.6
Organic diseases of heart.....	111.5	138.7	119.0	134.3
Pneumonia (all forms).....	43.4	69.7	48.8	98.2
Other respiratory diseases.....	12.1	16.7	10.8	13.0
Diarrhea and enteritis.....	24.5	22.0	31.7	29.8
Bright's disease (chronic nephritis).....	60.3	75.5	62.1	73.5
Puerperal state.....	13.4	16.3	14.7	15.3
Suicides.....	7.9	8.6	6.9	7.7
Homicides.....	6.7	7.6	7.6	7.0
Other external causes (excluding suicides and homicides).....	76.8	69.0	72.1	62.3
Traumatism by automobiles.....	19.7	19.5	17.5	16.8
All other causes.....	177.0	206.3	193.4	191.0

<sup>1</sup> All figures include infants insured under 1 year of age.

## PUBLIC HEALTH ENGINEERING ABSTRACTS

Studies of the Malaria Problem in Porto Rico. Anon. *Porto Rico Health Review*, vol. 2, No. 10, April, 1927, pp. 27-32. (Abstract by C. R. Fields.)

This is a part of malaria studies (Paper X) carried out in the island during 1924-25 by the International Health Board.

In Panama, regular extensive flights of *Anopheles* were observed in the evening and early morning, but nothing definite was learned, though certain observations seemed to indicate that possible concentrated flights occurred, which would influence malaria incidence.

In studying the habits of adult *Anopheles grabhamii*, it was found that fewer of this species were found in this region than of *Anopheles albimanus*. In 11 of the 27 night stations (40 per cent), *grabhamii* was never found at any time during the year. Of almost 400 *grabhamii* caught during the period of study, only 7 per cent were caught on human beings or dwellings at night. *Grabhamii* was also found feeding on cows, and a much higher percentage of these than *albimanus* was found on horses.

*Anopheles vestitipennis* were caught at half of the night stations some time during the year. All stations were in or bordering cane fields. The most *vestitipennis* were caught in the general region of bayous, but heavy breeding was also found during the wet season in temporary water deposits in cane field ditches. Possibly other breeding areas were overlooked. No observations were recorded of this mosquito biting other domestic animals than the horse.

*Vestitipennis* is the most active feeder of the three species, and it was found easy to keep this species alive in the laboratory for at least two weeks. It was easier to get *vestitipennis* than *albimanus* to bite human beings, and it was the hardest to induce *grabhamii* to feed on human blood. The average of night and day catches of all breeds of *Anopheles* shows the greatest rise to be in November, with a smaller rise in August.

**Studies on the Bionomics of North American Anophelines. The Number of Annual Broods of *A. Quadrimaculatus*.** Mark F. Boyd. *American Journal of Hygiene*, vol. 7, No. 3, May, 1927, pp. 264-275. (Abstract by H. B. Foote.)

Captures are expressed as "mosquitoes caught per man-hour of search," in order to give a more reasonable basis for comparing results of consecutive searches in the same territory and in comparing the prevalent density in different areas.

Data are based on catches in North Carolina and Georgia.

The author believes that few students of anophelines have given attention to the question of broods. He refers to James (James, S. P., Proc. 11th Meeting Anti-Malarial Advisory Comm., Palestine, 1925, p. 9) as the only writer whom he has found who has studied this phase of the problem.

**Some Recent Experiments in Fly Control.** R. J. Posson. Proceedings of the Nineteenth and Twentieth Conference of the American Association of Medical Milk Commissions and Certified Milk Producers Association of America. Pp. 322-327. (Abstract by W. D. Tiedeman.)

The experience of the United States Bureau of Dairying in controlling flies on an experimental farm at Beltsville, Md., during the years 1924 and 1925, is given in detail. House flies, which prefer horse manure as a breeding place, but breed readily in cow manure, and stable flies, which prefer damp straw or hay on which to lay eggs, but will readily lay eggs upon straw mixed with manure, had always been numerous.

In order to control breeding, all manure was hauled away at least once each week, and box stalls in which considerable straw was used were cleaned and the floors scraped regularly. The manure was either spread on fields or placed in large piles one-half mile from the buildings. Failure to remove manure on time resulted in a marked increase in flies. The author holds that the elimination of breeding places is the greatest factor in fly control.

Fly traps were also used in this work owing to the inability to eliminate all breeding places on the property and to the presence of breeding places on neighboring farms. In discussion it was brought out that experiments in liberating marked flies by the United States Department of Agriculture at Dallas, Tex., showed that the house fly traveled 11 miles in 4 to 7 days, and some were caught as far as 17 miles from the point of liberation. The length of flight indicates the necessity for using traps in addition to controlling local breeding places. Ten cylindrical fly traps similar to those described in the United States Department of Agriculture Farmer's Bulletin No. 734 were used in scattered positions. They were baited with blackstrap molasses from sugar cane, diluted with three or four parts of water. When this mixture fermented, it drew flies in large numbers. Bait was replenished about once a week. The effect of the traps could be noticed after about 10 days' use during August when flies were numerous. During 1925 the 10 traps caught 86 gallons of flies estimated by making counts to run 50,000 or 60,000 flies to the gallon.

As an added protection against flies entering the milk room, a 30-inch electric fan was operated from the porch ceiling, causing a slight air current against the screen door which proved very effective in keeping flies off the screen door and porch.

To protect cattle from horn and stable flies, a spray, made by soaking 1 pound of partially opened dried pyrethrum flowers (purchased in 20-pound lots) in 2 gallons of kerosene oil for 48 hours, was used. This is a killing spray rather than a repellent. It cost from 35 to 40 cents per gallon. It was applied by air pressure sprayer using a nozzle capable of producing a very fine vapor. Horn flies were quickly killed if caught in a cloud of vapor as they swarmed after the first spray struck them. While horn flies lay their eggs in fresh droppings, their number was appreciably reduced after a week of daily spraying. Stable flies were killed

by spraying them as they were found sucking blood on the cows legs. Stable flies were much harder to control, however. Care should be exercised not to wet the cattle unnecessarily with the spray, as the kerosene is irritating. When this spray was used one hour before milking no difficulties were experienced in causing odors or tastes in the milk.

Results of this fly-control work are reported as satisfactory. No statement is given as to the total cost of control. There was considerable discussion of this paper.

**The Public Health (Meat) Regulations, 1924.** Brennan DeVine. *Journal of the Royal Sanitary Institute*, vol. 47, No. 11, May, 1927, pp. 654-668. (Abstract by L. M. Fisher.)

Regulations should be made to include dressed poultry and rabbits, canned foods, and made-up foods. Of 100 cases of food poisoning, 42 were due to canned foods, 15 to made-up foods, and only 6 to fresh meat.

The removal of the gutscraping and tripe cleaning from the actual slaughtering compartment lessens the chances of the meat becoming infected with fecal contents of the bowels. Such infection has in the past caused cases of meat poisoning. Meat sold from barrows in the streets should be kept behind glass, as well as meat exposed for sale in shops. Illicit slaughtering, carried on principally by small farmers, and nonnotification of diseased carcasses should be made serious offenses. The ministry of health should require all local authorities to enforce the meat regulations in their entirety.

**Fifteen Years of Milk Control in the Oranges, New Jersey.** F. J. Osborne, health officer, East Orange, N. J. *The Nation's Health*, vol. 9, No. 3, March 15, 1927, pp. 26-28. (Abstract by Ralph E. Irwin.)

As soon as a full time health officer was employed in the city of Orange, a survey was made of the milk situation. This resulted in the adoption of a milk ordinance and the establishment of inspection and laboratory control. This work resulted in such marked improvement that four other nearby municipalities joined with the city of Orange and formed the Milk Inspection Association of the Oranges. The adoption of uniform milk regulations and centralized control received the support of the producers and distributors of milk. To the milk dealers it meant "first, that the ignorant, careless, and indifferent dealers have been eliminated, and, second, that those remaining as survivors are able, by virtue of the strength of their position and the profit from the business, to maintain high sanitary standards, and, too, in great part, control their supplies themselves."

To the consumer this association means efficient administration, a safe and sanitary milk supply, and a sensible expenditure of public funds.

**Oyster Producing Waters and Shellfish Sanitation in Relation to State and United States Certification Procedure.** Elliot H. Gage. Proceedings of the Ninth Texas Water Works Short School. Pp. 281-284. (Abstract by Chester Cohen.)

The principal oyster producing waters in Texas are given, together with an account of the typical growths and occurrences in these areas. It is estimated that there are 119,000 acres actually in condition to produce oysters on the coast of Texas. The influencing factors and life habits of the oyster are given. The possibility of contamination through the habitat and method of taking food is brought out. A short history of shellfish sanitation is included, together with the most recent developments in this field. A summarized report of the committee on shellfish sanitation is included. The importance of certification is especially stressed, inasmuch as certification carries with it the adequate inspection, supervision, and regulation of the industry.

**Imhoff Tank Gases and Odors.** William D. Hatfield. *Public Works*, vol. 58, No. 6, June 1927, pp. 204-206. (Abstract by M. S. Foreman.)

The odor situation at the sewage plant at Decatur, Ill., has been serious on account of the strength and temperature of the sewage received. A large volume of condensed water comes from a starch plant, the temperature of which varies from 70° F. in winter to 104° F. in summer. The strength of the sewage varies from 500 to 1,000 p. p. m. of biochemical oxygen demand. The high temperature, combined with strong sewage makes ideal conditions for bacterial reduction, and are responsible for the odoriferous condition.

In 1924, a careful analysis of the odor situation was begun when the sewage plant was started. Analyses were made of the air and gases about the plant, to determine the hydrogen sulphide content. The major odors were found to be caused by (1) sewer gases coming from entrance to grit chamber; (2) turbulent sewage at outlet of grit chamber; (3) turbulent effluent from Imhoff tanks; (4) digestion gases from Imhoff tanks; (5) from sprays and stones of sprinkling filters. The quantity of sulphide in the digestion gases at Decatur is a function of the temperature and is shown in a table.

The total gas production was determined by covering one of the Imhoff tanks at the water level with a sloping wooden structure resembling the Imhoff collector. The volume of gas produced was found to be dependent on the temperature of the sludge digestion. The odoriferous condition about the plant is now practically eliminated when the Imhoff gases are burned. This is accomplished by means of a suction fan built so as to force the trapped gases into a red-hot oven.

**Sewage Filtrate as a Source of Bacteriophage.** Janet Anderson Caldwell. *Journal of Infectious Diseases*, vol. 40, No. 5, May, 1927, pp. 575-578. (Abstract by L. M. Fisher.)

The adaptation of a bacteriophage strain to a nonsusceptible organism is often tedious and unsuccessful. Adapted bacteriophage is probably inferior to one which is active when isolated. Active bacteriophage seems to be ubiquitous but difficult of isolation.

Sewage filtrate obtained by filtering city sewage twice through Berkfeld filters yielded a clear, colorless, and usually odorless fluid, which was found to be a much better source of virulent antityphoid and antidysentery bacteriophage than the excreta of typhoid patients.

Sewage filtrate yields a potent bacteriophage for practically all strains of *B. coli* isolated from urinary infections; and its use as a source of bacteriophage will materially increase the number of urinary infections that can be treated with the bacteriophage, and will avoid confusion in the identification of resistant strains of bacteria.

**Distribution of Cellulose in Imhoff Tanks.** H. Heukelekian. *Public Works*, vol. 58, No. 4, April, 1927, pp. 133-135. (Abstract by A. S. Bedell.)

This is a preliminary report on the cellulose content and distribution in fresh sewage solids of an Imhoff tank at Plainfield, N. J. The solids were collected by suspending pails for 24 hours in the flowing through compartment at the inlet, middle portion, and outlet. Samples from each point and from the mixture of the three portions were analysed. A table is given showing results of solids concentration, volatile matter, and cellulose contents. A selective settling is indicated and, in view of the relation of cellulose to CO<sub>2</sub> production, the efficiency of the tank would be greatly affected by the design and the opportunity for reversal of flow.



## DEATHS DURING WEEK ENDED SEPTEMBER 17, 1927

Summary of information received by telegraph from industrial insurance companies for week ended September 17, 1927, and corresponding week of 1926. (From the Weekly Health Index, September 21, 1927, issued by the Bureau of the Census, Department of Commerce)

	Week ended Sept. 17, 1927	Corresponding week 1926
Policies in force.....	68, 711, 839	65, 301, 677
Number of death claims.....	12, 180	11, 485
Death claims per 1,000 policies in force, annual rate..	9. 2	9. 2

Deaths from all causes in certain large cities of the United States during the week ended September 17, 1927, infant mortality, annual death rate, and comparison with corresponding week of 1926. (From the Weekly Health Index, September 21, 1927, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Sept. 17, 1927		Annual death rate per 1,000 corresponding week 1926	Deaths under 1 year		Infant mortality rate, week ended Sept. 17, 1927 <sup>1</sup>
	Total deaths	Death rate <sup>1</sup>		Week ended Sept. 17, 1927	Corre- sponding week 1926	
Total (67 cities).....	6, 281	11. 1	10. 9	744	848	59
Akron.....	29			3	1	32
Albany <sup>2</sup> .....	33	14. 3	11. 4	4	2	83
Atlanta.....	76			15	9	
White.....	45			7	3	
Colored.....	31	( <sup>3</sup> )		8	6	
Baltimore <sup>3</sup> .....	213	13. 6	12. 3	25	25	77
White.....	156		10. 7	16	19	62
Colored.....	57	( <sup>3</sup> )	21. 5	9	6	140
Birmingham.....	63	15. 3	12. 1	8	11	
White.....	39		11. 0	6	4	
Colored.....	24	( <sup>3</sup> )	13. 8	2	7	
Boston.....	174	11. 4	10. 6	29	20	81
Bridgeport.....	29			4	3	74
Buffalo.....	105	10. 0	11. 7	16	10	67
Cambridge.....	19	8. 0	7. 7	3	2	53
Camden.....	29	11. 4	7. 2	3	6	52
Canton.....	17	7. 8	9. 5	2	5	47
Chicago <sup>4</sup> .....	645	10. 8	10. 4	79	91	68
Cincinnati.....	118	14. 9	14. 5	15	19	94
Cleveland.....	160	8. 5	9. 6	24	17	64
Columbus.....	83	14. 9	10. 8	11	9	102
Dallas.....	56	14. 0	12. 3	10	11	
White.....	41		12. 7	7	8	
Colored.....	15	( <sup>3</sup> )	9. 7	3	3	
Dayton.....	38	11. 0	11. 2	4	9	66
Denver.....	71	12. 8	13. 7	16	11	
Des Moines.....	34	11. 9	9. 6	2	5	33
Detroit.....	239	9. 3	10. 2	45	50	71
Duluth.....	21	9. 5	10. 2	2	1	43
El Paso.....	34	15. 6	12. 0	7	5	
Erie.....	28			2	2	39
Fall River <sup>5</sup> .....	26	10. 2	8. 8	7	4	124
Flint.....	31	11. 3	11. 1	8	13	131
Fort Worth.....	35	11. 1	7. 2	8	4	
White.....	27		6. 0	6	3	
Colored.....	8	( <sup>3</sup> )	16. 5	2	1	
Grand Rapids.....	35	11. 5	10. 7	4	6	59
Houston.....	47			5	8	
White.....	28			4	5	
Colored.....	19	( <sup>3</sup> )		1	3	
Indianapolis.....	101	14. 1	11. 5	8	18	63
White.....	82		11. 1	6	16	54
Colored.....	19	( <sup>3</sup> )	14. 2	2	2	122
Jersey City.....	55	8. 9	9. 2	12	5	90
Kansas City, Kans.....	30	13. 4	11. 6	3	4	58
White.....	26		10. 8	1	3	22
Colored.....	4	( <sup>3</sup> )	15. 3	2	1	304
Kansas City, Mo.....	101	13. 8	15. 2	8	13	
Knorrville.....	29	14. 8		6		
White.....	23			5		
Colored.....	6	( <sup>3</sup> )		1		

Footnotes on p. 2400.

