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Reinoculation as a Criterion of Cure of Experimental Syphilis, with Reference to Arsphenamine, Neoarsphenamine, and Sulpharsphenamine

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In the evaluation of the therapeutic potency of antisyphilitic drugs there is no matter which has presented so many difficulties and which is of such fundamental importance as the question of whether or not a given agent under certain conditions is capable of curing an infected animal. The term cure is here used as meaning the destruction of all *Treponemata* in the infected host. We believe that this definition of cure is the only one satisfactory from the standpoint of the complete eradication of the infection. Less rigid requirements, such as disappearance of the organisms from the primary lesion, healing of the lesion, and freedom from recurrence of such lesions during a prolonged period of observation offer no assurance of the absence of a latent infection.

Two methods have been proposed to determine whether an animal has been cured or not. The older method, adopted by Kuznitsky (1911) and Kolle (1922), is based on the result of reinoculation with *T. pallidum* some time after treatment. If reinoculation is successful, as shown by the appearance of a typical primary lesion containing spirochetes, the animal is supposed to have been cured of the first infection; if unsuccessful, it is thought that infection still existed. By means of this method, Kolle has arrived at the conclusion that a biologic cure of syphilis in the rabbit by means of repeated large doses of arsphenamines is possible in a considerable percentage of animals when treatment is given within 45 days after the primary inoculation. If treatment is instituted at a later stage, a cure can not be obtained, i. e.; the reinoculation is negative.

The second method was introduced by Pearce and Brown (1922) and is essentially based on the fact that syphilitic infection in the rabbit appears to involve, with great regularity, infection of the lymph glands. If the popliteal nodes of a treated animal are extirpated, macerated, and injected into the scrotum of normal rabbits, the occurrence of chancres in the latter is taken as indication of

failure to cure, and, vice versa, if chancres do not develop, as evidence of cure of the donor. This method was used for the evaluation of the curative action of arsphenamine in rabbit syphilis by Nichols and Walker (1923) and Chesney and Kemp (1923), and of neoarsphenamine and sulpharsphenamine by Voegtlin, Armstrong, and Dyer (1923). The results of these investigators suggest that it is possible to cure some rabbits with these remedies, even if treatment is postponed for 60 days or 90 days after infection. These results, therefore, are in obvious conflict with the conclusions reached by Kolle.

The work reported here was undertaken for the purpose of testing the validity of the reinoculation method. It is obvious that if Kolle's interpretations were correct, the eradication of syphilitic infection in the rabbit (and, presumably, in man) would be a more or less hopeless proposition, except in the very early stages of the disease. We may state at once that our experimental facts fully confirm similar results obtained by Kolle, but we are inclined to interpret these facts in a different manner.

EXPERIMENTAL

A series of 36 rabbits was inoculated in August, 1923, with a testicular emulsion of the Nichols strain of *T. pallidum.*[1] The animals were examined at frequent intervals in order to note the time of appearance and progress of scrotal lesions. In the following tables the size of the chancre at the time of treatment is indicated as large (1½ cm. or more), medium (¾ to 1¼ cm.), and small (less than ¾ cm.). The lesions thus produced were examined for the presence of motile *Treponemata* by means of dark-field examination. Of the 36 rabbits, all but one animal developed typical chancres. Spirochetes were present in all but three animals, which were excluded from further consideration. The remaining animals received, two months after inoculation, a *single* intravenous injection of either arsphenamine, neoarsphenamine, or sulpharsphenamine. A dose of 5 c. c. or 10 c. c. 1/100 arsenic equivalent solutions per kilogram body weight was given. This means that the animals receiving the 5 c. c. (or 10 c. c., respectively) dose were injected with the same amount of arsenic in the form of arsphenamine, neoarsphenamine, or sulpharsphenamine. The trypanocidal action and the toxicity of the three drugs in albino rats were determined by the methods which were devised in this laboratory.

[1] This strain was also used by Nichols and Walker, and Chesney and Kemp, in their work referred to above.

Two and one-half months after treatment, at a time when all chancres had disappeared, the animals were reinoculated with a testicular emulsion of the same strain of *T. pallidum* used for the primary inoculation. In nearly every case the reinoculation was made into the scrotum of the opposite side to that of the primary infection. In order to test the virulence of the suspension used for reinoculation, three normal rabbits were also injected. Two of these developed typical chancres, and the third animal died from an intercurrent infection before a sufficient time had elapsed for the production of a lesion. For the purpose of making the results obtained with the first reinoculation more conclusive, a second reinoculation was made in 13 of the animals (Table 1). The testicular emulsion employed for this second reinoculation was also used to infect 26 normal rabbits, all of which developed typical chancres.

The results obtained with the reinoculation with *T. pallidum* made it of interest to determine whether these animals would develop primary lesions if inoculated with *T. pertenue*. The strain used was obtained through the kindness of Major Nichols, and was originally obtained from a patient in Panama and had been kept in rabbits for some time. Of 14 normal control rabbits inoculated into the scrotum with this same testicular suspension, 10 animals developed chancres. The percentage of positive takes in normal rabbits with the yaws strain was therefore not as high as with the strain of *T. pallidum*, but sufficient to justify the drawing of definite conclusions. Seven weeks after the last inoculation, blood samples were withdrawn and a Wassermann test and Sigma test (Dryer-Ward) made thereon. We are indebted to Surgeon Armstrong and Miss Parrott for these results. The value of these serum tests in work with syphilis in the rabbit will be discussed in a subsequent publication.

The results obtained with the reinoculation made it of interest to determine whether or not the animals showed an infection of the lymph glands. For this purpose the popliteal glands of four rabbits were extirpated under aseptic precautions 8½ months after treatment, and the material thus obtained from each rabbit was inoculated into the scrotum of two normal rabbits. (In Table 2, + + indicates that both animals inoculated with the lymph gland maceration developed typical chancres.)

TABLE 1.—*Effect of treatment and result of reinoculation with T. pallidum, followed by inoculation with T. pertenue*

Time between primary inoculation and treatment, 2 months.
Time between treatment and reinoculation, 2½ months.
Time between reinoculation and inoculation with *T. pertenue*, 2 months 3 weeks.
Serum tests made 7 weeks after last inoculation.

No. of animal	Size of chancre before treatment	Chancre healed, number of days after treatment	Result of reinoculation	Result of inoculation with *T. pertenue*	Wassermann (cholesterol)	Sigma units
5 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (11.8 MG.) ARSPHENAMINE						
59	Medium	35			+++	50
10 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (23 MG.) ARSPHENAMINE						
68	Medium	71			++	70
5 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (18 MG.) NEOARSPHENAMINE						
57	Medium	13				0
61	Small	25				16
64	Medium	30				86
65	Large	30			+++	86
77	Medium	25				11
10 C. C 1/100 ARSENIC EQUIVALENT SOLUTION (36 MG.) NEOARSPHENAMINE						
60	Large	51				14
69	Medium	25				8
5 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (18 MG.) SULPHARSPHENAMINE						
76	Small	13				0
85	Small	13				5
94	Small	25				14
10 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (36 MG.) SULPHARSPHENAMINE						
100	Medium	25			+	32

TABLE 2.—*Effect of treatment and result of two reinoculations with T. pallidum*

Time between primary inoculation and treatment, 2 months.
Time between treatment and first reinoculation, 2½ months.
Time between first and second reinoculations, 3 months 10 days.
Serum tests made 7 weeks after last inoculation.
Lymph gland transfer 8½ months after treatment.

No. of animal	Size of chancre before treatment	Chancre healed, number of days after treatment	Result of reinoculations	Wassermann (cholesterol)	Sigma units	Result of lymph gland transfer
5 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (11.8 MG.) ARSPHENAMINE						
73	Medium	50			11	++
10 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (23 MG.) ARSPHENAMINE						
72	Large	25			100	++
10 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (36 MG.) NEOARSPHENAMINE						
95	Medium	50			33	
5 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (18 MG.) SULPHARSPHENAMINE						
96	Induration only spir.+	13			30	++
10 C. C. 1/100 ARSENIC EQUIVALENT SOLUTION (36 MG.) SULPHARSPHENAMINE						
81	Small	25			43	++
82	Large	50			0	

TABLE 3.—*Toxicity and trypanocidal action of drugs in albino rats*

(Doses expressed as number of c. c. 1/100 arsenic equivalent solution per kilogram body weight. Intravenous injections)

Drug	Minimum effective dose (M E D)	Minimum lethal dose (M L D)	$\frac{\text{M L D}}{\text{M E D}}$
	c. c.	*c. c.*	
Arsphenamine	3.0	76.6	25.5
Neoarsphenamine	5.0	97.5	19.5
Sulpharsphenamine	7.5	122.0	16.2

DISCUSSION OF RESULTS

Disappearance of organisms from lesions and healing of chancres as result of treatment.—Dark-field examination of serum obtained from the lesions four days after treatment showed that the spirochetes had disappeared in every case. The time required for the healing of the lesions varied considerably. The healing of lesions under treatment with sulpharsphenamine was at least as rapid as with the other drugs.

No clinical relapse was observed in any case during 2½ months after treatment. As will be noted from the data of Table 3, it so happened that the particular lot of sulpharsphenamine tested as to its trypanocidal action in rats was about half as effective as arsphenamine and less effective than the particular lot of neoarsphenamine. Previous work has shown that arsphenamine of various manufacturers does not show any appreciable differences in trypanocidal action, whereas various commercial neoarsphenamines and sulpharsphenamines reveal considerable variation in trypanocidal action. The present experimental data therefore suggest that the therapeutic potency of sulpharsphenamine, as judged by the healing of syphilitic lesions and freedom from clinical relapse, is at least as good as that of arsphenamine, in spite of the fact that the trypanocidal potency of the former drug is less than that of arsphenamine. These observations are in agreement with the conclusions of Stokes and Behn on the relative therapeutic action of the two drugs in clinical cases.

The difference in the trypanocidal and spirocheticidal efficiency of arsphenamine and sulpharsphenamine clearly shows that from an experimental standpoint the final therapeutic potency of antisyphilitic drugs should be established on syphilitic rabbits, as was pointed out in previous publications from this laboratory. However, this limitation of the value of the trypanocidal test should not be construed as meaning that the trypanocidal test is of no value whatsoever. On the contrary, our trypanocidal test is of great usefulness in the elaboration of new antisyphilitic arsenicals, as, in a general way, high trypanocidal power of an arsenical indicates also a high spirocheticidal power and, vice versa, arsenicals which possess a low trypanocidal power are, as a rule, also poor spirocheticides. A further important use to which the trypanocidal test has been put is the control of different lots of manufacture of the *same* arsenical. By means of this test it is possible, for instance, to eliminate the great fluctuations in therapeutic efficiency of commercial neoarsphenamine. (See Voegtlin and Miller, Public Health Reports, 1922, XXXVII, 1627, and Dale and White, The Lancet, 1922, CCII, 779.) It is hardly necessary to point out that the extremely slow and expensive spirocheticidal test in rabbit syphilis is not at all adapted for this purpose.

Results of reinoculation with T. pallidum.—The data compiled in Tables 1 and 2 include 19 animals in which the conditions were above criticism for the purpose of the work. The remaining 14 rabbits died either before or after reinoculation (at a time when the results of reinoculation could not be considered conclusive on account of insufficient time elapsing between reinoculation and death). The data in Tables 1 and 2, however, clearly indicate that, in our series of treated animals, reinoculation, even if repeated, yields consistently negative results.

These results are therefore in harmony with those obtained by Kolle, and indicate that, on reinoculation, it is not possible to produce typical chancres in rabbits when 2½ months intervene between primary infection and treatment. It is significant that the lymph gland transfer from four treated animals after two unsuccessful reinoculations gave positive results, clearly indicating the presence of syphilitic infection in these treated animals. This conclusion is furthermore strengthened by positive Wassermann and Sigma tests, which were made seven weeks after the last inoculation. Only three of the animals yielded negative serum tests. The question is whether this plain evidence of syphilitic infection after reinoculation is proof for incomplete cure of the primary infection or whether it may be considered as evidence indicating that the primary infection was actually cured and that reinfection occurred without the production of a local lesion at the site of reinoculation.

First infection not cured?—It is generally conceded that, without any treatment, syphilitic infection in the rabbit persists for many months, probably until the death of the animal. There is also general agreement that reinoculation in such animals fails to produce chancres at the site of reinoculation, after the appearance of the primary chancre. If, on the other hand, as Nichols (1911) and Kolle (1922) have shown, reinoculation is performed within 40 days, both inoculations produce chancres. In other words, persistent syphilitic infection, after a certain lapse of time produces a condition of the scrotum which prevents the development of another chancre on reinoculation. If, therefore, it were permissible, without further reservations, to apply these deductions to animals treated after a considerable period following the primary inoculation, the results obtained by Kolle and by us would indicate that none of our animals had been cured.

First infection cured?—There is a possibility, however, that the animals were cured of their first infection; but on account of the long time intervening between primary inoculation and treatment, the tissues may have acquired a resistance which prevented the development of a chancre at the site of reinoculation, but which did not prevent the establishment of a latent infection in the lymph glands.

That such an explanation may be correct is shown by the work of Chesney and Kemp (1924), who found that 10 rabbits infected with the Nichols strain and treated 127 days afterward with arsphenamine were cured as established by lymph node transfer and yet were resistant to reinoculation. Reinoculation in this case was made into the skin of the base of the ear. Under the same conditions nine syphilitic control rabbits were shown by lymph gland transfer to harbor the infection and were also resistant to reinfection.

The negative result of the inoculation of the treated rabbits with the yaws strain is difficult to interpret. No cross inoculations of untreated rabbits with *T. pallidum* and *T. pertenue* have been recorded in the literature. However, Neisser, Baermann, and Halberstaedter (1906) reported that a monkey inoculated into one eyebrow with *T. pallidum* developed a primary lesion on the twenty-sixth day which healed 14 days later. Fifteen days after the appearance of the syphilitic lesion the monkey was inoculated (into the opposite eyebrow) with a yaws strain, and 34 days afterwards a lesion developed at the site of the second inoculation. The investigators conclude that cross inoculation in the monkey is possible. If a similar result could be obtained in untreated rabbits it would indicate that our treated rabbits, on account of the treatment, had developed a refractory state, as far as the production of a local lesion is concerned, to inoculation with *T. pertenue*.

