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HIGH INCIDENCE OF TYPHOID IN SMALL EPIDEMIC.

AN OUTBREAK PRESUMABLY DUE TO THE EATING OF SALAD PREPARED BY A PERSON IN THE EARLY STAGES OF THE DISEASE.

By JAMES P. LEAKE, Passed Assistant Surgeon, United States Public Health Service, and RICHARD MESSER, C. E., Sanitary Engineer, Virginia State Board of Health.

On the evening of June 28, 1920, a dinner was given at Hopewell, Va., a community of approximately 7,000 population, at which 90 persons were present. Subsequently, from 5 to 23 days after the dinner, 49 of the 90 persons attending became ill enough to be confined to bed. The man who took to bed 23 days after the dinner had had an unusual headache since the ninth day. No other incidence of typhoid fever is known to have occurred in the community this season.

Some of the cases were typical cases of typhoid fever, but the disease corresponded to the recognized features of an outbreak caused by a very heavy infection of food with multiplying typhoid bacilli. The especial features of the outbreak were as follows:

1. The incubation period, in general, was short, the average being 10 days from the date of the dinner to the date of going to bed, 8 days for the more pronounced cases.

2. Many cases had a sudden onset, with severe symptoms.

3. There was a high incidence (54 per cent) among those persons exposed. Simultaneously there occurred among the persons who attended the dinner 9 other cases of illness of from 3 to 17 days duration, not severe enough to warrant confinement to bed. If these cases were included, the incidence rate would be 64 per cent.

4. The course of the disease was generally milder and shorter than the usual course of typhoid fever.

5. There were many atypical cases.

6. The disease occurred in spite of previous vaccination against typhoid (51 per cent of the histories) and even in some who had had typhoid fever (7 per cent of the histories). On the other hand, of those who attended the dinner but did not get sick, about 70 per cent had been vaccinated and about 40 per cent had had typhoid fever. Up to August 20 there shad been t3 deaths, making a

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mortality rate of 6 per cent among those persons who were the more seriously ill.

The rarity of such intense outbreaks of typhoid and the lack of correspondence to typhoid fever as seen in the usual hospital ward caused confusion in diagnosis in this instance. It was thought at first that some other factor of food poisoning was present.

There is no known form of food poisoning other than that of the typhoid group with such an incubation period as was shown in this outbreak. That the disease was true typhoid was proved by agglutinins (1:100 to 1:8,000) in the serum of the patients, even in some of the atypical cases, and by blood cultures, which were positive for the typhoid bacillus in 8 out of the 18 cases tried. The single autopsy was typical of typhoid fever, with marked hyperplasia of Peyer's patches, solitary follicles and mesenteric glands, and with intestinal hemorrhage as the immediate cause of death.

The only article of food at the dinner which was eaten by all who became sick was a chicken salad. This salad was placed on lettuce from different gardens, but many of those persons who did not eat the lettuce became sick. The chicken, veal, and celery used in the salad could not be brought under suspicion on account of their varied sources.

The member of the dinner committee who prepared the mayonnaise dressing had been tired and complaining for about a week previous to the dinner, though she was usually very active and free from any disability. After the dinner, her physician and his wife, knowing that she was sick, took her home by automobile. During the succeeding week, though up and about, she did not return to the hall. where the dinner had been given, to secure her dishes. Seven days after the dinner she took to her bed and became seriously sick, her attack being described by some of the physicians as one of the most typically typhoidal of the group. She had not received typhoid vaccine for 3 years, but her serum agglutinated at 1:200, and a blood culture yielded typhoid bacilli 16 days after the dinner. About 13 days before the dinner she had spent an evening in an adjoining county, but had made no other visits out of town nor received visitors for some months previously. None of her family (consisting of husband and four children) was taken sick, although she and her elder daughter prepared the meals. Her husband had typhoid fever 23 years previously.

Assuming that the mayonnaise dressing was the origin of the outbreak, the freedom of the other members of the family from the disease may be explained either as chance natural immunity, or on the assumption that the hands of the mother were heavily contaminated at the time when this dish was prepared, but on no occasion when she prepared uncooked food for her household. The only other member of the family who attended the dinner, except the husband, was the younger daughter, and she ate no salad. Parts of all other articles of food on the menu were carried to various homes after the dinner, but the salad barely sufficed for the second table, at which the committee, some children, and some late comers were served. No illness occurred in these other homes in persons who did not attend the dinner.

The mayonnaise was prepared about as follows: At 9 o'clock on the morning of the dinner a can of cottonseed oil, a dozen egg yolks, two teaspoonfuls of salt, and somewhat less than as much juice as could be squeezed with one hand from two lemons were mixed by beating the yolks with a silver fork, adding the oil slowly, then the salt, and the lemon juice, drop by drop. The beating continued until the dressing reached the proper consistency. The yellow glazed mixing bowl containing the dressing was placed in the bottom of the household ice chest until 2 p. m., when it was taken to the hall and placed on a shelf in the pantry.

From 5 o'clock until 8.30 the mayonnaise, together with the other components of the salad, but in separate dishes, stood on ice. The mixed chicken, veal, and celery, with mayonnaise on top, were then placed on lettuce leaves on each plate at the table. The maximum temperature of the day, 31° C. (U. S. Weather Bureau), occurred while the dressing stood on the pantry shelf.

Prof. William Mansfield Clark of the Hygienic Laboratory, United States Public Health Service, found egg yolk to have a $p_{\rm H}$ value¹ of approximately 6.0, while egg white is of the order of $p_{\rm H}$ 9.0; lemon juice alone has a $p_{\rm H}$ value averaging 2.2. J. H. Wright found that the maximum growth of typhoid bacillus occurred at $p_{\rm H}$ 6.0 to 6.5. The temperature of 31°C. would favor rapid proliferation. The brand of cottonseed oil used has been found, in work with lipo-vaccines, to maintain rather delicate organisms alive for long periods. The acidity of lemon juice is not sufficient to kill bacteria which may be washed down from the hands in the act of squeezing the lemons.

A single trial under conditions approximating as closely as possible those of June 28 as to assumed mode of infection of the salad dressing and as to temperature, showed that typhoid bacilli would remain alive and apparently multiply in mayonnaise prepared by the above recipe. Plates made from the experimental salad immediately, $1\frac{1}{2}$, 3, and 24 hours after mixing showed a progressive increase in growth of typhoid bacilli, but numerical comparisons were impracticable on account of the oily nature of the menstruum.

The Widal reactions and the blood cultures, which form an essential part of this investigation, were made by Mr. Straus, bacteriologist of the Virginia State Board of Health.

¹ The p_{π} value of a solution is an expression of its hydrogen on concentration or true acidity; the lower the p_{π} value the greater the acidity. A neutral solution has a p_{π} value of about 7.5.

METHODS OF INCREASING THE EFFICIENCY OF BURAL SANITATION.¹

By T. J. ROBINSON, Sanitary Demonstrator, United States Public Health Service.

We are to-day dealing with a problem that is confronting every civilized nation on the globe. Realizing the importance of rural sanitation to a country, all right-thinking persons who are interested more in the saving of human lives than in the jingle of coin are trying to determine practical methods through which the eyes of the people as a whole may be opened to an understanding of the need and feasibility of rural sanitation advancement.

Rural sanitation is a difficult and a delicaté problem. It is a difficult problem because satisfactory results can be accomplished only through the education and cooperation of the citizens who live out in the byways of the country, some of whom are so ignorant that when one talks sanitation to them they think he is trying to self them some kind of farming machinery. It is a delicate problem, because, to accomplish the sanitary improvements needed, it is necessary to extract from the pockets and purses of this same class of citizens a few of their hard-earned dollars.

There has never been a time in the history of our country when good common sense was more needed than it is at the present time, and the thinking people of our country are realizing that fact and are making an effort to broaden the scope of common-sense education among our people.

Rural sanitation will continue to be a difficult problem until the people of our rural communities are more thoroughly educated in public-health matters. Though laws may be passed and powers conferred upon the officials doing public-health work, no sanitary improvement is going to be thoroughly effective unless we create an intelligent interest, both in the individual and the public mind. Therefore we are naturally led to the conclusion that the most effective and most direct method of increasing the efficiency of rural sanitation is individual and public education. Then the questions arise: "How is this education to be brought about?" "How and through what channels are we going to educate the public mind to appreciate the importance of sanitation?" Experience has shown that the part-time health officer has failed in this.

There are three channels through which the people in rural communities may be educated to practice consistently the principles of sanitation. The first to be considered is the public school. It is to be regretted that in a large majority of our rural schools sanitation is neither tanght nor practiced, but with the proper influence brought

¹ Presented at the Conference of Field Workers of the State Board of Health at Rickmond, Va., Dec. 29, 1919-Jan. 3, 1920.

to bear upon the officials of the school, and with the proper execution of the meager sanitary laws that we have, there could be such an improvement made in the teaching of sanitation, both in the schoolroom and on the school grounds, that the fundamental principles of sanitation might thereby be instilled into the youthful mind, there to grow and develop into action as the child grows up to assume the responsibilities of adult citizenship. Sanitary clubs, organized among the larger boys and girls of the country schools, will serve to create an interest in and greatly facilitate the work of rural sanitation, both at the school and at the home. Such clubs should be supplied, through their sanitary demonstrator, with a sufficient amount of public-health literature, furnished either by the State or the United States Public Health Service, and they should have regular monthly meetings at which the sanitary conditions of their immediate community and methods of improving them can be discussed.

The second channel of increasing the efficiency of rural sanitation through education is the careful distribution of public-health literature among the adult citizens of the community. It is true that this method is a slow one, but experience has taught us that it is effective. The results obtained from the distribution of such literature will depend entirely upon the manner in which it is distributed. Therefore good judgment should be exercised, and an effort made to place the literature where it will be most effective. The merchants and other business men, for instance, are receiving much advertising and other literature, most of which goes into the wastebasket without ever being read; whereas the average farmer ordinarily does not receive a great amount of literature, and that which he does receive is usually read by both him and his family. Therefore, among farm households, educational efforts through the distribution of literature may prove especially advantageous.

The third and most important channel of increasing efficiency through education is the work of the "Man on the Job." Upon him and upon the efforts that he puts forth depends the success or failure of the work in his county, not only for the present time, but for some time to come. There is no means through which the public can receive more accurate and more direct information than through the man on the job. If he is a man who is able to talk rural sanitation with the proper degree of enthusiasm and energy and common sense, I will venture that at least 90 per cent of the homes that he visits will recommendations. This, however, can not be accomplished by making rush visits. It is not the man who visits the largest number of homes in one day or in one week who accomplishes the greatest results; it is the man who goes into a home with a definite idea of improving the conditions of that home and who spends time enough there in explaining to convince the people that such recommendations as he is making are necessary. Wherever such men go, we will find conditions changed and the sentiment of the people in favor of sanitation. Experience has taught us that where the proper individual appeal has been made, satisfactory results almost always follow.

To fill this position we should have men of character and influence; men who realize the responsibilities of the position they occupy; honest men; men who have as much interest in the results of their work at the end of the month as they have in the pay check they receive; men who realize that the value of their work is not measured by dollars and cents but by the saving of human lives; men who will believe and practice the motto that "Keeping everlastingly at it will win;" men filled with energy and enthusiasm and who have a definite object in view and let that object be the saving of human lives.

The harvest is ripe. The boys coming home from the Army camps have told what sanitation accomplished there. The people are interested; they are earnestly and eagerly waiting and watching for us to come and tell them what to do. There has never been a better time than this to see results. Let us go into this work with the same kind of determination to win that was displayed by our noble boys on Flanders's fields. Every man to his post and we will go "Over the top."

ALL-AMERICA HEALTH CONFERENCE ON VENEREAL DISEASES.

FIRST REGIONAL CONFERENCE TO BE HELD IN WASHINGTON, D. C., DEC. 6-11, 1920.

The All-America Conference on Venereal Diseases, to be held in Washington, D. C., December 6-11, 1920, is the first of a series of regional conferences suggested by the International Health Conference held at Cannes under the auspices of the League of Red Cross Societies. It is fitting that the first conference concern itself with the control of venereal diseases, for it is now generally recognized that these diseases constitute a large and important factor in the impairment of public health.

It is the purpose of the administrative committee of the conference to bring together recognized authorities in their respective fields and especially to make possible a comparison and evaluation of the methods now being employed in various parts of the world for the control of venereal diseases. As far as possible the presentation of set papers will be avoided, it being felt that full and free discussion will be far more helpful to those who attend. The program will be so arranged that it will be possible for any delegate to attend all the meetings. In general, the morning sessions will be devoted to a discussion by the conference delegates of the scientific basis underlying the campaign for the control of venereal diseases, the afternoon to a discussion by the delegates of administrative methods, and the evening will be given over to general meetings where the various findings of the conference delegates will be presented for consideration by the entire membership of the conference.

The opening general session of the conference, to be held Monday evening, December 6, will be preceded by registration of all members.

At this opening session addresses will be given by the president of the conference and by other speakers who will deal with the broader outlines of the subject.

The program presented below in outline serves to show the general scope of the conference and the kind of discussions planned. These discussions will be in the hands of eminent authorities on the control of venereal diseases.

A. Conference of Delegates-Morning Sessions.

THE SCIENTIFIC BASIS OF CONTROL MEASURES.

Tuesday, December 7: Present status and recent progress in medical investigations.

Wednesday, December 8: Education as a means of controlling venereal diseases.

Thursday, December 9: Law enforcement and protective social measures with individuals.

Friday, December 10: Social influence in the control of venereal diseases.

Saturday, December 11: Final session devoted to the formulation of reports.

Lists of questions under the first four headings given above have been proposed for discussion. The conference delegates will review past experiences and existing knowledge relating to the causes, carriers, treatment, and prevention of the venereal diseases, and prepare useful general statements covering answers to these questions which are selected for illustration. Specifically, the conference will endeavor to adopt recommendations relating to a practicable threeyear program for each of the North and South American countries participating and to suggest plans for putting such programs into effect.

B. Conference of Delegates-Afternoon Sessions.

ADMINISTRATIVE MEASURES IN THE CONTROL OF VENEREAL DISEASES.

Tuesday, December 7, to and including Friday, December 10:

Administrative measures in the United States—Federal, State, and local.

Administrative measures in Canada—Dominion, Provincial, and local.

Administrative measures in Latin-American countries.

Administrative measures in other countries.

Relation of official to nonofficial agencies.

Questions on problems relating to administrative control measures, which public officials are frequently asked to answer, will be discussed.