Deaths from all causes in certain large cities of the United States during the week ended September 17, 1927, infant mortality, annual death rate, and comparison with corresponding week of 1926—Continued

City	Week ended Sept. 17, 1927		Annual death rate per 1,000 corresponding week 1926	Deaths under 1 year		Infant mortality rate, week ended Sept. 17, 1927 <sup>2</sup>
	Total deaths	Death rate <sup>1</sup>		Week ended Sept. 17, 1927	Corresponding week 1926	
Los Angeles.....	251			18	15	52
Louisville.....	65	10.6	14.3	3	17	26
White.....	47		12.2	3	13	29
Colored.....	18	( <sup>o</sup> )	25.5	0	4	0
Lowell.....	21	9.9	12.3	1	3	19
Lynn.....	27	13.4	14.0	1	4	26
Memphis.....	78	22.7	18.3	11	7	-----
White.....	47		14.2	8	4	-----
Colored.....	31	( <sup>o</sup> )	25.7	3	3	-----
Milwaukee.....	100	9.8	8.3	10	7	47
Minneapolis.....	78	9.2	9.0	9	9	51
Nashville <sup>3</sup> .....	42	15.9	20.6	3	6	-----
White.....	28		18.6	2	4	-----
Colored.....	16	( <sup>o</sup> )	25.4	1	2	-----
New Bedford.....	21	9.2	10.9	1	6	17
New Haven.....	29	8.2	6.0	5	6	70
New Orleans.....	154	18.9	19.3	18	20	-----
White.....	80		14.6	9	9	-----
Colored.....	74	( <sup>o</sup> )	32.5	9	11	-----
New York.....	1,200	10.5	9.9	122	132	50
Bronx Borough.....	144	8.1	8.1	9	12	29
Brooklyn Borough.....	397	9.1	8.9	50	51	52
Manhattan Borough.....	507	14.6	13.3	64	53	63
Queens Borough.....	115	7.4	7.4	8	13	34
Richmond Borough.....	37	13.1	9.1	1	3	19
Newark, N. J.....	81	9.1	11.7	10	17	50
Oakland.....	64	12.5	10.4	4	8	47
Oklahoma City.....	31		5	5	7	-----
Omaha.....	60	14.3	16.2	4	4	44
Paterson.....	26	9.4	8.4	1	5	18
Philadelphia.....	372	9.5	10.4	49	59	65
Pittsburgh.....	194	10.9	12.1	22	29	77
Portland, Oreg.....	47			4	2	42
Providence.....	53	9.8	10.6	7	9	59
Richmond.....	48	13.0	14.1	5	12	66
White.....	31		11.7	1	5	20
Colored.....	17	( <sup>o</sup> )	19.9	4	7	152
Rochester.....	66	10.6	8.0	10	3	84
St. Louis.....	216	13.4	11.2	17	16	-----
St. Paul.....	54	11.3	11.8	2	3	18
Salt Lake City <sup>4</sup> .....	25	9.6	11.0	2	4	30
San Antonio.....	35	8.6	15.3	5	14	-----
San Diego.....	36	16.3	17.5	4	0	85
San Francisco.....	117	10.6	10.4	3	3	19
Schenectady.....	20	11.2	6.7	2	1	60
Seattle.....	70			2	2	21
Somerville.....	17	8.7	9.4	1	1	36
Spokane.....	28	13.4	14.4	0	4	0
Springfield, Mass.....	28	9.9	10.8	1	0	15
Syracuse.....	34	9.0	14.4	6	6	77
Tacoma.....	18	8.8	7.4	1	1	24
Toledo.....	79	13.6	9.2	7	9	67
Trenton.....	45	17.1	9.7	10	2	174
Washington, D. C.....	119	11.5	11.8	10	15	58
White.....	70		10.3	3	9	25
Colored.....	49	( <sup>o</sup> )	16.0	7	6	129
Waterbury.....	20			0	3	0
Wilmington, Del.....	21	8.7	11.4	2	5	50
Worcester.....	32	8.6	11.1	3	11	36
Yonkers.....	13	5.7	7.2	1	1	23
Youngstown.....	30	9.3	8.2	2	5	28

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.

<sup>3</sup> Data for 66 cities.

<sup>4</sup> Data for 62 cities.

<sup>5</sup> Deaths for week ended Friday, Sept. 16, 1927.

<sup>6</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

# PREVALENCE OF DISEASE

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

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

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

#### Reports for Week Ended September 24, 1927

DIPHTHERIA		Cases	INFLUENZA		Cases
Alabama	.....	64	Alabama	.....	13
Arkansas	.....	12	Arkansas	.....	9
California	.....	61	California	.....	5
Colorado	.....	16	Connecticut	.....	1
Connecticut	.....	17	Florida	.....	4
Delaware	.....	2	Georgia	.....	17
Florida	.....	28	Illinois	.....	3
Georgia	.....	41	Indiana	.....	14
Idaho	.....	2	Louisiana	.....	6
Illinois	.....	88	Maryland <sup>1</sup>	.....	8
Indiana	.....	10	Mississippi	.....	3
Iowa <sup>1</sup>	.....	23	Missouri	.....	3
Kansas	.....	39	Nebraska	.....	1
Louisiana	.....	48	New Jersey	.....	3
Maine	.....	5	Oklahoma <sup>2</sup>	.....	19
Maryland <sup>1</sup>	.....	23	Oregon	.....	5
Michigan	.....	52	South Carolina	.....	258
Minnesota	.....	27	Tennessee	.....	8
Mississippi	.....	29	Texas	.....	1
Missouri	.....	24	West Virginia	.....	10
Nebraska	.....	1	Wisconsin	.....	6
New Jersey	.....	102			
New Mexico	.....	10			
New York <sup>2</sup>	.....	59			
North Carolina	.....	75			
Oklahoma <sup>2</sup>	.....	99			
Oregon	.....	9			
Pennsylvania	.....	107			
Rhode Island	.....	7			
South Carolina	.....	88			
South Dakota	.....	4			
Tennessee	.....	36			
Texas	.....	30			
Utah <sup>1</sup>	.....	7			
Washington	.....	12			
West Virginia	.....	26			
Wisconsin	.....	39			

  

MEASLES		Cases
Alabama	.....	21
Arkansas	.....	3
California	.....	36
Colorado	.....	3
Connecticut	.....	3
Delaware	.....	3
Florida	.....	1
Georgia	.....	8
Illinois	.....	26
Indiana	.....	11
Iowa <sup>1</sup>	.....	1
Kansas	.....	33
Louisiana	.....	5
Maine	.....	7

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

<sup>2</sup> Exclusive of New York City.

<sup>3</sup> Exclusive of Oklahoma City and Tulsa.

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

<sup>3</sup> Exclusive of Oklahoma City and Tulsa.

MEASLES—continued

	Cases
Maryland <sup>1</sup> .....	11
Michigan.....	13
Minnesota.....	4
Missouri.....	2
Montana.....	2
Nebraska.....	2
New Jersey.....	5
New Mexico.....	9
New York <sup>2</sup> .....	30
North Carolina.....	75
Oklahoma <sup>3</sup> .....	8
Oregon.....	8
Pennsylvania.....	19
South Carolina.....	53
Tennessee.....	14
Texas.....	5
Washington.....	27
West Virginia.....	24
Wisconsin.....	73
Wyoming.....	7

MENINGOCOCCUS MENINGITIS

Alabama.....	2
California.....	4
Connecticut.....	2
Illinois.....	4
Iowa <sup>1</sup> .....	2
Maryland <sup>1</sup> .....	1
Michigan.....	1
Minnesota.....	4
Mississippi.....	1
Missouri.....	1
New Jersey.....	3
North Carolina.....	2
Oklahoma <sup>3</sup> .....	1
Oregon.....	1
Pennsylvania.....	1
Tennessee.....	1
Washington.....	2
West Virginia.....	1
Wisconsin.....	6

POLIOMYELITIS

Alabama.....	2
Arizona.....	2
Arkansas.....	1
California.....	43
Colorado.....	4
Connecticut.....	12
Florida.....	1
Illinois.....	42
Iowa <sup>1</sup> .....	5
Kansas.....	19
Louisiana.....	1
Maine.....	15
Maryland <sup>1</sup> .....	2
Michigan.....	24
Minnesota.....	8
Missouri.....	23
Nebraska.....	8
New Jersey.....	37
New Mexico.....	19
New York <sup>2</sup> .....	18
Oklahoma <sup>3</sup> .....	10
Oregon.....	21

POLIOMYELITIS—continued

	Cases
Pennsylvania.....	42
Rhode Island.....	4
South Carolina.....	4
South Dakota.....	2
Tennessee.....	4
Texas.....	25
Utah <sup>1</sup> .....	4
Vermont.....	1
Virginia.....	1
Washington.....	11
West Virginia.....	18
Wisconsin.....	14
Wyoming.....	1

SCARLET FEVER

Alabama.....	11
Arizona.....	1
Arkansas.....	4
California.....	75
Colorado.....	22
Connecticut.....	18
Delaware.....	4
Florida.....	6
Georgia.....	11
Idaho.....	4
Illinois.....	78
Indiana.....	54
Iowa <sup>1</sup> .....	11
Kansas.....	46
Louisiana.....	10
Maine.....	17
Maryland <sup>1</sup> .....	22
Michigan.....	57
Minnesota.....	48
Mississippi.....	12
Missouri.....	32
Montana.....	6
Nebraska.....	12
New Jersey.....	45
New Mexico.....	5
New York <sup>2</sup> .....	71
North Carolina.....	40
Oklahoma <sup>3</sup> .....	16
Oregon.....	5
Pennsylvania.....	167
Rhode Island.....	10
South Carolina.....	22
South Dakota.....	10
Tennessee.....	14
Texas.....	18
Utah <sup>1</sup> .....	4
Vermont.....	2
Washington.....	13
West Virginia.....	56
Wisconsin.....	65
Wyoming.....	4

SMALLPOX

Alabama.....	4
California.....	10
Colorado.....	1
Idaho.....	1
Illinois.....	17
Indiana.....	15

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

<sup>2</sup> Exclusive of New York City.

<sup>3</sup> Exclusive of Oklahoma City and Tulsa.

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

<sup>2</sup> Exclusive of New York City.

<sup>3</sup> Exclusive of Oklahoma City and Tulsa.

SMALLPOX—continued	Cases
Iowa <sup>1</sup> .....	4
Louisiana.....	1
Michigan.....	12
Missouri.....	4
Montana.....	3
New York <sup>2</sup> .....	2
North Carolina.....	13
Oklahoma <sup>3</sup> .....	3
Oregon.....	5
South Carolina.....	2
South Dakota.....	5
Tennessee.....	11
Texas.....	6
Utah <sup>1</sup> .....	17
Virginia.....	1
Washington.....	5
West Virginia.....	9
Wisconsin.....	16
Wyoming.....	1

TYPHOID FEVER	Cases
Alabama.....	57
Arizona.....	8
Arkansas.....	66
California.....	19
Colorado.....	15
Connecticut.....	9
Delaware.....	5
Florida.....	10
Georgia.....	44
Idaho.....	1

- <sup>1</sup> Week ended Friday.
- <sup>2</sup> Exclusive of New York City.
- <sup>3</sup> Exclusive of Oklahoma City and Tulsa.

TYPHOID FEVER—continued	Cases
Illinois.....	45
Indiana.....	34
Iowa <sup>1</sup> .....	3
Kansas.....	25
Louisiana.....	31
Maine.....	13
Maryland <sup>1</sup> .....	38
Michigan.....	8
Minnesota.....	4
Mississippi.....	11
Missouri.....	32
Montana.....	1
Nebraska.....	1
New Jersey.....	26
New Mexico.....	14
New York <sup>2</sup> .....	31
North Carolina.....	23
Oklahoma <sup>3</sup> .....	110
Oregon.....	10
Pennsylvania.....	36
Rhode Island.....	1
South Carolina.....	78
South Dakota.....	3
Tennessee.....	70
Texas.....	23
Utah <sup>1</sup> .....	4
Washington.....	7
West Virginia.....	59
Wisconsin.....	8
Wyoming.....	4

- <sup>1</sup> Week ended Friday.
- <sup>2</sup> Exclusive of New York City.
- <sup>3</sup> Exclusive of Oklahoma City and Tulsa.