At present it appears that both methods for the determination of the curative action of arsenicals involve an element of uncertainty. The reinoculation test, if positive, is fairly good evidence of cure; if negative it may indicate either (1) that the animal has not been cured or (2) that a cure has been effected, but on account of an acquired relative immunity the tissues are protected against the production of a chancre. If positive, the lymph gland transfer method is conclusive evidence of failure to cure; if negative, the experiments must be sufficiently numerous in order to permit the conclusion that the treatment had produced a cure. On the basis of other work, we have adopted the lymph gland transfer method for work in this laboratory in preference to the reinoculation.

The results of this work, which has been in progress for two years, will be published in the near future.

CONCLUSIONS

1. The difficulties of the interpretation of the reinoculation test as a criterion of cure in syphilitic rabbits are discussed in connection with previous work, using for this purpose the lymph gland transfer method. Both methods involve a certain amount of error; but the latter method, if carried out on a sufficient number of animals, appears to be more reliable.

2. It was found that animals treated with arsphenamine, neoarsphenamine, and sulpharsphenamine may be resistant not only to reinoculation with *T. pallidum* but also to a subsequent inoculation with *T. pertenue*.

3. Evidence was secured showing that, in spite of a relatively low trypanocidal action, sulpharsphenamine is just as effective as arsphenamine and neoarsphenamine with regard to the healing of lesions and freedom from clinical relapse.

4. The limitations of our trypanocidal test and its proper application are pointed out.

ADDENDUM

After submitting this paper for publication, a report by Chesney and Kemp on the same subject has appeared in the Journal of Experimental Medicine, 1925, XLII, 17, July. Their conclusions, as far as the reliability of the reinoculation test is concerned, agree with ours. They furthermore suggest that the refractory state in adequately treated animals is due to "the existence of an acquired immunity which persists after the abolition of the disease."

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SCOTTISH VITAL STATISTICS FOR 1924

The following résumé of the report of the Registrar General for Scotland is taken from The Medical Officer, London, for October 17, 1925:

The report of the Registrar General for Scotland, recently issued, states that births of 106,900 living children were registered in 1924, of whom 54,919 were males and 51,981 were females. The total births number 5,002 less than those of the previous year, 11,700 less than the mean of the numbers of the preceding 5 years, and 6,805 less than the mean of the numbers of the preceding 10 years. Since 1860 the only years in which a smaller number of births has been registered in Scotland were the three years 1917, 1918, and 1919, each of which was affected by war conditions. A maximum number of births was registered in Scotland in the year 1920, and was 136,546, and compared with this number that of the present year is 26,646, or 21.7 per cent, less.

The male births numbered 2,413 less than those of the previous year, 5,826 less than the mean of the numbers of the preceding 5 years, and 3,275 less than the mean of those of the preceding 10 years. The female births numbered 2,589 less than those of the previous

year, 5,875 less than the mean of the numbers of the 5 preceding years, and 3,530 less than the mean of those of the 10 preceding years. The ratio of male to female children registered during the year was 105.7 to 100. This ratio in the three preceding years, 1921, 1922, and 1923, was 104.9, 104.6, and 105.1, respectively, and thus that of this year shows an increase.

Marriages registered during the year numbered 32,352. This number is 2,848 less than that of the previous year, 7,574 less than the mean of those of the preceding 5 years, and 4,374 less than the mean of those of the preceding 10 years. It is the smallest number of marriages registered in any one year since 1917. The marriage rate of the year was 6.63 per 1,000. Marriages terminated by decrees of divorce or nullity of marriage during the year numbered 438, this number being 75 more than in the previous year, 56 more than in the year 1922, but 62 less than in the year 1921.

Deaths registered in Scotland during the year in all numbered 70,357, which is 7,074 more than in the previous year, 1,212 more than the average number registered in the preceding 5 years, but 1,584 less than the average number registered in the preceding 10 years. The number is greater than the number of deaths in the years 1923, 1921, 1920, and 1917, but is less than those of all other years subsequent to 1868. The death rate of the year, 14.41 per 1,000, is higher than the rates of the years 1923, 1921, and 1920, but lower than those of all other years. The rise of the death rate in the year 1924 is largely attributable to an epidemic of influenza, which occurred in the spring of the year. The infantile mortality rate of the year was 97.7 per 1,000 registered births. It is the sixth year in which the infantile mortality rate has been less than 100.

One woman, aged 106 years and 213 days, died in 1924. She was the oldest woman who has died for 15 years. In all there were 18 cases of reputed centenarians. In five cases the age was found to be under 100, and in five others proof of age could not be obtained. Inquiries in this connection have now been made for 15 years and have dealt with 212 reputed centenarians. In 95 instances the age has been verified and in 26 instances contradicted, while in the 91 other instances no proof could be got.

The population of Scotland in the middle of the year 1923 was estimated at 4,901,100, of whom 2,356,587 were males and 2,544,513 were females. Between the middle of the year 1923 and the middle of the year 1924 there was an excess of registered births over registered deaths amounting to 40,542, and there was an excess of emigrants from Scotland over immigrants into Scotland during that period amounting to 60,005, and the difference, 19,463, must be deducted from the 1923 estimate to obtain that for the middle of

the year 1924, the latter being thus found to be 4,881,637. The male population for the middle of the year 1924 is estimated at 2,347,228 and the female population at 2,534,409. Compared with the population of Scotland as ascertained by the census of 1921, the estimated population for the middle of the year 1924 is 860 less, that of the male population being 414 less and that of the female population 446 less.

"THE HUMAN FACTOR"

A New Venture in the Field of Industrial Relations

The Massachusetts Society for Mental Hygiene announces that during November it will begin regularly the publication of a new bulletin called "The Human Factor," devoted to everyday problems of industrial relations as they relate to mental health. It is to be prepared especially for busy executives, personnel workers, educators in stores or factories, physicians, and all other persons who are in any way concerned with the human factor in industry.

The society was organized in January, 1913. It is dedicated to the conservation and the fostering of the mental health of the people of Massachusetts. Its general purposes are to acquaint the community, especially industrial organizations, social institutions, and private and public agencies dealing with mental hygiene, with what may be done for the mental health of individuals and of society and to promote further study in this direction.

The articles to be published in "The Human Factor" will be written in nontechnical language, and it is stated that particular care will be exercised to see that the matter presented through its columns is sound and practical. By this means it is hoped to bring the principles of mental hygiene into the everyday life of business and industrial institutions and to make positive and definite contributions to the health of workers.

DEATHS DURING WEEK ENDED OCTOBER 31, 1925

Summary of information received by telegraph from industrial insurance companies for week ended October 31, 1925, and corresponding week of 1924. (From the Weekly Health Index, November 3, 1925, issued by the Bureau of the Census, Department of Commerce)

	Week ended Oct. 31, 1925	Corresponding week, 1924
Policies in force	61, 864, 119	57, 542, 323
Number of death claims	10, 682	10, 116
Death claims per 1,000 policies in force, annual rate	9. 0	9. 2

Deaths from all causes in certain large cities of the United States during the week ended October 31, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, November 3, 1925, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Oct. 31, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate week ended Oct. 31, 1925 [2]
	Total deaths	Death rate [1]		Week ended Oct. 31, 1925	Corresponding week, 1924	
Total (67 cities)	6,902	12.4	[3] 11.8	761	[3] 756	[4] 60
Akron	27			2	5	22
Albany [5]	30	13.1	14.1	2	5	44
Atlanta	56			11	9	
White	31			5		
Colored	25	([6])		6		
Baltimore [5]	208	13.6	13.5	25	30	75
White	160			17		63
Colored	48	([6])		8		129
Birmingham	74	18.8	13.8	10	2	
White	47			5		
Colored	27	([6])		5		
Boston	208	13.8	11.5	25	22	66
Bridgeport	21			3	2	48
Buffalo	118	11.1	10.0	21	17	85
Cambridge	20	9.3	10.7	3	3	50
Camden	37	15.0	7.4	3	5	48
Chicago [5]	647	11.3	10.0	67	81	59
Cincinnati	138	17.6	17.1	9	16	53
Cleveland	184	10.2	8.7	20	17	50
Columbus	73	13.6	14.4	12	13	100
Dallas	53	14.3	15.0	12	12	
White	47			11		
Colored	6	([6])		1		
Denver	62	11.5	11.3	6	5	
Des Moines	38	13.3	10.4	4	2	68
Detroit	243	10.2	9.6	35	35	60
Duluth	24	11.3	8.7	1	1	22
El Paso	27	13.4	11.4	3	4	
Erie [5]	27			1	2	19
Fall River [5]	26	11.2	13.8	3	5	44
Flint	22	8.8	4.6	1	2	16
Fort Worth	19	6.5	7.4	3	3	
White	14			2		
Colored	5	([6])		1		
Grand Rapids	49	16.6	7.0	7	1	110
Houston	56	17.7	17.3	10	8	
White	37			6		
Colored	19	([6])		4		
Indianapolis	105	15.3	11.9	4	9	28
Jersey City	65	10.8	10.2	11	12	78
Kansas City, Kans	33	13.9	9.8	2	2	40
White	28			2		45
Colored	5	([6])		0		0
Kansas City, Mo	91	12.9	12.3	15	9	
Los Angeles	202			19	25	52
Louisville	77	15.5	11.5	6	6	50
White	59			5		48
Colored	18	([6])		1		68
Lowell	20	9.0	14.0	1	3	17
Lynn	20	10.0	7.5	1	1	25
Memphis	62	18.5	20.9	8	1	
White	31			4		
Colored	31	([6])		4		
Milwaukee	109	11.3	10.1	19	21	88
Minneapolis	96	11.8	10.7	7	6	37

[1] Annual rate per 1,000 population.

[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1924. Cities left blank are not in the registration area for births.

[3] Data for 66 cities.

[4] Data for 61 cities.

[5] Deaths for week ended Friday, October 30, 1925.

[6] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following per cents of the total population: Atlanta 31, Baltimore 15, Birmingham 39, Dallas 15, Fort Worth 14, Houston 25, Kansas City, Kans., 14, Louisville 17, Memphis 38, Nashville 30, New Orleans 26, Norfolk 38, Richmond 32, and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended October 31, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924—Continued

City	Week ended Oct. 31, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate week ended Oct. 31, 1925
	Total deaths	Death rate		Week ended Oct. 31, 1925	Corresponding week, 1924	
Nashville [5]	54	20.7	15.6	2	4	
White	31			1		
Colored	21	(6)		1		
New Bedford	25	9.6	12.2	8	2	132
New Haven	38	11.1	10.7	5	6	65
New Orleans	116	14.6	16.7	16	11	
White	69			8		
Colored	47	(6)		8		
New York	1,394	11.9	11.6	143	141	57
Bronx Borough	172	9.9	9.5	14	12	48
Brooklyn Borough	445	10.4	9.9	51	45	53
Manhattan Borough	619	14.3	14.4	67	70	70
Queens Borough	122	11.1	9.0	9	10	42
Richmond Borough	36	14.0	18.0	2	4	36
Newark, N. J	104	12.0	10.5	14	11	64
Norfolk	38			6	6	117
White	15			3		88
Colored	23	(6)		4		197
Oakland	48	9.9	9.3	8	9	92
Oklahoma City	35			6	2	
Omaha	48	11.8	11.3	6	4	62
Paterson	30	11.0	13.3	3	1	50
Philadelphia	520	13.7	12.3	51	57	64
Pittsburgh	174	14.4	17.0	27	19	90
Portland, Oreg	72	13.3	10.7	4	5	40
Providence	63	13.4	14.5	5	6	40
Richmond	44	12.3	13.9	6	10	72
White	29			4		72
Colored	15	(6)		2		72
Rochester	64	10.1	10.4	13	4	104
St. Louis	214	13.6	13.9	9	18	
St. Paul	61	12.9	10.5	4	2	34
Salt Lake City [5]	32	12.7	15.8	2	2	30
San Antonio	53	14.0	16.1	10	15	
San Diego	28	13.8	15.1	1	3	23
San Francisco	121	11.3	13.5	3	8	17
Schenectady	18	9.2	6.7	1	2	28
Seattle	65			2	4	19
Somerville	32	16.3	11.4	2	1	53
Spokane	29	13.9	13.0	3	4	67
Springfield, Mass	34	11.6	11.9	4	4	59
Syracuse	51	13.9	11.6	6	1	75
Tacoma	20	10.0	10.6	3	2	70
Toledo	52	9.4	8.2	4	4	36
Trenton	35	13.8	14.5	3	6	49
Utica	29	14.1		9		193
Washington, D. C	131	13.7	14.0	15	23	84
White	85			9		73
Colored	46	(6)		6		110
Waterbury	27			6	1	129
Wilmington, Del	27	11.5	13.9	2	3	45
Worcester	61	16.0	11.2	8	5	92
Yonkers	19	8.9	11.4	2	1	44
Youngstown	27	8.8	10.8	3	3	37

[5] Deaths for week ended Friday, Oct. 30, 1925.

