PUBLIC HEALTH REPORTS

VOL. 39 SEPTEMBER 12, 1924 No. 37

CAUSES OF ABSENCES IN ONE GRADE OF FIFTEEN PUBLIC SCHOOLS IN WASHINGTON, D. C.[1]

By LOUISE TAYLER-JONES, M. S., M. D.

This study was made by a committee of the District of Columbia Public School Association, of which the writer was chairman. It was carried out in the public schools of Washington, D. C., through the courtesy of the superintendent of schools.

The method of procedure was as follows: Each committee member has had the pupils of one school room to follow in regard to absences, so that there have been about 15 rooms studied. As cooperation of the teacher in each of these 15 rooms has been essential, it means that more than 30 people have been at work on this problem.

The grade chosen, on the suggestion of the superintendent of schools, was the 3 A grade, changing mid year to 3 B. Children in this grade are of the age when they first come under the compulsory school law. The schools were chosen from various parts of the city in an endeavor to include all kinds of economic conditions. Some schools were added because of the excellence of the teachers' work and the belief that their assistance would be of value. The following are the schools selected: Abbot, Blake, Henry, and Twining, from the central section of the city; Elizabeth Brown (in Chevy Chase); John Eaton (in Cleveland Park); John Burroughs (beyond Brookland); Takoma Park and Brightwood Park, from outlying districts; Park View, the platoon, or study-work-play school; Lovejoy, for colored children, one of the best equipped schools in the city; Force School, near Du Pont Circle, and the Morgan and Dennison Schools in the densely settled northwest section of the city. All absences from all causes were recorded for some 490 pupils in fourteen 3 A–B grades (13 white and 1 colored) and 1 open-window school from September 17, 1923, to June 18, 1924, inclusive—180 school days.

The teacher reported weekly to her committee member any absences of children in her room. The committee member had an individual record card for each pupil and marked up against that pupil any

[1] This work was done by two principals of schools, three members of the educational section of the Twentieth Century Club, three members of the educational section of the Washington Branch of the American Association of University Women, and several members of the committee on health and sanitation of the District of Columbia Public School Association.

absences and their causes. All absences were classified arbitrarily by 7 causes, as follows:

1. Common colds.
2. Sickness other than colds. (What?)
3. Exposure to contagion. (What?)
4. Weather.
5. Truancy.
6. Religious holidays.
7. Other causes. (What?)

On the individual record card (see Chart 1) is a space for each school day in the year; Saturdays, Sundays, and holidays are crossed off. Absences are recorded by number, and explanations are made in the margin at the right for numbers 2, 3, and 7. The hypothetical record on this card shows that the child was absent September 28

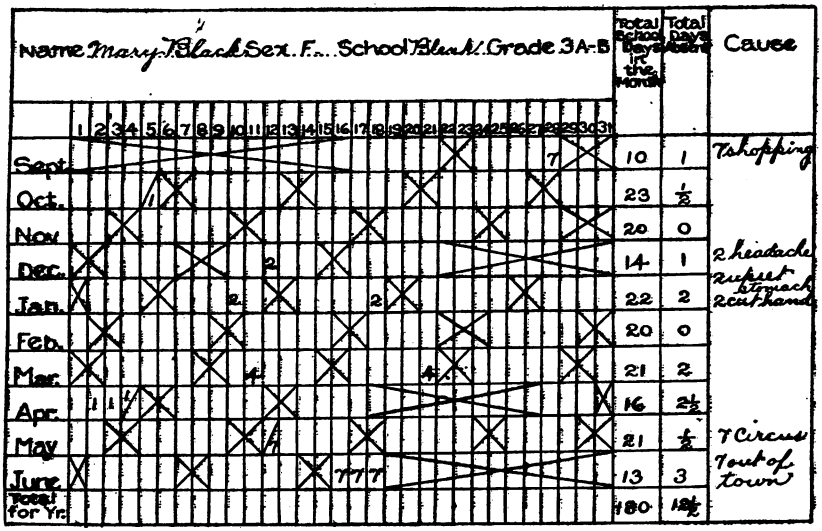

CHART 1.—Sample of individual report card.

to go shopping. On October 5 she was absent one-half day, in the afternoon, on account of a cold. On December 12 she was out all day because of headache. In January she was out two days, the 10th and 18th, because of upset stomach and a cut hand, respectively. Absences on March 11 and 21 were caused by the weather. In April she was absent two and one-half days because of a cold, and on May 12 one-half day with the circus recorded as the cause of absence. In June she left three days before school closed. She was absent a total of 12½ days of the 180 school days. The whole card shows very clearly and compactly the exact status of this child in regard to absences. There are nearly 500 of these individual cards.