**Reports for week ended September 17, 1927**

DIPHTHERIA	Cases
District of Columbia.....	15
North Dakota.....	6

  

MEASLES	Cases
District of Columbia.....	1
North Dakota.....	5

POLIOMYELITIS	Cases
North Dakota.....	1

  

SCARLET FEVER	Cases
District of Columbia.....	7
North Dakota.....	15

  

TYPHOID FEVER	Cases
District of Columbia.....	1
North Dakota.....	2

**SUMMARY OF MONTHLY REPORTS FROM STATES**

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

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
<i>July, 1927</i>										
Pennsylvania.....	9	703	-----	2	1,316	4	8	855	11	157
<i>August, 1927</i>										
Arkansas.....	0	13	46	995	50	253	4	9	11	192
Georgia.....	1	84	91	272	21	39	3	55	7	330
Iowa.....	8	42	-----	-----	16	-----	9	45	37	29
Louisiana.....	0	77	40	348	13	71	6	28	3	167
Massachusetts.....	5	216	21	1	253	3	176	349	0	69
Minnesota.....	9	119	3	-----	32	-----	12	195	0	32
New Jersey.....	2	274	12	4	36	-----	79	133	0	53
Ohio.....	9	323	19	3	51	-----	271	299	21	168
South Carolina.....	0	221	478	2,359	218	501	5	51	38	427
Vermont.....	0	12	-----	-----	58	-----	0	-----	0	2
West Virginia.....	4	53	7	-----	31	-----	35	109	47	157
Wyoming.....	0	-----	-----	-----	11	-----	2	10	0	3

<i>July, 1927</i>		Cases
<b>Pennsylvania:</b>		
Anthrax.....	1	
Chicken pox.....	934	
German measles.....	119	
Impetigo contagiosa.....	4	
Lethargic encephalitis.....	8	
Mumps.....	733	
Ophthalmia neonatorum.....	5	
Puerperal fever.....	6	
Tetanus.....	11	
Whooping cough.....	1,033	
<i>August, 1927</i>		
<b>Anthrax:</b>		
New Jersey.....	-1	
<b>Chicken pox:</b>		
Arkansas.....	36	
Georgia.....	4	
Iowa.....	12	
Louisiana.....	3	
Massachusetts.....	72	
Minnesota.....	54	
New Jersey.....	65	
Ohio.....	114	
South Carolina.....	33	
Vermont.....	13	
West Virginia.....	3	
Wyoming.....	5	
<b>Conjunctivitis:</b>		
Georgia.....	1	
<b>Dengue:</b>		
Georgia.....	5	
South Carolina.....	36	
<b>Dysentery:</b>		
Georgia.....	22	
Louisiana.....	1	
Massachusetts.....	5	
Minnesota.....	4	
New Jersey.....	4	
Ohio.....	2	
<b>German measles:</b>		
Iowa.....	2	
Massachusetts.....	8	
New Jersey.....	15	
Ohio.....	3	
Wyoming.....	2	
<b>Hookworm disease:</b>		
Arkansas.....	1	
Georgia.....	12	
Louisiana.....	7	
South Carolina.....	123	
<b>Lead poisoning:</b>		
Massachusetts.....	8	
New Jersey.....	6	
Ohio.....	7	
<b>Lethargic encephalitis:</b>		
Louisiana.....	4	
Massachusetts.....	12	
Ohio.....	4	
<b>Mumps:</b>		
Arkansas.....	168	
Georgia.....	16	
Iowa.....	9	
Louisiana.....	1	
Massachusetts.....	145	

<i>August, 1927—Continued</i>		Cases
<b>Mumps—Continued.</b>		
Ohio.....	147	
Vermont.....	45	
Wyoming.....	4	
<b>Ophthalmia neonatorum:</b>		
Arkansas.....	2	
Massachusetts.....	152	
New Jersey.....	2	
Ohio.....	117	
South Carolina.....	20	
<b>Paratyphoid fever:</b>		
Georgia.....	4	
Louisiana.....	2	
New Jersey.....	13	
Ohio.....	2	
South Carolina.....	23	
Wyoming.....	1	
<b>Puerperal fever:</b>		
Ohio.....	2	
<b>Rabies in animals:</b>		
South Carolina.....	10	
Vermont.....	1	
<b>Rabies in man:</b>		
Georgia.....	1	
Ohio.....	2	
<b>Rocky Mountain spotted or tick fever:</b>		
Wyoming.....	1	
<b>Septic sore throat:</b>		
Georgia.....	26	
Massachusetts.....	9	
Ohio.....	50	
<b>Tetanus:</b>		
Georgia.....	1	
Iowa.....	1	
Louisiana.....	3	
Massachusetts.....	2	
Minnesota.....	3	
Ohio.....	2	
<b>Trachoma:</b>		
Arkansas.....	10	
Georgia.....	1	
Louisiana.....	1	
Massachusetts.....	3	
New Jersey.....	1	
Ohio.....	1	
<b>Tularaemia:</b>		
Minnesota.....	1	
Wyoming.....	2	
<b>Typhus fever:</b>		
Georgia.....	1	
<b>Whooping cough:</b>		
Arkansas.....	104	
Georgia.....	48	
Iowa.....	64	
Louisiana.....	25	
Massachusetts.....	365	
Minnesota.....	53	
New Jersey.....	554	
Ohio.....	529	
South Carolina.....	267	
Vermont.....	31	
West Virginia.....	79	
Wyoming.....	21	

**Number of Cases of Certain Communicable Diseases Reported for the Month  
of June, 1927, by State Health Officers**

State	Chicken pox	Diph- theria	Measles	Mumps	Scarlet fever	Small- pox	Tuber- culosis	Typhoid fever	Whoop- ing cough
Alabama.....	65	65	820	44	35	97	447	210	225
Arizona.....	5	16	162	32	30	0	76	17	9
Arkansas.....	132	16	264	112	15	23	49	131	222
California.....	1,222	511	2,966	715	672	79	995	62	914
Colorado.....	96	106	546	15	386	15	126	19	47
Connecticut.....	469	138	252	167	277	0	165	5	98
Delaware.....	12	6	20	1	10	0	5	3	2
District of Columbia.....	52	54	15	-----	65	30	126	5	39
Florida.....	19	57	200	15	21	165	129	86	140
Georgia.....	40	32	246	83	42	56	61	234	135
Idaho.....	18	7	163	12	25	34	17	8	25
Illinois.....	873	475	2,084	1,453	806	63	1,362	70	1,089
Indiana <sup>1</sup> .....	-----	-----	-----	-----	-----	-----	-----	-----	-----
Iowa.....	92	63	458	84	115	91	77	4	73
Kansas.....	217	35	1,253	67	169	74	197	31	389
Kentucky <sup>1</sup> .....	-----	-----	-----	-----	-----	-----	-----	-----	-----
Louisiana.....	19	60	293	26	15	27	<sup>1</sup> 197	116	112
Maine.....	59	9	339	18	88	0	26	9	129
Maryland.....	300	232	81	79	160	5	302	44	350
Massachusetts.....	874	388	1,734	1,044	1,587	0	594	18	406
Michigan.....	820	334	900	927	921	151	532	29	613
Minnesota.....	773	94	341	-----	474	10	377	18	71
Mississippi.....	249	38	856	330	21	10	284	237	1,737
Missouri.....	94	106	487	294	175	95	146	38	330
Montana.....	43	6	71	3	62	45	36	7	54
Nebraska.....	49	37	317	66	74	38	20	5	35
Nevada <sup>4</sup> .....	-----	-----	-----	-----	-----	-----	-----	-----	-----
New Hampshire.....	-----	2	-----	-----	34	-----	-----	3	-----
New Jersey.....	1,197	431	196	-----	816	1	446	20	677
New Mexico <sup>1</sup> .....	-----	-----	-----	-----	-----	-----	-----	-----	-----
New York.....	2,556	1,875	3,699	2,056	2,208	18	1,425	91	1,382
North Carolina.....	247	53	4,974	-----	49	94	-----	151	2,204
North Dakota.....	33	8	117	3	89	6	-----	5	2
Ohio.....	6,706	388	467	670	750	197	701	50	576
Oklahoma <sup>5</sup> .....	41	24	375	19	43	161	88	153	68
Oregon.....	74	24	618	59	45	69	38	24	74
Pennsylvania.....	1,306	645	1,865	1,321	1,276	2	784	78	652
Rhode Island.....	71	48	30	23	107	0	40	0	22
South Carolina.....	214	55	824	14	13	35	157	378	661
South Dakota.....	19	13	142	2	73	25	7	10	21
Tennessee.....	65	21	197	27	47	54	186	247	282
Texas <sup>1</sup> .....	-----	-----	-----	-----	-----	-----	-----	-----	-----
Utah <sup>1</sup> .....	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vermont.....	107	4	335	141	30	0	17	1	125
Virginia.....	328	56	1,249	-----	82	54	118	111	1,331
Washington.....	265	45	1,714	150	173	145	115	20	146
West Virginia.....	70	43	564	-----	115	133	80	46	150
Wisconsin.....	775	113	2,473	786	422	73	172	14	393
Wyoming.....	9	1	161	2	38	7	-----	-----	27

<sup>1</sup> Pulmonary.<sup>2</sup> Report not received at time of going to press.<sup>3</sup> Reports received weekly.<sup>4</sup> Reports received annually.<sup>5</sup> Exclusive of Oklahoma City and Tulsa.

**Case Rates per 1,000 Population (Annual Basis) for the Month of June, 1927**

State	Chicken pox	Diph- theria	Measles	Mumps	Scarlet fever	Small- pox	Tuber- culosis	Typhoid fever	Whoop- ing cough
Alabama.....	0.31	0.31	3.91	0.21	0.17	0.46	2.13	1.00	1.07
Arizona.....	.13	.42	4.29	.85	.80	.00	2.01	.45	.24
Arkansas.....	.84	.10	1.67	.71	.09	.15	.31	.83	1.40
California.....	1.35	1.40	8.14	1.96	1.84	.22	2.73	.17	2.51
Colorado.....	1.09	1.20	6.19	.17	4.37	.17	1.43	.22	.53
Connecticut.....	3.49	1.08	1.87	1.24	2.06	.00	1.23	.04	.73
Delaware.....	.60	.30	1.00	.05	.50	.60	.25	.15	.10
District of Columbia.....	1.17	1.22	.34		1.46	.68	2.84	.11	.88
Florida.....	.17	.51	1.79	.13	.19	1.47	1.15	.77	1.25
Georgia.....	.15	.12	.94	.32	.16	.21	.23	.90	.52
Idaho.....	.41	.16	3.71	.37	.87	.77	1.16	.18	.57
Illinois.....	1.46	.79	3.48	2.42	1.34	.11	2.27	.12	1.82
Indiana <sup>1</sup> .....									
Iowa.....	.46	.32	2.30	.42	.58	.46	.39	.02	.37
Kansas.....	1.44	.23	8.34	.45	1.12	.49	1.31	.21	2.59
Kentucky <sup>1</sup> .....									
Louisiana.....	.12	.38	1.84	.16	.09	.17	1.24	.73	.70
Maine.....	.91	.14	5.20	.28	1.35	.09	.40	.14	1.98
Maryland.....	2.29	1.77	.62	.60	1.22	.04	2.30	.34	2.67
Massachusetts.....	2.51	1.11	4.97	2.99	4.55	.05	1.70	.05	1.16
Michigan.....	2.22	.91	2.44	2.51	2.50	.41	1.44	.06	1.66
Minnesota.....	3.50	.43	1.64		2.15	.65	1.71	.08	.32
Mississippi.....	1.69	.26	5.82	2.24	.14	.07	1.98	1.61	11.80
Missouri.....	.33	.37	1.69	1.02	.61	.32	.51	.13	1.14
Montana.....	.73	.10	1.31	.05	1.06	.77	.61	.12	.92
Nebraska.....	.43	.32	2.76	.58	.64	.33	.17	.04	.31
Nevada <sup>1</sup> .....									
New Hampshire.....		.05			.91			.06	
New Jersey.....	3.89	1.40	.64		2.65	.00	1.45	.06	2.20
New Mexico <sup>1</sup> .....									
New York.....	2.72	2.00	3.94	2.19	2.35	.02	1.52	.19	1.47
North Carolina.....	1.04	.22	20.89		.25			.63	9.26
North Dakota.....	.63	.15	2.22	.06	1.69	.11	.09	.04	.28
Ohio.....	12.16	.70	.85	1.21	1.36	.36	1.27	.09	1.04
Oklahoma <sup>1</sup> .....	.23	.14	5.61	.11	.25	.22	.50	.83	.39
Oregon.....	1.01	.33	8.45	.81	.62	.94	.52	.33	1.01
Pennsylvania.....	1.63	.81	2.33	1.65	1.60	.60	.98	.10	.82
Rhode Island.....	1.23	.68	.62	.49	1.83	.60	.69	.60	.38
South Carolina.....	1.41	.38	5.43	.09	.69	.23	1.04	2.49	4.36
South Dakota.....	.38	.23	2.48	.65	1.28	.44	.12	.17	.37
Tennessee.....	.33	.10	.96	.13	.23	.26	.91	1.31	1.38
Texas <sup>1</sup> .....									
Utah <sup>1</sup> .....									
Vermont.....	3.69	.14	11.56	4.87	1.04	.00	.59	.03	4.32
Virginia.....	1.57	.27	8.87		.39	.28	.58	.53	6.36
Washington.....	2.06	.35	13.35	1.17	1.35	1.13	.90	.16	1.14
West Virginia.....	.56	.31	4.05		.83	.05	.57	.22	1.08
Wisconsin.....	3.23	.47	10.31	3.28	1.76	.39	.72	.06	1.64
Wyoming.....	.45	.05	8.13	.10	1.22	.35			1.36

<sup>1</sup> Pulmonary.  
<sup>2</sup> Report not received at time of going to press.  
<sup>3</sup> Reports received weekly.  
<sup>4</sup> Reports received annually.  
<sup>5</sup> Exclusive of Oklahoma City and Tulsa.