[6] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following per cents of the total population: Atlanta 31, Baltimore 15, Birmingham 39, Dallas 15, Fort Worth 14, Houston 25, Kansas City, Kans., 14, Louisville 17, Memphis 38, Nashville 30, New Orleans 26, Norfolk 38, 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 November 7, 1925

ALABAMA

	Cases
Chicken pox	5
Dengue	10
Diphtheria	54
Influenza	49
Malaria	43
Mumps	14
Pellagra	11
Pneumonia	38
Poliomyelitis	1
Scarlet fever	20
Smallpox	49
Tetanus	1
Tuberculosis	52
Typhoid fever	33
Whooping cough	12

ARIZONA

Diphtheria	11
German measles	1
Mumps	66
Scarlet fever	10
Trachoma	33
Tuberculosis	27
Typhoid fever	9

ARKANSAS

Chicken pox	5
Dengue	4
Diphtheria	22
Hookworm disease	1
Influenza	108
Malaria	102
Measles	4
Paratyphoid fever	1
Pellagra	7
Scarlet fever	5
Smallpox	1
Trachoma	2
Tuberculosis	13
Typhoid fever	30
Whooping cough	2

CALIFORNIA

	Cases
Botulism	2
Chicken pox	205
Diphtheria	136
Influenza	6
Lethargic encephalitis:	
Newman	1
Stockton	1
Measles	12
Mumps	159
Poliomyelitis:	
Alameda	1
Alameda County	1
Los Angeles	1
Oakland	2
Plumas County	1
Sacramento	1
San Francisco	1
Santa Barbara County	2
Tulare County	1
Scarlet fever	96
Smallpox:	
Los Angeles	12
Oakland	5
Scattering	13
Typhoid fever	15
Whooping cough	58

COLORADO

(Exclusive of Denver)

Chicken pox	40
Diphtheria	56
Influenza	1
Measles	6
Mumps	15
Pneumonia	5
Scarlet fever	27
Tuberculosis	54
Typhoid fever	28
Whooping cough	39

CONNECTICUT

	Cases
Cerebrospinal meningitis	1
Chicken pox	57
Diphtheria	30
Favus	1
German measles	2
Influenza	9
Lethargic encephalitis	1
Measles	61
Mumps	1
Pneumonia (broncho)	20
Pneumonia (lobar)	34
Poliomyelitis	1
Scarlet fever	34
Septic sore throat	2
Tuberculosis (all forms)	21
Typhoid fever	3
Whooping cough	46

DELAWARE

Chicken pox	8
Diphtheria	12
Pneumonia	4
Scarlet fever	3
Tuberculosis	2
Typhoid fever	4
Whooping cough	2

FLORIDA

Chicken pox	4
Diphtheria	36
German measles	2
Malaria	11
Measles	1
Mumps	2
Pneumonia	1
Poliomyelitis	1
Scarlet fever	8
Tuberculosis	21
Typhoid fever	7
Whooping cough	8

GEORGIA

Cerebrospinal meningitis	1
Chicken pox	5
Dengue	2
Diphtheria	39
Dysentery	10
Hookworm disease	4
Influenza	134
Malaria	25
Measles	6
Mumps	5
Pellagra	2
Pneumonia	64
Poliomyelitis	2
Scarlet fever	20
Septic sore throat	13
Smallpox	3
Trachoma	1
Tuberculosis	40
Typhoid fever	26
Typhus fever	4
Whooping cough	9

ILLINOIS

	Cases
Cerebrospinal meningitis:	
Adams County	1
Livingston County	1
Diphtheria:	
Cook County	83
Macon County	13
McLean County	5
Rock Island County	5
Scattering	37
Influenza	12
Lethargic encephalitis—Cook County	1
Measles	124
Pneumonia	217
Poliomyelitis—	
Cook County	4
La Salle County	2
Livingston County	1
McLean County	1
Putnam County	1
Tazewell County	1
Winnebago County	1
Scarlet fever:	
Cook County	83
Cass County	5
Champaign County	7
Effingham County	8
Fulton County	5
Kane County	27
Peoria County	18
St. Clair County	17
Vermilion County	5
Scattering	69
Smallpox—McLean County	14
Tuberculosis	189
Typhoid fever:	
Cook County	5
Saline County	5
Scattering	34
Whooping cough	113

INDIANA

Cerebrospinal meningitis	1
Chicken pox	75
Diphtheria	77
Influenza	30
Measles	50
Pneumonia	13
Poliomyelitis	7
Scarlet fever	173
Smallpox	71
Trachoma	1
Tuberculosis	71
Typhoid fever	32
Whooping cough	99

KANSAS

Cerebrospinal meningitis:	
Leoti	1
Mullinville	1
Parsons	1
Chicken pox	90
Diphtheria	28
Dysentery	1

KANSAS—continued

	Cases
Influenza	6
Measles	4
Mumps	13
Pneumonia	36
Poliomyelitis:	
Burr Oak	1
Hutchinson	1
Oswego	1
Topeka	1
Scarlet fever	83
Smallpox	2
Tuberculosis	46
Typhoid fever	15
Whooping cough	39

LOUISIANA

Diphtheria	31
Influenza	24
Malaria	25
Pneumonia	28
Poliomyelitis	3
Scarlet fever	17
Smallpox	1
Tuberculosis	74
Typhoid fever	27
Whooping cough	9

MAINE

Chicken pox	10
Diphtheria	5
Measles	4
Mumps	5
Pneumonia	7
Scarlet fever	25
Tetanus	1
Tuberculosis	3
Typhoid fever	4
Vincent's angina	1
Whooping cough	14

MARYLAND [1]

Cerebrospinal meningitis	1
Chicken pox	52
Diphtheria	34
Dysentery	8
German measles	1
Influenza	10
Lethargic encephalitis	1
Malaria	3
Measles	78
Mumps	35
Ophthalmia neonatorum	1
Paratyphoid fever	1
Pneumonia (broncho)	23
Pneumonia (lobar)	38
Poliomyelitis	1
Scarlet fever	48
Tetanus	1
Tuberculosis	44
Typhoid fever	54
Whooping cough	44

[1] Week ended Friday.

MASSACHUSETTS

	Cases
Chicken pox	120
Conjunctivitis (suppurative)	14
Diphtheria	81
German measles	25
Influenza	6
Lethargic encephalitis	2
Measles	575
Mumps	24
Ophthalmia neonatorum	27
Pneumonia (lobar)	101
Poliomyelitis	5
Scarlet fever	187
Septic sore throat	2
Tetanus	1
Trachoma	2
Tuberculosis (pulmonary)	84
Tuberculosis (other forms)	12
Typhoid fever	8
Whooping cough	183

MICHIGAN

Diphtheria	129
Measles	70
Pneumonia	105
Scarlet fever	188
Smallpox	4
Tuberculosis	50
Typhoid fever	21
Whooping cough	111

MINNESOTA

Chicken pox	142
Diphtheria	95
Influenza	2
Measles	5
Pneumonia	7
Poliomyelitis	5
Scarlet fever	179
Smallpox	4
Tetanus	1
Tuberculosis	58
Typhoid fever	11
Whooping cough	27

MISSISSIPPI

Diphtheria	38
Scarlet fever	26
Typhoid fever	21

MISSOURI

Chicken pox	30
Diphtheria	88
Influenza	11
Measles	3
Mumps	3
Ophthalmia neonatorum	1
Pneumonia	3
Poliomyelitis	1
Scarlet fever	128
Septic sore throat	1
Smallpox	2
Tetanus	1
Trachoma	15
Tuberculosis	12
Typhoid fever	67
Whooping cough	13

MONTANA

	Cases
Chicken pox	34
Diphtheria	4
German measles	1
Influenza	1
Measles	1
Mumps	120
Pneumonia	3
Scarlet fever	37
Smallpox	6
Trachoma	1
Tuberculosis	1
Typhoid fever	2
Whooping cough	20

NEBRASKA

Cerebrospinal meningitis	1
Chicken pox	28
Diphtheria	6
Measles	1
Poliomyelitis	2
Scarlet fever	26
Smallpox	6
Tuberculosis	11
Typhoid fever	1
Whooping cough	10

NEW JERSEY

Cerebrospinal meningitis	3
Chicken pox	132
Diphtheria	102
Dysentery	1
Influenza	16
Malaria	1
Measles	113
Pneumonia	106
Poliomyelitis	4
Scarlet fever	111
Typhoid fever	22
Whooping cough	26

NEW MEXICO

Chicken pox	42
Diphtheria:	
Roswell	6
Scattering	3
Influenza	2
Malaria	5
Mumps	3
Pneumonia	6
Poliomyelitis	1
Rabies (in animals)	3
Scarlet fever	25
Tuberculosis	47
Typhoid fever:	
Las Vegas	3
Roswell	3
Scattering	29
Whooping cough	27

NEW YORK

(Exclusive of New York City)

Diphtheria	96
Influenza	9
Measles	287
Pneumonia	228
Poliomyelitis	13

NEW YORK—continued

	Cases
Scarlet fever	148
Smallpox	1
Typhoid fever	36
Whooping cough	171

NORTH CAROLINA

Chicken pox	18
Diphtheria	146
Measles	2
Poliomyelitis	2
Scarlet fever	104
Septic sore throat	4
Smallpox	14
Typhoid fever	17
Whooping cough	54

OKLAHOMA

(Exclusive of Tulsa and Oklahoma City)

Cerebrospinal meningitis—Johnston	2
Chicken pox	13
Diphtheria	49
Influenza	99
Malaria	61
Measles	1
Mumps	1
Pellagra	5
Pneumonia	31
Poliomyelitis—Johnston	1
Scarlet fever	27
Smallpox—Kay	1
Typhoid fever	110
Whooping cough	20

OREGON

Cerebrospinal meningitis	1
Chicken pox	42
Diphtheria:	
Portland	25
Scattering	17
Influenza	7
Measles	4
Mumps	16
Pneumonia	11
Poliomyelitis	2
Scarlet fever:	
Portland	20
Scattering	22
Septic sore throat	1
Smallpox:	
Salem	11
Scattering	3
Tuberculosis	11
Typhoid fever	6
Whooping cough	9

PENNSYLVANIA

Cerebrospinal meningitis	3
Chicken pox	186
Diphtheria:	
Pittsburgh	19
Scattering	147
German measles	2
Impetigo contagiosa	3
Measles	187
Mumps	42

PENNSYLVANIA—continued

	Cases
Pneumonia	68
Poliomyelitis (scattering)	6
Scabies	5
Scarlet fever	[1] 121
Tuberculosis	105
Whooping cough	113

SOUTH DAKOTA

Chicken pox	12
Diphtheria	6
Mumps	30
Pneumonia	4
Scarlet fever	32
Smallpox	5
Typhoid fever	7
Whooping cough	3

TEXAS

Chicken pox	3
Diphtheria	60
Dysentery	13
Influenza	27
Lethargic encephalitis	1
Measles	3
Mumps	3
Paratyphoid fever	1
Pellagra	2
Pneumonia	1
Poliomyelitis	2
Scarlet fever	20
Trachoma	2
Tuberculosis	27
Typhoid fever	29
Whooping cough	26

UTAH

Chicken pox	73
Diphtheria	16
Influenza	1
Measles	1
Mumps	4
Pneumonia	5
Poliomyelitis—Cedar City	1
Scarlet fever	8
Smallpox—Sandy	1
Typhoid fever	6
Whooping cough	12

VERMONT

Chicken pox	92
Diphtheria	1
Poliomyelitis	2
Scarlet fever	20
Whooping cough	25

VIRGINIA

Smallpox:	
Charlotte County	8
Lunenburg County	5

WASHINGTON

Chicken pox	65
Diphtheria	19
German measles	5
Measles	3
Mumps	20
Poliomyelitis:	
Kitsap County	1
Pierce County	1
Tacoma	2
Scarlet fever	62
Smallpox:	
Tacoma	11
Scattering	20
Tuberculosis	30
Typhoid fever	5
Whooping cough	7

WEST VIRGINIA

Diphtheria	26
Scarlet fever	11
Typhoid fever:	
Charleston	4
Charlestown	2
Fairmont	2
Hinton	2
Huntington	1
Keyser	1
Mannington	9
Morgantown	3
Weston	1
Wheeling	3

WISCONSIN

Milwaukee:	
Chicken pox	103
Diphtheria	40
German measles	2
Influenza	1
Lethargic encephalitis	1
Mumps	14
Pneumonia	9
Scarlet fever	9
Tuberculosis	13
Typhoid fever	1
Whooping cough	16
Scattering:	
Chicken pox	99
Diphtheria	44
German measles	5
Influenza	11
Measles	49
Mumps	91
Pneumonia	18
Poliomyelitis	7
Scarlet fever	82
Tuberculosis	26
Typhoid fever	10
Whooping cough	107

WYOMING

Chicken pox	40
Diphtheria	2
German measles	1
Influenza	1
Mumps	1
Scabies—Park	2
Scarlet fever	30
Smallpox—Uinta County	1
Typhoid fever:	
Converse	1
Natrona	4
Sheridan	4
Whooping cough	1

[1] Includes cases with onsets in October. Also onsets of some of the cases of other diseases not confined to the week under report.