C. General Sessions-Evenings.

AUTHORITATIVE SUMMARIES OF THE WORK IN VENEREAL DISEASE CONTROL.

Tuesday, December 7: The toll of the Great Red Plague.

Wednesday, December 8: Citizens awake! What your community, your State, and your Nation should do to combat the great red scourge.

Thursday, December 9: Let there be light! How educational measures can effectively combat the Great Red Plague.

Friday, December 10: A practical program for combating venereal diseases.

The following are the officers of the conference:

President: William H. Welch, M. D., LL. D., Johns Hopkins University.

Treasurer: John Poole, Federal National Bank, Washington, D. C. Administrative Committee: Dr. Thomas A. Storey, United States Interdepartmental Social Hygiene Board; Dr. C. C. Pierce, United States Public Health Service; Dr. Livingston Farrand, American Red Cross; Dr. William F. Snow, American Social Hygiene Association.

The committee will be glad to assist delegates in securing suitable hotel accommodations. All communications regarding the conference should be addressed to the Executive Secretary, All-America Conference on Venereal Diseases, in care of the American Red Cross, Eighteenth and B Streets NW., Washington, D. C.

"FAKE" ORANGE BEVERAGES.

The advent of prohibition has greatly increased the number and quantity of fruit beverages.

It has recently come to the attention of the United States Department of Agriculture that in some instances, mothers, misled by the labels and other advertisements, are feeding "fake" orange beverages to their children under the impression that they are giving them the orange juice recommended by their physician. Unfortunately, these preparations, as a rule, contain no orange juice and are lacking in the organic acids and the vitamines which give medicinal value to the genuine orange juice. In most instances they are sweetened carbonated water, flavored with a little oil from the peel of the orange and artificially colored to imitate orange juice, say the officials of the Bureau of Chemistry.

That Bureau, charged with the enforcement of the Federal food and drugs act, therefore, has ruled that the terms "ade" "squash," "punch," "crush," and "smash," when used in conjunction with the name of a fruit, can be applied correctly only to beverages which contain the edible portion of the fruit or juice of the fruit named.

It has been observed, the food officials say, that these spurious orange beverages, when sold, are not usually labeled as orange juice, since such labeling would be a direct violation of the food and drugs act. Frequently the labels contain statements, in a more or less inconspicuous place, that the beverage contains no orange juice. The manufacturer, it is held, tries to mislead the purchasers by suggestive statements and pictures played up prominently on the label so as to attract instant attention and convey the impression that the product is really orange juice and, at the same time, he endeavors to escape the charge of misbranding by seeming to correct the misleading features with inconspicuous statements in another part of the label, which the average purchaser does not read.

Prosecutions have been instituted by the Bureau of Chemistry, United States Department of Agriculture, under the Pure Food and Drugs Act, against this form of misbranding, and cases are now in the Federal courts. Pending decision by the courts, the food officials say, some firms are still using what are held to be deceptive labels.

A word of warning by physicians when recommending orange juice will go a long way toward preventing mothers from being misled by these deceptive labels and advertisements. The best way to get orange juice for children is to buy the fruit and squeeze out the juice.

THE EFFECT OF SHAKING ALKALINIZED AQUEOUS SOLU-TIONS OF ARSPHENAMINE AND AQUEOUS SOLUTIONS OF NEOARSPHENAMINE IN THE PRESENCE OF AIR.

By GEORGE B. ROTH, Pharmacologist, Hygienic Laboratory, United States Public Health Service.

The exposure of alkalinized aqueous solutions of arsphenamine and aqueous solutions of neoarsphenamine to the air has been shown by Ehrlich to increase markedly the toxicity of both compounds.⁴ For this reason the manufacturers, in their printed directions which accompany these products, state that solutions of either compound must be used as promptly as possible after they are prepared for administration. However, they do not advise against shaking in the presence of air when preparing the solutions for clinical use.

Inasmuch as a certain amount of shaking is always done in making solutions of either compound, it was thought advisable to determine whether shaking certain aqueous solutions in the presence of air might affect the toxicity of these compounds in the same manner as exposure to the air has been shown to influence them.

Arsphenamine.—Samples of arsphenamine are frequently obtained, which, upon the addition of normal sodium hydroxide to their aqueous solutions, form rather dense precipitates that redissolve with difficulty in excess of the alkali, and which require considerable shaking to effect their solution promptly.

The effect of shaking a solution of arsphenamine which had been made alkaline with sufficient sodium hydroxide to form the disodium salt, was therefore determined in the following manner: Twenty c. c. of a 2 per cent aqueous solution of disodium arsphenamine¹ was made from a high grade domestic arsphenamine.² The solution was then divided into equal parts and each 10 c. c. was transferred to a 25 c. c. glass-stoppered cylinder. One part served as control and the other was shaken vigorously in the cylinder, at room temperature (about 20° C.), either by hand or by means of a shaking machine; the number of excursions in either case was about 250 per minute.

These solutions were then given intravenously to white rats, which were taken from the same stock and which were alike as regards their weight and condition. The rate of injection was the same for the administration of both solutions. In all the experiments except those of set E, the shaken solution was administered first; in set E the rats alternately received shaken and control solutions. The results of the experiments on alkalinized arsphenamine are given collectively in Table I.

³One c. c. of normal sodium hydroxide was used for each 100 mgms. of arsphenamine. This was a trifip more than was necessary to form the disodium salt.

² The maximal tolerated dose for the white rat or the dose tolerated by 60 per cent or more of the animals for 48 hours when given intravenously as a 2 per cent alkaline solution, 0.9 c. c. normal sodium hydroxide being used for each 100 mgms. of arsphenamine, was 140 mgms. per kilo. The minimal lethal dose or the dose required to kill 60 per cent or more of the animals in 48 hours when given as above, was 160 mgms. per kilo.

TABLE I.—The	effect on	toxicity o	of shaking	a 2 1	per cent	alkalinize	d aqueous	soluti	ion of
arsphenamine	in the p	resence of	about tu	rice it.	s volum	e of air, d	s shown	by the	death
rate in white r	ats after	its intrave	nous adm	inistr	ation.	•		•	

•		Shal	ken.					Not sł	aken	(cont	trols).	
Set.	Length of time shaken.	Dose, mgm. per kilo. bodyweight.	Number injected.	Number died within 48 hours.	Number lived 48 hours.	Remarks.	Set.	Dose, mgm. per kilo. bodyweight.	Number injected.	Number died within 48 hours.	Number lived 48 hours.	Remarks.
A	10 min	100	5	3	2	Solution dark greenish yel- low. Rats all very sick; re-	. A	100	5	· 1	4	Rats only slight- ly sick, did not resist injection.
BCDE	do do 1 min do	100 60 100 100	5 5 5 5	5 2 2 5	0 3 3 0	tion. do	B C D E	100 60 100 100	5 5 5 5	1 0 1 1 2	4 5 4 3	Do.
F	do	70	5		5	nately with controls.	F	70	5	1	4	

¹One pregnant; other, caseous masses in lungs.

It is shown by Table I that shaking alkalinized aqueous solutions of arsphenamine for 10 minutes in the presence of air caused changes not only in the color of the solutions but in their toxicity as well. The original color of these solutions was a light canary-yellow. After the solution was shaken for 10 minutes, its color deepened to a dark greenish-yellow. The toxicity increased at least 60 per cent, as shown by the fact that the shaken solution killed over 60 per cent of the animals within 48 hours at the dosage of 100 mgm. per kilo, while solutions not shaken were previously found to kill a like percentage of the animals in the same period at 160 mgm. per kilo. Shaking for 1 minute caused only a slight deepening in the color of the solution, but a decided increase in its toxicity. These experiments further indicate that the increase in toxicity was due to changes which occurred during the first minute of the shaking, since solutions shaken either for 1 minute or 10 minutes killed over 60 per cent of the animals within 48 hours at the dosage of 100 mgm. per kilo and were tolerated by 60 per cent or over for 48 hours at 60 and 70 mgm. per kilo.

Neoarsphenamine.—The various market preparations of neoarsphenamine as a rule are so readily soluble in water at room temperature that shaking is usually unnecessary to assist in dissolving them promptly. Occasionally, however, the powder forms a gelatinous mass upon the addition of water. If this occurs, vigorous shaking may be required to break up the partially dissolved mass.

Under certain conditions some lots of neoarsphenamine, which were readily soluble in water when manufactured, later become difficultly soluble. Such preparations are usually shaken to hasten their solution. It has been shown by previous studies that such preparations are almost always highly toxic for animals, even when not shaken, and therefore they should not be used clinically.

Experiments to determine the effect of shaking neoarsphenamine solutions were made with two samples of domestic neoarsphenamine, products of two different manufacturers, both samples being readily soluble in water at room temperature. They will be designated as Lots B and P.¹

In the foliowing tests each sample was made up as follows: Twenty c. c. of a 4 per cent aqueous solution was made up with freshly distilled water at room temperature (about 20° C.). Ten c. c. of the 4 per cent solution was then transferred to a 25 c. c. glass cylinder and shaken vigorously for varying periods, the shaking being done either by hand or by means of a shaking machine. The number of excursions in either case was about 250 per minute. The other 10 c. c. was not shaken and served as a control. These solutions were then given intravenously and at a constant rate to white rats, which were from the same stock and were about the same as regards weight and condition. The shaken solution was given first in all cases. The results with Lot P are shown in Table II; with Lot B in Table III.

T/	BLE	II.	-Effe	ct on	toxic	'ty of	shakin	g a 4	per cent	agr	ieoris s	olution	of neod	rspher	ramine
	(Lot	P)	in the	pres	ence o	oj ab	out tw	ice ite	volum	of	air, as	shown	by the	death a	rate in
	white	rai	is after	its i	ntravé	nou	s admir	istrat	ion.		•		•		

	p.	Sha	ken.					Not s	haker	ı (con	trols).	
Set.	Length of time shaken.	Dose, mgm. per kilo. bodyweight.	Number injected.	Number died within 7 days.	Number lived 7 days.	Remarks.	Set.	Dose, mgm. per kilo. bodyweight.	Number injected.	Number died within 7 days.	Number lived 7 days.	Remarks.
H	10 min	200	5	5	0	No change in color of solu-	н	200	5	0	5	
I J K K	do do do	140 100 90 70	5 5 5 5	5 4 1 1	0 1 4 4	Same solution.	I J K	140 100 100	5 5 5	0 0 0	5 5 5	Served as control
L M N	5 min 2 min 1 min	200 200 300	5 5 5	5 2 5	0 3 0	Rats very sick	L M N	200 200 309	5 5 5	0 0 0	5 5 5	Stood one-half
0 P	do do	200 140	5 5	2 3	3 2	after injection.	O P	200 140	5 5	0 0	5 5	hour.

¹ The maximal tolerated dose for the white rat or the dose tolerated by 60 per cent or more of the animal or seven days when given intravenously as a 4 per cent aqueous solution for P was 420 mgm. per kilos for B, 200 mgm. per kilo. The minimal lethal dose or the dose which kills 00 per cent or more of the animals within seven days when given as above described was found to be 500 mgm. per kilo for P, and 240 mgm. per kilo for B. In all these determinations at least five rats were injected at the same dosare.

TABLE	III.—Effec	xt on toxi	rity of sho	iking a 4	per cent	aqueous	solution o	f neoarsphena-
mine	(Lot B) in	the pres	ence of tu	rice its v	olume of	air, as si	hown by th	e death rate in
white	rats after it	ls intraver	ious admi	nistratio	n.	•	•	

		Shake	en.					Not shaken (controls).			
Set.	Length of time shaken.	Dose, mgm. per kilo. bodyweight.	Number injected.	Number died within 7 days.	Number lived 7 days.	Remarks.	Set.	Dose, mgm. per kilo. bodyweight.	Number injected.	Number died within 7 days.	Number lived 7 days.
Q	1 min	200	5	5	0	No change in color of solution after	Q	200	5	1	4
rs Tuv	do 30 sec 10 sec 5 sec 10 min	100 200 200 200 200 50	5 5 5 5 5	15 1 10	4 0 4 4 5	Shaking.	R S T U V	100 200 200 200 200 50	5 5 5 5 5	0 1 0 0 0	5 4 5 5 5

Table II (Lot P) shows that shaking a high-grade neoarsphenamine for 10 minutes as above described increases its toxicity over fourfold, whereas shaking for 1 minute converts it into a border-line preparation when tested at the Hygienic Laboratory standard test dose of 200 mgm. per kilo. No change in color occurred in these solutions even after they had been shaken for 10 minutes; therefore change in color is no criterion by which to judge the toxicity of a solution of this lot of neoarsphenamine. In set N the rats which received the shaken solution were all very sick after the injection; however, on the smaller doses no marked effects of a similar kind were observed.

Table III (Lot B) deals with a border-line neoarsphenamine, that is, it was tolerated by rats receiving the Hygienic Laboratory standard test dose of 200 mgm. per kilo, but failed at a 20 per cent higher dosage.

These experiments (Lot B) demonstrate that a relatively lowgrade preparation will tolerate a certain amount of shaking and yet pass the Hygienic Laboratory tests, since shaking for 5 and 10 seconds caused only 1 death in 5 in each set. Inasmuch as all the control rats survived, these deaths might indicate that there was a slight increase in the toxicity when the solution was shaken for these short periods. However, if shaken for 1 minute or even 30 seconds, the increase in the killing properties of this lot is strikingly seen. On the other hand, shaking the solution for two minutes will not increase its toxicity fourfold as was the case with Lot P, probably because the initial toxicity of Lot P is lower. In contradistinction to Lot P, solutions of Lot B when shaken for 10 minutes showed a distinct deepening in the color of the solution to a rather deep golden-yellow. In order to ascertain whether the increase in the toxicity of these solutions was due to oxidation or to some purely physical change in the solution, the following experiment was conducted:

A 10 c. c. glass-stoppered cylinder was filled with a 4 per cent solution of Lot B and before stoppering, 25 glass beads, each having a diameter of 3 mm., were placed in the fluid. The cylinder was then stoppered so that no visible air bubbles were included and shaken vigorously for 1 minute. The shaken solution was then tested against a control solution in the usual way at the dosage of 200 mgm. per kilo, using 10 animals for the set. The shaken solution caused no deaths, whereas the control solution caused one death in the five rats injected.

This experiment indicates that air is essential to the production of an increase in the toxicity of this compound and that the probable change which occurs is the oxidation of the neoarsphenamine to p-oxyphenylarsenoxide, commonly called "arsenoxide," which we know to be many times more toxic than neoarsphenamine.