**RECIPROCAL NOTIFICATIONS**

*Notifications regarding communicable diseases sent during the month of August 1927, to other State health departments by departments of health of certain States*

Referred by—	Diph- theria	Dysen- tery	Polio- myelitis	Scarlet fever	Small- pox	Tuber- culosis	Typhoid fever	Whoop- ing cough
California.....						2		
Illinois.....				1	6	21	7	1
Minnesota.....	1	3				21	1	
New York.....	1		1	1	1		5	
Washington.....	1							



## GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 94 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 30,110,000. The estimated population of the 89 cities reporting deaths is more than 29,470,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended September 10, 1927, and September 11, 1926

	1927	1926	Estimated expectancy
<i>Cases reported</i>			
Diphtheria:			
42 States.....	1,306	965	
94 cities.....	531	428	556
Measles:			
41 States.....	613	754	
94 cities.....	112	155	
Poliomyelitis:			
42 States.....	504	137	
Scarlet fever:			
42 States.....	1,131	963	
94 cities.....	304	325	304
Smallpox:			
42 States.....	133	155	
94 cities.....	20	7	18
Typhoid fever:			
42 States.....	1,138	1,488	
94 cities.....	172	269	220
<i>Deaths reported</i>			
Influenza and pneumonia:			
89 cities.....	378	364	
Smallpox:			
89 cities.....	0	0	

*City reports for week ended September 10, 1927*

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

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1918 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
<b>NEW ENGLAND</b>									
<b>Maine:</b>									
Portland.....	75,383	0	1	1	0	0	1	1	2
<b>New Hampshire:</b>									
Concord.....	22,546	0	0	0	0	0	0	0	0
Manchester.....	83,097	0	2	0	0	0	0	0	1
<b>Vermont:</b>									
Barre.....	10,008	0	0	2	0	0	0	0	0
Burlington.....	24,089	0	0	0	0	0	1	0	1

## City reports for week ended September 10, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
<b>NEW ENGLAND—CON.</b>									
<b>Massachusetts:</b>									
Boston	779,620	6	28	24	1	1	22	2	17
Fall River	128,993	0	1	0	0	0	0	0	1
Springfield	142,085	0	1	1	0	0	0	1	0
Worcester	190,757	0	4	1	0	0	0	0	0
<b>Rhode Island:</b>									
Pawtucket	69,760	0	0	0	0	0	0	0	0
Providence	267,918	0	3	5	0	0	0	0	2
<b>Connecticut:</b>									
Bridgeport	(1)		4						
Hartford	160,197	0	4	0	0	1	0	1	2
New Haven	178,927	0	2	1	0	0	3	0	2
<b>MIDDLE ATLANTIC</b>									
<b>New York:</b>									
Buffalo	538,016	2	11	14		1	1	1	4
New York	5,873,356	11	82	97	4	3	7	7	65
Rochester	316,786	0	4	3		0	0	2	2
Syracuse	182,003	0	4	1		0	5	1	1
<b>New Jersey:</b>									
Camden	128,642	0	2	14	0	0	0	0	2
Newark	452,513	3	6	7	1	0	2	5	11
Trenton	132,020	0	3	2	0	0	0	0	7
<b>Pennsylvania:</b>									
Philadelphia	1,979,364	4	33	31		1	0	10	28
Pittsburgh	631,563	2	12	12		2	16	3	15
Reading	112,707	0	2	2		0	1	1	0
<sup>1</sup> No estimate made.									
<b>EAST NORTH CENTRAL</b>									
<b>Ohio:</b>									
Cincinnati	409,333	0	7	4	0	0	2	0	7
Cleveland	936,485	11	22	37	1	0	4	12	6
Columbus	279,836	1	3	2	0	1	0	0	5
Toledo	287,380	3	7	4	1	0	1	0	2
<b>Indiana:</b>									
Fort Wayne	97,846	0	2	1	0	0	0	0	0
Indianapolis	358,819	2	5	5	0	0	0	4	5
South Bend	80,091	0	1	0	0	0	0	0	0
Terre Haute	71,071	0	0	1	0	0	0	0	1
<b>Illinois:</b>									
Chicago	2,995,239	22	50	45	5	2	4	12	34
Springfield	63,923	2	1	0	1	0	0	0	1
<b>Michigan:</b>									
Detroit	1,245,824	5	39	19	1	1	3	3	14
Flint	130,316	0	5	5	0	1	1	0	2
Grand Rapids	153,698	0	2	3	0	0	3	0	4
<b>Wisconsin:</b>									
Kenosha	50,891	1	0	0	0	0	0	1	0
Madison	48,385	1	1	0	0	0	1	0	0
Milwaukee	509,192	4	8	11	1	1	4	12	8
Racine	67,707	2	1	1	0	0	1	0	1
Superior	39,671	0	1	1	0	0	0	0	1
<b>WEST NORTH CENTRAL</b>									
<b>Minnesota:</b>									
Duluth	110,502	0	1	0	0	0	0	0	0
Minneapolis	425,435	8	17	7	0	0	0	0	5
St. Paul	246,001	0	13	1	0	0	2	0	5
<b>Iowa:</b>									
Davenport	52,469	0	1	2	0		0	0	
Des Moines	141,441	0	3	3	0		0		3
Sioux City	76,411	0	1	0	0		1	0	
Waterloo	36,771	0	0	1	0		1	0	
<b>Missouri:</b>									
Kansas City	367,481	1	3	3	0	0	0	1	5
St. Joseph	78,342	1	1	0	0	0	0	0	1
St. Louis	821,543	2	21	16	0	0	1	4	

<sup>1</sup> No estimate made.

## City reports for week ended September 10, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
<b>WEST NORTH CENTRAL—continued</b>									
North Dakota:									
Fargo.....	26,403	0	0	0	0	0	0	0	0
Grand Forks.....	14,811	0	0	0	0	0	0	0	0
South Dakota:									
Aberdeen.....	15,036	0	0	0	0	0	0	0	0
Sioux Falls.....	30,127	0	0	0	0	0	0	0	0
Nebraska:									
Lincoln.....	60,941	0	0	0	0	0	0	1	1
Omaha.....	211,768	0	10	2	0	0	0	0	3
Kansas:									
Topeka.....	55,411	0	0	0	0	0	0	1	1
Wichita.....	88,367	1	1	2	0	0	0	0	1
<b>SOUTH ATLANTIC</b>									
Delaware:									
Wilmington.....	122,049	0	1	0	0	0	0	0	1
Maryland:									
Baltimore.....	796,296	2	14	26	3	0	1	1	7
Cumberland.....	33,741	0	1	0	0	0	0	0	0
Frederick.....	12,035	2	0	0	0	0	0	0	0
District of Columbia:									
Washington.....	497,906	0	5	6	0	0	0	0	5
Virginia:									
Lynchburg.....	30,395	0	1	2	0	0	0	0	1
(1) Norfolk.....		1	0	0	0	0	0	0	1
Richmond.....	186,403	0	11	4	0	1	0	0	0
Roanoke.....	58,298	0	3	3	0	0	0	0	1
West Virginia:									
Charleston.....	49,019	2	0	0	0	0	0	0	0
Wheeling.....	56,208	0	1	0	0	0	1	0	1
North Carolina:									
Raleigh.....	30,371	0	2	2	0	1	1	0	0
Wilmington.....	37,061	0	1	0	0	0	0	0	1
Winston-Salem.....	68,081	1	2	3	0	0	2	5	0
South Carolina:									
Charleston.....	73,125	0	1	0	20	0	0	0	0
Columbia.....	41,225	0	1	2	0	1	3	0	1
Greenville.....	27,311	0	1	0	0	0	0	0	0
Georgia:									
Atlanta.....	(1)	0	5	7	3	1	0	1	4
Brunswick.....	16,809	0	0	0	0	0	0	0	0
Savannah.....	93,134	0	1	1	5	0	0	0	3
Florida:									
Miami.....	69,754	0	0	3	0	0	0	1	0
St. Petersburg.....	26,847	0	0	0	0	0	0	0	0
Tampa.....	94,743	0	1	4	0	0	0	0	2
<b>EAST SOUTH CENTRAL</b>									
Kentucky:									
Covington.....	56,309	0	0	2	0	0	0	0	1
Lexington.....	46,895	0	0	0	0	0	1	0	2
Louisville.....	305,935	1	5	0	1	0	0	2	8
Tennessee:									
Memphis.....	174,533	0	4	5	0	1	1	1	3
Nashville.....	136,220	2	2	6	0	1	1	0	4
Alabama:									
Birmingham.....	205,670	0	4	5	2	0	0	1	3
Mobile.....	65,955	0	1	0	0	0	0	0	3
Montgomery.....	46,481	0	1	3	0	0	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Arkansas:									
Fort Smith.....	31,643	0	0	0	0	0	0	1	0
Little Rock.....	74,216	0	0	0	0	0	2	1	6
Louisiana:									
New Orleans.....	414,493	0	7	11	3	3	0	0	0
Shreveport.....	57,857	0	1	2	0	0	0	2	1

1 No estimate made.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
<b>WEST SOUTH CENTRAL—continued</b>									
Oklahoma:									
Oklahoma City.....	(1)	0	2	2	6	1	0	0	5
Tulsa.....	124,478	0		0	0		0	0	
Texas:									
Dallas.....	194,450		4						
Galveston.....	48,375	0	0	0	0	0	0	0	0
Houston.....	164,954	0	3	2	0	0	0	0	2
San Antonio.....	198,069	0	1	3	0	0	0	0	3
<b>MOUNTAIN</b>									
Montana:									
Billings.....	17,971	0	0	0	0	0	0	0	0
Great Falls.....	29,883	0	0	0	0	0	1	0	0
Helena.....	12,037	0	0	0	0	0	0	0	0
Missoula.....	12,668	0	0	0	0	0	0	0	0
Idaho:									
Boise.....	23,042	0	0	0	0	0	0	5	0
Colorado:									
Denver.....	280,911	3	10	11		1	2	2	6
Pueblo.....	43,787	0	3	0	0	0	0	0	1
New Mexico:									
Albuquerque.....	21,000	0	0	0	0	0	1	0	0
Utah:									
Salt Lake City.....	130,948	7	3	6	0	0	1	1	3
Nevada:									
Reno.....	12,665	0	0	0	0	0	0	0	0
<b>PACIFIC</b>									
Washington:									
Seattle.....	(1)	6	3	1	0		0	1	
Spokane.....	108,897	2	1	0	0		1	0	
Tacoma.....	104,455		2						
Oregon:									
Portland.....	282,383	4	4	3	0	0	2	0	0
California:									
Los Angeles.....	(1)	4	24	25	2	1	3	4	8
Sacramento.....	72,260	2	2	2	0	0	0	0	1
San Francisco.....	557,530	3	15	4	1	1	8	7	4

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
<b>NEW ENGLAND</b>											
Maine:											
Portland.....	1	0	0	0	0	0	2	3	0	9	21
New Hampshire:											
Concord.....	0	0	0	0	0	0	0	0	0	0	5
Manchester.....	0	0	0	0	0	0	0	0	0	0	12
Vermont:											
Barre.....	0	1	0	0	0	2	0	0	0	0	3
Burlington.....	0	0	0	0	0	1	0	0	0	0	7
Massachusetts:											
Boston.....	15	13	0	0	0	7	4	6	1	18	206
Fall River.....	1	1	0	0	0	1	2	0	0	0	24
Springfield.....	2	1	0	0	0	1	0	3	0	10	34
Worcester.....	2	1	0	0	0	2	0	2	0	6	37

<sup>1</sup> No estimate made.

## City reports for week ended September 10, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND— continued											
Rhode Island:											
Pawtucket.....	0	0	0	0	0	0	0	0	0	0	17
Providence.....	2	5	0	0	0	2	0	2	0	0	43
Connecticut:											
Bridgeport.....	2		0				1				
Hartford.....	2	1	0	0	0	1	1	0	0	0	31
New Haven.....	2	0	0	0	0	1	4	1	0	4	23
MIDDLE ATLANTIC											
New York:											
Buffalo.....	5	4	0	0	0	7	3	0	0	7	123
New York.....	28	27	0	0	0	195	47	41	1	98	1,174
Rochester.....	2	4	0	0	0	4	1	1	0	0	65
Syracuse.....	3	3	0	0	0	0	2	0	0	4	41
New Jersey:											
Camden.....	1	0	0	0	0	2	1	0	0	0	25
Newark.....	4	1	0	0	0	5	2	1	0	44	96
Trenton.....	1	0	0	0	0	4	0	0	0	2	36
Pennsylvania:											
Philadelphia.....	21	20	0	0	0	30	14	7	1	20	392
Pittsburgh.....	12	1	0	0	0	13	4	4	0	9	125
Reading.....	1	0	0	0	0	0	1	0	0	6	14
EAST NORTH CENTRAL											
Ohio:											
Cincinnati.....	4	4	0	0	0	12	2	1	0	8	154
Cleveland.....	11	9	0	0	0	15	5	2	0	21	173
Columbus.....	3	7	0	0	0	4	1	0	0	16	59
Toledo.....	4	2	0	0	0	3	3	0	0	12	72
Indiana:											
Fort Wayne.....	1	0	0	0	0	0	2	0	0	1	21
Indianapolis.....	3	6	0	0	0	6	2	1	1	2	86
South Bend.....	1	0	0	0	0	0	0	0	0	5	9
Terre Haute.....	1	1	0	0	0	0	0	0	0	0	15
Illinois:											
Chicago.....	29	24	1	2	0	40	9	3	2	126	702
Springfield.....	1	1	0	0	0	1	1	1	0	0	22
Michigan:											
Detroit.....	26	19	1	0	0	18	6	2	0	62	260
Flint.....	4	5	0	0	0	2	1	0	0	14	25
Grand Rapids.....	3	3	1	0	0	2	0	0	0	6	32
Wisconsin:											
Kenosha.....	0	2	1	0	0	0	0	0	0	0	4
Madison.....	1	2	0	0	0	0	0	0	0	4	4
Milwaukee.....	10	7	0	0	0	12	0	0	0	31	135
Racine.....	2	6	0	0	0	0	1	0	0	8	8
Superior.....	1	3	0	0	0	1	0	0	0	0	10
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	4	4	0	0	0	1	0	1	0	3	17
Minneapolis.....	13	15	1	0	0	2	1	1	1	0	75
St. Paul.....	6	3	1	0	0	4	1	0	0	6	56
Iowa:											
Davenport.....	1	0	0	0			0	0		0	
Des Moines.....	3	4	0	0		1	0	1		3	43
Sioux City.....	0	1	0	0			0	0		4	
Waterloo.....	1	0	0	0			0	0		0	
Missouri:											
Kansas City.....	3	0	0	0	0	3	3	5	2	2	77
St. Joseph.....	1	0	0	5	0	0	1	0	0	0	41
St. Louis.....	0	13	0	0	0	9	7	7	1	6	178
North Dakota:											
Fargo.....	0	2	0	0	0	0	1	0	0	0	6
Grand Forks.....	1	0	0	0			0	0		0	