Reports for Week Ended October 31, 1925

DISTRICT OF COLUMBIA

	Cases
Chicken pox	14
Diphtheria	9
Measles	3
Pneumonia	14
Scarlet fever	31
Tuberculosis	20
Typhoid fever	1
Whooping cough	4

NEBRASKA

Cerebrospinal meningitis	1
Chicken pox	20
Diphtheria	12
Measles	1
Pneumonia	1
Poliomyelitis	7
Scarlet fever	27
Smallpox	10
Tuberculosis	1
Typhoid fever	1
Whooping cough	11

NORTH DAKOTA

Chicken pox	1
Diphtheria	16
Mumps	15
Pneumonia	5
Poliomyelitis	1
Scarlet fever	52
Smallpox	2
Tuberculosis	3
Typhoid fever	7
Whooping cough	20

RHODE ISLAND

Chicken pox	9
Diphtheria	9
Influenza	10
Measles	48
Mumps	3
Scarlet fever	7
Smallpox	4
Typhoid fever	1
Whooping cough	10

SOUTH CAROLINA

Dengue	4
Diphtheria	56
Influenza	212
Malaria	255
Measles	2
Poliomyelitis	4
Scarlet fever	8
Smallpox	4
Tuberculosis	53
Typhoid fever	35
Whooping cough	71

SUMMARY OF MONTHLY REPORTS FROM STATES

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

State	Cerebrospinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
September, 1925										
Florida	0	84	17	68	5	12	8	4	4	97
Hawaii Territory	2	35	16	----	9	----	----	1	----	9
Pennsylvania	6	663	----	6	327	2	49	637	1	562
South Carolina	----	409	190	1,685	19	2	----	41	7	287
Utah	3	74	6	----	15	----	2	35	4	42
Virginia	2	380	607	252	140	18	13	155	6	231

Number of Cases of Certain Communicable Diseases Reported for the Month of September, 1925, by State Health Officers

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Alabama		144			90	25		281	
Arizona	5	3	5	6	22		79	17	32
Arkansas	7	23	2	14	10	1	[1] 49	197	6
California	180	376	74	364	225	91	776	120	373
Colorado [2]									
Connecticut	12	67	31	3	70	0	119	42	256
Delaware	1	11	2		1	0	11	18	11
District of Columbia	2	31	8		32	0	84	16	79
Florida	9	84	5	12	4	4	118	97	40
Georgia	13	83	10	46	19	3	66	243	39
Idaho		16			11			22	
Illinois	96	273	151	54	377	20	1,166	297	547
Indiana		102			125			176	
Iowa	8	69	7	10	48	19	2	([3])	4
Kansas	29	56	25	24	114	0	217	166	201
Kentucky [4]									
Louisiana	1	75	0	1	20	4	[1] 184	242	47
Maine	22	14	4	30	36	0	[1] 26	49	39
Maryland	21	119	47	31	55		291	286	216
Massachusetts	83	288	269	38	225	1	482	80	723
Michigan	80	224	71	19	353	17	632	153	651
Minnesota	53	358	8		360	8	[1] 404	47	158
Mississippi	211	151	180	379	37	48	362	516	450
Missouri	13	135	8	17	165	6	187	184	188
Montana	26	19	5	56	66	5	36	81	52
Nebraska		21			18			12	
Nevada [5]									
New Hampshire [5]									
New Jersey	53	255	70		153		420	141	295
New Mexico [2]									
New York	148	571	288	138	347	1	1,693	426	864
North Carolina	25	564	15		190	47		174	278
North Dakota	2	25	1	12	83	8	7	29	98
Ohio	80	369	100	52	387	41	688	436	629
Oklahoma [6]	5	66	10	9	54	10	79	459	49
Oregon	29	54	8	43	66	16	64	33	68
Pennsylvania	148	663	327	74	637	1	441	562	1,095
Rhode Island	8	25	21	1	22	11	51	17	21
South Carolina	4	409	19	4	41	7	176	287	187
South Dakota	10	23	3	2	108	5	13	23	31
Tennessee [5]									
Texas [4]									
Utah	46	74	15	28	35	4	[1] 12	42	182
Vermont	17	19	11	77	34	0	9	4	57
Virginia [5]									
Washington	63	101	7	41	98	63	119	82	131
West Virginia	4	93	17		127	9	43	256	61
Wisconsin	86	160	197	98	202	25	159	60	779
Wyoming	7	15	1	6	25	1	2	8	3

[1] Pulmonary.
[2] Report not received at time of going to press.
[3] Report not required by law.
[4] Reports received weekly.
[5] Reports received annually.
[6] Exclusive of Oklahoma City and Tulsa.

Case Rates per 1,000 Population (Annual Basis) for the Month of September, 1925

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Alabama		0.74			0.46	0.13		1.44	
Arizona	0.16	.09	0.16	0.19	.68		2.45	.53	0.99
Arkansas	.05	.16	.01	.10	.07	.01	[1] .33	1.35	.04
California	.57	1.18	.23	1.15	.71	.29	2.44	.38	1.17
Colorado [2]									
Connecticut	.10	.55	.26	.02	.58	.00	.98	.35	2.12
Delaware	.05	.59	.11		.05	.00	.59	.97	.59
District of Columbia	.05	.79	.20		.81	.00	2.14	.41	2.01
Florida	.10	.98	.06	.14	.05	.05	1.37	1.13	.46
Georgia	.05	.34	.04	.19	.08	.01	.27	1.01	.16
Idaho		.41			.28			.57	
Illinois	.17	.50	.27	.10	.69	.04	2.12	.54	.99
Indiana		.42			.52			.73	

[1] Pulmonary.
[2] Report not received at time of going to press.

Case Rates per 1,000 Population (Annual Basis) for the Month of September, 1925—Continued

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Iowa	.04	.35	.04	.05	.24	.10	.01	(3)	.02
Kansas	.20	.39	.17	.17	.80	.00	1.52	1.16	1.40
Kentucky [4]									
Louisiana	.01	.51	.00	.01	.13	.03	[1] 1.24	1.63	.32
Maine	.36	.23	.06	.49	.58	.00	[1] .42	.79	.63
Maryland	.17	.98	.39	.26	.45		2.40	2.36	1.78
Massachusetts	.25	.88	.83	.12	.69	.00	1.48	.25	2.22
Michigan	.24	.68	.22	.06	1.08	.05	1.93	.47	1.98
Minnesota	.26	1.77	.04		1.78	.04	[1] 2.00	.23	.78
Mississippi	1.49	1.07	1.27	2.68	.26	.34	2.56	3.65	3.18
Missouri	.05	.49	.03	.06	.60	.02	.68	.67	.69
Montana	.51	.37	.10	1.10	1.29	.10	.70	1.59	1.02
Nebraska		.20			.17			.11	
Nevada [5]									
New Hampshire [5]									
New Jersey	.19	.92	.25		.55		1.52	.51	1.07
New Mexico [2]									
New York	.17	.65	.33	.16	.40	.00	1.93	.49	.99
North Carolina	.11	2.59	.07		.87	.22		.80	1.28
North Dakota	.04	.46	.02	.22	1.53	.15	.13	.54	1.81
Ohio	.16	.74	.20	.10	.78	.08	1.38	.87	1.26
Oklahoma [6]	.03	.37	.06	.05	.31	.06	.45	2.60	.28
Oregon	.43	.81	.12	.64	.99	.24	.96	.49	1.02
Pennsylvania	.20	.90	.44	.10	.87	.00	.60	.76	1.49
Rhode Island	.16	.50	.42	.02	.44	.22	1.01	.34	.42
South Carolina	.03	2.91	.14	.03	.29	.05	1.25	2.04	1.33
South Dakota	.19	.44	.06	.04	2.05	.10	.25	.44	.59
Tennessee [2]									
Texas [4]									
Utah	1.18	1.90	.39	.72	.90	.10	[1] .31	1.08	4.68
Vermont	.61	.68	.40	2.77	1.22	.00	.32	.14	2.05
Virginia [2]									
Washington	.54	.87	.06	.35	.84	.54	1.02	.70	1.12
West Virginia	.03	.74	.13		1.00	.07	.34	2.03	.48
Wisconsin	.39	.72	.89	.44	.91	.11	.72	.27	3.52
Wyoming	.40	.86	.06	.34	1.43	.06	.11	.46	.17

[1] Pulmonary.
[2] Report not received at time of going to press.
[3] Report not required by law.
[4] Reports received weekly.
[5] Reports received annually.
[6] Exclusive of Oklahoma City and Tulsa.

PLAGUE-ERADICATIVE MEASURES IN THE UNITED STATES

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

Los Angeles, Calif.

Week ended Oct. 24, 1925:

Number of rats trapped	2,930
Number of rats found to be plague infected	0
Number of squirrels examined	463
Number of squirrels found to be plague infected	0
Number of mice trapped	4,331
Number of mice found to be plague infected	0

Date of discovery of last plague-infected rodent, Oct. 2, 1925.
Date of last human case, Jan. 15, 1925.

Oakland, Calif.

(Including other East Bay communities)

Week ended Oct. 24, 1925:

Number of rats trapped	796
Number of rats found to be plague infected	0

Totals:

Number of rats trapped Jan. 1 to Oct. 24, 1925	72,504
Number of rats found to be plague infected	21
Number of squirrels examined May 1 to Aug. 1, 1925	7,277
Number of squirrels found to be plague infected	0
Number of mice trapped Jan. 1 to Oct. 24, 1925	24,678

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

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

Diphtheria.—For the week ended October 24, 1925, 36 States reported 1,895 cases of diphtheria. For the week ended October 25, 1924, the same States reported 2,176 cases of this disease. One hundred and one cities, situated in all parts of the country and having an aggregate population of about 29,000,000, reported 934 cases of diphtheria for the week ended October 24, 1925. Last year for the corresponding week they reported 970 cases. The estimated expectancy for these cities was 1,243 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty-four States reported 995 cases of measles for the week ended October 24, 1925, and 627 cases of this disease for the week ended October 25, 1924. One hundred and one cities reported 518 cases of measles for the week this year and 197 cases last year.

Poliomyelitis.—The health officers of 37 States reported 172 cases of poliomyelitis for the week ended October 24, 1925. The same States reported 179 cases for the week ended October 25, 1924.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-six States—this year, 1,891 cases; last year, 2,261 cases. One hundred and one cities—this year, 733 cases; last year, 929 cases; estimated expectancy, 665 cases.

Smallpox.—For the week ended October 24, 1925, 36 States reported 121 cases of smallpox. Last year for the corresponding week they reported 450 cases. One hundred and one cities reported smallpox for the week as follows: 1925, 40 cases; 1924, 134 cases; estimated expectancy, 33 cases. Two deaths from smallpox were reported by these cities for the week this year—at Los Angeles, Calif.

Typhoid fever.—Eight hundred and seventy-four cases of typhoid fever were reported for the week ended October 24, 1925, by 35 States. For the corresponding week of 1924 the same States reported 548 cases of this disease. One hundred and one cities reported 185 cases of typhoid fever for the week this year and 135 cases for the corresponding week last year. The estimated expectancy for these cities was 165 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia were reported by 93 cities, with a population of nearly 28,000,000, for the week as follows: 1925, 535; 1924, 466.

City reports for week ended October 24, 1925

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

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

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	73,129	1	2	1	0	0	0	1	1
New Hampshire:									
Concord	22,408	0	1	0	0	0	0	0	0
Manchester	81,383	0	4	0	0	0	0	1	1
Vermont:									
Barre	[1] 10,008		0						
Burlington	23,613	0	1	2	0	0	0	0	1
Massachusetts:									
Boston	770,400	19	48	11	3	1	33	0	14
Fall River	120,912	2	3	5	0	0	59	0	1
Springfield	144,227	2	5	4	0	0	1	1	2
Worcester	191,927	3	6	7	0	0	111	0	5
Rhode Island:									
Pawtucket	68,799	0	2	3	0	0	0	0	2
Providence	242,378	0	10	4	0	0	15	0	6
Connecticut:									
Bridgeport	[1] 143,555	0	10	0	0	0	18	0	1
Hartford	[1] 138,036	1	8	4	0	0	2	0	1
New Haven	172,967	2	3	0	0	0	1	0	3
MIDDLE ATLANTIC									
New York:									
Buffalo	536,718	0	24	10	0	0	3	3	9
New York	5,927,625	50	137	109	15	10	119	19	113
Rochester	317,867	10	6	26	0	1	16	2	3
Syracuse	184,511	3	9	3	0	0	1	1	4
New Jersey:									
Camden	124,157	10	8	5	0	0	0	0	0
Newark	438,699	14	15	12	1	1	9	2	14
Trenton	127,390	2	5	2	2	0	1	0	1
Pennsylvania:									
Philadelphia	1,922,788	50	53	65	0	3	15	9	32
Pittsburgh	613,442	0	32	19	0		6	0	
Reading	110,917	6	5	3	0	0	2	0	1
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	406,312	4	15	6	0	2	1	0	6
Cleveland	888,519	18	46	86	8	0	13	4	16
Columbus	261,082	2	9	1	0	1	0	0	2
Toledo	268,338	12	13	8	0	1	0	0	3
Indiana:									
Fort Wayne	93,573	0	4	3	0	0	0	0	2
Indianapolis	342,718	5	21	16	0	1	24	0	11
South Bend	76,709	4	2	2	0	0	0	0	0
Terre Haute	68,939	0	4	0	0	0	0	0	1
Illinois:									
Chicago	2,886,121	30	168	49	12	4	9	4	35
Springfield	61,833	0	3	3	2	2	0	0	2
Michigan:									
Detroit	1,155,000	26	72	51	3	0	17	5	24
Flint	117,968	1	13	3	0	0	1	4	3
Grand Rapids	145,947	2	8	6	0	1	0	2	3

[1] Population Jan. 1, 1920.