Several difficulties were encountered, and these may be mentioned here as follows:

First. Pupils' cards have been kept, where possible, throughout the year. Pupils dropping out at mid-year (February 1), or going to another school on that date, have been recorded for the first half-year and not for the second half. This accounts for fewer pupils in the second half. Other pupils may, however, be entered then, so that in some schools the number of pupils studied in the first half is the same as that in the second half. In some instances teachers have reported on the same group of pupils by getting, after mid-year, the record of their pupils from other teachers. In a few cases new pupils have been added on February 1. In the open-window school, where attendance is expected only during a subnormal physical status, the average of the attendance was taken of a few, though the majority were there the full year. The final plan was that each pupil whose record was kept must have been recorded in attendance a half year at least, and preferably the whole year, and must account for every day of that time.

Second. Causes of absences are not noted by the teacher in her roll book. A note from the parent that Johnnie was sick or that Susie was needed at home is sufficient, except for a kindly inquiry from the teacher, who often learns the cause. The only record ordinarily kept by the teacher is that of absences. This special information as to cause of absence entailed extra work on the part of the teachers, and it may be noted that a statement has been made in most cases. Also, the trivial causes recorded in many cases convince one that the majority of statements may be regarded as true and, therefore, fairly valuable for an accurate study.

Third. A further interesting fact about absences led to errors that had to be carefully checked. After a pupil is absent three days he forfeits his seat and is no longer carried on the attendance roll. He may reenter two weeks later, having in the meantime recovered from chicken pox, or five weeks later, after whooping cough. The school records show only an absence of three days; our records will show an absence of 10 days in the case of chicken pox, for example, or of 25 days in the case of whooping cough. Fewer days will be recorded if the illness occurs during holidays or a vacation. The school method serves its purpose in the crowded condition of the schools, where it seems only fair to let waiting pupils have seats that might otherwise remain vacant for weeks. The official records of schools throughout the country that use this method—and most of them seem to do so—do not, however, contain an accurate record of school absences.

Fourth. There was a natural tendency among the teachers, on learning of certain trivial causes of absences, to urge better attendance. But this was discouraged, since the object of the study was to learn the facts of absences rather than to have corrections made.

The study of the individual pupil's card and of individual school absences could be carried out further with much profit, but only certain outstanding points will be presented in this paper.

Table 1 shows all absences of boys and girls in the 3 A–B grades according to the seven causes already enumerated. It may be noted that there is very little difference in absences of boys as compared with girls.

TABLE 1.—*Number of days of absence of boys and girls in each 3 A–B grade, according to causes.*

School.	Average number of boys.	Average number of girls.	Total days of absence.	Cause. (1) Colds.		(2) Other illnesses.		(3) Exposed to contagion.		(4) Weather.		(5) Truancy.		(6) Religious holidays.		(7) Other causes.	
				Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Abbot	8	10	280	29	30½	43½	107½	0	0	9	8½	0	0	13	11½	12	15½
Blake	15	5	175½	34½	0	47	6	0	0	20½	1	0	0	4	4	42½	16
Brightwood Park	10	11	162½	18	44	16	15½	0	0	9	18	2	0	6	11	12½	10½
Dennison	13	9	142	17½	6	22½	11½	0	40	5	3½	1½	0	2	2	16	14½
Elizabeth Brown	31	29	658	131	106	117	118	3	0	35½	27½	3	0	0	0	54	63
Force	13	13	349	25	42	73	102	0	0	12	16	0	1	6	0	22	50
Henry	14	13	222½	75½	40	22	13	0	2	12	7	0	8	15	14	8	6
John Burroughs	9	17	318	31	80	30	58½	0	19	19	39	0	0	0	0	14	27½
John Eaton	15	25	441	71½	70½	78	123½	0	0	7	13½	0	0	0	0	34	43
Lovejoy	18	23	590	77	78	61	107	16	52	30	52	0	0	0	4	50	63
Morgan	17	16	493	73	53	153	71	24	0	13½	10	1	0	5	½	45	44
Park View	28	24	570½	71	41	96½	139½	6	0	32	29	0	½	17½	21	68	48½
Takoma Park	19	21	412	35	52½	111	77½	0	0	27½	48	½	0	4	0	28	28
Twining	13	6	166½	65	21	19	26	0	18	2	3½	0	0	4	0	3½	4½
Total	223	222	4,980½	754	664½	889½	976½	49	131	234	276½	8	9½	76½	68	409½	434