1 Pulmonary tuberculosis only.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
<b>WEST NORTH CENTRAL—contd.</b>											
<b>South Dakota:</b>											
Aberdeen.....	2	0	0	0			0	0		0	
Sioux Falls.....	1	1	0	0			0	0		0	
<b>Nebraska:</b>											
Lincoln.....	0	1	0	0	0	1	0	0	0	0	25
Omaha.....	2	3	0	1	0	6	1	0	0	1	56
<b>Kansas:</b>											
Topeka.....	1	0	0	0	0	2	0	1	0	10	21
Wichita.....	1	5	0	0	0	1	2	1	0	5	27
<b>SOUTH ATLANTIC</b>											
<b>Delaware:</b>											
Wilmington.....	1	2	0	0	0	2	0	0	0	3	26
<b>Maryland:</b>											
Baltimore.....	6	5	0	0	0	11	11	9	0	33	188
Cumberland.....	0	0	0	0	0	0	0	0	0	0	7
Frederick.....	0	0	0	0	0	0	0	0	0	0	4
<b>District of Col.:</b>											
Washington.....	4	8	0	1	0	6	5	3	1	5	114
<b>Virginia:</b>											
Lynchburg.....	0	0	0	0	0	4	1	0	0	5	13
Norfolk.....	0	1	0	0	0	1	1	1	0	0	
Richmond.....	3	2	0	0	0	5	2	2	0	0	43
Roanoke.....	1	1	0	0	0	0	2	0	0	0	15
<b>West Virginia:</b>											
Charleston.....	0	3	1	0	0	1	2	3	0	4	16
Wheeling.....	2	0	0	0	0	2	1	0	0	3	22
<b>North Carolina:</b>											
Raleigh.....	0	0	0	0	0	0	0	0	0	2	11
Wilmington.....	0	0	0	0	0	0	1	0	0	1	9
Winston-Salem.....	0	2	0	0	0	2	2	2	0	6	31
<b>South Carolina:</b>											
Charleston.....	0	0	0	0	0	0	3	3	1	0	16
Columbia.....	0	2	0	0	0	0	1	0	0	1	9
Greenville.....	0	0	0	0	0	1	0	0	0	0	9
<b>Georgia:</b>											
Atlanta.....	4	6	0	0	0	4	5	8	1	4	67
Brunswick.....	0	0	0	0	0	0	0	0	0	0	4
Savannah.....	0	0	0	0	0	2	1	1	1	0	39
<b>Florida:</b>											
Miami.....		0		0	0	1		1	0	0	26
St. Petersburg.....	0		0		0	1	0	0	0		7
Tampa.....	0	1	0	0	0	0	0	0	0	0	33
<b>EAST SOUTH CENTRAL</b>											
<b>Kentucky:</b>											
Covington.....	1	3	0	0	0	1	0	0	0	0	20
Lexington.....		2		0	0	2		0	0	2	18
Louisville.....	2	3	0	1	0	3	6	1	0	2	83
<b>Tennessee:</b>											
Memphis.....	1	4	0	0	0	2	5	5	2	1	60
Nashville.....	2	1	0	0	0	4	6	5	0	0	53
<b>Alabama:</b>											
Birmingham.....	3	6	0	1	0	7	5	7	2	1	71
Mobile.....	1	1	1	0	0	0	1	0	0	0	25
Montgomery.....	0	1	0	0	0	0	1	4	0	3	
<b>WEST SOUTH CENTRAL</b>											
<b>Arkansas:</b>											
Fort Smith.....	1	0	0	0			0	0		1	
Little Rock.....	1	5	0	0	0	1	2	0	1	0	
<b>Louisiana:</b>											
New Orleans.....	1	2	0	0	0	17	5	3	0	0	139
Shreveport.....	1	1	0	0	0	1	2	0	0	0	24
<b>Oklahoma:</b>											
Oklahoma City.....	1	2	1	0	0	1	2	0	0	1	39
Tulsa.....		0		0	0			1		1	

## City reports for week ended September 10, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
<b>WEST SOUTH CENTRAL—continued</b>											
Texas:											
Dallas.....	1		0			0	3				
Galveston.....	0	0	0	0	0	0	1	2	0	0	6
Houston.....	0	0	1	0	0	2	1	5	1	0	41
San Antonio.....	1	0	0	0	0	3	0	1	0	0	36
<b>MOUNTAIN</b>											
Montana:											
Billings.....	0	0	0	0	0	0	0	0	0	1	6
Great Falls.....	0	0	1	0	0	0	0	2	0	0	4
Helena.....	0	0	0	0	0	0	0	0	0	0	4
Missoula.....	0	0	0	0	0	0	1	0	0	0	7
Idaho:											
Boise.....	0	0	0	0	0	0	0	0	0	0	16
Colorado:											
Denver.....	4	3	2	0	0	11	3	1	1	6	91
Pueblo.....	0	0	0	0	0	0	1	4	0	0	11
New Mexico:											
Albuquerque.....	0	2	0	0	0	4	1	0	1	0	7
Utah:											
Salt Lake City.....	1	3	0	1	0	0	1	0	0	17	26
Nevada:											
Reno.....	0	0	0	0	0	0	0	0	0	0	3
<b>PACIFIC</b>											
Washington:											
Seattle.....	5	0	1	0			3	1		3	
Spokane.....	3	1	1	3			0	0		0	
Tacoma.....	2		1				0				
Oregon:											
Portland.....	3	0	3	5	0	4	2	0	0	0	54
California:											
Los Angeles.....	7	6	2	0	0	22	4	1	1	12	175
Sacramento.....	0	1	1	2	0	0	1	1	0	2	21
San Francisco.....	6	4	1	0	0	5	1	0	0	11	118

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)			
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	
<b>NEW ENGLAND</b>										
Maine:										
Portland.....	0	0	0	0	0	1	1	1	3	
Massachusetts:										
Boston.....	2	2	0	0	0	0	2	36	3	
Fall River.....	0	0	0	0	0	0	1	2	0	
Springfield.....	1	0	0	0	0	0	0	1	0	
Worcester.....	0	0	0	0	0	0	0	2	0	
Rhode Island:										
Providence.....	0	0	0	0	0	0	1	2	0	
Connecticut:										
Hartford.....	0	0	0	0	0	0	1	1	0	
New Haven.....	0	0	0	0	0	0	0	1	0	

## City reports for week ended September 10, 1927—Continued

Division, State, and city	Meningo- coccus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infan- tile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, esti- mated expect- ancy	Cases	Deaths
<b>MIDDLE ATLANTIC</b>									
New York:									
Buffalo.....	1	0	0	0	0	0	1	0	0
New York.....	3	2	4	5	0	0	10	42	7
New Jersey:									
Newark.....	0	0	0	0	0	0	1	4	0
Pennsylvania:									
Philadelphia.....	0	1	0	0	0	1	1	3	0
Pittsburgh.....	0	0	0	0	0	1	0	3	1
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cincinnati.....	0	0	0	0	0	0	0	3	1
Cleveland.....	0	0	0	0	0	1	1	9	0
Toledo.....	0	0	0	0	0	0	0	1	0
Indiana:									
Fort Wayne.....	0	0	0	0	0	0	0	1	0
South Bend.....	1	0	0	0	0	0	0	1	0
Illinois:									
Chicago.....	3	6	0	0	0	0	5	16	3
Michigan:									
Detroit.....	0	0	0	0	0	0	1	3	0
Grand Rapids.....	0	0	0	0	0	0	0	1	0
Wisconsin:									
Madison.....	0	0	0	0	0	0	0	1	0
Milwaukee.....	2	1	0	0	0	0	1	2	0
<b>WEST NORTH CENTRAL</b>									
Minnesota:									
Duluth.....	0	0	0	1	0	0	0	0	0
Iowa: <sup>1</sup>									
Des Moines.....	0	0	0	0	0	0	0	2	1
Waterloo.....	0	0	0	0	0	0	0	4	1
Missouri:									
Kansas City.....	0	0	1	1	0	0	0	5	1
Nebraska:									
Omaha.....	0	0	1	1	0	0	1	2	0
Kansas:									
Wichita.....	0	0	0	0	0	0	0	1	0
<b>SOUTH ATLANTIC</b>									
Maryland:									
Baltimore.....	0	0	2	2	1	1	2	0	0
District of Columbia:									
Washington.....	0	0	1	1	0	0	0	0	0
West Virginia:									
Wheeling.....	0	0	0	0	0	0	0	1	0
North Carolina:									
Raleigh.....	0	0	0	0	0	2	0	0	0
South Carolina:									
Charleston.....	0	0	0	0	2	1	0	0	0
Greenville.....	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta.....	0	0	0	0	1	1	0	0	0
Savannah <sup>2</sup> .....	0	0	0	0	0	3	0	0	0
Florida:									
Tampa <sup>3</sup> .....	1	1	0	0	0	0	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Kentucky:									
Louisville.....	0	0	0	0	0	0	0	1	0
Tennessee:									
Memphis.....	0	0	0	0	0	1	0	0	0
Nashville.....	0	0	0	0	0	1	0	1	0
Alabama:									
Birmingham.....	0	0	0	0	2	1	0	0	0
Montgomery.....	0	0	0	0	0	0	0	1	0

<sup>1</sup> Malta fever: 1 case at Davenport, Iowa.<sup>2</sup> Dengue: 1 case at Savannah, Ga.<sup>3</sup> Typhus fever: 5 cases and 1 death at Savannah, Ga., and 2 cases at Tampa, Fla.



## City reports for week ended September 10, 1927—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>WEST SOUTH CENTRAL</b>									
Arkansas:									
Little Rock.....	0	0	0	0	0	1	0	0	0
Louisiana:									
New Orleans.....	0	0	0	0	1	1	0	0	0
Shreveport.....	0	0	0	0	0	1	0	0	0
Oklahoma:									
Oklahoma City.....	0	0	0	2	0	1	0	0	0
Tulsa.....	1	0	0	0	0	0	0	0	0
Texas:									
Houston.....	0	0	0	0	0	1	0	0	1
<b>MOUNTAIN</b>									
Montana:									
Great Falls.....	0	0	0	0	0	0	0	1	0
Utah:									
Salt Lake City.....	0	0	0	0	0	0	0	1	0
<b>PACIFIC</b>									
Washington:									
Seattle.....	1		0		0		1	0	
Oregon:									
Portland.....	0	1	0	1	0	0	0	0	0
California:									
Los Angeles.....	0	0	1	1	0	0	1	5	1
San Francisco.....	0	1	0	0	0	0	0	3	1

The following table gives the rates per 100,000 population for 101 cities for the five-week period ended September 10, 1927, compared with those for a like period ended September 11, 1926. The population figures used in computing the rates are approximate estimates as of July 1, 1926, and 1927, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 30,445,000 in 1926 and 30,966,000 in 1927. The 95 cities reporting deaths had nearly 29,785,000 estimated population in 1926 and nearly 30,296,000 in 1927. The number of cities included in each group and the estimated aggregate populations are shown in a separate table on the following page.

Summary of weekly reports from cities, August 7 to September 10, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1926<sup>1</sup>

DIPHTHERIA CASE RATES

	Week ended—									
	Aug. 14, 1926	Aug. 13, 1927	Aug. 21, 1926	Aug. 20, 1927	Aug. 28, 1926	Aug. 27, 1927	Sept. 4, 1926	Sept. 3, 1927	Sept. 11, 1926	Sept. 10, 1927
101 cities.....	69	90	68	80	65	81	73	84	75	92
New England.....	31	70	47	111	50	86	26	88	38	99
Middle Atlantic.....	62	97	59	94	56	78	59	77	53	90
East North Central.....	101	94	87	85	76	81	99	87	78	91
West North Central.....	56	67	83	44	81	54	67	69	75	62
South Atlantic.....	48	82	60	62	61	89	69	89	136	109
East South Central.....	57	25	21	51	57	61	41	51	103	107
West South Central.....	26	92	64	75	34	96	60	164	86	79
Mountain.....	73	180	146	54	73	135	91	117	173	133
Pacific.....	104	107	62	60	91	94	134	73	91	89

MEASLES CASE RATES

101 cities.....	59	28	44	32	30	25	25	21	27	39
New England.....	68	63	52	84	38	58	33	58	35	73
Middle Atlantic.....	33	28	27	35	15	24	17	18	11	16
East North Central.....	84	19	72	13	43	13	31	11	20	15
West North Central.....	67	22	28	22	20	16	10	16	10	8
South Atlantic.....	80	14	35	27	15	31	9	18	19	14
East South Central.....	31	15	36	5	36	25	31	10	16	10
West South Central.....	4	21	9	42	4	17	0	42	4	710
Mountain.....	64	36	18	18	27	27	36	9	109	36
Pacific.....	94	60	78	71	94	62	91	42	158	83

SCARLET FEVER CASE RATES

101 cities.....	51	58	48	50	55	54	51	57	58	53
New England.....	68	93	73	51	54	81	59	60	80	62
Middle Atlantic.....	30	39	29	81	32	38	25	38	32	30
East North Central.....	55	73	46	78	55	61	58	80	61	66
West North Central.....	119	77	119	64	183	62	131	69	98	93
South Atlantic.....	30	33	39	42	58	63	37	60	36	60
East South Central.....	47	36	36	29	62	87	57	76	109	97
West South Central.....	21	59	17	50	26	59	26	59	47	740
Mountain.....	36	117	36	81	64	63	82	69	73	54
Pacific.....	86	63	78	42	75	37	70	34	88	83

SMALLPOX CASE RATES

101 cities.....	7	4	2	5	4	5	2	44	2	3
New England.....	0	6	6	0	9	0	0	0	6	0
Middle Atlantic.....	0	0	1	0	0	0	0	0	0	0
East North Central.....	1	5	2	7	7	6	0	7	2	43
West North Central.....	4	4	4	4	0	4	0	2	2	12
South Atlantic.....	11	5	6	4	9	0	9	6	2	2
East South Central.....	26	0	5	25	0	25	10	0	0	10
West South Central.....	21	0	0	4	9	0	4	0	0	70
Mountain.....	73	9	0	18	0	27	0	36	0	9
Pacific.....	32	24	5	13	13	31	13	18	16	14

<sup>1</sup> The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1926 and 1927, respectively.