One may naturally conclude from the foregoing experiments that any procedure other than shaking, which brings the solution in intimate contact with the air, will also likely result in an increase in its toxicity. The practice of making a solution in an open mortar or in a large beaker, as is sometimes done, should therefore be abandoned.

Summary: Shaking alkalinized aqueous solutions of arsphenamine or aqueous solutions of neoarsphenamine in the presence of air renders them highly toxic, as shown by intravenous administration to white rats. The increase in toxicity caused by such shaking is presumably due to the oxidation of these compounds to p-oxyphenylarsenoxide, commonly called "arsenoxide," inasmuch as shaking a solution of neoarsphenamine in the absence of air does not increase the toxicity of such a solution.

Conclusion: The toxicity of alkalinized aqueous solutions of arsphenamine or aqueous solutions of neoarsphenamine is greatly influenced by the manner in which they are prepared for administration.

DEATHS DURING WEEK ENDED SEPT. 4, 1920.

[From the "Weekly Health Index," Sept. 7, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Sept. 4, 1920, infant mortality (per cent), annual death rate, and comparison with corresponding week of preceding years.

	Population	Week en 4, 1	ded Sept. .920.	Average	Per cen unde	t of deaths r 1 year.
City.	1920, sub- ject to revision.	Total deaths.	Death rate.1	annual death rate per 1,000. ²	Week ended Sept. 4, 1920.	Previous year or years. ²
Akron, Ohio Albany, N. Y. Atlanta, Ga.	208, 435 113, 344 200, 616	21 32 45	5.3 14.7 11.7	⁸ 8.2 C 14.8 C 12.4	19.0 21.9 15.6	³ 18.7 C 9.4 C 6.4
Birmingham, Ala. Boston, Mass. Bridgeport, Conn.	173, 820 178, 270 747, 923 143, 152	188 51 195 25	13.4 14.9 13.6 9.1	A 15.3 A 17.6 A 16.1	27.1 25.5 27.7 36.0	A 24.8 A 13.7 A 25.2
Buffalo, N. Y. Cambridge, Mass. Chicago, Ill Cincinnati, Obio	505,875 109,456 2,701,212 401,158	127 24 495 99	13.1 11.4 9.6 12.9	C 13.0 A 12.1 A 13.6 C 12.4	31.5 20.8 18.6 16.2	C 23.2 A 22.6 A 26.7 C 14.7
Cleveland, Ohio Columbus, Ohio Dallas, Tex Denter Ohio	796, 836 237, 031 158, 976	180 40 33	11.8 10.1 10.8	C 12.5 C 9.6	18.3 30.4 21.2	C 17.0 C 16.3
Denver, Colo Detroit, Mich Fall River, Mass	256, 491 993, 739 120, 485	83 187 30	16.9 9.8 13.0	$\begin{array}{c} 0 & 12.4 \\ $	17.9 13.3 24.1 36.7	C 19.4 C 47.8
Grand Rapids, Mich Hartford, Conn Indianapolis, Ind Jersev City, N. J	137, 634 138, 036 314, 194 297, 864	32 20 86 60	12.1 7.6 14.3 10.5	C 11.5 C 10.4 C 10.9	34.4 30.0 18.6 26.7	C 20.0 C 14.5 C 17.7
Kansas City, Kans Kansas City, Mo Los Angeles, Calif Louisville, Ky	101, 177 324, 410 576, 673 234, 891	14 70 130 39	7.2 11.3 11.8 87	C 11.2 A 10.4	28.6 37.1 10.0	C 15.9 A 8.1 C 10.8
Lowell, Mass. Milwaukee, Wis. Minneapolis, Minn	234, 831 112, 479 457, 147 380, 498	21 73 74	9.7 9.7 8.3 10.1	$\begin{array}{ccc} 0 & 0.2 \\ \Lambda & 18.1 \\ \Lambda & 10.6 \\ C & 9.0 \\ \end{array}$	42.9 19.2 14.9	A 36.2 A 26.1 C 12.3
Nashville, Tenn. Newark, N. J. New Bedford, Mass. New Haven, Conn.	118, 342 414, 216 121, 217 162, 519	36 77 22 38	15.9 9.7 9.5 12.2	C 16.4 C 9.5 A 16.6 C 15.2	30.6 20.8 22.7 21.1	C 18.9 C 13.3 A 37.9 C 21.3
New Orleans, La. New York, N. Y. Norfolk, Va.	387, 219 5, 621, 151 115, 777	103 1,054 23	13.9 9.8 10.4	A 17.6 C 9.7	7.8 20.2 4.3	A 15.1 C 22.0
Omaha, Netr Philadelphia, Pa Pittsburgh, Pa	191, 601 1, 823, 158 588, 193	42 362 152	11.4 10.4 13.5	C 6.6 ³ 14.4 C 11.3	19.0 23.5 21.7	C 16.7 *22.8 C 20.5
Portland, Oreg. Providence, R. I Richmond, Va Rochester, N. Y	258, 288 237, 595 171, 667 295, 850	59 46 36 73	11.9 10.1 10.9 12.9	C 7.8 C 12.1 C 13.5 C 7.3	8.5 21.7 27.8 23.3	C 5.3 C 16.4 C 20.5 C 7.3
St. Louis, Mo. St. Paul, Minn. Salt Lake City, Utah San Francisco, Calif	772, 897 234, 595 118, 110 508, 410	146 43 24 110	9.9 9.6 10.6	C 10.7 C 7.8 A 10.8 C 11.0	13.7 18.6 20.8	C 12.7 C 14.3
Seattle, Wash. Spokane, Wash. Springfield, Mass.	315,652 104,204 129,338	41 22 29	6.8 11.0 11.7	Ă 7.1 C 10.5	14.6, 4.5 24.1	Ă 11.6 C 0.0
Byracuse, N. Y Toledo, Ohio. Trenton, N. J Washington, D. C	171,647 243,109 119,289 437,571	43 49 36 81	13. 1 10. 5 15. 7 9. 7	U 9.8 A 15.3 A 18.7 A 14.4	34.9 18.4 22.2 11.1	A 26.3 A 25.9 A 19.1
Worcester, Mass Yonkers, N. Y Youngstown, Ohio	179, 754 100, 226 132, 358	51 18 26	14.8 9.4 10.2	C 9.1 A 13.8	27.5 22.2 19.2	C 9.7 A 36.7

¹ Annual rates per 1,000 population.
³ "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1919.
³ Data are based on statistics of 1915, 1916, and 1917.

Summary of information received by telegraph from industrial insurance companies for week ended Sept. 4, 1920. _ .. .

Policies in force.	44, 495, 470
Number of death claims	5, 994
Death claims per 1,000 policies in force, annual rate	7.0

PREVALENCE OF DISEASE.

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

UNITED STATES.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Sep .: 11, 1920.

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

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FLORIDA.

ALABAMA.

Ua Ua	ses.	Ca	ses.
Diphtheria	32	Diphtheria	18
Malaria	53	Dysentery	2
Scarlet fever	9	Influenza	1
Smallpox	6	Malaria	64
Trachoma	2	Plague (bubonic)	1
Tuberculosis (pulmonary)	13	Scarlet fever	1
Typhoid fever	34	Typhoid fever	6
Whooping cough	3		•
4 THT A TO A C		GEORGIA.	
ABRANSAS,		Cerebrospinal meningitis	
Cerebrospinal meningitis	1	Chicken pox.	1
Chicken pox	15	Diphtheria	
Diphtheria	35	Dysentery (hacillary)	- JU - A
Hookworm	2	Dysentery (amebic)	4
Influenza	9	Hookworm	20
Malaria	491	Influenza	3
Measles	3	Malaria	14
Ophthalmia neonatorum	3	Manelan	152
Pellagra	16	Micasics	20
Pneumonia	1	Bonotymbold form	1
Scarlet fever	15	Dalla ata	2
Smallpox	3	De sum en 's	1
Trachoma	5	l'neumonia	2
Tuberculosis	28	Scarlet lever.	9
Typhoid fever	54	Septic sore throat	2
Whooping cough	79	Smallpox	2
		Trachoma	- 4
CALIFORNIA.	~	Tuberculesis (all forms)	5
Innuenza.	24	Typhoid fever	26
Letnargic enceptiantis—san Francisco	1	Whooping cough	6
	ა		
Smanpox:	_	ILLINOIS.	
San Luis Obispo	~	Cerebrospinal meningitis—Chicago	2
Scattering	21	Dinhtheria:	-
Typnoid lever:	-	Chicago	90
	7	Seattering	40
Scattering	16	Influenze_Chicago	-11
DELAWARE.		Pneumonia_Chicago	
Braumonio	1	Poliomvalitie:	-14
	15	Bloomington	•
1 uvoi vuivsis	10	Chiongo	4
M noobing confin	1	UHIU050	0
	(22	12)	

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ILLINOIS—continued.		1
Scarlet fever: C	ases.	
· Chicago	41	A
Scattering	22	Ce
Smallpox	23	Ch
Typhoid fever:		Co
Chicago	. 14	Di
Scattering	13	Ge
		In
INDIANA.		Ma
Diphtheria	26	Me
Poliomyelitis:		Mu
Allen County	. 1	Op
Jackson County	1	Pn
Maricn County	2	Po
Shelby County	. 1	Sca
Scarlet fever	45	Te
Smallpox	21	Tr
Typhoid fever	26	Tu
10111		Ty
JUWA.		w
Cerebrospinal meningitis-Iowa County	1	
Diphtheria	17	
Poliomvelitis-Madrid	1	Pol
Scarlet fever.	21	Sm
Smallpox:	_	
Armstrong	10	
Dubuque.	8	Di
Scattering	12	Sca
Whenring cough	12	Sm
wheeling confinences	10	Ту
· LOUISIANA.		
Diphtheria]4	1
Leprosy	2	Cer
Malaria	87	Dir
Measles	8	Me
Scarlet fever	4	Sca
Smallpox	17	Sm
Typhoid fever	21	Tu
MAINE		Ty
Diphtheria	3	Wh
Malaria	2	
Measles	6	
Mumps	ĩ	Inf
Poliomvelitis	•	Pn
Scarborough	1	
Wienesset	1	
Searlet forer	-	Act
Tubarmlosis		Dip
Tubbiculosis		Mal
ryphold level		Mea
MARYLAND. ¹		Mu
Chicken pox	7	Pne
Diphtheria	18	Sca
Dysentery	7	Sma
Influenza.	1	Tub
Malaria	9	Тут
Measles	15	Wh
Mumps.	1	
Paratyphoid fever	j l	
Pellagra		
Pneumonia (all forms)	25	4 mt
Poliomvelitis		Corr
Scarlet lever	20	ten
Tuberculacia	76	
Turnhaid lever	10	D:
wheening sough	21	Jp.
whorking confirment of the second s	91]	reti

MASSACHUSETTS.

A ASEACH CEET IS.	Cases.
Anthrax	1
Cerebrospinal meningitis	. 8
Chicken pox	. 11
Conjunctivitis (suppurative)	. 5
Diphtheria	. 81
German measles	. 1
Influenza	. 10
Malaria	. 1
Measles	. 35
Mumps	. 21
Ophthalmia neonatorum	. 29
Pneumonia (lobar)	. 16
Policmyelitis	. 53
Scarlet fever	. 54
Tetarus	. 1
Trachoma	. 2
Tuberculosis (pulmonary)	. 169
Typhoid fever.	. 35
Whooping cough	. 110

MINNESOTA.

Poliomyclitis	6
Smallpox	1

MISSISSIPPI.

Diphtheria	30
Scarlet fever	10
Smallpox	3
Typhoid fever	16

NEBRASKA.

Cerebrospinal meningitis-Howe'ls.	1
Diphtheria	8
Mcasles	1
Scarlet fever.	13
Smallpox	12
Tut erculosis	-1
Tychoid fever	3
Whooping cough	8

NEW JERSEY.

Influenza	- 4
Pneumonia	23

NEW MEXICO.

Actinomycosis	
Diphtheria	1
Malaria	
Measles	
Mumps	
Pneumonia	
Scarlet fever	
Smallpoz	
Tuterculosis	
Typhoid fever.	
Whooping cough	

NEW YORK.

(Exclusive of New York City.)

	25	Anthrax	1
	1	Cerebrospinal meningitis:	
	22	Barton	1
	76	Lackawanna	2
	52	Diphtheria	56
••••	31	Lethargic encephalitis	2
↓Wee	k en	ded Friday.	