Under the different causes of absence, the common cold has become of increasing interest. In these records colds caused more than one-fourth of all days of absence (27.7 per cent) and constituted more than one-third of all illnesses (39.2 per cent). This in spite of the fact that coughs, sore throat, and bronchitis are not included. Chart 2 shows the average number of days of absence from colds per child in each of the fourteen 3 A–B grades and the open-window school. It is interesting to note that the open-window school shows the fewest number of days of absence from this cause; and in this connection it may be well to make several statements about this open-window class in the Blake School building. It is the only open-window school for white children in Washington. (There is also one open-window school for colored children.) The children are there because of their physical handicap. They are usually pale, undernourished, nontuberculous children, and are absent from school for other causes quite as much as children in the other schools. (See Charts 3 and 4.) They do seem, however, to be

entirely free from colds. (See Charts 2 and 4.) There were just eight days of absence among the 35 pupils in the open-window school in the first half of the year (September 17–February 1). Six of these eight days were just after Christmas vacation. Noting that the pupil who had caused four of the eight days had left the school after mid-year, inquiries were made, and the teacher explained that the girl's mother felt that the child had more illness because of the open windows. A study of the roll-book showing her record for the two months following her departure from the open-window school

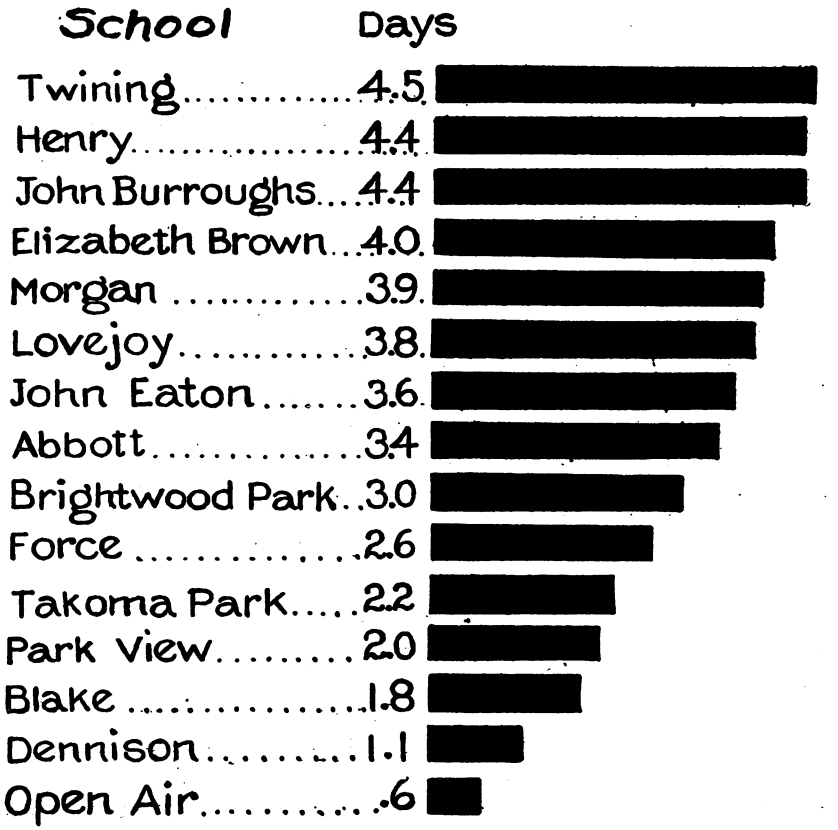

CHART 2.—Average number of days of absence from colds per child for the school year 1923-24.

showed more absence (an average of one day a week), and the same information was obtained from her roll book record preceding her entrance into the open-window school. This was the only complaint of the year. The teacher in this room states that members of the class are unusually free from contagious diseases. These children, on going to the grade school rooms temporarily for examinations, passed better and more uniformly so than other pupils of their ages and grades—an interesting fact, considering their rather

poor health and that they spend quite some time on the crafts. The apparent benefit to children, both physically and mentally, from schools of the open-window plan would indicate the desirability of extending this system. It would involve some additional appropriation for cots and blankets for the rest period and for extra food.