<sup>2</sup> Greenville, S. C., not included.

<sup>3</sup> Pawtucket, R. I., Bridgeport, Conn., Hartford, Conn., Fort Wayne, Ind., Waterloo, Iowa, Dallas, Tex., and Tacoma, Wash., not included.

<sup>4</sup> Pawtucket, R. I., Bridgeport, Conn., and Hartford, Conn., not included.

<sup>5</sup> Fort Wayne, Ind., not included.

<sup>6</sup> Waterloo, Iowa, not included.

<sup>7</sup> Dallas, Tex., not included.

<sup>8</sup> Tacoma, Wash., not included.

Summary of weekly reports from cities, August 7 to September 10, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1926—Continued

## TYPHOID FEVER CASE RATES

	Week ended—									
	Aug. 14, 1926	Aug. 13, 1927	Aug. 21, 1926	Aug. 20, 1927	Aug. 28, 1926	Aug. 27, 1927	Sept. 4, 1926	Sept. 3, 1927	Sept. 11, 1926	Sept. 10, 1927
101 cities.....	35	25	41	37	40	31	40	32	45	30
New England.....	17	30	17	30	19	33	12	21	17	48
Middle Atlantic.....	24	15	34	20	39	21	34	28	34	27
East North Central.....	20	14	17	19	20	11	20	15	20	17
West North Central.....	24	22	48	38	42	20	42	10	50	32
South Atlantic.....	99	45	93	82	56	58	91	71	104	58
East South Central.....	140	97	186	219	233	204	176	183	284	112
West South Central.....	47	88	43	80	39	75	43	55	39	56
Mountain.....	73	36	73	27	18	45	9	54	18	63
Pacific.....	29	10	24	31	38	21	46	8	27	8

## INFLUENZA DEATH RATES

	1	3	3	4	3	5	3	4	4	4
	95 cities.....	1	2	1	2	0	2	0	2	0
New England.....	0	2	0	2	0	2	0	2	0	3
Middle Atlantic.....	1	2	1	2	3	2	2	3	4	3
East North Central.....	0	2	3	2	3	3	4	5	4	4
West North Central.....	2	6	2	0	8	2	4	4	0	0
South Atlantic.....	0	4	2	6	2	11	0	7	0	6
East South Central.....	10	5	0	10	0	15	16	5	0	10
West South Central.....	13	13	26	30	4	22	9	13	18	16
Mountain.....	0	0	0	0	18	9	9	18	36	9
Pacific.....	0	3	7	0	0	7	0	0	0	7

## PNEUMONIA DEATH RATES

	50	55	54	45	47	46	51	56	51	62
	95 cities.....	31	77	40	49	33	51	50	49	40
New England.....	62	57	58	47	56	55	59	72	65	67
Middle Atlantic.....	35	41	35	35	37	34	34	51	37	60
East North Central.....	25	44	49	25	42	31	36	23	30	44
West North Central.....	57	72	87	53	59	37	64	42	44	50
South Atlantic.....	52	66	36	66	47	66	62	46	41	112
East South Central.....	106	56	66	69	71	65	49	82	97	73
West South Central.....	82	63	82	36	73	36	64	54	64	90
Mountain.....	39	55	78	72	21	62	78	55	57	48
Pacific.....										

<sup>2</sup> Greenville, S. C., not included.

<sup>3</sup> Pawtucket, R. I., Bridgeport, Conn., Hartford, Conn., Fort Wayne, Ind., Waterloo, Iowa, Dallas, Tex., and Tacoma, Wash., not included.

<sup>4</sup> Pawtucket, R. I., Bridgeport, Conn., and Hartford, Conn., not included.

<sup>5</sup> Fort Wayne, Ind., not included.

<sup>6</sup> Waterloo, Iowa, not included.

<sup>7</sup> Dallas, Tex., not included.

<sup>8</sup> Tacoma, Wash., not included.

<sup>9</sup> Pawtucket, R. I., Bridgeport, Conn., Hartford, Conn., Fort Wayne, Ind., Dallas, Tex., and Tacoma, Wash., not included.

Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1926 and 1927, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1926	1927	1926	1927
Total.....	101	95	30,443,800	30,966,700	29,783,700	30,285,900
New England.....	12	12	2,211,000	2,245,900	2,211,000	2,245,900
Middle Atlantic.....	10	10	10,457,000	10,567,000	10,457,000	10,567,000
East North Central.....	16	16	7,650,200	7,810,600	7,650,200	7,810,600
West North Central.....	12	10	2,585,580	2,626,000	2,470,000	2,510,000
South Atlantic.....	21	20	2,799,500	2,878,100	2,737,700	2,835,700
East South Central.....	7	7	1,008,300	1,023,500	1,008,300	1,023,500
West South Central.....	8	7	1,213,800	1,243,300	1,181,500	1,210,400
Mountain.....	9	9	572,100	580,000	572,100	580,000
Pacific.....	6	4	1,946,400	1,991,700	1,475,300	1,512,800

# FOREIGN AND INSULAR

## PLAGUE ON VESSELS

*Steamship "Capafric"*—At Duala, French Cameroons, from Nigeria—August 23, 1927.—Three cases of plague with one death were reported on the steamship *Capafric*, from Nigeria, arriving at Duala, French Cameroons, August 23, 1927.

*Steamship "Elcano"*—At Piraeus, Greece, from Constanza, Rumania, August 19, 1927.—The steamship *Elcano* arrived at Port Said, Egypt, August 22, 1927, with history of a case of plague disembarked at Piraeus, Greece, August 19, 1927. The case occurred in a member of the personnel of the ship. The itinerary of the vessel showed communication with Alexandria, Egypt, August 2 to 4; Constanza, August 8 to 15; Piraeus, August 18 to 20, 1927.

*Steamship "Madonna"*—At Dakar, Senegal, from ports south—August 24, 1927.—A case of plague occurring in a European passenger was reported landed from the steamship *Madonna* arriving August 24, 1927, at Dakar, Senegal, from ports south and destined for Marseilles, France.

## THE FAR EAST

*Report for week ended September 3, 1927.*—The following report for the week ended September 3, 1927, was transmitted by the Eastern Bureau of the health section of the secretariat of the League of Nations, located at Singapore, to the headquarters at Geneva:

Maritime towns	Plague		Cholera		Smallpox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Egypt: Suez.....	1	0	0	0	0	0
Iraq: Basra.....	0	0	31	21	1	1
Persia: Mohammerah.....	0	0	11	5	0	0
British India:						
Bombay.....		1		1	2	3
Madras.....		0		24	2	0
Viragapatam.....		0		0	1	1
Calcutta.....		0		10	4	2
Bassein.....		1		0	0	0
Rangoon.....		0		0	2	1
Ceylon: Colombo.....	1	0	0	0	0	0
Straits Settlements: Singapore.....	1	0	0	0	0	0
Siam: Bangkok.....	0	0	1	0	0	0
Dutch East Indies:						
Banjermasin.....	0	0	0	0	26	1
Surabaya.....	0	0	0	0	1	0
French Indo-China:						
Saigon and Cholon.....	1	0	1	0	1	0
Turane.....	0	0	2	2	0	0
Philippine Islands: Manila.....	0	0	1	0	0	0
China:						
Canton.....	0	0	10	6	0	0
Amoy.....	0	0	18	0	0	0
Shanghai.....	0	0		23	0	0
Hong Kong.....	0	0	0	0	2	1
Macao.....	0	0	1	0	0	0

Telegraphic reports from the following maritime towns indicated that no case of plague, cholera, or smallpox was reported during the week:

## ASIA

*Aden Protectorate*.—Aden, Kamaran, Perim.  
*Arabia*.—Bahrein.  
*Persia*.—Bender-Abbas, Bushire, Lingah.  
*India*.—Karachi, Chittagong, Cochin, Tutloorin, Negapatam, Moulinein.  
*Portuguese India*.—Nova Goa.  
*Federated Malay States*.—Port Swettenham.  
*Straits Settlements*.—Penang.  
*Dutch East Indies*.—Batavia, Pontianak, Semarang, Cheribon, Balikpapan, Padang, Belawan-Deli, Tarakan, Palembang, Samarinda, Manado, Makassar.  
*Sarawak*.—Kuching.  
*British North Borneo*.—Sandakan, Jesselton, Kudat, Tawao.  
*Portuguese Timor*.—Dilly.  
*Philippine Islands*.—Iloilo, Jolo, Cebu, Zamboanga.  
*French Indo-China*.—Halphong.  
*China*.—Tientsin, Tsingtao.  
*Wei-hai-wei*.  
*Formosa*.—Keelung, Takao.  
*Chosen*.—Chemulpo, Fusan.  
*Manchuria*.—Yingkow, Antung, Harbin, Mukden, Changchun.  
*Kwantung*.—Port Arthur, Dairen.  
*Japan*.—Nagasaki, Yokohama, Niigata, Shimoda, Moji, Tsuruga, Kobe, Osaka, Hakodate.

## AUSTRALASIA AND OCEANIA

*Australia*.—Adelaide, Melbourne, Sydney, Brisbane, Rockhampton, Townville, Port Darwin, Broome, Fremantle, Carnarvon, Thursday Island,

## AUSTRALASIA AND OCEANIA—continued

Cairns, Port Moresby.  
*New Guinea*.—Port Moresby.  
*New Britain Mandated Territory*.—Rabaul and Kokopo.  
*New Zealand*.—Auckland, Wellington, Christchurch, Invercargill, Dunedin.  
*Western Samoa*.—Apia.  
*New Caledonia*.—Nouméa.  
*Fiji*.—Suva.  
*Hawaii*.—Honolulu.  
*Society Islands*.—Papeete.

## AFRICA

*Egypt*.—Alexandria, Port Said.  
*Anglo-Egyptian Sudan*.—Port Sudan, Suakin.  
*Eritrea*.—Massua.  
*French Somaliland*.—Djibouti.  
*British Somaliland*.—Berbera.  
*Italian Somaliland*.—Mogadiscio.  
*Kenya*.—Mombasa.  
*Zanzibar*.—Zanzibar.  
*Tanganyika*.—Dar-es-Salaam.  
*Seychelles*.—Victoria.  
*Portuguese East Africa*.—Mozambique, Beira, Lourenço-Marques.  
*Union of South Africa*.—East London, Port Elizabeth, Cape Town, Durban.  
*Reunion*.—Saint Denis.  
*Mauritius*.—Port Louis.  
*Madagascar*.—Majunga, Tamatave, Diégo-Suarez.

## AMERICA

*Panama*.—Colon, Panama.

Reports had not been received in time for publication from:

*Dutch East Indies*.—Sabang.  
*Union of Socialist Soviet Republics*.—Vladivostok.

Belated information:

Week ended August 20.—*Pondicherry* and *Karikal*, nil.

*Movement of infected ships*

*Kobe*.—The mail steamers *Buckeye State* and *Glenapp* arrived during the week ended September 3 from Shanghai infected with cholera.

*Hong Kong*.—The mail-steamer *Morea* arrived from Shanghai infected with cholera on September 2.

The coolie steamer *Kutsang* arrived on September 8 from Amoy infected with cholera.

*Singapore*.—The pilgrim ship *Armanestan* arrived September 6 from Jeddah infected with smallpox.

## ARGENTINA

*Plague—Entre Rios*.—During the week ended August 13, 1927, one case of plague was reported in Argentina, occurring in the interior of the Province of Entre Rios.

## CANADA

*Communicable diseases—Week ended September 10, 1927.*—The Canadian Ministry of Health reports cases of certain communicable diseases in six Provinces of Canada for the week ended September 10, 1927, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Manitoba	Saskatchewan	Alberta	Total
Influenza.....	2			1	3		6
Poliomyelitis.....						42	42
Smallpox.....					33	1	34
Typhoid fever.....	3	10	30	2	14	3	62

<sup>1</sup> These cases are chiefly about city of Edmonton, Alberta.

*Communicable diseases—Province of Ontario—August, 1927 (comparative).*—During the month of August, 1927, communicable diseases were reported in the Province of Ontario, Canada, as compared with occurrence during the corresponding period of the preceding year, as follows:

Disease	1927		1926	
	Cases	Deaths	Cases	Deaths
Cerebrospinal meningitis.....		5	6	2
Chancroid.....	3		1	
Chicken pox.....	169		136	
Diphtheria.....	175	9	158	13
Dysentery.....	1	1		
Erysipelas.....	3			
German measles.....	21		24	
Gonorrhoea.....	128		107	
Influenza.....	2	1		
Lethargic encephalitis.....		1		
Measles.....	205		320	
Mumps.....	82		2	
Pneumonia.....		75		67
Poliomyelitis.....	3		5	
Scarlet fever.....	123	1	106	
Septic sore throat.....	2			
Smallpox.....	69		17	
Syphilis.....	90		48	
Tetanus.....	1			
Tuberculosis.....	92	42	95	59
Typhoid fever.....	141	2	42	2
Whooping cough.....	297	3	256	8

*Smallpox.*—Smallpox was reported present in nine localities, the greatest number of cases being reported at Ottawa, viz, 38, and the lowest number, viz, 1 case, at Sarnia.

*Communicable diseases—Quebec—Week ended September 10, 1927.*—The bureau of health of the Province of Quebec reports cases of certain communicable diseases for the week ended September 10, 1927, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	2	Tuberculosis.....	19
Diphtheria.....	35	Typhoid fever.....	30
Measles.....	1	Whooping cough.....	12
Scarlet fever.....	34		

*Epidemic poliomyelitis—Alberta—August–September, 1927.*—Poliomyelitis in epidemic form has been reported in Alberta, Canada, as follows: *Calgary*—September 4 to 10, 1927, 4 cases, of which 1 case was stated to have been from a country district. *Edmonton*—One case reported in May, 1927; in July, 4 cases; in August, 51 cases; September 1 to 9, 14 cases; total for Edmonton, 70 cases. Under date of September 9, 1927, 22 cases were stated to exist in other localities in the Province of Alberta, mainly in the vicinity of Edmonton.