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NEW YORK-continued.		VERMONT-continued.	
Ca	36S.	Mumps	ses.
Measure ania	90 E0	Recentlet forces	5
Fileumonia	50	Scallet lever	10
	94	Whooning anoth	y
Smanpox	C	w nooping cough	9
Typhold lever:		WASHINGTON	
Seneca Falls	41	TAMATIVA.	
Scattering	62	Chicken pox	1
Whooping cough	203	Diphtheria.	8
NORTH CAROLINA		Measles	2
	-	Scarlet fever	6
Cnicken pox	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Smallpox	20
Diphtheria	96	Tuberculosis	10
Measles	34	Typhoid fever	13
Scarlet fever	28	Whooping cough	2
Septic sore throat	3		
Smallpox	8	WEST VIRGINIA.	
Typhoid fever	89	Cerebrospinal meningitis-Charleston	1
Whooping cough	112	Diphtheria	7
SOTTAL DAKOTA		Measles	1
BOUTH DAROIA.		Scarlet fever	5
Diphtheria	5	Smallpox	1
Measles	8	Typhoid fever	2
	-		_
Poliomyelitis	2		
Poliomyelitis Scarlet fever	$^{2}_{11}$	WISCONSIN.	
Poliomyelitis. Scarlet fever Smallpox	2 11 9	WISCONSIN. Milwaukee:	
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis.	2 11 9 16	WISCONSIN. Milwaukee: Cerebrospinal meningitis	1
Poliomyelitis Scarlet fever. Smallpox Tuberculosis. Typhoid fever	2 11 9 16 3	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox	1 5
Poliomyelitis Scarlet fever	2 11 9 16 3	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria.	1 5 16
Poliomyelitis Scarlet fever	2 11 9 16 3	WISCONSIN. Milwaukee: Cerebrospinal meningitis Chicken pox. Diphtheria. Measles.	1 5 16 1
Poliomyelitis Scarlet fever. Smallpox Tuberculosis Typhoid fever Diphtheria: Grapevine.	2 11 9 16 3	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever.	1 5 16 1 28
Poliomyelitis Scarlet fever. Smallpox Tuberculosis Typhoid fever Diphtheria: Grapevine. Scattering	2 11 9 16 3 7 5	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smaltpox.	1 5 16 1 28 6
Poliomyelitis Scarlet fever. Smallpox Tuberculosis. Typhoid fever. Diphtheria: Grapevine. Scattering. Induenza.	2 11 9 16 3 7 5 2	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever.	1 5 16 1 28 6 2
Poliomyelitis Scalet fever. Smallpox. Tuberculosis. Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria.	2 11 9 16 3 7 5 2	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping cough.	1 5 16 1 28 6 2 17
Poliomyelitis Scarlet fever. Smallpox Tuberculosis Typhoid fever Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine	2 11 9 16 3 7 5 2	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles Scarlet fever. Smallpox. Typhold fever. Whooping cough. Scatterine:	1 5 16 1 28 6 2 17
Poliomyelitis Scarlet fever. Smallpox Tuberculosis Typhoid fever Diphtheria: Grapevine. Scattering Influenza. Malaria: Grapevine. Scattering	2 11 9 16 3 7 5 2 57	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping congh. Scattering: Cerebrospinal meningitis	1 5 16 1 28 6 2 17
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering.	2 11 9 16 3 7 5 2 57 16	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox	1 5 16 1 28 6 2 17 1 3
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Dellogre	2 11 9 16 3 7 5 2 57 16 1	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria	1 5 16 1 28 6 2 17 1 3 28
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. TEXAS. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra.	2 11 9 16 3 7 5 2 57 16 1 1	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles Scarlet fever. Smallpox. Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza	1 5 16 1 28 6 2 17 1 3 28
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra. Scarlet fever.	2 11 9 16 3 7 5 2 57 16 1 3	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles	1 5 16 1 28 6 2 17 1 3 28 4 9
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra. Scarlet fever. Typhoid fever.	2 11 9 16 3 7 5 2 57 16 1 1 3 8	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles. Poliomvelitis	1 5 16 1 28 6 2 17 1 3 28 4 21 2 3
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra. Scarlet fever. Typhoid fever. Whooping cough.	2 11 9 16 3 7 5 2 57 16 1 1 3 8 8	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measlos. Scarlet fever. Smallpox. Typhold fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles. Poliomyellitis. Seart fever.	1 5 16 1 28 6 2 17 1 3 28 4 21 2 16
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. TEXAS. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra. Scattef fever. Typhoid fever. Whooping cough. VEEMONT.	2 11 9 16 3 7 5 2 57 16 1 1 3 8 8	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles. Poliomyelitis. Scarlet fever. Smallpox. Scarlet fever. Scarlet fever. Scarle	1 5 16 1 28 6 2 17 1 3 28 4 21 2 46 8
Polimyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra. Scarlet fever. Typhoid fever. Whooping cough. VERMONT.	2 11 9 16 3 7 5 2 57 16 1 1 3 8 8 8	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles. Poliomyelitis. Scarlet fever. Smallpox. Typhodere.	1 5 16 1 28 6 2 17 1 3 28 4 21 2 46 22 2 46 22
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. Diphtheria: Grapevine. Scattering Influenza. Malaria: Grapevine. Scattering. Mularia: Scattering. Pellagra Scarlet fever. Typhoid fever. Whooping cough VERMONT. Chicken pox.	2 11 9 16 3 7 5 2 57 16 1 1 3 8 8 8 10	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhoid fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles. Poliomyelitis. Scarlet fever. Smallpox. Tuberenlosis. Tuberenlosis.	1 5 16 1 28 6 2 17 1 3 28 4 21 2 46 2 13 s
Poliomyelitis Scarlet fever. Smallpox. Tuberculosis Typhoid fever. EXAS. Diphtheria: Grapevine. Scattering. Influenza. Malaria: Grapevine. Scattering. Mumps. Pellagra. Scarlet fever. Typhoid fever. Whooping cough. VERMONT. Chicken pox. Diphtheria. Measlos	2 11 9 16 3 7 5 2 57 16 1 1 3 8 8 10 1 6	WISCONSIN. Milwaukee: Cerebrospinal meningitis. Chicken pox. Diphtheria. Measles. Scarlet fever. Smallpox. Typhold fever. Whooping cough. Scattering: Cerebrospinal meningitis. Chicken pox. Diphtheria. Influenza. Measles. Poliomyellits. Scarlet fever. Smallpox. Tuberculosis. Typhoid fever. Whooping cough.	1 5 16 1 28 6 2 17 1 3 28 4 21 2 46 22 13 8 5

Kentucky Report for Week Ended Sept. 4, 1920.

		Scarlet fever	20
Cerebrospinal meningitis-Jefferson County	1	Septic sore throat	4
Chicken pox	5	Smallpox	12
Diphtheria	33	Tonsillitis	7
Dysentery	11	Trachoma	8
Influenza	4	Tubereulosis	20
Malaria	5	Typhoid fever:	
Measles	29	Jefferson County.	11
Paratyphoid fever	1	Seattering.	41
Pneumonia	5	Whooping cough	11

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
1920. Florida (August) Iowa (July) Oregon (July)	2 3 1	26 51 13	21 	273	6 218	5		6 80 19	201 115	46

RECIPROCAL NOTIFICATION.

Connecticut—August, 1920.

Cases of communicable discases referred during August, 1920, to other State health departments by department of health of the State of Connecticut.

Diseases and locality of notification.	Referred to health authority of—	Why referred.
Diphtheria: Westerly, R. I	State board of health, Provi- dence, R. I.	A case in Mystic, Conn., apparently was infected in Westerly, R. I., by an undiagnosed case of diphtheria.
Mcasles: West Gloucester, R. I.	do	In an investigation of measles cases in Putnam, Comm., 4 cases were found in West Gloucester,
Stafford, Conn	State department of public health, Boston, Mass,	A case visiting in Stafford, Conn., returned to her home in Palmer. Mass.
Typhoid fever: New Haven, Conn	do	Patient in New Haven, Conn., visited his brother at Mount Herman College, Mass., 2
Madison, Conn	do	Patient visited North Adams, Mass., while in the involution particular the discours
New London, Conn.	do	Patient was a nurse in a hospital at Fall River, Mass. 2 weeks prior to the onset of disease.
Madison, Conn	State department of health,	Patient visited Alexandria, N. Y., less than 2 weeks prior to the great of the disease
East Hartford, Conn.	State department of public health, Boston, Mass.	Person from Holyoke, Mass., visited a typhoid fever case during the incubation period of the disease in Fast Hartford Comp
Hartford, Conn	State department of health, Harrisburg, Pa	Patient became ill with typhoid fever 6 days
Canaan, Conn	State department of public health, Boston, Mass.	Patient was sick at Canaan, Conn., and was taken to the hospital at Pittsfield, Mass., for
Hartford, Conn	State board of health, Con-	Patient visited Weirs, N. H., about 3 weeks
Whooping cough: New Canaan, Conn	State department of health,	Patient was ill on arriving at New Cansan, Conn.,
Salisbury, Conn	A10809, N. I. do	Three children were ill on arriving at Lincoln City, Salisbury, Conn., from New York City.

ANTHRAX.

New Britain, Conn., and New York, N. Y.

During the week ended August 28, 1920, one death from anthrax was reported in New Britain, Conn., and two cases were reported in New York, N. Y.

CEREBROSPINAL MENINGITIS.

State Reports for July and August, 1920.

Place.	New cases reported.	Piace.	New cases reported.
Fiorida (August): Escambis County— Pensacola. Iowa (July): Hardin County. Ida County Taylor County. Total.	2 1 1 1 1 3	Oregon (July): Clackamas County	1

City Reports for Week Ended Aug. 28, 1920.

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

The second s	Aver-	1920			Aver-	1920	
1'12Ce.	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths.
California: Los Angeles Bridgeport Illinois: Chicago Rockford Indiana: Bedford Kansas: Hutchinson Louisiana: New Orleans Massechusetts: Chicopee. Quincy	(') (') 0 (') 0 0	1 1 3 1 1 1 1 1 1 1 2		Michigan: Detroit New Hampshire: Berlin New York: New York. Ohio: Cleveland Pennsylvania: Philadelphia Rhode Jeland: Providence Tennessee: Memphis	(') 0 3 2 2 (') (')	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1

¹ Average less than 1.

DIPHTHERIA.

See Telegraphic weekly reports from States, p. 2212; Monthly summaries by States, p. 2215; and Weekly reports from cities, p. 2224.

INFLUENZA.

City Reports for Week Ended Aug. 28, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
California: Los Angeles	2 6 1 1 1 1 2 1 1		Michigan: Detroit Missouri: Kansas City New York: New York. Ohio: Davton Zanosville Texas: Dallas Waco	2 1 6 1 1	1 3

LEPROSY.

2217

Los Angeles, Calif., and New Orleans, La.

During the week ended August 28, 1920, 1 case of leprosy was reported at Los Angeles, Calif., and 1 at New Orleans, La.

LETHARGIC ENCEPHALITIS.

State Reports for July and August, 1920.

During the month of August, 1920, one case of lethargic encephalitis was reported in Florida. During the month of July, 1920, 3 cases were reported in Oregon.

MALARIA.

Florida Report for August, 1920.

Place.	New cases reported.	Place.	New cases reported.
Florida (August): Alachua County. Baker County. Bay County. Bradford County. Brevard County. Calhoun County. Citrus County. De Soto County. Duval County. Jacksonville. Escambia County. Franklin County. Gadsden County. Hernando County. Hillsboro County. Hernando County. Hernando County. Harnando County. Harnando County. Harnando County. Jackson County.	4 39 4 16 17 22 11 13 36 2 1 3 36 2 1 3 1 1 3 1 4	Florida (August)—Continued. Leon County. Levy County. Manatee County. Manatee County. Marion County. Morroe County. Oralge County. Palm Beach County. Palm Beach County. Palm Beach County. Palm Beach County. Palm Beach County. Putnam County. Seminole County. Seminole County. Seminole County. Volusia County. Volusia County. Walton County. Walton County. Walton County. Washington County.	28 13 1 1 1 1 3 3 0 5 11 1 1 3 3 1 5 5 11 1 1 3 3 1 5 5 11 1 1 3 3 2 73

City Reports for Week Ended Aug. 28, 1920.

Piace.	Cases.	Deaths.	Place.	Casés.	Deaths.
Alabama: Mobile Arkansas: North Little Rock California: Sacramento. Georgia: Atlanta. Brunswick. Rome. Savannah. Kentucky: Louisville. Louisville. Louisiana: Alexandria. New Orleans.	1 2 2 1 6 2 5 1 1 19 2	i	Massachusetts: Cambridge	1 1 7 22 1	1 2 i

MEASLES.

See Telegraphic weekly reports from States, p. 2212; Monthly summaries by States, p. 2215 and Weekly reports from cities, p. 2224.

PELLAGRA.

Florida Report for August, 1920.

Place.	New cases reported.	Place.	New cases reported.
Florida (August): Escambia County Gadsden County	1 3	Florida (August)—Continued. Putnam County Total	1 5

City Reports for Week Ended Aug. 28, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama: Birmingham Massachusetts: Waltham	1	1	North Carolina: Greensboro Texas: Dallas	1	1

PLAGUE.

Human Cases of Plague Reported.

Place.	Period covered.	Cases.	Deaths.	Remarks.
California: Alameda County Florida:	Apr. 19, 1920	1	1	Diagnosis confirmed Apr. 26,
Pensacola	June 2 to Sept. 7, 1920 Sept. 8-11	10 0	4 0	
Kalopa Louisiana	Mar. 22, 1920	1	0	
New Orleans	Oct. 29 to Dec. 31, 1919 Jan. 1 to Sept. 7, 1920 Sept. 8-13.	12 7 0	4 3 0	
Texas:				
Beaumont	June 26 to Sept. 7, 1920 Sept. 8-12	14 0	5 0	
Galveston	June 16 to Sept. 7, 1920 Sept. 8-12.	11 0	7 0	
Port Arthur	July 7, 1920	1	i	From Galveston.

Plague-Infected Rodents.

Place.	Period covered.	Rodents found plague infected.
Florida: Pensacola	1920. June 28 to Sept. 7. Sept. 8–12.	81 0
Louisiana: New Orleans	1919. Nov. 1 to Dec. 31	276
Texas:	1920. Jan. 1 to Sept. 4 Sept. 5-12	285 0 121
Galveston	Sept. 8-12. June 21 to Sept. 7. Sept. 8-12.	1 53 2

۰.

PLAGUE—Continued.

Rodents Examined for Plague Infection.

Piace.	Period covered.	Rodents exam- ined.	Found infected.
Florida: Pensacola	1920. Week ended Sept. 4	340	1
Hawaii: Honolulu	Two weeks ended Aug. 7	706	0
Louistana: New ()r!eans- Mus norvegicus Mus nortue	Week ended Aug. 28	3,333	0
Mus alexandrinus Wood rats.	do. do. do.	225 8	00
Putrid	do.	203	ă
Seattle	Month of August	1,208	Ŭ

PNEUMONIA (ALL FORMS).

,

City Reports for Week Ended Aug. 28, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Massachusetts:		
Birmingham		. 3	Boston	2	2
California:			Cambridge		1
Fresno		. 1	Fall River.	. 1	2
Los Angeles	1 11	3	Haverhill		1
Oakland		. 1	Lawrence	. 1	
San Diego	1	1 1	Lowell	. 1	2
San Francisco	2	3	Lynn	. 1	1
Stockton		. 2	New Bediora		1
Colorado:		· .	Quincy		- I
Denver		4	Somerville	1	1 1
Connecticut:		1	Southbridge	1	•••••
Bridgeport	2		Springneid	1	
Bristol		4 - 1	Worcester	1	2
Hartford		. 2	Michigan:		!
New London		1 1	Detroit	16	13
District of Columbia:	1	1	Flint	1	1 1
Washington		2	Grand Rapids	2	1
Georgia:			Kalamazoo	2] 1
Atlanta		3	Marquette	1	
Brunswick		1	Minnesota:		
Illinois:			Duluth		1
Chicago	53	25	St. Paul		3
Danville		1	Missouri:		
East St. Louis		1	Kansas City	6	- 4
Galesburg	1		St. Joseph		2
La Salle		1	Montana:		
Rockford		Ī	Butte		1
Indiana:		-	Great Falls		1
Gary		3	Nebraska:		
Hammond		2	Lincoln	1	
Indianapolis		8	Omaha		1
Marion		ı i	New Jersev:		
Richmond		i	Elizabeth		1
Terre Haute		2	Kearny		1
Kansas:		-	Montclair		-1
Lawrence	1	1	Orange	1	
Wichita	-	i	Perth Amboy		1
Kentucky:	•••••	-	Trenton		1
Lexington		1	New York:		-
Louisville	1	2	Albany.	1	
I onigiana	•	-	Buffalo	Ā	3
Beton Rouge	9	2	Lackawanna	i	2
New Orleans	~	6	Mount Vernon	2	_
Maine:	•••••	, v	New York	F3	67
Biddeford	1		Niagara Falls	A	
Portland	*		Olean	-	
Mervland.	•••••	· · · · · ·	Port Chester		1
Raltimore	10		Rochester		1
Cumberland	10	-	Schenetady		· · · ·
			· ····································		**********

PNEUMONIA (ALL FORMS)—Continued.