The time of year showing the greatest prevalence of colds varies somewhat in the different schools, but a sudden rise comes first with the advent of cool weather and furnace heat (over 50 days of absence in the first week in November), and again a peak comes in the winter (90 days of absence one week in January). It may be noted that colds are fairly evenly distributed between the boys and

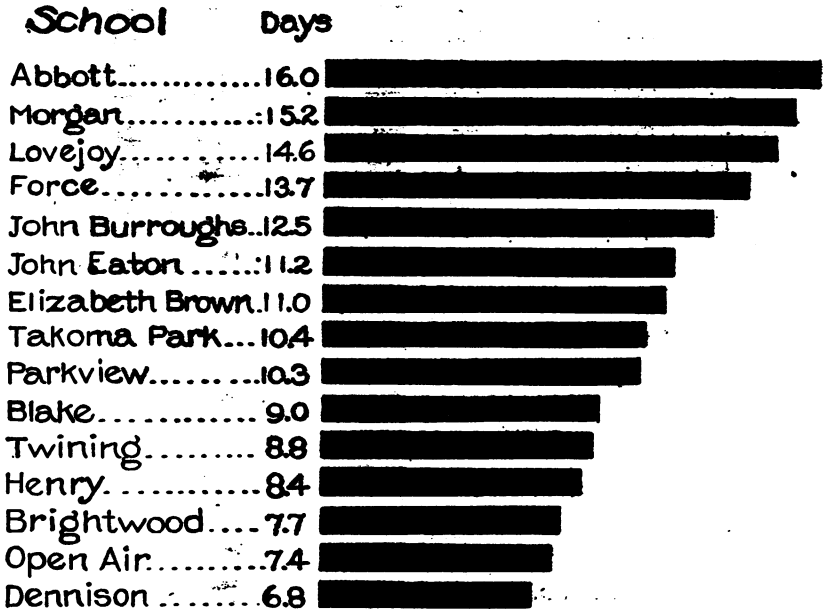

CHART 3.—Average number of days of absence from all causes per child for the school year 1923-24.

girls (see Table 1) in the 3 A–B grades—754 days of colds among 223 boys against 664½ days of colds among 222 girls.

Absences from other illnesses (No. 2) and absences from exposure to contagion (No. 3) will be discussed together. The term "other illnesses" (see Table 2) includes such respiratory conditions as bronchitis and tonsillitis. It also includes accidents and toothache. It does not, however, include dental work nor operations on tonsils. These two causes of absence are looked upon as work that can be done in nearly every case in vacation time, instead of in the 180 school days. This is reasonable, since less than half the days in the year are school days. Dentistry and tonsil operations are put under No. 7.

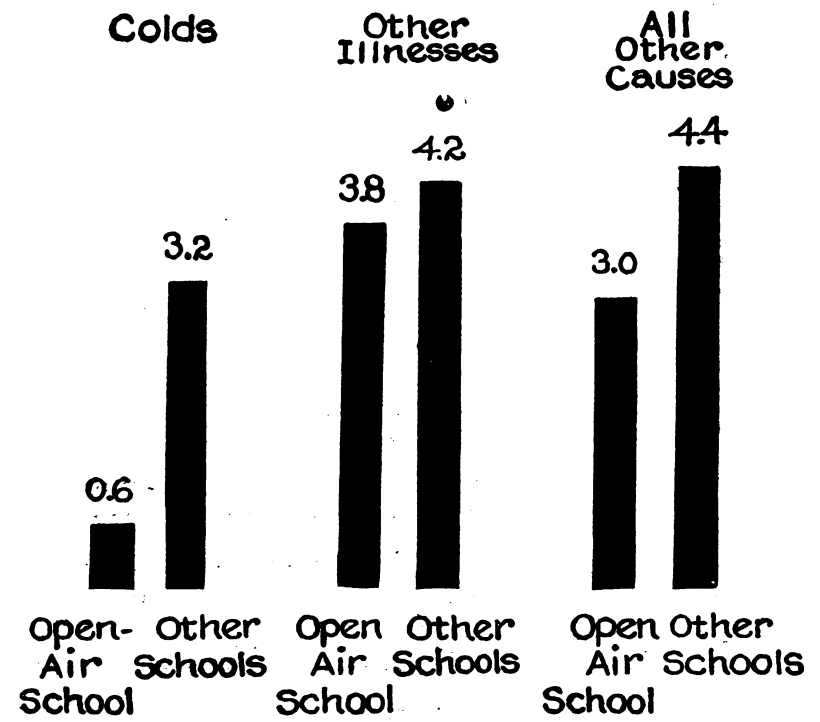

CHART 4.—Comparison of absences from colds, other illnesses, and from all other causes between open-air school and other schools studied.