*Typhoid fever—Montreal—January 2–September 17, 1927.*—The following table gives the cases of typhoid fever and deaths from this disease reported at Montreal, Quebec, Canada, since January 1, 1927:

Week ended—	Cases	Deaths	Week ended—	Cases	Deaths
Jan. 8, 1927	3	1	May 21, 1927	770	26
Jan. 15, 1927	4	3	May 28, 1927	353	38
Jan. 22, 1927	1	2	June 4, 1927	229	37
Jan. 29, 1927	3	1	June 11, 1927	128	36
Feb. 5, 1927	1	0	June 18, 1927	86	—
Feb. 12, 1927	0	0	June 25, 1927	75	23
Feb. 19, 1927	1	2	July 2, 1927	66	21
Feb. 26, 1927	1	1	July 9, 1927	52	10
Mar. 5, 1927	9	1	July 16, 1927	39	4
Mar. 12, 1927	208	4	July 23, 1927	22	9
Mar. 19, 1927	353	14	July 30, 1927	23	10
Mar. 26, 1927	568	22	Aug. 6, 1927	16	5
Apr. 2, 1927	649	48	Aug. 13, 1927	20	5
Apr. 9, 1927	386	40	Aug. 20, 1927	14	4
Apr. 16, 1927	175	38	Aug. 27, 1927	8	3
Apr. 23, 1927	125	43	Sept. 3, 1927	27	—
Apr. 30, 1927	106	23	Sept. 10, 1927	17	—
May 7, 1927	106	19	Sept. 17, 1927	13	2
May 14, 1927	367	16			

### CZECHOSLOVAKIA

*Communicable diseases—July, 1927.*—During the month of July, 1927, communicable diseases were reported in the Republic of Czechoslovakia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax	3	—	Puerperal fever	41	16
Cerebrospinal meningitis	19	8	Scarlet fever	894	20
Diphtheria	335	20	Trachoma	263	—
Dysentery	47	3	Typhoid fever	614	32
Malaria	120	—	Typhus fever	6	—
Paratyphoid fever	11	—			

### GREECE

*Plague—Athens.*—A case of plague was reported at Athens, Greece, August 29, 1927.

## RUMANIA

*Poliomyelitis—Bucharest, city and Province—June–September, 1927.*—Epidemic poliomyelitis was reported present at Bucharest, Rumania, in June, 1927, and from that period to September 6, a total of 226 cases in Bucharest and 50 cases in the Province, with a mortality of 15–16 per cent, was reported. There were 12 cases reported in adults over 20 year of age.

## UNION OF SOUTH AFRICA

*Plague—Orange Free State—July 31–August 6, 1927.*—During the week ended August 6, 1927, a fatal case of plague was reported in Rouxville District, Orange Free State. The case occurred in a native and on a farm.

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

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

Reports Received During Week Ended September 30, 1927<sup>1</sup>

## CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Amoy.....	Aug. 7-13.....	5	2	
Shanghai.....	Aug. 7-20.....		13	In International Settlement and French Concession, Chinese and foreign.
Swatow.....	July 31-Aug. 6....	42		Aug. 7-20, 1927: Reported prevalent.
India.....				July 17-30, 1927: Cases, 23,526; deaths, 12,143.
Bombay.....	July 24-Aug. 6....	76	39	
Madras.....	Aug. 14-20.....	110	61	
Indo-China (French):				
Saigon.....	July 16-21.....	1		
Iraq:				
Basra.....	July 17-23.....	5	5	
Do.....	July 24-30.....	29	18	
Do.....	July 31-Aug. 6....	48	35	
Do.....	Aug. 7-13.....	125	108	
Do.....	Aug. 14-20.....	99	79	
Do.....	Aug. 21-27.....	47	19	
Persia:				
Abadan.....	July 24-30.....	122	103	
Do.....	July 31-Aug. 6....	66	56	
Do.....	Aug. 7-13.....	27	22	
Ahwaz.....	July 31-Aug. 6....	12	6	
Do.....	Aug. 7-13.....	8	7	
Minab.....	do.....		23	
Mohammerah.....	July 17-23.....			Present.
Do.....	July 24-30.....	52	37	
Do.....	July 31-Aug. 6....	34	26	
Do.....	Aug. 7-13.....	16	12	
Do.....	Aug. 14-20.....	69	60	
Do.....	Aug. 21-27.....	23	20	
Siam.....				July 24-30, 1927: Cases, 26; deaths, 20. Apr. 1-July 30, 1927: Cases, 626; deaths, 430.
Bangkok.....	July 24-30.....		1	

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



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

## Reports Received During Week Ended September 30, 1927—Continued

### PLAGUE

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers.....	Aug. 21-31.....	1		
Oran.....	do.....	4	3	
Argentina:				
Entre Rios.....	Aug. 7-13.....	1		
British East Africa:				
Konya.....				
Mombasa.....	July 24-30.....	1	1	Imported from Fort Hall.
Tanganyika Territory.....	July 24-Aug. 6.....		10	
China:				
Tientsin.....	Aug. 14-20.....	2		
Greece:				
Athens.....	Aug. 29.....	1		
Patras.....	Aug. 31-Sept. 4.....	2		
India:				
Bombay.....	July 24-Aug. 3.....	7	7	
Madras Presidency.....	July 24-30.....	68	27	
Rangoon.....	July 31-Aug. 6.....	5	5	
Java:				
East Java and Madura— Surabaya.....	July 17-23.....	6	6	June 19-25, 1927: Cases, 4; deaths 3. Out of date.
Senegal:				
Baol District.....	Aug. 22-28.....	23	13	In two Cantons.
Cayor District.....	do.....	227	166	Greatest prevalence, Tivaouane District.
Dakar.....	do.....	10	7	
Rufisque.....	do.....	3	3	
Siam.....				Apr. 1-July 30, 1927: Cases, 10; deaths, 7.
Union of South Africa:				
Orange Free State— Rouxville District.....	July 31-Aug. 6.....	1	1	Native. On farm.
On Vessels:				
S. S. Capricorn.....	Aug. 23.....	3	1	At Duala, French Cameroons, from Nigeria.
S. S. Elicano.....	Aug. 19.....	1		At Piraeus, Greece, from Constantza, Rumania, Aug. 15, 1927 at Port Said Aug. 22, 1927.
S. S. Madonna.....	Aug. 24.....	1		At Dakar, Senegal; from ports south; destination Marseille, France. In European passenger.

### SMALLPOX

British South Africa:				
Northern Rhodesia.....	Aug. 8-12.....	3		
Canada:				
Alberta.....	Sept. 4-10.....	1		Cases, 34.
British Columbia— Vancouver.....	Aug. 29-Sept. 4.....	2		
Ontario:				
Ottawa.....	August, 1927.....	38		Aug. 1-31, 1927: Cases, 69; corresponding period, year 1926, 17 cases.
Do.....	Sept. 10-17.....	10		
Saskatchewan.....	Sept. 4-10.....	33		
Moose Jaw.....	do.....	9		
China:				
Foochow.....	Aug. 7-13.....			Present.
Hong Kong.....	do.....	1	1	
Great Britain:				
England and Wales.....	Aug. 21-Sept. 3.....	277		
Leeds.....	Aug. 23-Sept. 3.....	3		
Scotland— Dundee.....	do.....	1		
Greece:				
Saloniki.....	Aug. 1-15.....		2	
India:				
Bombay.....	July 24-Aug. 6.....	23	13	July 17-30, 1927: Cases, 5,338; deaths, 1,411.
Rangoon.....	July 31-Aug. 6.....	5	1	
Indo-China (French):				
Saigon.....	July 15-21.....	1		

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued****Reports Received During Week Ended September 30, 1927—Continued****SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
Poland				July 18-Aug. 6, 1927: Cases, 3. July 24-30, 1927: Cases, 4; deaths, 2. Apr. 1-July 30, 1927: Cases, 172; deaths, 42.
Siam				
Syria: Damascus	Aug. 11-20	1		
Union of South Africa: Cape Province— Mount Ayliffe District.	July 31-Aug. 6			Outbreaks.

**TYPHUS FEVER**

Algeria: Algiers	Aug. 21-31	2		
Oran	do.	1		
Chosen: Chemulpo	July 1-31	1		
Gensan	do.	2	1	
Seoul	do.	2		
Czechoslovakia	do.	6		
Egypt: Cairo	Apr. 23-May 20	7	4	
Greece: Athens	July 1-31	1		
Mexico: Mexico City	Aug. 28-Sept. 3	9		Including municipalities in Federal District.
Poland				July 24-Aug. 6, 1927: Cases, 36; deaths, 4.
Union of South Africa: Cape Province				July 31-Aug. 6, 1927: Outbreaks in four districts.
Natal				July 31-Aug. 6, 1927: Outbreaks in one district.
Transvaal— Johannesburg	Aug. 14-20	1		

**YELLOW FEVER**

Senegal: Dakar	Sept. 17			Present.
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**Reports Received from June 25 to September 23, 1927<sup>1</sup>****CHOLERA**

Place	Date	Cases	Deaths	Remarks
China: Amoy	May 22-Aug. 6	6	1	
Canton	May 1-July 23	16	7	
Foochow	July 24-30			Present.
Hong Kong	July 17-23	2	2	
Kulangsu	June 21	1		
Shanghai	June 19-25	2		
Do	July 31-Aug. 6		3	In international settlement and French concession.
Swatow	May 15-July 30	96	13	
India: Apr. 17-July 16				Cases, 102,184; deaths, 56,008.
Bombay	May 8-July 23	27	11	
Calcutta	May 8-Aug. 6	580	355	
Karachi	May 29-June 4	1	1	
Madras	June 19-Aug. 13	568	272	
Rangoon	May 8-July 30	17	13	
India, French Settlements in	Mar. 30-June 30	15	8	

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

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

## Reports Received from June 25 to September 23, 1927—Continued

### CHOLERA—Continued

Place	Date	Cases	Deaths	Remarks
Indo-China (French).....	Apr. 1-July 10.....			Cases, 11,145.
Annam.....	do.....	1,467		
Cambodge.....	do.....	235		
Cochin-China.....	do.....	1,354		
Saigon.....	June 4-July 14.....	9	4	
Tonkin.....	Apr. 1-June 30.....	8,069		
Iraq:				
Baghdad.....	July 24-30.....	29	18	
Basra.....	July 25-Aug. 13.....	172	140	
Japan:				
Yokohama.....	July 31-Aug. 6.....	1	1	
Persia:				
Abadan.....	July 19-31.....		166	
Mohammerah.....	do.....		61	
Nasseri.....	do.....		10	
Philippine Islands:				
Manila.....	July 17-23.....	1		
Bulacan Province.....	June 7-July 8.....	3	2	
Leyte Province—				
Barugo.....	June 29.....	1	1	
Carigara.....	June 23.....	1	1	Final diagnos's not received.
Palo.....	May 18.....	1		
Siam.....	May 1-July 23.....			Cases, 226; deaths, 130.
Bangkok.....	do.....	43	12	
On vessel:				
S. S. Adrastus.....	Reported Aug. 6.....	1	1	At Yokohama, Japan.
S. S. War Mehtar (oil tanker).....	Aug. 4.....	1	1	At Safageha, Egypt.

### PLAGUE

Argentina.....	Jan. 1-Aug. 2.....			Cases, 80; deaths, 44.
Buenos Aires.....	Apr. 10-May 7.....	4	3	
Cordoba.....	Jan. 11-Aug. 6.....	52	29	
Corrientes.....	June 1.....	1	1	
Entre Rios.....	Mar. 29-Aug. 2.....	7	1	
Santa Fe.....	Apr. 28-May 16.....	4	3	
Territory—				
Chaco—				
Barranqueras.....	May 29.....	2	2	
Formosa.....	June 25.....	3	2	
Pampa.....	July 27-Aug. 2.....	4		
Rio Negro.....	Aug. 6.....	1		
City—				
Merou.....	Reported July 14.....			Present.
Rosario.....	May 7.....	1	1	
Santa Fe.....	May 16.....	4	2	
Azores:				
Rebeira Grande.....	June 12-18.....			9 miles from port.
St. Michaels Island.....	May 15-July 30.....	3		
British East Africa:				
Kenya.....	Apr. 24-July 2.....	66	14	
Nairobi.....	May 23-28.....	6		
Tanganyika.....	Mar. 29-May 28.....		57	
Uganda.....	Jan. 1-Feb. 28.....	138	121	
Do.....	Mar. 27-June 18.....	366	360	
Canary Islands:				
Laguna district—				
Tejina.....	June 17.....	1		
Ceylon:				
Colombo.....	May 1-July 2.....	17	11	Plague rats, 4.
China:				
Amoy.....	July 3-23.....			Present in surrounding country.
Ecuador:				
Guayaquil.....	June 1-July 31.....			Rats taken, 48,290; found infected, 34.
Egypt.....	(May 1-July 8.....			Cases, 7; deaths, 2
Alexandria.....	Aug. 6-12.....			Cases, 5.
Biba.....	June 4-10.....	1		
Beit-Souf.....	do.....	1		At Nama.
Dakhalia.....	June 4-July 13.....	5	2	
Minia.....	June 24-July 9.....	6	1	
Port Said.....	Aug. 8-9.....	4		
Tanta district.....	June 24-July 21.....	4	1	
	June 4-10.....	1		