City Reports for Week Ended Aug. 28, 1920-Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
New York—Continued. Syracuse Troy	1	2	Pennsylvania: Philadelphia Rhode Island: Providence	38	21
North Carolina: Charlotte		2 1	South Carolina: Spartanburg Tennessee: Memphis		. 1
Chillicothe Cincinnati Cleveland	1	3 1 2 6	Nashville Texas: Corpus Christi Dallas.	1 1	2
Dayton. New Philadelphia Springfield.	1 1	i	El Paso Utah: Provo. Salt Lake City	1	1
Oklahoma City Oregon: Portland Salem	1	2	Virginia: Richmond West Virginia: Wheeling		1

POLIOMYELITIS (INFANTILE PARALYSIS).

City Reports for Week Ended Aug. 28, 1920.

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

	A ver-	1920.			Aver-	1920.	
Place.	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths.
California: Los Angeles Connecticut: Waterbury Illinois: Chicago. Evanston Sioux City Massachusetts: Boston Cambridge Everett Havenhill Lynn Malden	(1) 23 1 0 (3) (1) 0 2 (1) 0	1 1 2 14 2 2 1 1	1 	Massachusetts—Cont'd. Pittsfield Somerville Winthrop. Missouri: St. Louis. New York: New York: Niagra Falls. Troy Ohio: Cincinnati Steubenville	1 0 (1) (1) (1) (1) 1 4 4 0 (1) 1 0	3 2 1 2 1 4 2 1 1 1 1 1	1

¹ A verage less than 1. ² Excluding 1916 and 1917, epidemic years. ³ Excluding 1916, the average is less than 1. ⁴ Excluding 1916, an epidemic year.

RABIES IN ANIMALS.

Canton, Ohio, Week Ended Aug. 28, 1920.

During the week ended August 28, 1920, one case of rabies in animals was reported at Canton, Ohio.

RABIES IN MAN.

Pennsylvania Report for June, 1920.

During the month of June, 1920, one death from rabies in man was reported in Pennsylvania.

September 17, 1920,

2221

SCARLET FEVER.

See Telegraphic weekly reports from States, p. 2212; Monthly summaries by States, p. 2215; and Weekly reports from cities, p. 2224.

SMALLPOX.

Towa and Oregon Reports for early, 1920.							
Place.	Cases.	Deaths.	Place.	Cases.	Deaths.		
lowa (July):			Iowa (July)-Continued.				
Benton County	4		Pottawattamie County	7			
Boone County	9		Ringgold County	1			
Cass County	· 1		Scott County	4			
Cerro Gordo County	4		Sioux County	1			
Clay County.	4		Taylor County	ī			
Clayton County	2		Van Buren County	Š			
Clinton County	2		Warren County	3			
Delaware County.	4		Wright County	Š			
Dubuque County	52						
Favette County	5		Total	201	1		
Franklin County	2						
Fremont County	3		Oregon (July):				
Hardin County	2		Clackamas County	3	ſ		
Harrison County	3		Columbia County	4			
Jackson County	ī		Coos County	12			
Jasper County	3		Klamath County	ī			
Johnson County	5		Morrow County	3			
Jones County	16		Multnomah County	ī			
Kossuth County.	1		Portland.	39			
Linn County	6		Polk County.	5			
Lvon County	13		Sherman County	8			
Mahaska County	5		Umatilla County	Š			
Marion County	ī		Union County	ž			
Mills County	ī		Wallows County	2			
Mitchell County	5		Wasco County	ĩ			
Monrce County	ž		Washington County	13			
Muscatine County	ī		Yamhill County	8			
Page County	$\hat{2}$						
Polk County.	9		Total	115			
	- 1				•••••		

Iowa and Oregon Reports for July, 1920.

City Reports for Week Ended Aug. 28, 1920.

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

Place.	Aver-	1920.			Aver-	1920,	
	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths.
Alabama: Birmingham California: Fresno Los Angeles Oakland. Pasadena San Francisco Colorado: Denver Georgia: Atlanta Savannah Idaho: Boise Bliaois: Chicago Calesburg Granite City Springfield Indiana: Bedford Gar Bedford Gar Bouth Bend	(!) (0 (!) (!) (!) (!) (!) (!) (!) (!)		······································	Iowa: Council Bluffs Davenport Dubuque Kansas: Hutchinson Wichita. Louisiana: New Orleans Maryland: Cumberland Michigaa: Detroit Flint Battle Creek Minneapolis St. Paul Winona Missouri: Joplin St. Louis Montana: Billings Great Falls	(i) (i) (i) (i) (i) (i) (i) (i) (i) (i)	2 2 6 1 2 1 1 1 2 1 4 10 2 1 2 1 2 1 1 1 1	

SMALLPOX-Continued.

City Reports for Week Ended Aug. 28, 1920-Continued.

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

	Aver-	1	920.		Aver-	1920.		
Place.	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths	
Nebraska: Omaha New Jersey: Trenton	1	5		South Dakota: Sioux Falls Utah: Provo	0	1		
New York: New York. Syracuse.	0 0	12		Salt Lake City Washington: Seattle Tacoma	2 1	16 6		
Winston-Salem Ohio: Akron	(¹)	1		Vancouver Yakima. West Virginia:	8	111		
Lima Oklahoma: Oklahoma City	Ŭ O	6 4		Wisconsin: Appleton Green Bay	0	1 2		
Oregon: Portland South Carolina: Charleston Columbia	3 (') 0	7 1 1	·····	Marinette Milwaukee Oshkosh Superior	(1) (1) (1) (1)	2 1 10 1 8		

¹Average less than 1.

TETANUS.

City Reports for Week Ended Aug. 28, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
California: Oakland Illinois: Chicago. Indiana: Indianapolis		1 1 1	Maryland: Baltimore Pennsylvania: Philadelphia South Carolina: Columbia	1	1

TRICHINOSIS.

Florida Report for August, 1920.

During the month of August, 1920, one case of trichinosis was reported in Florida.

TUBERCULOSIS.

See Telegraphic weekly reports from States, page 2212, and Weekly reports from cities, page 2224.

TYPHOID FEVER.

State Reports for July and August, 1920.

Place.	New cases reported.	Place.	New cases reported.
Florida (August): Baker County Bradford County Brevard County Dade County De Soto County Duval County Jacksonville	1 3 2 1 5 4 5	Florida (August)—Continued. Okaloosa County. Pinethas County. Polk County. Putnam County. Volucia County. Walton County. Total	3 4 1 1 1 1 46
Escambia County Pensacola. Gadiden County. Hillsborough County— Tampa. Leon County Moarce County— Key West	1 2 1 5 2 3	Oregon (July): Linn County Multnomah County— Portland Washington County Total	1

City Reports for Week Ended Aug. 28, 1920.

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

Place.	Aver-	1920.			Aver-	1930.		
Place.	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths	
Alabama				Kansas.			1	
Anniston		2	1	Atchison	1 0	1 1		
Rirmingham	25	ไ จี	·····i	Fort Scott	Ň	•		
Mobile	2	łi	1	Hutchinson	l ŏ	7		
Arkansas:		1 -	1	Kansas City	3	2		
Fort Smith		1 1		Topeka	1	7		
Hot Springs		1		Wichita	4	1		
Little Rock	2			Kentucky:			1,	
California:		۱ <u> </u>	1	Louisville	16	6		
Fresho	0	2	·•····	Pacueah		1		
Los Angeles	5	1 4	1 1	LOUISIADA:				
Rediands	1			New Orleans	9	20	f	
San Francisco				Aubnen			1	
Santa Cruz	1 1	1		Portland		2		
Colorado:	ľ	1 -		Marvland:	-	-		
Celorado Springs	1	2	1 1	Baltimore.	24	13	!	
Denver	· ē	12	i i	Massachusetts:		-		
Connecticut:				Boston	9	12		
Bristol	(1)	1		Brockton	(י)	1		
Hartford	5	4		Easthampton	0	1		
Meriden	0	2		Everett	(•) _	2		
New Haven	6	3		Fall River	7	7	1	
Norwich	1	2		Lowell	2	L I	•••••	
Wilmington				Now Rodford	1	1		
	1	1	-	Newburyport	ഹ്	1	•••••	
District of Columbia:	10			Newton	X	i		
wasnington	19	Ð		Salem	- X	i		
Georgia:				Springfield.	1	ī		
Athens	•••••	1	••••••	Winchester	(I) (I)	1		
Reinewich	4) 1	1	Michigan:	.,			
Rame	ŏ	i	-	Detroit	15	6	2	
Savannah	2	-	Ť	Flint	5	10	2	
Tilinola	-	•••••	-	Grand Rapids	2	1	• • • • • • • • •	
Chicago	15	6		POHLING	. 0	0		
East St. Louis	1	ĭ		Durbach				
Galesburg	രീ	ī	i	Minneanolis		·····i		
LaSelle		1	·	St. Paul	2	i		
Indiana				Winons.	៍	i		
Bedford	1	1		Missouri:		_		
Fort Wayne	ō	. 8	2	Independence	0	2		
Hammond	Ó		1	Joplín	0	1		
Indianapolis	- 40	. 2		Kansas City	6	4	3	
Loganspert	0,	•••••	. 1)	Bt. Louis	. 16	6		

^IAverage less than I.

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TYPHOID FEVER—Continued.

City Reports for Week Ended Aug. 28, 1920-Continued.

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

	Aver-	Ì	20.	The sec	Aver-	19	20.
. Flace.	age cases.	Cases.	Deaths.	rnce.	cases.	Cases.	Deaths.
Montana: Billings. Missoula Nebraska: Lincoln. Omaha. New Hampshire: Manchester. New Jersey: Atlantic City. Hoboken. Jersey City. New York: Albany. Buffalo. Ithaca. Mount Vernon. New York: Albany. Buffalo. Ithaca. Mount Vernon. New York Niagara Falls. North Tonawanda. Port Chester. Byracuse. Watertown. North Carolina: Charlotte. Durham. Greensboro. Wilmston-Salem. Ohio: Ashtabula. Parbertom. Canton. Columbus. Fremont. Fiqua. Springfield. Toledo. Oklahoma: Oklahoma.	$\begin{array}{c} 0 \\ 0 \\ (1) \\ (1) \\ (2) \\ 3 \\ 1 \\ 2 \\ 2 \\ 6 \\ 0 \\ 0 \\ 7 \\ 1 \\ 2 \\ 6 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1$	2 1 1 1 2 4 1 1 1 3 1 56 56 2 1 1 2 1 2 1 2 1 2 1 2 1 1 1 1 2 2 9 9 1 1 1 2 2 1 1 1 1	1 1 1 7 1 1 1 	Pannsylvania: Allentown Bethlehem Bradford Brie Johnstown I ancaster Philadelphia Pottsville Readine Shamokin West Chester York Rhode Island: Providence South Carolina: Columbia Tcanessee: Many Nille Memphis Port Worth Galveston Waco Utah: Provo Virginia: Nanoke Washington: Seattle Tacoma West Virginia: Bluefield Huntingtrn Moundsville Wisconsin: Appletcn Fond du Lac	$ \begin{array}{c} 2 \\ (1) \\ 0 \\ 25 \\ 22 \\ (1) \\ 3 \\ 0 \\ 3 \\ 2 \\ 5 \\ 2 \\ 1 \\ 5 \\ 16 \\ 2 \\ 3 \\ (1) \\ 0 \\ 4 \\ 8 \\ 3 \\ 1 \\ 2 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	5 5 1 1 1 1 2 2 2 3 3 3 8 13 2 1 1 1 6 4 2 9 1 1 1 1	
1				1 1			

¹ Average less than 1.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Aug. 28, 1920.

City.	Popula- tion as of July 1, 1917	Total deaths	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
	(estimated by U. S. Census Burcau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio Alameda, Calif Albany, N Y	93,604 28,433 106,632	28 7	5 1	1			3	1		
Alexandria, La. Alexandria, Va. Allentown, Pa. Alton, Ill.	16.232 17,959 65,109 23,783	3 2 4		·····	 i	· · · · · · · · · · · · · · · · · · ·			5	· · · · • • •
Amesbury, Mass. Ann Arbor, Mich. Anniston, Ala. Ansonia. Conn.	10, 200 15, 041 14, 326 16, 954	0 7 0	2 	· · · · · · · · · · · · · · · · · · ·	 1		2 2		4	·····

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

City Reports for Week Ended Aug. 28, 1920-Continued.