TABLE 2.—*Percentage of absences of illnesses other than colds.*

Other illnesses (No. 2).	Approximate per cent of all absences under No. 2.	Other illnesses (No. 2).	Approximate per cent of all absences under No. 2.
Throat trouble	14.9	Impetigo	1.2
Digestive disturbances	14.7	Asthma	0.9
Chicken pox	13.6	Erysipelas	0.7
Scarlet fever	8.7	Measles	0.7
Headache	8.1	Reaction, Schick	0.5
Accidents and abrasions	6.7	Boils	0.5
Grippe	4.6	Fever	0.5
Toothache	4.3	Appendicitis	0.5
Earache	3.8	Kidney disease	0.5
Eye trouble	3.6	Rheumatism	0.4
Mumps	2.3	Malaria	0.4
Pain in side	1.9	Jaundice	0.3
Bronchitis	1.9	Illness totaling 5 days or less	1.8
Diphtheria	1.2		

There were few epidemics during the winter of the study (1923–24). Washington has probably not seen in years a school year so comparatively free from measles. Only two cases were reported in these 15 schools. There were no cases of whooping cough, and very little diphtheria (only two cases, both in the Lovejoy School). Chicken pox was more prevalent. (There were 24 cases, one-fourth of them

occurring in the Eaton School and the others being fairly well scattered.) The only real epidemics in Washington were of smallpox and scarlet fever. The former caused the absence of only one child in the schools studied, and that was for exposure. Of scarlet fever there were seven cases in six different schools. In the Twining School, where there were two cases, the total amount of absence would have been one-third less had it not been for these two cases of scarlet fever and one case of exposure to scarlet fever. The record of only one case of scarlet fever in each of six classes shows the care exercised to prevent the spread of contagious diseases in the Washington schools. Only two of these 3 A–B grades, Dennison and Henry Schools, reported no contagious diseases; nor were there any in the open-window school. Six of the schools did not have any absences because of exposure to contagion (No. 3). Only 180 days were recorded for this cause, which is 3.6 per cent of all causes. Three-fourths of these were among girls, and more than one-third of them were in the Lovejoy School.

In looking down the list of illnesses under No. 2, one realizes that many of these causes could be eliminated or at least brought to a minimum with adequate medical and nursing care. Toothache in sound and properly cared-for teeth should hardly exist. Yet about 75 days were lost for this cause. Impetigo is a skin condition that clears up in a few days with proper medical treatment, yet one child remained out 20 days from this cause. Earache would be greatly lessened with the throat in a healthy condition; yet there were more than 70 days lost with pain in the ear, and 230 days of absence were recorded for tonsillitis and other throat troubles. The large number of days lost on account of digestive upset is a commentary in itself.

There was a great deal of absence from eye trouble (67 days, or 3.6 per cent of the many causes under No. 2). Headache was an important cause too (156½ days, or 8.1 per cent of all causes under No. 2). Of course, all headaches were not due to eye strain nor were all eye troubles traceable to eye strain; yet it is possible that the physical examinations of all pupils of the first grade, begun this year as a part of the regular medical work, may eliminate much of the absence from these two causes.

The weather (No. 4) during the winter in which the study was made (1923–24) was unusually favorable for school attendance. In the first half of the school year there was no snow; there were only about five days on which there was much rain, and the rain was mild. In spite of this, the Abbott School had the only 3 A grade among the 15 with a perfect record for weather for the first half year. The second half of the year (February 1 to June 18), though mild, had

more rain and some snow. It is rather interesting to note that the school showing the best weather attendance for the whole year, with only 10½ days' absence among an average of 30 pupils, was the open-window class. Dennison came a close second with 8½ days' absence among 22 pupils. There is added interest in the fact that the open-window and the Dennison School have the best two records as regards common colds.

Boys were absent on account of rain almost as much as girls—234 days for the boys against 276½ days for the girls.

We are dealing for the most part with 8-year-old pupils in the 3 A–B grade. They are just entering their compulsory-attendance age, and one would look for very little truancy (No. 5) among them. There are, however, only six schools entirely free from this cause of absence, several schools having one-half a day or one day against them. The total number of days of truancy is 17½, or 0.3 per cent of all absences; and 9½ of these days were among the girls. One girl stayed out eight days. This absence occurred early in the year and the girl's record afterwards was fairly clear. All cases of truancy occurred in the first two months of school. One boy had a perfect attendance record from his one truant day in October to the end of the school year.