City reports for week ended October 24, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST NORTH CENTRAL—continued									
Wisconsin:									
Madison	42,519	4	1	0	0	0	0	0	1
Milwaukee	484,595	52	25	33	2	2	0	2	4
Racine	64,393	0	2	0	0	0	0	3	2
Superior	[1] 39,671	0	1	0	0	0	0	0	1
WEST NORTH CENTRAL									
Minnesota:									
Duluth	106,289	28	6	0	0	0	1	0	1
Minneapolis	409,125	16	29	37	0	1	0	0	3
St. Paul	241,891	7	21	10	0	0	1	2	7
Iowa:									
Davenport	61,262	0	2	7	0	--	1	0	--
Sioux City	79,662	5	2	3	0	--	0	0	--
Waterloo	39,667	1	1	0	0	--	0	0	--
Missouri:									
Kansas City	351,819	4	16	4	2	2	0	1	5
St. Joseph	78,232	4	4	2	0	0	0	0	2
St. Louis	803,853	8	62	50	0	0	1	3	--
North Dakota:									
Fargo	24,841	0	0	4	0	0	0	7	0
Grand Forks	14,547	0	1	0	0	--	0	0	--
South Dakota:									
Aberdeen	15,829	0	0	0	0	--	0	18	--
Sioux Falls	29,206	1	1	0	0	0	0	0	1
Nebraska:									
Lincoln	58,761	0	2	0	0	0	1	0	1
Omaha	204,382	2	12	12	0	0	1	1	8
Kansas:									
Topeka	52,555	0	2	2	2	0	0	0	0
Wichita	79,261	13	5	1	0	0	1	0	2
SOUTH ATLANTIC									
Delaware:									
Wilmington	117,728	0	2	7	0	0	0	0	2
Maryland:									
Baltimore	773,580	25	33	13	8	1	15	17	23
Cumberland	32,361	0	1	4	0	0	0	0	1
Frederick	11,301	0	1	0	0	0	0	0	1
District of Columbia:									
Washington	[1] 437,571	2	17	17	0	0	1	0	13
Virginia:									
Lynchburg	30,277	0	2	2	0	0	0	0	2
Norfolk	159,089	2	3	0	0	0	1	0	2
Richmond	181,044	0	16	46	0	0	1	0	5
Roanoke	55,502	0	4	16	0	0	1	0	0
West Virginia:									
Charleston	45,597	0	4	0	0	0	0	0	1
Huntington	57,918	0	4	7	0	0	0	0	1
Wheeling	[1] 56,208	0	3	6	0	0	0	1	0
North Carolina:									
Raleigh	29,171	0	4	6	0	0	0	0	0
Wilmington	35,719	0	1	0	0	0	0	0	2
Winston-Salem	56,230	--	4	--	--	--	--	--	--
South Carolina:									
Charleston	71,245	0	1	1	0	0	0	0	1
Columbia	39,688	0	3	0	0	--	0	2	--
Greenville	25,789	0	1	2	0	0	0	0	1
Georgia:									
Atlanta	222,963	1	11	5	12	0	0	0	1
Brunswick	15,937	0	0	0	0	0	0	0	0
Savannah	89,448	0	4	2	0	0	0	0	3
Florida:									
Tampa	56,050	0	2	1	0	0	0	0	1

[1] Population Jan. 1, 1920.

City reports for week ended October 24, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST SOUTH CENTRAL									
Kentucky:									
Covington	57,877	0	3	1	0	0	1	0	3
Louisville	257,671	0	12	8	1	0	0	0	6
Tennessee:									
Memphis	170,067	0	16	2	0	1	0	0	6
Nashville	121,128	0	5	2	0	0	0	0	3
Alabama:									
Birmingham	195,901	0	7	4	3	0	6	0	5
Mobile	63,858	0	2	0	3	0	0	0	0
Montgomery	45,383	0	4	2	0	0	0	3	----
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	30,635	1	2	0	0	----	0	0	----
Little Rock	70,916	0	2	2	1	0	2	0	----
Louisiana:									
New Orleans	404,575	0	12	6	7	4	1	0	14
Shreveport	54,590	0	1	1	0	0	0	0	2
Oklahoma:									
Oklahoma	101,150	0	4	0	0	0	1	0	1
Texas:									
Dallas	177,274	0	13	5	0	0	0	0	3
Galveston	46,877	0	0	0	0	0	0	0	0
Houston	154,970	----	3	6	0	0	0	----	1
San Antonio	184,727	0	1	3	0	0	0	0	3
MOUNTAIN									
Montana:									
Billings	16,927	5	1	0	0	0	0	6	0
Great Falls	27,787	1	1	3	0	0	0	39	0
Helena	[1] 12,037	0	0	0	0	0	0	0	0
Missoula	[1] 12,668	0	0	0	0	0	0	0	0
Idaho:									
Boise	22,806	3	0	2	0	0	0	0	0
Colorado:									
Denver	272,031	16	14	16	0	4	2	1	9
Pueblo	43,519	2	4	10	0	0	0	0	1
New Mexico:									
Albuquerque	16,648	0	1	1	0	0	0	1	0
Arizona:									
Phoenix	33,899	----	----	0	0	0	0	----	1
Utah:									
Salt Lake City	126,241	25	3	8	0	0	1	6	2
Nevada:									
Reno	12,429	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle	[1] 315,685	26	7	6	0	----	0	8	----
Spokane	104,573	27	6	5	0	----	0	0	----
Tacoma	101,731	0	3	4	0	0	0	2	3
Oregon:									
Portland	273,621	2	7	17	0	0	0	2	5
California:									
Los Angeles	666,853	7	38	22	6	1	1	4	9
Sacramento	69,950	0	2	1	0	0	1	1	1
San Francisco	539,038	28	20	11	0	0	2	6	8

[1] Population Jan. 1, 1920.

City reports for week ended October 24, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	1	3	0	0	0	1	1	0	0	3	18
New Hampshire:											
Concord	0	0	0	0	0	1	0	0	0	0	9
Manchester	1	5	0	0	0	0	0	0	0	0	10
Vermont:											
Barre	1		0				0				
Burlington	1	0	0	0	0	0	0	0	0	0	10
Massachusetts:											
Boston	30	28	0	0	0	15	4	5	0	42	185
Fall River	1	0	0	0	0	1	2	1	0	4	22
Springfield	5	6	0	3	0	1	0	0	0	1	35
Worcester	7	9	0	0	0	4	0	0	0	27	51
Rhode Island:											
Pawtucket	1	1	0	0	0	0	0	0	0	0	16
Providence	3	2	0	0	0	0	1	0	0	2	63
Connecticut:											
Bridgeport	4	0	0	0	0	0	1	0	0	5	22
Hartford	3	2	0	0	0	1	1	0	0	1	26
New Haven	5	1	0	0	0	1	2	0	0	16	42
MIDDLE ATLANTIC											
New York:											
Buffalo	13	6	0	0	0	9	2	10	0	12	160
New York	61	58	0	0	0	[1] 81	25	27	2	71	1,247
Rochester	5	7	0	0	0	0	1	0	0	9	68
Syracuse	7	0	0	0	0	0	1	0	0	17	42
New Jersey:											
Camden	2	8	0	0	0	1	1	0	1	2	34
Newark	9	7	0	0	0	5	3	3	0	7	98
Trenton	1	3	0	0	0	1	1	2	0	0	28
Pennsylvania:											
Philadelphia	39	53	0	0	0	36	12	6	4	25	498
Pittsburgh	25	46	0	0			2	1		0	
Reading	1	2	0	0	0	1	1	0	0	10	18
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	10	9	0	0	0	8	1	0	0	9	124
Cleveland	21	10	1	0	0	15	4	1	2	36	182
Columbus	7	11	0	0	0	3	2	1	1	0	73
Toledo	10	7	0	0	0	7	4	0	0	2	75
Indiana:											
Fort Wayne	1	2	0	0	0	1	1	2	0	2	25
Indianapolis	8	5	1	6	0	4	1	0	0	8	107
South Bend	2	0	1	0	0	1	0	0	1	0	15
Terre Haute	2	0	0	0	0	3	0	0	0	0	28
Illinois:											
Chicago	84	67	1	0	0	52	8	2	1	28	599
Springfield	3	0	0	0	0	0	1	0	0	10	20
Michigan:											
Detroit	47	60	2	0	0	15	5	4	1	39	259
Flint	7	3	0	0	0	1	1	2	0	10	20
Grand Rapids	6	5	1	0	0	4	1	0	0	13	41
Wisconsin:											
Madison	1	0	0	0	0	0	0	1	0	4	9
Milwaukee	21	9	1	0	0	4	1	0	1	16	98
Racine	4	0	1	0	0	1	0	0	0	2	13
Superior	2	13	1	0	0	0	0	0	0	0	9
WEST NORTH CENTRAL											
Minnesota:											
Duluth	4	21	0	0	0	0	1	0	0	6	25
Minneapolis	23	37	1	0	0	1	1	2	0	1	77
St. Paul	9	19	3	0	0	1	1	2	0	13	51
Iowa:											
Davenport	1	1	0	0			0	0		0	
Sioux City	2	0	1	1			0	0		0	
Waterloo	3	1	0	0			1	0		1	

[1] Pulmonary tuberculosis only.

City reports for week ended October 24, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST NORTH CENTRAL—continued											
Missouri:											
Kansas City	8	13	0	0	0	1	2	3	1	12	73
St. Joseph	3	1	0	0	0	0	1	0	1	0	22
St. Louis	28	32	0	0	0	10	4	9	1	0	192
North Dakota:											
Fargo	1	4	0	0	0	1	0	0	0	6	4
Grand Forks	1	0	0	0			0	0		1	
South Dakota:											
Aberdeen	1	0	1	0			1	0		0	
Sioux Falls	1	4	1	0	0	1	1	0	0	0	11
Nebraska:											
Lincoln	1	2	0	0	0	0	0	0	0	6	9
Omaha	3	6	0	1	0	4	1	0	1	3	68
Kansas:											
Topeka	2	2	0	0	0	0	0	0	0	0	16
Wichita	2	3	1	0	0	0	0	0	0	2	21
SOUTH ATLANTIC											
Delaware:											
Wilmington	2	1	0	0	0	1	2	2	0	0	28
Maryland:											
Baltimore	10	8	0			22	7	10	0	43	215
Cumberland	1	0	0	0	0	2	1	2	1	0	12
Frederick	0	0	0	0	0	0	0	0	0	0	3
District of Col.:											
Washington	10	26	0	0	0	4	4	1	1	8	134
Virginia:											
Lynchburg	1	3	0	0	0	0	0	0	0	0	10
Norfolk	1	1	0	0	0	2	1	0	0	0	
Richmond	7	8	0	0	0	2	2	1	0	0	35
Roanoke	2	2	0	0	0	0	1	1	1	0	16
West Virginia:											
Charleston	1	1	0	0	0	2	1	4	2	0	25
Huntington	1	0	0	0	0	0	0	1	1	0	14
Wheeling	2	5	0	0	0	4	2	4	0	0	16
North Carolina:											
Raleigh	2	3	0	0	0	2	0	0	0	1	19
Wilmington	1	2	0	0	0	1	1	0	0	0	13
Winston-Salem	2		0				1				
South Carolina:											
Charleston	1	0	0	0	0	1	2	0	0	0	14
Columbia	1	1	1	0			0	0		0	
Greenville	0	0	0	0	0	0	1	4	0	1	9
Georgia:											
Atlanta	7	2	1	0	0	6	2	5	3	0	68
Brunswick	0	0	0	0	0	0	0	0	0	0	2
Savannah	1	1	0	0	0	1	1	1	1	0	33
Florida:											
Tampa	0	0	0	0	0	0	0	2	0	0	23
EAST SOUTH CENTRAL											
Kentucky:											
Covington	2	0	0	0	0	1	0	3	0	0	16
Louisville	4	7	0	0	0	4	2	8	0	2	90
Tennessee:											
Memphis	4	5	0	1	0	3	2	8	0	1	54
Nashville	4	8	1	0	0	3	3	6	3	0	43
Alabama:											
Birmingham	6	2	0	0	0	5	3	3	0	0	50
Mobile	1	1	0	0	0	1	1	0	0	1	16
Montgomery	1	0	1	0	0	0	0	0	0	3	
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	1	0	0	0			0	0		1	
Little Rock	2	2	0	0	0	0	1	2	0	0	
Louisiana:											
New Orleans	3	1	0	0	0	13	4	5	0	37	151
Shreveport	0	1	0	0	0	0	0	2	1	0	17

City reports for week ended October 24, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST SOUTH CENTRAL—continued											
Oklahoma:											
Oklahoma	3	2	0	0	0	1	1	1	1	0	20
Texas:											
Dallas	4	2	0	0	0	2	2	5	0	7	48
Galveston	0	0	0	0	0	1	0	2	0	0	8
Houston	1	2	1	0	0	2	1	0	0	----	45
San Antonio	0	1	0	0	0	13	0	2	0	0	51
MOUNTAIN											
Montana:											
Billings	0	0	0	0	0	0	1	0	1	0	8
Great Falls	1	2	1	1	0	0	1	0	0	2	9
Helena	1	2	1	0	0	0	0	0	0	0	1
Missoula	0	0	0	0	0	0	0	0	0	0	4
Idaho:											
Boise	1	1	0	0	0	0	0	0	0	0	3
Colorado:											
Denver	6	3	3	0	0	9	2	0	0	8	92
Pueblo	1	1	0	0	0	0	0	1	0	0	16
New Mexico:											
Albuquerque	1	4	0	0	0	6	1	1	0	0	10
Arizona:											
Phoenix	----	3	----	0	0	5	----	1	0	----	21
Utah:											
Salt Lake City	2	3	0	0	0	4	3	6	0	10	23
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	7
PACIFIC											
Washington:											
Seattle	7	12	1	2	----	----	2	1	----	5	----
Spokane	4	5	3	1	----	----	1	5	----	1	----
Tacoma	1	4	0	4	0	0	1	0	0	0	22
Oregon:											
Portland	6	10	3	2	0	6	2	1	0	0	----
California:											
Los Angeles	11	14	1	14	2	18	4	2	1	4	193
Sacramento	2	4	0	5	0	1	1	2	0	0	25
San Francisco	6	7	1	1	0	7	1	1	0	12	150

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
Massachusetts:									
Boston	1	0	1	2	0	0	2	4	1
Springfield	0	0	1	0	0	0	1	1	0
Rhode Island:									
Providence	0	0	0	0	0	0	0	1	1
MIDDLE ATLANTIC									
New York:									
Buffalo	0	1	0	0	0	0	1	1	1
New York City	0	1	8	5	0	0	14	7	2
Rochester	0	0	0	0	0	0	0	1	0
New Jersey:									
Newark	1	0	1	0	0	0	0	0	0
Pennsylvania:									
Philadelphia	1	2	1	1	0	0	1	1	0