	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Mea	sles.	Sca fev	rlet ver.	Tu cul	ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Appleton, Wis	18,005		3							
Arlington, Mass.	13,073	5					2			1
Ashtabula. Ohio	14,629 22,008	5	1						1	
Athens, Ga.	18,519		1							
Atlanta, Ga	196, 144	57			2		2			3
Attleboro, Mass	19,776	5	⁻ -				1		ĩ	
Auburn, Me	16,607	4	····;·		·····,·					
Baltimore, Md.	594,637	172	7		6		13		18	18
Bangor, Me	26,958					¦			2	
Baton Rouge, La.	14,187	10								
Battle Creek, Mich	30, 159		3						· · · · · ·	
Bayonne, N. J Beatrice Nehr	72,204	3			•••••	¦	1		3	
Beaumont, Tex	28,851	11	2							2
Beaver Falls, Pa	13,749				•••••		1			
Belleville. N. J.	10,013								·····i	•••••
Beloit, Wis.	18,547						3		····.	
Bernn, N. H. Bethlehem Pa	13,892	4	3		• • • • • •					
Beverly, Mass	22,128	1								
Billings, Mont	15,123	10				· · · · · ·	1		7	· · · · · <u>·</u>
Bloomfield, N. J.	19,013	14					1			5
Bloomington, Ind	11,661	3	1							1
Bolse, Idano.	35,951	184	18	•••••	3		5		36	
Braddock, Pa	22,060		2						Ĩ	
Bradford, Pa Brazil Ind	¹ 14, 544 10, 479				4					
Bridgeport, Conn.	124,724	33	5		1		1		10	2
Bristol, Conn	16,318	5								
Brookline, Mass	33, 526	9	1						3	
Brunswick, Ga.	10,984	3								1
Burlington, Iowa.	475,781 25,144	114	19	1	9	1	3	• • • • • •	33	8
Burlington, Vt	21, 802	14					1			1
Butter, Pa	28,677 44,057				1			· · · · · ·	••••;•	•••••
Gadillac, Mich.	10, 158	13							1	
Cambridge Mass	15,995	2	••••;•		····;·		••••;•		•••••	
Canton, Ill	13,674	1			9		1		4	4
Canton, Ohio.	62, 566	15	1				1		1	1
Centralia, III.	19, 597	••••••	3		•••••			• • • • • •	•••••	
Charleston, S. C.	61,041	14	2						1	i
Chelsea, Mass	40,759	24	2	• • • • • •	••••••	•••••	•••••	•••••	1	2
Chester, Pa	41,857		$\tilde{2}$		4		····i		ə	
Cheyenne, Wyo	111,320	1	• • • • • •		•••••				•••••	.
Chicago, Ill	2, 547, 201	505	80	6	16	·····i	26		163	43
Chicopee, Mass	29,950	7	4							2
Cincinnati, Ohio	414, 248	2	7	····i	•••••				····	
Cleveland, Ohio	692, 259	129	18	i	8	1	20		24	15
Coffevville, Kans	14,998 18 331	·····;·	1		•••••			•••••	•••••	
Cohoes, N. Y	25, 292	6			5					•••••
Columbia S. C.	38,965	9		•••••	••••••		•••••		4	2
Concord, N. H.	30, 100 22, 858	10				•••••	····i		27	·····i
Connellsville, Pa	15,876						$\hat{2}$			•••••
Cortland, N. Y.	10,789	4	•••••	•••••	····;·	•••••	•••••	•••••	•••••	•••••
			•••••			•••••	!		. 4	•••••

¹Population Apr. 15, 1910.

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

City Reports for Week Ended Aug. 28, 1920-Continued.

	Popula- tion as of July 1, 1917 (estimated by U.S.	Total	Dipł	theria	. Me	asles.	Ecarlet fover.		Tucu	uber- losis.
City.	(estimated from by U. S. all Census causes, Bureau).		Cases.	Deaths.	Cases.	Deaths.	Cases.	Doaths.	Cases.	Deaths.
Council Bluffs, Iowa	31,838	8	l				. 1			ŀ
Covington, Ky.	59,623	13					• •••••	• • • • • • •		
Dallas. Tex.	129,738	33	4	''''i'	3	1	i		5	i i
Danbury, Conn	22, 931	7								
Darville, Ill Davton, Obio	32,969	42	3	• • • • • • • • •			• • • • • • •	• • • • • • •		. 1
Decator, Ill.	41,483	5					1			
Dedham, Mass	10,618	2	1	····;·]····;·	· · · · ; ·	1]		· · · · · ; ;
Des Moines, Iowa	268,439	60	20	I	0	1	3			. 17
Detroit, Mich	619,648	178	46	5			30	2	31	17
Dubuque Iowa	13,276	2	····;	····;·			····;·		•••••	• •••••
Duluth, Minn.	97.077	20	· 5	t .			7		5	
Durham, N. C.	26,160	4		ļ		•••••			1	1
Fasthampton Mass	30,286	6	• • • • • •		•••••				····;·	·····;
Easton, Pa	30,854	••••••			2					
East Orange, N. J.	43,761	5			•••••					. 1
East St. Louis, III Eau Claire, Wis	18 887	12	•••••		•••••		····i			1
Elgin, Ill.	28,562	5	1				····-		.	i
Elizabeth, N. J.	88,830	······	2		1.	•••••	5		4	·····
El Paso, Tex.	69,149	41	•••••							9
Elwood, Ind.	111,028	3								
Englewood, N. J.	12,603	2		•••••		• • • • • •		•••••	•••••;•	
Eureka, Calif.	15,142	5	1							
Evansten, Ill.	29,304	10					1			
Everett, Wash	40,160	9	1	•••••	•••••;•	• • • • • •	• • • • • • •	•••••	2	
Fall River, Mass.	129,828	46	4		i		2		2	5
Fargo, N. Dak	17,872	12				• • • • • •				
Flint, Mich.	57,386	21	7	•••••		•••••	•••••	•••••	•••••	•••••
Fond du Lac, Wis.	21,486						i			
Fort Scott, Kans	10,564	3	3	•••••	• • • • • •	• • • • • •				
Fort Wayne, Ind.	78.014	17	1	····i			2		2	
Fort Worth, Tex	109, 597	26	ī						1	
Framingham, Mass	10,959	0	1	•••••••	•••••	•••••	•••••	•••••	•••••	·····
Freeport, Ill	19,844	3	•••••						•••••	
Fremont, Nebr	10,080	0	•••••						•••••	
Fresno, Calif.	36.314	5	····i	•••••	•••••		1	•••••	•••••	
Galesburg, Ill.	24,629	5								
Gardner, Mass	42,650	6	•••••	•••••	•••••	•••••	•••••	•••••	•••••	
Gary, Ind.	56,000	10		. .					•••••	•••••
Geneva, N. Y.	13,915	7	•••••							
Grand Rapids, Mich	132,861	35			•••••	•••••		•••••	2	·····i
Granite City, Ill.	15,890	5							ھ 	
Greely, Colo	113,948	8	•••••		•••••	•••••	1	•••••	•••••	•••••
Green Bay, Wis.	30,017	3	i		····i	:::::	····i		•••••	•••••
Greenfield, Mass.	12,251	4	ī							
Greenwich, Conn	20,171	95	····;·	•••••	•••••	•••••	•••••	•••••	••••;•	1
Hackensack, N. J.	17,412	4	3							1
Harrisburg, Pa	27,016	10		1				•••••	•••••	•••••
Harriscn, N. J	17,345		1	•••••	1		•••••	•••••	····;·	•••••
Hartford, Conn.	112,831	26	3		i l		3		4	•••••
Hazelten, Pa	49,180 28 081	9	2	•••••	····· ·	•••••		•••••		2
Hoboken, N. J.	78,324	12	i							····i.
Holland, Mich	13,459	01	J						!	

¹ Population Apr. 15, 1910.

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

City Reports for Week Ended Aug. 28, 1920-Continued.

	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Measles.		Scarlet fever.		Tuber- culosis.	
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Holvoke. Mass	66, 503	14	1						1	×
Hot Springs, Ark	17,690	8	· • • • <u>-</u> •							2
Huntington, Ind	10,982	0	1	;-			····;·			····· 3
Hutchinson, Kans.	21,461		····i	· · · · ·			·		1	
Independence, Mo	11,964	5	3							<u>.</u>
Indianapolis, Ind	283,622	70			• • • • • • •		2		16	7
Ironton, Ohio	14,079	4	.		1					
Ironwood, Mich	15, 095	4	2		2					1
Irvington, N. J.	16,710				••••;•	• • • • • •			1	•••••
Ithaca. N. Y.	16,017	3 1					····i			
Jamestown, N. Y	37, 431	3	3		2					
Janesville, Wis	14,411	······2	1		• • • • • •	• • • • • •	1	• • • • • •		····•
Jersev City, N. J.	312, 557		14				2		13	
Johnstown, Pa	70, 437		2							
Joplin, Mo	33,400		••••	•••••	• • • • • •	•••••	1	• • • • • •		
Kankakee. Ill.	14.270	10								
Kansas City, Kans	102, 096		6		•••••		2		1	
Kansas City, Mo	305,816	89	3	1	16	• • • • • •	1		7	7
Keene. N. H.	10,725	03				•••••	•••••		6	·····i
Kenosha, Wis.	32, 833						3			
Kewanee, Ill.	13,607	5			•••••	• • • • • •	···· <u>·</u> ·			· · · · · ;
Kokomo, Ind	21, 929	7	1		•••••	•••••	Э	1	1	1
Ilackawanna, N. Y	16, 219	4	2		6				3	
La Fayette, Ind	21,481	4	• • • • • •	• • • • • •	•••••		1			·····;
Lare Charles, La	14,930	5	•••••			•••••	····;·	•••••	····;·	1
Lancaster, Pa	51, 437		4						3	
La Salle, Ill.	12,332	3			1					
Lawrence, Kans Lawrence Mass	102 923	10	•••••	·····i	2	•••••	T	•••••	·····	
Leavenworth, Kans	1 19, 363	2							1	
Leominster, Mass	21,365	4	• • • • • •		•••••					
Lexington, Ky	41,997	12	•••••	•••••		•••••	····;·	• • • • • •	1	2
Lincoln, Nebr	46, 957	11	i						2	2
Lincoln, R. I.	10,473						1			
Lockport, N. Y	20, 028		4	•••••		•••••	Т	•••••	+	·····i
Logansport, Ind	21, 338	3					1			
Long Beach, Calif	29,163	18	• • • • • •							1
Lorani, Ono	535, 485	125	20		21		3 1	•••••	51	25
Louisville, Ky	240, 808	56	2						7	6
Lowell, Mass	114,366	. 22	1		13	•••••	4	·····	9	•
Lynn. Mass	104, 534	15	·····i				3		3	
McKeesport, Pa	48, 299				1					
McKees Rocks, Pa	20,795		····;·		•••••	•••••	· · · · · ·	•••••	1	• • • • • •
Malden, Mass.	52,243		i						····i	
Manchester, Conn	15, 859	1					1			
Manchester, N. H.	79,607	14	• • • • • •			•••••	•••••	• • • • • •	· • • • •	
Mankato, Minn.	110,365	3					<u> </u>		ï	
Marinetto, Wis	1 14, 610				1		1			
Marion, Ind	19,923	8	•••••		•••••	•••••	1	• • • • • •	:	1
Mason City, Iowa	14, 938	3	··•• 1	i						
Meadville, Pa	13, 968		···· <u>·</u> ·	· · · · · · ·	2					
Mediord, Mass	26,681 17 794	9	1		3	•••••	1	•••••		•••••
Memphis, Tenn.	151, 877	51	5		1				10	5
Meriden, Conn	29, 431		1		1	•••••	I	·····	1	

Population Apr. 15, 1910.

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

City Reports for Week Ended Aug. 28, 1920-Continued.

•	Popula- tion as of July 1, 1917	Total deaths	Dip	htheria	. Me	asles.	Sc. fe	arlet ver.	Tu	ıber- losis.
City.	(estimated by U. S. Census Bureau).	trom all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Methuen, Mass.	14,320	4	;		. 				2	
Middletown, Onlo Milwankee, Wis	445,008	74	14	i i	3		12	i	12	
Minneapolis, Minn	373, 448	68	6	1	·····		2	····-	13	1 8
Mishawaka, Ind Missonla Mont	17,083								·····	• • • • • • •
Mobile, Ala	59, 201	20								2
Monessen, Pa	23,070	••••••	····;	• •••••					1	· · · · · ·
Montgomery, Ala	44,039	11	l i		l				2	
Morgantown, W. Va	14,444	2	····;·	• • • • • • • •					2	1
Moundsville, W. Va	11, 513	2	1		····i	•••••	•••••		•••••	
Mount Carmel, Pa	20, 709		4							
Mount Vernon, N. Y	37, 991 17 713	2	· · · · ·	· • • • • • •	•••••	•••••	• • • • • •		2	
Nanticoke, Pa	23, 811				2				•••••	
Nashville, Tenn	118, 136	34	···· <u>.</u> ·						1	3
New Bedlord, Mass	55, 385	40 12	2	1	•••••	• • • • • •	15	•••••	6	5
Newburyport, Mass	15, 291	-5							1	2
New Castle, Pa	41,915		2		•••••	•••••	1		····;·	•••••
New London, Conn	21, 199	·····	2			1			í	4
New Orleans, La	377, 010	121	10		13		2	2	15	12
Newport, K. I	30, 585 44, 345	4	I		•••••	•••••	••••	•••••	•••••	•••••
New York, N. Y.	5, 757, 492	1,088	98	9	20	····i.	30	2	1 171	196
Niagara Falls, N. Y	38,466	6	4	•••••	2		1		3	1
Norristown Pa	31, 969	•••••	1		1	•••••	3	•••••	3	3
North Adams, Mass	22,019	7	ī						1	ï
Northampton, Mass.	20,006	10	• • • • • •		•••••	•••••		•••••	2	•••••
North Braddock, Pa	15,684		2						4	•••••
North Little Rock, Ark	15,515	5								
North Tonawahoa, N. 1	27.332	4 5	2	•••••	•••••	•••••	•••••	•••••	····2	· 1
Norwich, Conn	21,923	7							ĩ	2
Norwood, Ohio	23,269	2	•••••	•••••	•••••	•••••		•••••	•••••	•••••;
Oak Park, Ill.	27,816	9	2			· · · ·				
Ogdensburg, N. Y	16,845	3								•••••
Oli City, Pa	20,162	14	3	•••••	8	••••• •		•••••[•		•••••
Olean, N. Y.	16,927	4								
Omaha, Nebr	177,777	25	11	2	1		2	••••• •	•••••	1
Orange, N. J.	33,636	12			1		3		1	
Oshkosh, Wis	36,549		2	•••••						
Parkersburg, W. Va	21,059		Z	•••••			- <u>†</u> ·		1	•••••
Pasadena, Calif	49,620	7							3	
Paterson, N. J	140,512	2	6		2		•••••		4	•••••
Peoria, Ill.	72,184	17	2				1			1
Perth Amboy, N. J.	42,646	5	2		1.		1.		1.	
Phillipsburg, N. J.	15.879	500	20	•	5.		24	•••••	65	38
Phoenixville, Pa	11,871 .				i .					
Pittsburgh, Pa	14,275 586 198	1	12	••••• •	14	·····			···;;· ·	•••••
Pittsfield, Mass	39,678	8 .			2		3		3	
Plainfield, N. J	24,330	9.					1.		_ i .	
Plymouth, Mass.	14,001	3.4					••••• •		•••••	•••••
Pontiac, Mich.	18,006	10	1						2	•••••
Port Huron, Mich	16,727	5	1	1	1.	····· ·	···;• •	•••••		1
Portland, Me	64,720	23					!:	 i:		•••••

¹Pulmonary tuberculosis only.