Religious holidays (No. 6) do not, to any considerable degree, refer to the Christian religion, since such holidays are provided by law. They refer mostly to Jewish holidays. In a few cases they refer to preparation for communion in the Roman Catholic Church. One Greek Catholic child stayed away one day, giving religious rites as the reason. There was an absence from this cause amounting to 3 per cent of the absence from all causes. Boys and girls were affected about equally, but there was, naturally, much variation among the schools. There were no absences under No. 6 in three schools.

"All other causes" (No. 7) is a heterogeneous grouping, as might be supposed. This group includes a great variety of causes for absence, including the most trifling reasons. School days seem to provide the time, in some cases, for going to the dentist, to the oculist, to have a haircut, for shopping, and even for going to the movies and the horse show. The Parent-Teachers Association evidently found much absence due to a need of shoes, for they have provided a fund to meet such conditions. In spite of this, however, there are many absences resulting from the cause given as "no shoes."

There were surprisingly few cases of perfect attendance, only four schools (12 pupils) reporting such. Five of these pupils were in the Elizabeth Brown School, four in the Park View, two in the Dennison, and one in the Lovejoy. Seven of these were boys and five were girls. A good many pupils were absent only one-half day, colds and the circus predominating as to the causes in such absences.

To sum up the results of this study, it was found that in this particular group of school children—

(1) Over 70 per cent of all absences are due to medical problems;

(2) More than one-fourth of all absences are because of the common cold, and all respiratory disturbances constitute nearly 40 per cent of all absences;

(3) Truancy is not a large problem at this age (8 years);

(4) Boys and girls at 8 years of age seem to be absent about equally for all causes.

THYROID ENLARGEMENT AMONG MONTANA SCHOOL CHILDREN.

WITH NOTES ON THE POSSIBLE INFLUENCE OF THE PLACE OF RESIDENCE AND THE USE OF VEGETABLES AND DRINKING WATER UPON THE CONDITION.

By FRED T. FOARD, Acting Assistant Suregon, United States Public Health Service. [1]

The following study of the prevalence of thyroid enlargement among Montana school children was made through the examination of 13,937 school children during the school year of 1922–23. Sections of counties in the Rocky Mountains and at varying distances to more than 100 miles east of them were selected for the study with the view of comparing the prevalence of simple goiter among children residing in both mountainous and nonmountainous districts. The area included parts of Fergus, Carbon, Yellowstone, Big Horn, Lewis and Clark, and Hill Counties and all of Cascade County. Owing to the necessity of having to collect a part of the data included in this report through examinations conducted by different physicians, no attempt was made to classify the degree of thyroid enlargement found in individual children. Through previous arrangements made with the physicians participating in the survey, however, it was decided that doubtful cases would be classified as normal thyroid, rather than as enlarged thyroids. All children included in the study from Cascade, Hill, and Fergus Counties (6,321) were personally examined by the writer, and in the examination of the children included in the study from Lewis and Clark County (2,304) exactly the same method of examination was used as was used in Cascade, Hill, and Fergus Counties. The writer did not personally assist in the survey of Yellowstone, Big Horn, and Carbon Counties, but it was requested that data submitted for this report from Yellowstone, Big Horn, and Carbon Counties include only definitely enlarged thyroids. The data collected, therefore, represent a minimum rather than a maximum prevalence of thyroid enlargement among the children examined.

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[1] For valuable assistance rendered in collecting the data included in this report, the writer wishes to express his appreciation to the health officers and school officials of Cascade, Hill, Fergus, Lewis and Clark, Yellowstone, Big Horn, and Carbon Counties.

The children examined represent all ages from 6 to 20 years, but in only two counties were children of high-school age included in the study. The total number of children examined and the prevalence of simple goiter among the children of each county are shown in Table No. 1.

TABLE NO. 1.—*Prevalence of simple goiter among school children of seven Montana counties.*

County.	Number of children examined.	Number having simple goiter.	Percentage having simple goiter.
Fergus	1,561	582	37.2
Carbon	1,923	583	30.4
Cascade	3,848	913	23.7
Yellowstone	2,312	430	18.6
Big Horn	1,077	182	16.9
Lewis and Clark	2,304	239	10.4
Hill	912	82	9.0
Total	13,937	3,011	[1] 21.6

[1] Average.