City reports for week ended October 24, 1925—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	0	0	0	0	0	0	0	1	1
Cleveland	0	2	1	0	0	0	1	2	0
Indiana:									
Indianapolis	0	0	0	0	0	0	0	2	1
Illinois:									
Chicago	0	1	0	0	0	0	5	1	0
Michigan:									
Detroit	0	0	0	0	1	0	1	0	0
Wisconsin:									
Milwaukee	0	0	0	1	0	0	0	0	0
WEST NORTH CENTRAL									
Minnesota:									
Minneapolis	0	0	0	0	0	0	0	2	0
Iowa:									
Davenport	0	0	0	0	0	0	0	1	0
Missouri:									
Kansas City	0	0	0	0	0	0	0	1	0
Nebraska:									
Omaha	0	0	0	0	0	0	0	8	2
Kansas:									
Wichita	0	0	0	0	0	0	0	1	1
SOUTH ATLANTIC									
Delaware:									
Wilmington	1	1	0	0	0	0	0	0	0
District of Columbia:									
Washington	0	0	2	2	0	0	1	0	0
North Carolina:									
Raleigh	0	0	0	0	0	1	0	0	0
Georgia:									
Savannah	0	0	0	0	0	1	0	0	0
EAST SOUTH CENTRAL									
Kentucky:									
Louisville	0	0	0	0	0	0	0	13	0
Tennessee:									
Memphis	0	0	0	0	0	1	0	0	0
Alabama:									
Birmingham	0	0	0	0	2	0	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock	0	0	0	1	0	0	0	0	0
Louisiana:									
New Orleans	0	0	2	1	1	2	0	0	0
Shreveport	0	0	0	0	0	1	0	0	0
Oklahoma:									
Oklahoma City	0	0	0	1	0	0	0	0	0
MOUNTAIN									
Montana:									
Great Falls	0	0	0	0	0	0	0	1	0
Colorado:									
Denver	0	0	0	0	0	1	0	0	0
Utah:									
Salt Lake City	0	0	0	0	0	0	0	1	0
PACIFIC									
Washington:									
Seattle	0	0	0	0	0	0	1	1	0
Tacoma	0	0	0	0	0	0	0	2	0
California:									
Los Angeles	0	0	1	0	0	1	1	0	1
Sacramento	0	0	0	0	0	0	0	1	0
San Francisco	1	1	0	1	0	0	1	3	0

The following table gives the rates per hundred thousand population for 103 cities for the 10-week period ended October 24, 1925. The population figures used in computing the rates were estimated as of July 1, 1923, as this is the latest date for which estimates are available. The 103 cities reporting cases had an estimated aggregate population of nearly 29,000,000, and the 96 cities reporting deaths had more than 28,000,000 population. The number of cities included in each group and the aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, August 16 to October 24, 1925—Annual rates per 100,000 population [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Aug. 22	Aug. 29	Sept. 5	Sept. 12	Sept. 19	Sept. 26	Oct. 3	Oct. 10	Oct. 17	Oct. 24
103 cities	70	[2] 75	[3] 72	96	99	[4] 102	[5] 121	[6] 154	154	[7] 168
New England	52	42	45	77	144	84	77	99	124	[8] 97
Middle Atlantic	73	63	62	89	83	81	[9] 84	[6] 155	129	129
East North Central	55	72	61	75	81	113	[10] 140	164	174	189
West North Central	102	118	102	145	149	155	195	207	236	259
South Atlantic	64	[2] 73	113	127	94	117	225	191	224	[11] 268
East South Central	63	40	34	80	80	63	69	97	97	109
West South Central	60	97	32	125	60	79	65	83	93	102
Mountain	76	172	315	200	224	[4] 195	134	200	162	372
Pacific	104	110	[3] 80	78	136	107	107	107	110	142

MEASLES CASE RATES

103 cities	31	[2] 28	[3] 22	23	30	[4] 36	[5] 40	[6] 53	70	[7] 93
New England	97	89	52	94	112	184	250	385	447	[8] 599
Middle Atlantic	38	34	25	25	34	32	[9] 32	[6] 24	65	87
East North Central	19	22	21	17	24	24	[10] 26	26	25	47
West North Central	6	4	6	4	10	6	8	6	10	10
South Atlantic	35	[2] 25	25	23	16	31	25	16	55	[11] 40
East South Central	6	11	0	0	6	11	11	11	6	40
West South Central	9	0	0	5	5	0	0	0	0	14
Mountain	29	29	0	10	10	[4] 29	10	38	10	29
Pacific	12	6	[3] 28	9	15	20	3	12	29	12

SCARLET FEVER CASE RATES

103 cities	53	[2] 40	[3] 56	54	63	[4] 66	[5] 87	[6] 113	126	[7] 132
New England	92	70	47	65	62	47	89	109	132	[8] 130
Middle Atlantic	23	27	30	31	47	49	[9] 49	[6] 111	75	96
East North Central	58	48	62	61	62	70	[10] 104	117	151	142
West North Central	147	112	125	114	151	147	195	135	276	296
South Atlantic	43	[2] 41	59	57	39	66	69	98	137	[11] 134
East South Central	34	29	143	120	57	80	80	132	154	132
West South Central	51	19	37	32	42	14	51	65	56	42
Mountain	67	29	76	38	166	[4] 88	181	153	48	115
Pacific	44	70	[3] 52	38	67	81	93	107	142	133

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

Summary of weekly reports from cities, August 16 to October 24, 1925—Annual rates per 100,000 population—Continued

SMALLPOX CASE RATES

	Week ended—									
	Aug. 22	Aug. 29	Sept. 5	Sept. 12	Sept. 19	Sept. 26	Oct. 3	Oct. 10	Oct. 17	Oct. 24
103 cities	6	[2]8	[3]5	6	7	[4]6	[5]2	[6]7	8	[7]7
New England	0	0	0	0	0	0	0	0	0	[8]7
Middle Atlantic	0	1	0	0	0	0	[9]0	[6]0	0	0
East North Central	2	8	5	2	2	2	[10]0	1	8	4
West North Central	6	4	4	4	4	2	2	10	0	4
South Atlantic	4	[3]12	2	12	12	6	0	6	6	[11]0
East South Central	40	57	11	23	40	34	0	17	46	6
West South Central	5	14	5	5	5	0	0	0	0	0
Mountain	10	10	10	19	0	[4]39	10	10	29	10
Pacific	44	29	[3]40	44	49	41	26	46	58	78

TYPHOID FEVER CASE RATES

103 cities	57	[2]47	[3]40	42	51	[4]45	[5]40	[6]38	36	[7]33
New England	32	27	30	35	30	22	47	17	25	[8]15
Middle Atlantic	45	30	29	27	35	34	[9]33	[6]33	28	25
East North Central	31	28	19	22	19	31	[10]18	22	32	9
West North Central	48	35	21	62	58	17	35	33	21	33
South Atlantic	111	[2]95	62	51	111	94	54	55	70	[11]78
East South Central	183	177	183	246	212	217	143	177	132	160
West South Central	134	111	176	74	167	102	97	60	46	83
Mountain	105	115	29	133	88	[4]98	115	124	48	67
Pacific	64	55	[3]31	29	29	23	29	9	20	32

INFLUENZA DEATH RATES

96 cities	2	[2]4	[3]3	5	5	[4]3	[5]5	[6]3	6	[12]8
New England	0	0	0	2	0	0	0	0	0	[8]2
Middle Atlantic	2	3	3	3	6	3	[9]3	[6]1	5	[9]8
East North Central	1	4	3	7	4	5	[10]7	3	8	9
West North Central	0	2	2	0	7	4	4	4	7	7
South Atlantic	0	[3]2	2	0	2	2	4	2	2	[11]2
East South Central	11	6	0	6	6	0	17	0	17	6
West South Central	10	15	5	5	10	0	20	15	10	20
Mountain	10	10	19	29	20	[4]10	0	10	0	38
Pacific	8	0	[3]0	4	0	4	0	0	11	4

PNEUMONIA DEATH RATES

96 cities	55	[2]64	[3]73	64	62	[4]57	[5]62	[6]67	94	[12]93
New England	40	42	55	52	70	55	32	60	97	[8]87
Middle Atlantic	65	65	84	68	62	66	[9]63	[6]68	94	[9]95
East North Central	43	54	64	49	47	42	[10]47	65	94	83
West North Central	31	53	33	37	46	28	37	46	61	63
South Atlantic	64	[2]85	57	64	86	92	87	76	129	[11]124
East South Central	80	69	143	154	86	46	109	120	103	132
West South Central	82	112	76	87	82	51	66	66	56	117
Mountain	67	76	86	38	117	[4]78	143	95	124	115
Pacific	53	69	[3]106	102	69	57	98	57	83	78

[2] Greenville, S. C., not included.
[3] Spokane, Wash., not included.
[4] Helena, Mont., not included.
[5] Pittsburgh, Pa., and Superior, Wis., not included.
[6] New York, N. Y., not included.
[7] Barre, Vt., and Winston-Salem, N. C., not included.
[8] Barre, Vt., not included.
[9] Pittsburgh, Pa., not included.
[10] Superior, Wis., not included.
[11] Winston-Salem, N. C., not included.
[12] Barre, Vt., Pittsburgh, Pa., and Winston-Salem, N. C., not included.

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

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases	Aggregate population of cities reporting deaths
Total	103	96	28,977,311	28,321,626
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	16	16	7,135,899	7,135,899
West North Central	14	11	2,515,330	2,381,454
South Atlantic	21	21	2,542,498	2,542,498
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	4	1,797,830	1,377,572

FOREIGN AND INSULAR

THE FAR EAST

Report for week ended October 10, 1925.—The following report for the week ended October 10, 1925, was transmitted by the Far Eastern bureau of the health section of the League of Nations, located at Singapore, to the headquarters at Geneva:

	Plague		Cholera		Smallpox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Calcutta	------	0	------	12	1	1
Bombay	------	0	------	0	3	1
Madras	------	0	------	0	3	2
Rangoon	------	5	------	1	0	0
Karachi	------	8	------	0	0	0
Negapatam	------	0	------	0	1	1
Singapore	0	0	0	0	0	0
Port Swettenham	0	0	0	0	0	0
Penang	0	0	0	0	0	0
Batavia	0	0	0	0	0	0
Soerabaya	1	1	0	0	1	1
Samarang	0	0	0	0	0	0
Belawan Deli	0	0	0	0	0	0
Macassar	0	0	0	0	0	0
Sandakan (North Borneo)	0	0	0	0	0	0
Kuching (Sarawak)	0	0	0	0	0	2
Bangkok	0	0	0	1	0	0
Saigon and Cholon	0	0	0	0	0	0
Hongkong	0	0	0	0	0	0
Shanghai	0	0	0	0	0	0
Manila	0	0	27	7	0	0
Colombo	0	0	2	2	0	0
Amoy	0	0	0	0	0	0
Nagasaki	0	0	0	0	0	0
Yokohama	0	0	1	------	0	0
Shimonoseki	0	0	0	0	0	0
Moji	0	0	0	0	0	0
Kobe	0	0	1	------	0	0
Osaka	0	0	0	0	0	0
Keelung (Formosa)	0	0	0	0	0	0
Fusan	0	0	0	0	0	0
Dairen	0	0	0	0	0	0
Adelaide	0	0	0	0	0	0
Brisbane	0	0	0	0	0	0
Fremantle	0	0	0	0	0	0
Melbourne	0	0	0	0	0	0
Sydney	0	0	0	0	0	0
Suez	0	0	0	0	0	0
Alexandria	0	0	0	0	0	0
Port Said	1	1	0	0	0	0
Mombasa (Kenya)	0	0	0	0	0	0
Massowah	0	0	0	0	0	0
Djibuti	0	0	0	0	0	0
Lourenco Marques	0	0	0	0	0	0
Durban	0	0	0	0	0	0
Cape Town	0	0	0	0	0	0
Mauritius	4	4	0	0	0	0
Seychelles	0	0	0	0	0	0

CANAL ZONE

Communicable diseases—September, 1925.—During the month of September, 1925, communicable diseases were notified in the Canal Zone, and at Colon and Panama as follows:

Disease	Canal Zone		Colon		Panama		Nonresident		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chicken pox	2				22				24	
Diphtheria	2				2				4	
Dysentery			2	1	5		4		11	1
Hookworm			3		53		49		105	
Leprosy					1				1	
Malaria	132	2					21		153	2
Measles	33		4		2				39	
Pneumonia [1]		3		3		18		2		26
Poliomyelitis					1				1	
Tuberculosis [1]		5		2		18		4		29
Typhoid fever					2			1	2	1

[1] Only deaths reported.

ECUADOR

Plague—Guayaquil—October 1-15, 1925.—During the two-week period ended October 15, 1925, 6 cases of plague with 5 deaths were reported at Guayaquil, Ecuador.

Plague-infected rodents.—During the same period, out of 10,579 rats taken at Guayaquil, 57 were found plague infected.

FINLAND

Communicable diseases—August, 1925.—During the period August 1 to 31, 1925, communicable diseases were reported in Finland as follows: Diphtheria, 54 cases; dysentery, 54 cases; measles, 9 cases; paratyphoid fever, 174 cases; poliomyelitis, 1 case; scarlet fever, 62 cases; typhoid fever, 103 cases.

LATVIA

Communicable diseases—August, 1925.—Communicable diseases were reported in the Republic of Latvia during the month of August, 1925, as follows:

Disease	Cases	Disease	Cases
Diphtheria	40	Scarlet fever	110
Dysentery	64	Typhoid fever	136
Measles	68	Typhus fever	3
Mumps	10	Whooping cough	45
Paratyphoid fever	2		

Leprosy.—During the same period 2 cases of leprosy were reported in Latvia.

MALTA

Communicable diseases—September, 1925.—During the period September 1 to 30, 1925, communicable diseases were reported in the Island of Malta as follows:

Disease	Cases	Disease	Cases
Chicken pox	4	Poliomyelitis	1
Diphtheria	5	Scarlet fever	1
Lethargic encephalitis	1	Tuberculosis	25
Malta (undulant) fever	69	Typhoid fever	66
Pneumonia (including broncho-pneumonia	8	Whooping cough	1

Smallpox—Valetta and vicinity.—During the period October 5 to 13, 1925, 16 cases of smallpox with 4 deaths were reported in the island. Of these, 7 cases occurred in the port of Valetta and 9 cases in the adjacent locality of Floriana.