* Population Apr. 15, 1910.

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

City	Reports	for	Week	Ended	Aug.	28,	1920-Continued.

	Popula- tion as of July 1, 1917	Total deaths	Dipi	htheria	. Mes	sles.	Sca fe	arlet ver.	Tu cul	ber- osis.
City.	(estimated by U. S. Census Burcau).	from all causes.	Ca tes.	Deaths.	Casos.	Deaths.	Cases.	Deaths.	Ca3es.	Deaths.
Portsmouth, N. H	11,730				1		1	,		
Pottstown, Pa	16,987	15			3					
Pottsville, Pa	22,717 30,786	12	. 1							
Providence, R. I.	259, 895	64	4	4	3		3			n n
Quincy, Ill	36,832 39,022	97	····;	••••••		•••••	2			2
Racine, Wis	47, 465		4		1 i		3		2	·····
Rahway, N. J.	10,361 20,274					···;··		••••		·····;
Reading, Pa	111,607		2			•••••				
Redlands, Calif	14,573 15,514	2	·····			•••••	•••••	•••••		1
Richmond, Ind	25,080	4					1			
Richmond, Va	158, 702 20, 496	41	1 11			•••••	2		14	5
Roanoke, Va.	46,282	20	l i		i		2		1	3
Rochester, N. Y.	264, 714 56, 739	60	18	2	1	•••••	1	•••••	12	3
Rock Island, Ill.	29, 452	6	l				1		1	
Rocky Mount, N. C.	12,673 15,607	2	1	•••••		•••••	•••••			
Rome, N. Y	24,259		1		8				1	
Rutland, Vt.	15,038	2	1		5	•••••				
St. Joseph, Mo	86, 498	24					1		2	32
St. Louis, Mo.	768,650	138	45	3	4	•••••	5		39	12
Salem, Mass	49,346	- 30 - 8	11				1	•••••	9	0
Salem, Oreg.	21,274	4							1	
San Bernardino, Calif	121,623	16	•••••	•••••	2		•••••	•••••	2	
San Diego, Calif.	56,412	19	3		ī				11	2
Sanford, Me	20,226	52	•••••						1	•••••
San Francisco, Calif	471,023	107	4		3		8		18	13
Santa Cruz, Calif	15,360	5. 4	•••••	•••••	•••••		•••••	•••••	•••••	•••••
Saratoga Springs, N. Y	13, 839	Ĝ	·····		!					•••••
Savannah. Ga	14,130	2 46	····;·	•••••	•••••		3	•••••	•••••	
Schenectady, N. Y.	103,774	14			1				4	
Seattle, Wash	149,541 366,445	•••••	1	•••••	•••••¦·	•••••	····;·	•••••	3	•••••
Shamokin, Pa	21, 274		1		!					•••••
Sioux City, Iowa	19,156	•••••	1	•••••	1		3	•••••	•••••	•••••
Sioux Falls, S. Dak	16,887	3			1 j.					•••••
Somerville, Mass	88,618 70,967	12 10		•••••			····;·	•••••	7	····;
Southbridge, Mass	14,465	2					i			
Spartanburg, S. C	21,985 62,623	18	1	•••••	•••••	•••••	····;·	•••••	•••••	•••••
Springfield, Mass	108,668	29	3				7	i	2	2
Springheld, Ohio	52, 296 31, 810	17	····;·	•••••¦	·····¦·	•••••	1		2	3
Steelton, Pa	15,759								î	· · · · · · · ·
Steucenville, Onio	28,259	8	····;·	•••••	•••••		·····		•••••	•••••
Stockton, Calif	36,209	<u>9</u>								•••••
Superior, W1s	47,167	34	1	•••••¦		···;·	2		1	1
Tacoma, Wash	117, 446		!		2				°	<u>م</u>
Taunton, Mass	36,610 67 361	12	1	•••••¦	·····¦·				2	•••••
Tiffin, Ohio	12,962	1			Ì				ï	ï
Foledo, Ohio Topeka, Kans	202,010	54	2	1	····		13	2	,2	4
- Upora, Maus	49,008 '	1.	••••••	•••••	2'.	·····'	2'.	·····'	15 /	•••••

¹ Pop ulation Apr. 15, 1910.

7244°-20-3

City Reports for Week Ended Aug. 28, 1920-Continued.

City. (estimated by U. S. Census Bureau). all causes. is generation (is generation) is generation (is generation) is generation (is generation) is generation (is generation) is generation (is generation) is generation (is generation) is generation (is generation) is generation (is generation) is generation) is gen		Popula- tion as of	Total deaths	Diph	theria.	Mea	sles.	Sca fev	rlet ver.	Tu culo	ber- osis.
Traverse City, Mich. 14,090 5 1<	City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Zanesville, Unio	Traverse City, Mich. Trenton, N. J. Troy, N. Y. Troy, N. Y. Troy, N. Y. Troy, N. Y. Troy, N. Y. Troy, N. Y. Vallejo, Calf. Vancouver, Wash. Waco, Tex. Watcham, Mass. Warren, Pa. Washington, D. C. Washington, D. C. Washington, D. C. Washington, D. C. Washington, D. C. Washington, D. C. Washington, N. Y. Waterbury, Conn. Waterbury, Conn. West Orange, N. J. Wheeling, W. Va. Wildiamsport, Pa. Williamsport, Pa. Williamsport, Pa. Winnington, N. C. Winchester, Mass. Woburn, Mass. Worcester, Mass. Workers, N. Y. York, Pa. Zanesville, Ohio.	$\begin{array}{c} 14,090\\ 113,974\\ 78,094\\ 17,324\\ 21,600\\ 13,803\\ 13,805\\ 34,015\\ 31,011\\ 15,083\\ 369,282\\ 22,076\\ 89,201\\ 30,404\\ 19,663\\ 30,404\\ 19,663\\ 13,403\\ 18,769\\ 44,386\\ 19,613\\ 13,964\\ 43,657\\ 23,331\\ 13,964\\ 43,657\\ 23,331\\ 13,964\\ 43,657\\ 23,331\\ 13,964\\ 43,657\\ 23,331\\ 13,964\\ 43,657\\ 23,331\\ 13,964\\ 43,657\\ 23,331\\ 13,964\\ 43,657\\ 22,331\\ 13,964\\ 43,657\\ 22,331\\ 13,964\\ 43,657\\ 22,331\\ 33,136\\ 657\\ 22,058\\ 13,106\\ 166,106\\ 166,106\\ 166,106\\ 166,106\\ 120,078\\ 13,302\\ 13,320\\ 13,320\\ 13,320\\ 13,320\\ 14,$	$\begin{array}{c} 5\\ 34\\ 20\\ 10\\ \end{array}$	1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						$\begin{array}{c} 1 \\ 5 \\ 3 \\ \end{array}$	4 8 1 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1

FOREIGN AND INSULAR.

RUSSIA.

Epidemic Dysentery-Latvia.

Information received under date of September 4, 1920, shows epidemic prevalence of dysentery in southeast Latvia, Russia, with 1,200 reported cases, with a mortality of 10 per cent.

TURKEY.

Pernicious Malaria-Samsoun.

Under date of July 17, 1920, numerous cases of pernicious malaria were reported at Samsoun, Turkey.

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

Reports Received During Week Ended Sept. 17, 1920.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India: Bombay Madras Rangoon	July 4–17 July 11–31 July 4–10	56 4 6	28 5	

PLAGUE.

Apr. 1-30, 1920: Cases, 22; deaths, British East Africa... July 11-17..... Kisumu..... 1 15 31 June 19-26..... June 27-July 7... 16 Mombasa. 34 Do..... Ceylon: 6 6 Colombo July 11-24..... July 4-17, 1920: Cases, 1,321; deaths, 1,061. India... July 4–17. July 18–24. July 11–31. July 4–10. Bombay..... 10 11 Karachi. 1 1 Madras Presidency... 504 319 Rangoon..... 36 34 Uruguay: Montevideo.... June 1-30..... 1 1

SMALLPOX.

A laoria :				
Departments -				
Algiers.	July 21-31	3		Algiers (city) July 1-31, 1920:
Oran	do	31		Cases, 5, deatins, 2.
Austria				May 30-June 26, 1920: Cases, 27.
Vieuma	May 30-June 26	1		•••••••••••••••••••••••••••••••••••••••
Azores: Ponta Delgada	July 25-Aug. 20	4	••••••	Stated to have come from Ma-

¹From 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 Sept. 17, 1920-Continued.

EMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil: Rio de Janeiro Do British East Africa	May 16-22. July 10-24	115	3	Received out of date. Mar. 1-31, 1920: Cases, 107; Apr. 1-30, 1920: Cases, 69. Re-
Mombasa. Nairobi.	July 11-17 June 20-26	3	i	ported by native inspectors.
New Brunswick— Bonaventure a n d Gaspe Counties.	Λug. 1–31	1		
Queens County Ontario—	Aug. 15–21	2		
North Bay Quebec—	Aug. 22–28	1		
Quebec Colombia: Santa Marta	Aug. 8-14	3		Present.
France: Nice	June 1-30		2	
Great Britain: Glasgow	Aug. 15-21	16		
Greece: Saloniki	July 25-Aug. 1	1		
indis: Bombay Madras Banggon	July 4-17 July 18-31	10 8 8	131	
Italy: Catania Palermo	Aug. 9-15 July 16-Aug. 5	1 24	7	30 cases in surrounding country.
Portugal: Lisbon	July 25-31		· 1	
Spain: Barcelona Valencia	July 29-Aug. 4 Aug. 8-14		1	
Tunis: Tunis	Aug. 10-16	2	1	
	TYPHUS	FEVE	R.	
Algeria:				· · · · ·
Departments- Algiers Constantine	July 21–31 do	1 10		Algiers (City), July 1-31, 1920: Cases, 3; deaths, 2.
Oran Austria Vienna	do May 30-June 26	22 7	· · · · · · · · · · · · · · · · · · ·	May 30-June 26, 1920: Cases, 7.
Brazil: Ceara Germany	May 23-June 12	••••••	2	June 13-26, 1920: Cases, 10. June
				27-July 10, 1920: Cases, 25. Occurring in Anhalt and in the districts of Arnsberg, Kos- lin, Madgeburg, Mecklenberg- Strelitz, Merseburg, and Op- peln.
Oreat Britain: Queenstown	Aug. 1–7	1		
Saloniki	July 19-Aug. 1	13	12	May 8-23, 1920; Cases, 2.
Budapest	May 8-23	2	•••••	aray 0 20, 1820. Casto, 2.
Trieste	July 4-Aug. 14	53	7	

YELLOW FEVER.

Mexico: Puerto M exico	. Aug. 24-27	1	1	Case arrived Ang. 23, on s. s. Melchor Ocampo from Pro- greso. Previously reported, P. H. R., Sept. 10, 1920.
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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 26 to Sept. 10, 1920-Continued.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil: Rio de Janeiro	June 27–July 3		1	
China:	Tune 20-Tuly 3			
Chungking	May 16-24		1,319	
Foochow	July 11-24		2,890	Present.
Hankow	July 4-17	12	5	Sept. 8, 1920; Cases, 13,000; deaths,
Chemulpo	Sept. 8	2		5,000 (estimated).
Bombay	May 2-June 26	85	36	7,549.
Do Calcutta	June 27-July 3 May 2-June 12	376	363	May 30-June 12, 1920: Deaths,
Madras	June 13-19 May 2-June 26	2	1	1,486.
Rangoon.	July 4-10	1		
Saigon	Apr. 26-May 16	56	41	Report for May 9 not received.
Do Japan:	June 7–13	74	53	
Kobe	June 14-27	36	24	Kobe, June 6-13, 34 cases. Moji,
Nagasaki	June 21-27	7	121	June 6-12, 1 case. Hiroshima,
Osaka	June 28-July 18	34	13	June 6–12, 6 cases.
Taiwan Island Do	May 22–June 20 July 11–20	60 10	33	-
Java: West Java				
Batavia	Apr. 30-June 3	6	2	June 4-17: Present.
Philippine Islands:	June 25-July 1	· · ·		
Manila Do	May 9–June 26 June 27–July 10	53	1	May 9-June 26, 1920: Cases, 16; deaths. 12. June 27-July 17.
Provinces-	May 0_15	-	1	1920: Cases, 63; deaths, 31.
Batangas	June 27-July 3	1		
Cagayan	do May 9–June 26	11	1 19	
Do Tioilo	June 27-July 10 June 27-July 17	35	9	
Isabela	July 11-17	5	5	
Misamis	July 11-17	4	2	
Russia	July 4-17	6	4	Reported prevalent in southern
Sebastopol (district)	June 20			Russia, June 4, 1920. Reported increasing.
Siam: Bangkok	Apr 25-Tune 26	549	242	
Turkey:	Apr. 20 vane 20		020	
Amassia Kaiseri	Dec. 22	1		Asiatic Turkey. Do.
Karassi Mamuret-ul-Aziz	Jan. 3 Dec. 31	1	1	Do. Do.
Panderma	DecJan	16	6	Furancen Turkey
Smyrna	Dec. 22	3	2	Asiatic Turkey.
,	1		1	

PLAGUE.

Brazil:			
Bahia	Apr. 25-May 22	8	2
Do	June 27–July 3	2	3
Pernambuco	May 3-9	1	1
Porto Alegre	June 27-July 10		ī
British East Africa:	-		
Kisumu	Apr. 25-June 26	14	12
Mombasa	Apr. 25-June 10	88	74
Nairobi	do	14	8
Cevlon:			-
Colombo	May 25-June 12	7	2
Do	June 27-July 10	3	3

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

Reports Received from June 26 to Sept. 10, 1920-Continued.

PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile				Mar. 1-May 31, 1920: Cases 15; deaths, 2. Plague reported in Departments of Tacna and
Antofagasta	May 17-June 20	5		Tarata. Mar. 1-May 31, 1920: Cases, 7; deaths. 1.
Iquique	Mar. 1-May 31	8	1	
China: Amoy	June 20-July 3		. 1	
Honykong	Apr. 4-June 28	90	70	
Egypt.	June 21-July 10			Jan. 1-July 15, 1920: Cases, 387;
Alexandria	June 18-July 29	7	6	1 ucatilo, 221.
Buez.	May 13-June 8 July 3-13	12	6	3 cases pneumonic.
Provinces-				
Assiout.	May 15-June 5	6	4	
Beni-Souef	July 7-10	2	1	
Fayoum Garbieh	June 5.			
Do	July 1-12	14	10	
Keneh Mariut	May 18	10		
Do	July 3-9	ĩ	2	
Minieh	May 15	2	1	Septicemic.
Great Britain:	July 15	^		
Liverpool	June 20-26	1	1	
Greece: Cavalla	July 5-Aug. 21	3		
Dante	July 22	2		
Nauplia Pireus	Aug. 21	28	1	
India				Apr. 18-June 26, 1920: Cases,
Bombay	Apr. 18-June 26	152	124	12,476; deaths, 9,961. June 27-
Calcutta	May 2-June 12	26	19	454.
Karachi	May 9-July 10	63 649	56	
Rangoon	Apr. 25-June 26	120	112	
Indo-China:	Nov 10-16		1	
Do	June 7–13	8	î	
Italy:	Tuno 99 Tuly'9	,	,	
Java:	June 22-July 5	3	-	
East Java	Apr. 23-May 5	7	7	
Bagdad	June 1-30	6	3	
Mexico	Tuly 96 Aug 16	••••••		Apr. 15-June 16, 1920: Cases, 8;
Vera Cruz.	June 14–20	11	ı 1	May 29-July 24, 1920: Cases, 49;
Do	July 18-24	2	2	deaths, 29. Mar 1 21 1920: Cases Afridaetha
Callao	Mar. 1-31	6	3	29. Apr. 1-30, 1920: Cases, 40. deaths,
Do	Apr. 1-30	9	4	deaths, 13. In coastal depart-
Do	Apr. 1-30	4	3 4	ments.
Lima (country)	Mar. 1-31	1	1	
Mollendo	Mar. 1-31	13	9	
Paita	do	5	2	
Salaverry	Mar. 1-31	4	3	
Do	Apr. 1-30	1	••••••	
Trujillo	May 31-June 29	3	2	
Siam:	Ann Of Mars 1			
Вапукок Do	May 9-June 5.	3	32	
Straits Settlements:	Am. 07. T			
Singapore	Apr. 25-June 19	14	13	
Beirut	June 30	•••••		Present.
Constantinople	July 25-31	3	2	

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

Reports Received from June 26 to Sept. 10, 1920-Continued.

SMALLPOX.

Place.	Date.	Cases.	. Deaths.	Remarks.
Algeria:				
Departments-		I		
Algiers	. May 11-July 20	42		. City of Algiers, Apr. 1-30, 1920:
Constantine	Mey 11-July 20	114		. One case.
A 20105'	. May 11-July 20	1		•
Ponta Delgada	July 17-23.	3		
Bolivia:				
La Paz	. May 2-31	6	8	
Brazil:	A		-	
Bana	Apr. 25-June 20	1 1	5	
Pernambuco	Mar. 29-May 2	70	2	1
Rio de Janeiro	Apr. 11-June 26	30	6	1
Do	June 27-July 10	12	1	
Sentes.	. Mar. 21-28	1		
British East Airica:	Mar 9 99			
Neirobi	May 2-22	10	1 1	
Bulgaria:	atay 20 0 and 10	10	•	
Sofia	July 11-17	1		
Canada:				
Alberta-				
Calgary	June 3-9	1		1
British Columbia-	July 4-Aug. 1	Э		
	May 16-July 10	3		
Manitoba-	2.2.3 10 0013 20000	•		
Winnipeg	May 29-June 5	3		
_ Do	Aug. 8-21	2		
New Brunswick—	16			
Compositer County	July 1_31	7		
Queens County	July 4-10.	5		
Nova Scotia—				· · ·
Halifax	do	2		
Sydney	May 31-June 26	2		
Ontario-	Tumo 05 20			
Fort William	July 25-Ang. 14	2		· · ·
Hamilton	June 13-Aug. 7	3		
Kingston	May 31-June 19	4		
North Bay	June 23-29	1		
Do	July 11-1/	2		
D0	Juno 6-26	32		
Do	June 27-Aug. 28	42		
Peterborough	Apr. 18-July 31	33	1	
Port Arthur	July 11-17	2		
Prescott	do	1		Brocont at Cordinal and Brook.
Do Toronto	Aug. 1-14 Juno 610		•••••	ville.
Do	June 26-Aug. 21	24		vinia .
Windsor	Aug. 22-28	3		
Prince Edward Island-				
Charlotte Town	Aug. 12-18	1	• • • • • • • • • • •	
Montreal	Tune 12-10	1		
Do	July 4-Aug. 7.	4		
Quebec	June 27-Aug. 28	3		
Saskatchewan-				
Moosejaw	June 26-30	6	• • • • • • • • • • •	
Do Rogino	July 25-Aug. 7		•••••	
Cevion:	June 20-30	-	••••••	
Colombo	May 9-June 5	2		
Chile:				· · · · · ·
Antolagasta	May 17-23		· · · · · · · · · · · · ·	1 case in interior.
unina:	Moy 2-July 3		10	
Antung	May 9-June 13	3	14	
D0	June 21-27.	ĭ		
Chungking	May 2-June 5			Present.
Do	July 11-24			Do.
Foochow.	мау 9-29			Do'
Hongkong	Apr 4-June 96	10	·····ie	
Do	June 27-July 10	17	"i"	•

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

Reports Received from June 26 to Sept. 10, 1920-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China—Continued.	Tuly 10.95			Present
Nanking	May 9-June 5			Do.
Tientsin	May 25-31.	2		TIGVALENC,
Do Tsinanfu	May 9-15			
Chosen (Korea): Chemulpo Fusan	Mar. 1-June 30	69 24	40 6	
Seoul	do	358	86	
Barranquilla	May 16–July 3 May 31–July 17			Epidemic. Endemic.
Cuba: Habana	July 4	1		From steamship Frank Hennis from Jamaica. Arrived Santi-
Matanzas	Aug. 15-21	1	1	ago June 30, 1920. In vicinity, at Aguacate, Aug. 1-7, 1920: Cases, 12.
Cyprus	•••••			August, 1919: Cases, 242; deaths, 54.
Czechoslovakia: Moravia	Feb. 1-28	68		
Danzig Egypt:	June 20-July 17	9	. 10	
Do	June 25–July 15	- 55 9	19	
Cairo Port Said	Apr. 2–May 20 do	45 18	13	
France: Brest.	May 15-21	1		
Cette	June 24-30		1	
Germany.				Feb. 22-June 12, 1920: Cases, 720.
Glasgow	May 25–June 26	136	22	
Do Liverpool	July 4–Aug. 14 July 18–24	128 1	34	
London	June 13-July 10	14		
Saloniki	May 31–June 27	4	1	Apr 11-May 22 1920. Deaths
				7,743. May 30-June 12, 1920: Deaths, 1,197.
Bombay	Apr. 26–June 26	103	45	May 9-15, 1920: Cases, 26; deaths, 11.
Do Calcutta	June 27–July 3 May 2–June 12	12 101	4 93	
Karachi	May 9-June 26	15	12	
Madras	May 9-June 26	27	15	• ·
Do	June 27–July 10	12	2	
Indo-China:	Mov 10_16	30 7	14	
Do	June 7–13	5	ĩ	
Italy: Catania	July 12-Aug. 8	23		
Genoa	May 17-23	12		In Province.
Do Do	June 14-27	20		
Messina	May 10-June 27	7	1	Province, May 10-June 27: Cases 168; deaths, 27.
Do Mílan	June 28-July 11 Mar. 1-May 31	1 30	1 5	Province: Cases, 9; deaths, 3.
Naples Palermo	May 23-June 20	7	3	
Turin	June 28-July 4	1		
Jamaica: Kingston	July 22			Present.
Jaran. Koba	May 0 Tune 07		.	
Do	June 28-July 18	7	2	
Taiwan Island	May 1-June 20	40	11	
Tokyo	Apr. 21-May 10	5	4.	

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

Reports Received from June 26 to Sept. 10, 1920-Continued.

SMALLPOX-Continued.

Piace.	Date.	Cases.	Deaths.	Remarks.
Java: West Java. Batavia	Apr. 16-June 17		26	Apr. 16-June 24, 1920: Cases, 56; deaths, 10. June 25-July 1, 1920: Cases, 6.
Madeira: Funchal Do	June 20-26		2	Present.
Malta. Manchuria:	May 1-June 30		3	
Mukden Mexico: Ciudad Juarez	May 2-8	1		<i>D</i> 5.
Guadalajara Do	May 1-31 July 1-31	1		• • •
Laredo Mazatlan Salina Cruz	July 30 May 19–25 June 1–30	2 5	1	
San Luis Potosi Do	May 31-June 6 June 28-Aug. 22		1 6	
Tampico Newfoundland: St. Johns	July 1–31 June 5–11	3	• 5	Reported at 2 other localities.
Shoal Harbor Poland	July 10-16	7		July 3-16: Present at 4 localities. Jan. 1-31, 1920: Cases, 1,895;
Porto Rico: Caguas	Jan. 1-31	1,052	228	deaths, 301.
Portugal: Lisbon	May 16-June 28		8	
Russia: Vladivostok	June 2July 24 Jan, 1-June 30	252	78	
Spain: Barcelona	May 19-June 12	·····	4	.i
Corunna Valencia	July 16-29 May 23-June 26	8 	1 3	
Do Vigo	July 4-24 May 31-June 26	9	2 4	July 25-31: Present.
Switzerland: Geneva	May 9-15.	7		
Tunis: Tunis Turkou:	May 25-Aug. 9		18	
Constantinople Do	May 16-June 19 June 20-July 31	7 5		
1	•		1	

TYPHUS FEVER.

	4		1	
Algeria:				
Algiers	May 11-July 20	37		
Oran	May 21-July 20	322		
Austria.	Fab. 15-May 20			Feb. 15-Mar. 15, 1920: Cases, 60.
Boliyia:	reo. 15-May 29		•••••	
La Paz Brazil:	May 2-31	•••••	5	
Ceara	Apr. 25-May 1		2	
Sofia	June 20-25	2		
Chile				March, 1929: Cases, 409; deaths,
				deaths, 49. May, 1920: Cases, 208;
Antofagasta	July 5-11			312; deaths, 50. Present.
Caleta Coloso	May 10-16		2	
Concepcion	Mar. 8-June 28	31	39	•
Do	June 29–July 12	37	5	
Santiago	Mar. 1-May 31	315	59	
Valparaiso	May 2–July 17		50	
China:				
Antung	July 12–18	1 1		

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

Reports Received from June 26 to Sept. 10, 1920-Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chosen: Chemulpo Seoul Czechoslovakia.	June 1–30 Mar. 1–Apr. 30	3	1	Feb. 1-28, 1920: Cases, 88; deaths.
Leipnik Danzig Do	Feb. 22–28 June 20–26 July 25–31		1	7. Quarantine station. Feb. 27-Mar. 27, 1920: Cases, 16.
Egypt: Alexandria. Do. Cairo. Port Said. Germany.	May 7-June 24 June 25-July 29 Apr. 2-May 20 Apr. 9-May 13	338 112 565 112	86 44 202 52	Feb. 22-Mar. 27, 1920: Cases, 23 Among troops, 4; among per-
Great Britain: Dublin Dundee	May 23-June 19 July 4-10	3	1	sons from Poland, 8. Mar. 28– June 2, 1920: Cases, 86.
Greece: Athens. Drama. Patras. Piræus.	June 27-July 3 July 12-18 June 29-July 4 June 29-July 5	1		
Saloniki. Do. Hungary. Budapest Italy:	Apr. 12–27. June 28–July 18 Jan. 10–May 9	384 70 25	42 16	Jan. 19-May 29, 1920: Cases, 48.
Trieste. Do. Japan: Nagasaki. Do.	May 16-22 June 13-July 3 May 25-30 June 21-27	3 5 12 1 1	2	
Java: East Java— Surabaya West Java— Batavia	June 10–16 May 28–June 30	1	1	
Mexico: Chibuahua Nogales. San Luis Potosi Do	May 31–June 6 Aug. 9–14 June 8–July 8 July 2–Aug. 15	2	1	Present.
Poland Warsaw Serbia		•••••	•••••	Jan. 1-Mar. 31, 1920: Cases, 87,910: deaths, 19,733. Jan. 1-Feb. 29, 1920: Cases, 911; deaths, 117. Mar. 14 Apr. 10, 1920: Cases, 181-
Portugal: Oporto	Apr. 4-June 24	15	6	deaths, 23.
Spain: Barcelona	July 9-15 June 1-30		2 1 1	Jan. 1-Apr. 30, 1920: Cases, 1,204; deaths, 144.
Builzeriana: Geneva Tunis: Tunis Do	June 28–July 4 May 24–June 27. July 6–12	1 36	 18 1	
Turkey: Constantinople Do Venezuela: Maracaibo	May 16–June 12 June 19–July 19 July 21–27	27 15		

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

Reports Received from June 26 to Sept. 10, 1920-Continued.

YELLOW FEVER.

Place.	Date.	Cases:	Deaths.	Remarks.
Brazil: Bahia	May 23-June 19	1		
Colombia: Buenaventura	June 3	1	1	
Guatemala: Los Amates	Aug. 5-14	9	3	Aug. 17: Present at several
Mexico: Progreso	July 30	1		Iocantico.
Do Puerto Mexico	Aug. 4-18. Aug. 28-Sept. 6	4	2	July 30-Aug. 18, 1920: Cases, 5; deaths, 3.
Vera Curz	Aug. 10–16 June 22 July 10–Sent 4			•
Peru				Mar. 1-31, 1920: Cases, 128. Apr. 1-30, 1920: Cases, 64.
Callao Catacaos	Apr. 1–30 Mar. 1–31	1 14		At quarantine station. From S. S. Huallaga.
Do La Huaca	Apr. 1–30 Mar. 1–31	2 9 5		2
Morropon Munuella	do	37 12		
Paita Do	do Apr. 1–30	81 14		
Puira Do Salitral	Mar. 1–31 Apr. 1–30 Mar. 1–21	1 4 9		
Sullana Do	Apr. 1–30	9 1		
Salvador: Armenia	June 27-26	1	1	
Sonsonate On vessel:	May 22-June 24	49 1	17	At Overentine Te
5. 5. 50cstuljk	pept. 11	1	1	At Quarantino, Da.