Of a total of 8,625 children personally examined by, or under the personal supervision of, the writer, the ratio of incidence in girls to that in boys was slightly more than two to one. Table No. 2 is given to show the incidence of thyroid enlargement among the school children of five counties in which the incidence, as classified by sex, was carefully noted. All ages from 6 to 20 years are included.

TABLE NO. 2.—*Incidence of thyroid enlargement among 9,321 school children, by sex.*

County.	Number of girls examined.	Percentage of girls having enlarged thyroids.	Number of boys examined.	Percentage of boys having enlarged thyroids.
Fergus	848	49.2	713	23.2
Carbon	1,913	39.4	1,010	22.0
Cascade	1,892	33.7	1,956	10.0
Big Horn	574	25.3	503	6.7
Hill	463	12.6	449	5.1
Total	4,690	[1] 32.0	4,631	[1] 13.4

[1] Average.

The ratio of incidence of thyroid enlargement in boys to that in girls in this group of children is 1 to 2.4.

It was found that those children living in the rural districts of Cascade County, where individual water supplies from wells or springs are used, had a greater incidence of thyroid enlargement than those children living in the city of Great Falls and other smaller towns of Cascade County where public water supplies are derived

from surface streams and where imported green and canned vegetables may be purchased. In the city of Great Falls, Cascade County, there was a thyroid enlargement incidence of only 19.2 per cent among 2,550 children of all ages and both sexes; whereas in Cascade County, exclusive of the city of Great Falls, there was a thyroid enlargement prevalence of 32.4 per cent among 1,298 rural school children of all ages and both sexes. All rural school children obtained their water supplies from shallow wells or surface springs. It was interesting to note that the nearer the homes of the rural school children of Cascade County were located to the Rocky Mountains or their tributary ranges the greater was the prevalence of enlarged thyroids. This condition was also found to exist among the children of rural schools in mountainous sections of other counties. The same condition was found to be true as applied to the proximity of whole counties to the Rocky Mountains or their tributary ranges. As shown by Table No. 1, Hill County, located approximately 150 miles east of the Rockies and having no tributary ranges within the limits of the county, had a goiter incidence of 8.4 per cent; whereas in Fergus and Carbon Counties, both of which are partially surrounded and intersected by a number of mountain ranges tributary to the Rockies, the goiter prevalence, including both sexes and all grade school ages, was 37.2 per cent and 30.3 per cent, respectively.

The municipal water supply of the city of Lewistown is derived from a very large flowing spring from which the water is piped throughout the city without exposure to surface drainage before entering the water mains. The volume and the lack of turbidity of water from this spring are uniform in wet and dry seasons alike, and the temperature of the water is the same, winter and summer, indicating that the source of the water is from a deeply located underground stream into which surface water does not gain entrance and which is unaffected by varying air temperatures. Repeated examinations have shown the water from this spring to be bacteriologically pure. Examination for iodine content, in so far as the writer could learn, has never been made; the following data, however, which were obtained through the examination of Lewistown school children, suggest a low iodine content. The goiter prevalence among all school children examined in Lewistown (1,561), including both sexes and all ages through high school, was 37.2 per cent. As classified by grade and high school ages there were 49.2 per cent of 485 grade school girls who had enlarged thyroids and 22.9 per cent of 450 grade school boys who had enlarged thyroids. Of 363 high school girls examined in Lewistown, 54.5 per cent were found to have enlarged thyroids, and of 263 high-school boys 23.5 per cent were found to have enlarged thyroids. The minimum and maximum

goiter prevalence among Lewistown grade school girls, as classified by age groups, varied from 24 per cent at 6 years of age to 83 per cent at 16 years of age, and from 20 per cent among boys at 6 years of age to 34 per cent among boys at 13 years of age. Among high school students the maximum goiter prevalence among girls was 58 per cent at 18 years of age and among boys 38 per cent at 17 years of age.

With the exception of the city of Lewistown the general rule in all counties in which the survey was conducted was that the enlarged thyroid prevalence was found to be decidedly greater in the isolated rural districts than in the towns and cities where public water supplies from surface streams were in use and where a greater proportion of imported green and canned vegetables was consumed. Owing to a short summer season and altogether uncertain temperatures until as late as mid-June, few vegetables are grown in Montana for the local markets. Most of the vegetables used in Montana cities are shipped from southern California producers. Few of these vegetables, however, reach the isolated rural districts. In a number of the isolated rural schools of the Belt Mountain district of Cascade County, where the enrollments varied from 5 to 15 children, the writer found all children of both sexes to have enlarged thyroids. On inquiry made of a number of children in this district it was learned that a considerable portion of vegetables used at their homes throughout the year were home grown and home canned. The general rule in Cascade County was that the prevalence of thyroid enlargement among the children of individual rural schools varied with the degree of isolation of the school district.