PERU

Plague—Callao—Lima—July-August, 1925.—Plague has been reported in Callao, Lima, and vicinity, for the months of July and August, 1925, as follows: July—cases, 29; deaths, 12; August—cases, 11; deaths, 6. The distribution was in six localities. In Lima city 15 cases were reported, and in the country district, 6 cases. For general distribution according to locality, see page 2546.

RUSSIA

Communicable diseases—Ukraine—July, 1925.—During the month of July, 1925, communicable diseases were notified in the Ukraine, Russia, as follows:

Disease	Cases	Disease	Cases
Anthrax	636	Paratyphus fever	130
Cerebrospinal meningitis	76	Recurrent fever	83
Diphtheria	1,025	Scarlet fever	3,117
Dysentery	3,146	Smallpox	19
Influenza	19,463	Typhoid fever	1,416
Lethargic encephalitis	52	Typhus fever	248
Malaria	75,398	Whooping cough	9,706
Measles	9,504		

VIRGIN ISLANDS

Communicable diseases—August, 1925.—During the month of August, 1925, communicable diseases were reported in the Virgin Islands of the United States as follows:

Island and disease	Cases	Remarks
St. Thomas and St. John:		
Chancroid	5	
Chicken pox	3	
Dysentery	1	Unclassified.
Gonorrhea	4	
Malaria	1	Benign tertian.
Syphilis	10	Secondary, 8; laryngeal, 1; cerebrospinal meningeal, 1.
Tuberculosis	3	Chronic pulmonary, 1; of peritoneum, 1; pneumonic, 1.
St. Croix:		
Diphtheria	1	
Dysentery	1	Unclassified.
Gonorrhea	2	
Malaria	2	Malignant tertian.
Tuberculosis	1	Chronic pulmonary.

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

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

Reports Received During Week Ended November 13, 1925[1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Shanghai	Sept. 13-26	3	8	Cases, foreign; deaths, 8 (foreign and native); international settlement and French concession.
South Manchuria—				
Yingkou	Sept. 27-Oct. 3	2		On railway line.
India:				
Madras	Sept. 20-Oct. 3	2	2	

PLAGUE

Ceylon:				
Colombo	Sept. 13-19	1	1	
Ecuador:				
Guayaquil	Oct. 1-15	6	5	October 1-15, 1925: Rats taken, 10,579; found plague-infected, 57.
Greece:				
Athens	Aug. 1-31	27	9	Including Piræus.
India				Aug. 30-Sept. 12, 1925: Cases, 2,477; deaths, 1,760.
Karachi	Sept. 20-Oct. 3	5	2	
Madras Presidency	Aug. 29-Sept. 12	55	24	
Rangoon	Sept. 13-19	19	14	
Mauritius				August, 1925: Cases, 1.
Peru				July, 1925: Cases, 29; deaths, 12.
Barranca	July-August	8	6	August, 1925: Cases, 11; deaths, 6. Total, cases, 40; deaths, 18.
Callao	do	3	2	
Canete	do	5	1	
Huacho	July	3	1	
Lima (city)	July-August	15	7	
Lima (country)	do	6	1	

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

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

Reports Received During Week Ended November 13, 1925—Continued

SMALLPOX

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	Sept. 20-30	2		
Brazil:				
Rio de Janeiro	Sept. 27-Oct. 3	29	11	
British East Africa:				
Kenya—				
Mombasa	Sept. 5-26	1	4	
Tanganyika	Aug. 23-Sept. 12	32	4	
Canada:				
British Columbia—				
Vancouver	Oct. 19-25	2		
Great Britain:				
England—				
Newcastle-on-Tyne	Oct. 11-17	2		
India				Aug. 30-Sept. 12, 1925: Cases, 2,208; deaths, 451.
Bombay	Sept. 13-19	3		
Karachi	Sept. 20-26	4	1	
Madras	Sept. 20-Oct. 3	19	9	
Rangoon	Sept. 13-19	1	1	
Malta				Oct. 5-13, 1925: Cases, 16; deaths, 4.
Floriana	Oct. 5-13	9		
Valetta	do	7		
Mexico:				
Mexico City	Oct. 11-17	1		Including municipalities in Federal District.
San Luis Potosi	Oct. 18-24		1	
Peru:				
Arequipa	Aug. 1-31	4		
Lima	do	5		
Poland				Aug. 2-8, 1925: Cases, 1.
Russia:				
Ukraine	July 1-31	19		
Uruguay:				
Montevideo	Aug. 1-31	1		

TYPHUS FEVER

Chile:				
Valparaiso	Sept. 27-Oct. 3		2	
Greece:				
Athens				August, 1925: Cases, 14; deaths, 3. Including Piraeus.
Mexico:				
Mexico City	Oct. 11-17	11		Including municipalities in Federal District.
Peru:				
Arequipa	Sept. 1-30		1	
Poland				Aug. 2-15, 1925: Cases, 27; deaths, 3. Recurrent fever: Cases, 4; death, 1.
Rumania:				
Constantza	Sept. 1-10	1		
Russia:				
Ukraine	July 1-31	248		

Reports Received from June 27 to November 6, 1925 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 11-20	1		
Ceylon				Jan. 25-June 27, 1925: Cases, 172; deaths, 120. June 28-Aug. 8, 1925: Cases, 27; deaths, 21.
Colombo	May 10-16	2	2	

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

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

Reports Received from June 27 to November 6, 1925—Continued

CHOLERA—Continued

Place	Date	Cases	Deaths	Remarks
China:				
Foochow	Aug. 23–Sept. 19	19	9	
Hongkong	Sept. 13–19	2	2	
Nanking	Sept. 6–12			Sporadic cases.
Shanghai	July–September	2,058	218	Foreign: Cases, 58; deaths, 15. Native: Cases, 2,000; deaths, 103.
Swatow	Oct. 8			Present.
India				Apr. 26–June 27, 1925: Cases, 33,617; deaths, 19,950. June 28–Aug. 29, 1925: Cases, 16,453; deaths, 9,239.
Bombay	May 10–June 27	2	1	
Do	June 28–Aug. 15	11	7	
Calcutta	May 3–9	58	49	
Do	May 17–23	79	61	
Do	June 14–20	12	11	
Do	July 5–Sept. 12	81	66	
Karachi	Aug. 30–Sept. 5	1	1	
Madras Presidency	June 6–20	4	1	
Do	July 5–Sept. 19	47	17	
Rangoon	May 3–June 6	22	15	Feb. 8–14, 1925: Cases, 2; deaths, 2. (Received out of date.)
Do	June 14–27	12	8	
Do	June 28–Sept. 5	7	6	
Indo-China:				
Saigon	May 4–June 7	4	3	Including 100 square kilometers of surrounding country.
Do	June 22–July 12	3	2	
Do	Aug. 3–9	1	1	Do.
Japan:				
Kobe	Sept. 4–6	5	2	
Yokohama	Sept. 2	5	3	
Philippine Islands:				
Albay—				
Tabaco	June 14–20	1	1	
Bulacan	do	1	1	
Do	June 28–July 18	3	2	
Camarines Sur	July 3–9	1		
Lagonoy	June 6–12	2	1	
Leyte	July 8–14	1	1	
Manila	June 15–28	3		
Do	June 29–Aug. 16	17	4	June 1–Aug. 8, 1925: Cases, 17.
Do	Sept. 7–20	8	6	
Mountain Province	June 23–29	1	1	
Rizal Province	Aug. 2–8	2		
Do	Aug. 16–22	3	3	
Siam:				
Bankok	Apr. 29–June 27	9	4	
Do	Aug. 23–29	1	1	
Turkey:				
Constantinople	May 16–22	1		
On vessel:				
——		1		At Nagasaki. Reported Sept. 2, 1925, arrived on vessel from China.
Steamship President Lincoln.		1		At Kobe, Sept. 5, 1925, from Shanghai.

PLAGUE

Brazil:				
Bahia	May 3–June 13	5	4	
Do	Sept. 6–12	1	1	
British East Africa:				
Uganda	Feb. 1–28	28	28	
Entebbe	May 4–June 30	79	74	Apr. 1–May 31, 1925: Cases, 129; deaths, 118.
Ceylon:				
Colombo	May 10–June 30	11	10	
Do	June 28–Aug. 29	16	13	
Do	Aug. 30–Sept. 5	3	3	
Do	Sept. 18			Plague in rats.
China:				
Foochow	May 24–31			Reported present in epidemic form.
Do	Aug. 23–29			Present.
Nanking	July 25–Sept. 12			Do.
North Manchuria	May 27	2	1	

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

Reports Received from June 27 to November 6, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Ecuador:				
Guayaquil	June 1–15	1	1	May 16–June 30, 1925; Rats examined, 30,347, found infected, 95. July 1–Sept. 30, 1925: Rats taken, 54,453; rats found infected, 215.
Do	Sept. 1–30	4	3	
Egypt				Jan. 1–Sept. 9, 1925: Cases, 111. Corresponding period year 1914: Cases, 354.
City—				
Alexandria	June 17–24	2	2	Bubonic.
Port Said	June 17–18	1	1	
Do	June 28–Sept. 3	11	3	
Suez	June 14–27	3	2	
Do	Aug. 19	1	1	Septicemic.
Province—				
Assiut	June 5	1	1	
Beni-Souef	June 10–16	8	4	
Do	Aug. 6–12	5	2	
Charkieh	June 6–8	1	1	
Kena	June 17	1	1	
Minia	June 6–17	3	2	
France:				
Marseille	Aug. 13–18	3		
Gold Coast	March–April	3	3	
Greece:				
Athens	July 1–Aug. 14	26		
Do	Sept. 1–30	19	5	
Piræus	July 18–Aug. 14	9		
Pyrgos	Sept. 1	1		
Saloniki	Oct. 3	1		
Hawaii Territory:				
Honokaa	June 28			Plague-infected rat.
Do	Aug. 7	1		
Do	Aug. 15			Plague-infected rat, near Paauilo.
Kukuihaele	July 31			Plague-infected rat.
Paauhau	Aug. 12			Do.
India				Apr 26–June 27, 1925: Cases, 10,166; deaths, 8,913. June 28–Aug. 29, 1925: Cases, 4,967; deaths, 3,265.
Bombay	Apr. 26–June 27	65	59	
Do	June 28–Sept. 12	23	17	
Calcutta	May 30–June 6	1	1	
Do	July 5–11	1	1	
Karachi	May 18–June 6	4	3	
Do	July 31–Aug. 6	1	1	
Do	Sept. 6–19	2	2	
Madras	May 10–June 27	15	8	
Do	June 28–Aug. 29	108	41	
Rangoon	May 3–June 27	113	95	Feb. 8–14, 1925: Cases, 13; deaths, 13. (Received out of date.)
Do	June 28–July 4	20	18	
Do	July 12–Sept. 12	193	161	
Indo-China:				
Cochin-China—				
Saigon	Apr. 20–June 21	3	3	Including 100 square kilometers of surrounding country.
Do	Aug. 31–Sept. 13	2	1	Do.
Irak:				
Bagdad	May 24–June 6	9		
Do	June 21–27	5	1	
Japan:				
Taiwan—				
Taihoku	Oct. 2–6	1	1	
Java:				
Batavia	May 6–June 19	32	31	
Do	July 5–31	65	65	In Province.
Do	Aug. 8–14	28	26	Do.
Do	Aug. 22–Sept. 11	100	101	Do.
Besoeki Residency	Aug. 4–12			Epidemic in capital and in five native villages.
Cheribon	Apr. 1–June 27		102	
Do	June 28–Aug. 22		66	
Pasoeroean Residency	Mar. 7–May 25			Epidemic in several localities.
Do	July 13			Do.
Pekalongan	Apr. 9–June 27		96	
Do	June 28–July 25		9	
Soerabaya	May 7–27	3	3	
Do	June 28–Aug. 29	22	7	
Soerakarta Residency	May 28			Epidemic at Kalidgambe.
Do	Aug. 5–12			Epidemic at Klaten.
Tegal	Apr. 2–May 16		36	
Do	May 24–June 13		16	

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

Reports Received from June 27 to November 6, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Madagascar:				
Province—				
Itasy	Apr. 1-15	1	1	
Do	July 1-15	4	4	Bubonic, 3; septicemic, 1.
Tananarive	Apr. 1-June 30	232	200	
Do	July-Aug	70	66	Bubonic, 25; pneumonic, 28; septicemic, 17.
Town—				
Tamatave (port)	Apr. 1-15	2		
Do	June 1-7		1	
Tananarive Town	Apr. 16-May 31	5	5	
Do	Aug. 1-31	5	5	
Mauritius				April, 1925: 1 case.
Do				Sept. 18, 1925: Plague-infected rats found.
Nigeria	December, 1924	17	13	
Do	January, 1925	10	6	
Do	March-June	25	20	
Peru:				
Callao	July, 1925			Present. Press reports.
Cañete	August, 1925			Do.
Lima	Aug. 14	14		Press reports.
Russia:				
Kalmyk District	May 19-31	10	8	
North Caucasus	June 6-7	2	2	
Urts	May 25-June 3	2	2	In laboratory worker and contact. Locally, Province of Bukeevsk.
Siam:				
Bangkok	Apr. 26-June 20	13	11	
Do	June 28-Aug. 22	5	4	
Do				Sept. 18, 1925: Plague-infected rats found.
Straits Settlements:				
Singapore	May 3-30	9	9	
Do	June 28-Aug. 1	3	3	
Syria:				
Beirut	Sept. 4-10	2		
Tunis:				
Tunis	Aug. 12-18			Plague rodent.
Turkey:				
Constantinople	May 25-31	1		
Union of South Africa:				
Cape Province—				
Kimberley	June 14-20	1	1	In a Malay camp.
Do	July 5-11			One plague-infected house mouse
Orange Free State—				
Boshof District	June 28-Aug. 15	5	2	Natives.
On vessel:				
Steamship Efstratios Cavoundis.	July 7-11	4	1	At Alexandria, Egypt. Vessel arrived July 7, 1925. Regular route, ports in Syria, Greece, and Port Said. Dead rats reported found on board.
Steamship Arcadia	July 24-27	2		At Piræus, Greece, from Alexandria, Egypt.
Steamship Anatolia	Aug. 8	1		Do.
Steamship City of Norwich.	Apr. 15	1		At Port Said, Egypt, Apr. 14, 1925, from Rangoon, Colombo, and Perim; destination, London. Case occurred in first officer of vessel.
Steamship Naxos	Sept. 12	1		At Rhodes, from Dodecanese Islands via Alexandria, Egypt. The vessel left Alexandria Sept. 9, 1925.