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

**Reports Received from June 25 to September 23, 1927—Continued**

**PLAGUE—Continued**

Place	Date	Cases	Deaths	Remarks
Greece	May 1-June 30	4	3	
Athens	June 1-Aug. 6	2		Including Piræus.
Mytilene	Aug. 9	1		
Patras	May 30-Aug. 6	6	1	
Hawaii Territory:				
Hamakua	July 15			1 plague rodent.
Honokaa	May 17-23	2	2	
Kukuihaele	Aug. 12-17	1	1	Plague rodent.
Paauiio	July 26-Aug. 1		4	
India	Apr. 17-July 16			Cases, 21,814; deaths, 8,324.
Bombay	May 8-July 23	80	67	
Madras	May 1-July 23	353	167	
Rangoon	May 8-July 30	48	44	
Indo-China (French)	Apr. 1-July 10	32		
Kwang-Chow-Wan	May 21-July 10	68		
Iraq:				
Baghdad	Apr. 8-May 28	12	1	
Java:				
Batavia	May 1-July 23	182	183	Province.
East Java and Madura	May 22-July 16	28	27	
Paseroean Residency	May 9			Outbreak reported at Nagdiwono.
Surabaya	Apr. 17-May 7	24	24	Mar. 16-Apr. 30, 1927: Cases, 266; deaths, 135.
Madagascar:				
Province—				
Ambositra	Mar. 16-July 15	94	87	
Antsirabe	Mar. 16-May 15	8	8	
Miarinarivo (Itasy)	Mar. 16-July 15	65	59	
Moramanga	May 16-July 15	24	23	
Tananarivo	Mar. 16-July 15	221	194	
Tananarivo Town	Mar. 16-June 30	22	20	
Nigeria	Mar. 1-May 31	228	177	
Peru	Apr.-May 31			Cases, 22; deaths, 8.
Departments—				
Ica	Apr. 1-30	1		
Lambayeque	do.	1		
Elbertad	Apr. 1-May 31	7	4	
Lima	do.	13	4	
Lima City	Apr. 1-30	5	1	
Senegal	May 23-Aug. 21			Cases, 656; deaths, 415.
Baol	June 2-July 31	45	23	
Cayor Frontier	July 4-31	126	74	
Dakar	June 20-Aug. 21	116	75	
Facel	July 6	17	8	
Guindel	June 20-26	11	2	
M'Bour	July 6-10	26	23	
Medina	June 13-19	2	2	
Pout	July 4-10	1		
Rufisque	May 23-Aug. 21	204	162	
Thies district	May 23-July 30	27	9	
Tivaouane	June 2-July 17	50	32	
Siam	Apr. 1-July 23			Cases, 10; deaths, 7.
Bangkok	May 8-June 11	2	1	
Syria:				
Beirut	June 11-July 10	3		
Tunisia	Apr. 21-July 10	144		
Tunis	July 25-Aug. 1	1		
Turkey:				
Constantinople	May 13-19	1		
Union of South Africa:				
Cape Province—				
Maraisburg district	May 1-14	2	2	Native.
Orange Free State—				
Edenburg district	July 17-26	3	3	Natives; on farm.
Rouxville district	July 24-30	1	1	
On vessel:				
S. S. Avoroff	June 24-30	1		On Greek warship at port of Athens.
S. S. Ransholm	Aug. 5	3		At Gavle, Sweden, from Rufisque, Senegal. Originally reported in quarantine at Gavle in July.

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

## Reports Received from June 25 to September 23, 1927—Continued

### SMALLPOX

Place	Date	Cases	Deaths	Remarks
Algeria	Apr. 21-July 10			Cases, 648.
Algiers	May 11-June 30	8		
Oran	May 21-Aug. 10	47		
Arabia:				
Aden	July 17-Aug. 1	2	1	
Brazil:				
Porto Alegre	July 1-31	5		
Rio de Janeiro	May 22-Aug. 20	12	8	
British East Africa:				
Kenya	Apr. 24-May 14	7	14	
Tanganyika	Mar. 29-June 18	2	22	
Zanzibar	Apr. 1-May 31	19	7	
British South Africa:				
Northern Rhodesia	Apr. 30-Aug. 5	108	2	
Canada	June 5-Sept. 3			Cases, 413.
Alberta	June 12-Sept. 3			Cases, 96.
Calgary	June 12-Aug. 27	9		
British Columbia—				
Vancouver	May 23-29	2		
Manitoba	June 5-Sept. 3			Cases, 31.
Winnipeg	June 12-Aug. 27	17		
Ontario	June 5-Aug. 27			Cases, 177.
Ottawa	June 12-Sept. 10	122		
Sarnia	Aug. 7-13	1		
Toronto	June 19-July 23	9		
Quebec	June 19-Aug. 27	15		
Saskatchewan	June 12-Sept. 3			Cases, 71.
Moose Jaw	Aug. 14-20	5		
Regina	July 17-Aug. 27	10		
Ceylon	May 1-7			Cases, 3; deaths, 1.
Colombo	July 31-Aug. 6	1	1	
China:				
Amoy	May 8-28	1		
Do	July 3-16			Present in surrounding country.
Antung	July 4-31	3		
Cheefoo	May 8-14			Present.
Roohow	May 8-July 16			Do.
Hong Kong	May 8-July 30	19	18	
Manchuria—				
Anshan	May 22-28	1		
Changehun	May 15-July 30	8		
Dairen	May 2-July 3	10	5	
Fushun	May 15-July 30	10		
Harbin	June 13-July 10	4		
Kai-Yuan	July 3-9	2		
Mukden	May 22-July 30	6		
Pensihu	July 3-9	1		
Ssuningkai	May 8-July 9	3		
Tientsin	May 8-July 30	18		
Chosen	Feb. 1-May 31			Cases, 451; deaths, 195.
Chinnampo	Apr. 1-May 31	2		
Fusan	Apr. 1-30	1		
Gensan	May 1-31	1		
Seishin	Apr. 1-30	1		
Curacao	May 29-June 4	1		Alastrim.
Ecuador:				
Guayaquil	June 1-30	2		
Egypt	May 7-July 29			Cases, 21; deaths, 3.
Alexandria	May 21-June 17	4	1	
Cairo	Jan. 22-Apr. 15	14	3	
France	Apr. 1-June 30			Cases, 178.
Lille	July 24-30	1		
Paris	May 21-July 31	14	2	
Gold Coast	Mar. 1-May 31	33	7	
Great Britain:				
England and Wales	May 22-Aug. 20			Cases, 2,591.
Birmingham	Aug. 14-29	1		
Bradford	May 29-June 11	2		
Cardiff	June 19-July 2	4		
Leeds	July 17-Aug. 27	10		
Liverpool	July 17-30	1		
London	May 15-June 18	2		
Newcastle upon Tyne	June 12-Aug. 13	5		
Sheffield	June 12-Aug. 6	25		
Stoke-on-Trent	Aug. 21-27	1		
Scotland—				
Dundee	May 29-July 2	5		

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

## Reports Received from June 25 to September 23, 1927—Continued

### SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Greece	June 1-30	14		
Saloniki	July 12-18		1	
Guatemala:				
Guatemala City	June 1-30		9	
Guinea (French)	June 4-10	9		
India	Apr. 17-July 16			Cases, 63,349; deaths, 16,505.
Bombay	May 28-July 23	190	131	
Calcutta	May 8-Aug. 6	374	280	
Karachi	May 15-Aug. 6	10	5	
Madras	May 23-Aug. 13	22	6	
Rangoon	May 8-July 30	169	53	
India, French Settlements in	Mar. 20-June 18	174	111	
Indo-China (French)	Mar. 21-July 20			Cases, 314.
Saigon	May 14-20	1	1	
Iraq:				
Baghdad	Apr. 10-16	2		
Basra	Apr. 10-July 16	2	1	
Italy	Apr. 10-May 21	13		
Rome	June 13-19	1		
Jamaica	May 29-Aug. 27	30		Reported as alastrim. Cases, 19.
Japan	Apr. 3-May 7			
Nagasaki City	June 20-Aug. 14	26	7	
Taiwan Island	May 21-31	1		
Java:				
Batavia	May 22-July 23	3		
East Java and Madura	Apr. 24-July 9	12		
Latvia	Apr. 1-30	1		
Mexico	Mar. 1-31			Deaths, 162.
Durango	June 1-30		1	
La Oroya	Apr. 1-June 30			Present.
Monterrey	July 1-31	6	4	
San Luis Potosi	May 29-Aug. 13		11	
Tampico	June 1-July 31	1	2	
Torreón	Aug. 7-13		1	
Morocco	Apr. 1-June 30	154		
Netherlands India:				
Borneo				
Holoe Soengei	Apr. 21			Epidemic in two localities.
Pasir Residency	Apr. 30-May 6			
Samarinda Residency	May 21-27			Epidemic outbreak.
Nigeria	Mar. 1-May 31	2,077	513	Do.
Paraguay:				
Asuncion	July 10-23		2	
Persia:				
Teheran	Feb. 21-May 22		8	
Poland	Apr. 10-July 9	17	2	
Portugal:				
Lisbon	May 29-Aug. 6	17	1	
Senegal:				
Medina	July 4-10	7		
Siam	Apr. 1-July 23			Cases, 168; deaths, 40.
Bangkok	May 1-July 23	13	7	
Spain:				
Valencia	May 29-June 4	2		
Straits Settlements	June 12-18			Cases, 3.
Singapore	Apr. 1-June 18	7	2	
Sumatra:				
Medan	June 5-11	2		
Switzerland:				
Berne	June 26-July 2	1		
Tunisia	Apr. 1-June 10			Cases, 10.
Tunis	June 1-10	1		
Union of South Africa:				
Cape Province	July 17-23			Outbreaks. Do. Do. Do.
Elliott district	May 11-June 10			
Idutywa district	July 3-9			
Kalanga district	May 11-June 10			
Transvaal—				
Barberton district	May 1-7			Do.
Venezuela:				
Maracaibo	July 12-18		1	

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

## Reports Received from June 25 to September 23, 1927—Continued

### TYPHUS FEVER

Place	Date	Cases	Deaths	Remarks
Algeria.....	Apr. 21-July 20.....			Cases, 399; deaths, 39.
Algiers.....	May 11-July 31.....	26		
Oran.....	May 21-Aug. 10.....	33		
Bulgaria.....	Mar. 1-June 20.....			Cases, 206; deaths, 18.
Sofia.....	June 4-Aug. 5.....	2		
Chile:				
Antofagasta.....	Apr. 16-May 31.....	1		
Concepcion.....	May 29-June 4.....		1	
La Calera.....	Apr. 16-May 31.....	1		
Ligua.....	Mar. 16-31.....	2		
Puerto Montt.....	Apr. 16-May 31.....	1		
Santiago.....	do.....	5	1	
Talcahuano.....	July 19-16.....		1	
Valparaiso.....	Apr. 16-Aug. 6.....	4	1	
China:				
Manchuria—				
Harbin.....	July 25-31.....	3		
Mukden.....	May 29-June 4.....	1		
Tientsin.....	July 10-16.....	1		
Chosen.....	Feb. 1-May 31.....			Cases, 512; deaths, 42.
Chemulpo.....	May 1-June 30.....	15	1	
Gensan.....	do.....	2		
Seoul.....	Apr. 1-June 30.....	30	2	
Czechoslovakia.....	do.....			Cases, 49.
Egypt.....	May 29-July 29.....			Cases, 120; deaths, 18.
Alexandria.....	May 21-Aug. 5.....	13	5	
Cairo.....	Jan. 15-Apr. 22.....	30	8	
Estonia.....	Apr. 1-June 30.....			Cases, 5.
Greece.....	June 1-30.....	2		
Athens.....	do.....		9	
Iraq:				
Baghdad.....	Apr. 24-30.....	1		
Irish Free State:				
Cork County.....	July 3-9.....	1		In urban district.
Latvia.....	Apr. 1-June 30.....	26		
Lithuania.....	Feb. 1-June 30.....	303	37	
Mexico:				
Mexico City.....	May 29-Aug. 7.....	40		Deaths, 88.
San Luis Potosi.....	July 31-Aug. 6.....		1	Including municipalities in Federal district.
Morocco.....	Apr. 1-July 10.....	815		
Palestine:				
Haifa.....	do.....	6		Cases, 16.
Jaffa.....	Aug. 2-15.....	2		
Jerusalem.....	June 28-Aug. 15.....	3		
Mahmeit.....	May 17-23.....	1		In Safad district.
Nazareth.....	July 19-25.....	1		
Safad.....	May 17-Aug. 8.....	10		
Peru:				
Arequipa.....	Apr. 1-30.....		1	
Poland.....	Apr. 10-July 9.....	1,009	92	
Portugal:				
Lisbon.....	May 29-June 4.....	1		
Oporto.....	Aug. 20-27.....	1		
Rumania.....	Apr. 3-June 25.....	923	61	
Spain:				
Seville.....	Aug. 19-25.....		2	
Tunisia.....	Apr. 22-July 20.....			Cases, 158.
Tunis.....	July 5-Aug. 21.....	2		
Turkey:				
Constantinople.....	May 13-19.....		2	
Union of South Africa.....	Apr. 1-30.....			Cases, 55; deaths, 8, native. In
Cape Province.....	Apr. 1-July 23.....	42	5	Europeans, cases, 2.
Albany district.....	June 5-11.....			Outbreaks.
East London.....	May 22-28.....	1		Do.
Glen Gray district.....	May 1-7.....			Do.
Kentani district.....	June 26-July 2.....			Do.
Qumbu district.....	May 1-7.....			Do.
Umzimkulu district.....	June 26-July 2.....			Do.
Natal.....	Apr. 1-July 9.....	7	3	
Impendhle district.....	June 5-11.....			Do.
Orange Free State.....	Apr. 1-July 23.....	5		
Transvaal.....	Apr. 1-30.....	1		
Johannesburg.....	July 3-16.....	18	5	
Yugoslavia.....	May 1-July 31.....			Cases, 15; deaths, 4.

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

**Reports Received from June 25 to September 23, 1927—Continued**

**YELLOW FEVER**

Place	Date	Cases	Deaths	Remarks
Ashanti:				
Obuasi	Aug. 6	1	1	
Dahomey (West Africa):				
Porto Novo	July 1	1	1	In Syrian woman.
Gold Coast	Apr. 1-May 31	45	20	
Do	Aug. 4	2		
Ivory Coast	July 29	1	1	
Liberia:				
Monrovia	May 29-July 8	4	5	
Senegal	May 27-July 31			Cases, 5; deaths, 2.
Dakar	July 9	1		
Do	Aug. 8	2	2	
Khombole	Aug. 1-14	3		
M'Bour	May 27-June 19	5	5	
Ouakam	June 2-Aug. 14	4	2	
St. Louis	Aug. 1-14	2	2	
Thies	July 10	1	1	In European.
Tivaouane	May 27-June 8	5	5	
Togoland:				
Meatsa	Aug. 15-21	1	1	