SMALLPOX

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

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

Reports Received from June 27 to November 6, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Brazil:				
Bahia	June 28–Sept. 5	8	6	
Do	Sept. 19–26	2		
Pernambuco	Apr. 26–May 30	40	21	
Do	June 7–27	5	3	
Do	July 5–18	1	1	
Porto Alegre	June 14–20		1	
Do	Aug. 9–15		1	
Rio de Janeiro	May 9–June 27	5	1	
Do	June 28–Aug. 15	122	36	
Do	Aug. 29–Sept. 26	116	64	
British East Africa:				
Kenya—				
Mombasa	Apr. 19–June 20	27	13	
Do	July 5–Sept. 5	72	15	
Nairobi	May 3–9	3	2	
Tanganyika Territory	Apr. 5–May 23	82	24	
Do	June 14–27	48	3	
Do	Aug. 9–15	1,181	427	
Uganda	Feb. 1–28	2		
Entebbe	June 1–30	1		
British South Africa:				
Northern Rhodesia	Apr. 28–May 4	3		
Southern Rhodesia	June 11–July 1	2		
Bulgaria:				
Sofia	Aug. 6–19	2		
Canada:				
Alberta—				
Calgary	Aug. 2–Sept. 26	2		
British Columbia—				
Vancouver	June 1–28	7		
Do	July 6–Oct. 4	16	1	
New Brunswick—				
Restigouche County	June 1–30	1		
Ontario				May 31–Sept. 30, 1925: Cases, 52; deaths, 1.
Galt	June 14–20	2		
Kingston	do	1		
Do	Aug. 23–29	1		
North Bay	June 28–July 18	3		
Toronto	Oct. 4–17	3		
Saskatchewan—				
Regina	May 24–30	3		
China:				
Amoy	May 17–June 30		7	
Do	July 12–Sept. 19			Present.
Antung	May 11–June 21	7		
Do	June 29–Aug. 9	3		
Do	Sept. 7–13	4		
Canton	May 10–June 13			Do.
Chungking	May 3–30			Widespread.
Foochow	May 9–Aug. 22			Present.
Hongkong	Apr. 19–June 13	15	12	
Do	July 19–25	1		
Manchuria—				
Dairen	Apr. 13–June 28	115	17	
Do	June 28–Aug. 30	5	2	
Harbin	May 13–June 2	2		
Nanking	May 9–Sept. 26			Do.
Shanghai	May 3–June 6	5	2	
Do	July 6–25	1	1	
Swatow	May 17–Sept. 12			Stated to be endemic.
Tientsin	May 9–June 6	3		
Do	July 12–18	1		
Chosen	January–May	1,663	386	
Seoul				January–June, 1925; Cases, 341; deaths, 74.
Colombia:				
Buenaventura	Sept. 15–29	1		
Czechoslovakia				Apr. 1–June 30, 1925: Cases, 3; deaths, 1. Occurring in State of Slovakia.
Egypt				January–July, 1925: Cases, 341; deaths, 74.
Alexandria	May 21–27	1	1	
Cairo	Mar. 19–May 13	5		
Do	June 18–24	17	5	
France				February–June, 1925: Cases, 102.
Paris	May 21–31	1		July, 1925: Cases, 49.

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

Reports Received from June 27 to November 6, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Germany:				
Baden (State)	July 12-25	2	1	
Stuttgart	July 5-Sept. 19	4	1	
Gibraltar				Year 1924: Cases, 6.
Gold Coast				January-June, 1925: Cases, 1,121; deaths, 99. July, 1925: Cases, 159; deaths, 36.
Great Britain:				
England and Wales				May 24-June 27, 1925: Cases, 441. June 28-Oct. 10, 1925: Cases, 722.
Birmingham	July 7-13	1		
Cardiff	June 14-20	1		
Do	Aug. 2-8	14	8	
Newcastle-on-Tyne	May 31-June 27	4		
Do	June 28-Oct. 10	16	1	
Sheffield	Oct. 4-10	8		
Greece				January-June, 1925: Cases, 47; deaths, 8. July, 1925: Cases, 2.
Athens	May 1-31		2	
Do	June 24-30	27	3	
Do	July 1-31	14	1	
Do	Sept. 1-30	8		
Haiti:				
Port au Prince	Aug. 23-29	1		Reported at Jean Rabel Aug. 27.
Hungary:				
Budapest	July 5-18	13		
India				Apr. 26-June 27, 1925: Cases, 37,107; deaths, 9,152. June 28-Aug. 29, 1925: Cases, 18,972; deaths, 4,612.
Bombay	Apr. 26-June 27	156	115	
Do	June 28-Sept. 5	32	23	
Calcutta	May 3-9	109	100	
Do	May 17-23	75	61	
Do	May 31-June 20	88	81	
Do	July 5-Sept. 12	64	53	
Karachi	May 18-June 27	6	1	
Do	June 28-July 4	1	1	
Do	Aug. 30-Sept. 19	6	5	
Madras	May 18-June 27	152	66	
Do	June 28-July 18	68	25	
Do	Aug. 2-Sept. 19	122	43	
Rangoon	May 3-June 27	207	99	
Do	June 28-July 4	2	1	
Do	July 12-Sept. 12	28	13	
Indo-China:				
Cochin-China—				
Saigon	Apr. 20-May 21	13	9	Including 100 square kilometers of surrounding country.
Do	Aug. 17-Sept. 6	15	4	Do.
Irak				Jan. 11-May 30, 1925: Cases, 136; deaths, 46.
Bagdad	Apr. 26-June 20	4	1	
Italy	Dec. 28-June 27	97		
Do	June 28-Aug. 1	29		
Catania	Aug. 17-23	1		
Syracuse Province	do	1		
Turin	Aug. 17-Sept. 13	7		
Venice	July 27-Aug. 2	3		
Jamaica				Apr. 26-June 27, 1925: Cases, 110. June 28-Sept. 26, 1925: Cases, 161 (reported as alastrim).
Kingston	Apr. 26-June 27	19		Reported as alastrim.
Do	June 28-Sept. 26	59		Do.
Japan:				
Kobe	May 24-June 27	2		
Nagasaki	May 15-21	2		
Do	July 6-19	1	1	
Taiwan	June 1-30	11		
Do	July 1-31	1		
Tokyo	June 14-20	1		
Yokohama	May 25-June 12	3		
Java:				
Bantam Residency	June 14-27	2		
Batavia	May 2-June 26	2		
Do	July 4-31	5		
Do	Aug. 8-22	5		Province.
Brebes	Apr. 22-28	1		
Cheribon	Apr. 16-22		1	
Do	July 12-18	1		Do.
Kediri Residency	July 14			Epidemic.
Pekalongan	Apr. 2-8	1		
Rembang Residency	Apr. 23			Epidemic at Kawedanan.
Do	Aug. 8			Epidemic at Montong.

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

Reports Received from June 27 to November 6, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Java—Continued.				
Soerabaya	Apr. 16–June 27	304	41	
Do	June 28–Aug. 8	373	43	
Do	Aug. 16–29	173	36	
South Bantam	Apr. 16–22	1		
Tegal	Mar. 29–May 2	2	1	
Latvia				May–June, 1925: Cases, 4. July, 1925: Case, 1.
Lithuania				February–May, 1925: Cases, 6.
Malta	June 1–30	9		
Do	July 1–Aug. 31	9	1	
Mexico				January–June, 1925: Deaths, 2,667.
Durango	July–August		22	
Guadalajara	June 2–29		10	
Do	June 30–Sept. 21		3	
Merida	Sept. 20–Oct. 16	2		
Mexico City	May 24–June 27	12		Including municipalities in Federal district.
Do	July 5–11	3		Do.
Do	July 26–Sept. 5	8		Do.
Do	Sept. 27–Oct. 3	2		Do.
Oaxaca, State	Aug. 14			Epidemic at El Hule and other localities.
San Luis Potosi	Aug. 16–Sept. 19	3	2	
Do	Oct. 11–17		2	
Tampico	June 1–10		1	
Do	July 1–31	4	2	
Torreon	Aug. 1–Sept. 30	2	4	
Morocco:				
Tangier	May 17–June 5			Present among natives.
Nigeria				December, 1924: Cases, 40; deaths, 16.
Do				January–June, 1925: Cases, 1,541; deaths, 169.
Persia:				
Teheran	Mar. 21–May 21		29	
Peru:				
Arequipa	June 1–30		1	
Poland				Mar. 1–June 27, 1925: Cases, 41. July 5–12, 1925: Cases, 2.
Portugal:				
Lisbon	Apr. 26–June 27	36	6	
Do	June 28–Oct. 3	100	14	Sept. 7–20, 1925: Deaths, 6.
Oporto	June 14–20	1		
Do	July 19–Aug. 29	7		
Rumania				January–May, 1925: Cases, 22; deaths, 1.
Russia				December, 1924: Cases, 1,000. January–April, 1925: Cases, 5,733.
Siam:				
Bangkok	Apr. 26–June 27	27	19	
Do	June 28–July 11	2	1	
Spain:				
Malaga	May 24–June 20		15	
Do	July 5–Oct. 10		44	
Valencia	May 31–June 27	3	1	
Straits Settlements:				
Singapore	May 17–23	1		
Do	July 5–11	1	1	
Sumatra:				
Pedang	July 12–25	5		
Switzerland:				
Berne	June 7–13	1		
Lucerne	June 14–20	4		
Syria:				
Beirut	Apr. 21–30	1		
Tripoli				Jan. 3–Apr. 15, 1925: Cases, 14.
Tunis:				
Tunis	May 6–June 30		46	
Do	July 1–Oct. 6		91	
Turkey:				
Constantinople	May 16–22	2		
Union of South Africa:				
Cape Province	May 24–Aug. 8			Outbreaks.
Port Elizabeth	Apr. 18–25	8	1	
Orange Free State	Aug. 9–15			Outbreak in Ladybrand district.
Transvaal	May 3–June 6			Outbreaks.
Uruguay				December, 1924: Cases, 8.
Do				February–May, 1925: Cases, 11.

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

Reports Received from June 27 to November 6, 1925—Continued

TYPHUS FEVER

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 11-20	6	2	In vicinity, 12 cases. Isolated.
Do	July 1-Aug. 20	18	8	
Constantine	July 1-10	17		District.
Do	July 21-31	7		Department.
Oran	do	8		Do.
Bolivia:				
La Paz	Apr. 1-June 30	5		
Do	Aug. 1-31	1		
Bulgaria				November-December, 1924: 1 case. January - June, 1925: Cases, 124; deaths, 7. July, 1925: Cases, 27; deaths, 3.
Sofia	May 28-June 3	2		
Canary Islands:				
Santa Cruz de Teneriffe	Sept. 14-20		1	
Chile:				
Iquique	Aug. 8-22		2	
Valparaiso	May 10-June 27		2	
Do	June 28-Sept. 26		11	
China:				
Manchuria—				
Harbin	May 19-June 2	2		
Do	Sept. 2-8	2		
Chosen	January-May	394	69	
Czechoslovakia				April-June, 1925: 1 case, occurring in Province of Russinia. July, 1925: Cases, 3.
Egypt				January-June, 1925: Cases, 1,011; deaths, 211. July 2-Aug. 4, 1925: Cases, 107; deaths, 19.
Alexandria	May 7-June 3	3	1	
Do	July 9-Sept. 17	3		
Cairo	Mar. 26-May 13	6	4	
Do	July 16-29	3	1	
Port Said	May 14-20	1	1	
Do	July 30-Aug. 12	4	1	
Do	Aug. 20-26	3		
Esthonia				Apr. 1-May 30, 1925; Cases, 6; Aug., 1925: Cases, 1.
Great Britain:				
Scotland—				
Glasgow	Sept. 6-Oct. 8	2		
Greenock	May		2	
Do	Aug. 6-18	7		
Greece				January-June, 1925: Cases, 57; deaths, 6. July, 1925: Cases, 3.
Athens	May 1-31		2	
Do	Sept. 1-30	12	1	Including Piræus.
Kalamata	Apr. 1-30		2	
Patras	June 28-July 4		2	
Irak:				
Bagdad	July 12-18	1		
Ireland:				
Cork County	Aug. 25	3		
Latvia				April-June, 1925: Cases, 26. July-August, 1925: Cases, 9.
Libau	July 14-20	1		
Lithuania				March-May, 1925: Cases, 158; deaths, 7.
Mexico				January-June, 1925: Deaths, 124.
Mexico City	May 24-June 6	24		Including municipalities in Federal district.
Do	June 28-Aug. 1	39		Do.
Do	Aug. 16-Oct. 10	71		Do.
San Luis Potosi	June 26-July 4		1	
Tampico	Aug. 20-31	1		
Morocco				January-June, 1925: Cases, 421. July, 1925: Cases, 59.
Palestine:				
Dagania	July 21-27	1		
Ekron	do	1		
Haifa	Aug. 20-Sept. 28	2		
Jaffa district	June 28	2		
Do	Aug. 20-Sept. 14	3		
Jerusalem	July 29-Sept. 14	9		From Ramleh district.
Maijdal	May 26-June 8	3		
Ramleh	May 19-25	1		
Safad	June 9-15	1		
Do	July 21-27	1		
Tel Aviv	do	1		

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

Reports Received from June 27 to November 6, 1925—Continued

TYPHUS FEVER—Continued

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

YELLOW FEVER

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