DISCUSSION AND SUGGESTIONS.

The original object in making the above survey was only to determine definitely the prevalence of simple goiter among the school children of Cascade County and, if necessary, to recommend for the children of Cascade County preventive goiter measures similar to those being carried out in Akron and other cities of the Great Lakes goitrous region, as suggested by Marine and Kimball. Interesting data obtained through the Cascade County survey, however, suggested that the survey be extended to other counties in order that the general prevalence of simple goiter might be more definitely determined and some information secured as to its importance as a possible state-wide public health problem. While the one object of the survey was to determine the percentage of school children afflicted with simple goiter, the data obtained from all counties included in the study indicate:

(1) That simple goiter is prevalent among Montana school children to the extent that it should be considered a public health problem

of such nature that both preventive and curative measures should be applied through the public schools;

(2) That a more careful and a state-wide survey for determining the goiter prevalence should be conducted in Montana with the use of definite and uniform methods of examination in all counties;

(3) That a state-wide chemical study of Montana water supplies should be made to determine the variation, if there be a variation, in the iodine content of public water supplies used by municipalities and private water supplies used by individual families in districts where simple goiter is particularly prevalent; and

(4) That widespread publicity should be given through the medical profession and public health associations of Montana to the necessity for goiter preventive treatment for women during pregnancy. . .

PER CAPITA MEDICINAL REQUIREMENTS OF NARCOTICS.

Data Secured in a Narcotic Survey of Allegany County, Maryland.

By A. G. DuMez, Pharmacologist, Division of Pharmacology, Hygienic Laboratory, United States Public Health Service.

In connection with the drug-addiction studies being carried out by the United States Public Health Service, a narcotic survey of Allegany County, Md., was made during the period May 8 to 28, 1924. The object of this survey was to secure accurate data on the quantities of narcotics used annually for medicinal purposes in a restricted area, so that a reliable basis might be obtained for computing the requirements of the country as a whole.

Allegany County, Md., was selected for this purpose for several reasons, namely, (1) because of its remoteness from the sea coast and boundary lines, where the greater possibility of obtaining narcotics might tend to vitiate the results; (2) because the county is fairly distant from and contains no large cities in which it is thought that abnormal conditions are more likely to prevail; (3) because the occupations of its inhabitants are quite diversified—farming, mining, railroading, and manufacturing being represented; (4) because the county is easily accessible from Washington. In other words, it was thought that Allegany County represents as nearly as possible a normal unit within easy reach of Washington where conditions prevail which can be taken as typical of the country as a whole.

The actual work of the survey consisted in visiting all of the narcotic registrants in the county and compiling from their records the amounts of narcotics dispensed or used during the period of one year. In all there were visited 69 physicians, 12 dentists, 20 retailers (pharmacists), 3 wholesalers (pharmacists), 1 veterinarian, and 5 hospitals and sanitoria. The records of each were examined in detail. These records showed that for the period July 1, 1922, to June 30, 1923, the following quantities of narcotics were dispensed or used:

TABLE 1.—*Total quantities of opiates dispensed or used.*

	Grains.
Opium	38,937
Codeine sulphate and phosphate	29,410
Morphine sulphate and hydrochloride	22,284
Ethylmorphine hydrochloride (dionin)	4,724
Diacetylmorphine hydrochloride (heroin)	1,940
Cotarnine hydrochloride (stypticin)	788
Apomorphine hydrochloride	93
	Fl. oz.
Exempt preparations (paregoric, Bateman's drops, Godfrey's cordial, etc.)	10,366

Total cocaine dispensed or used.

	Grains.
Cocaine hydrochloride	11,485

The equivalents of the foregoing quantities in terms of crude drugs are given in Table 2. In computing these equivalents the amount of anhydrous morphine present in opium has been taken as 10 per cent, of anhydrous codeine as 0.3 per cent, and of narcotine as 5 per cent. In computing the opium equivalent of the total quantity of opiates 855 grains of codeine sulphate have been subtracted from the 29,410 grains of codeine sulphate and phosphate, as this quantity can be extracted (on the 0.3 per cent basis) from the opium required to manufacture the stated quantities of morphine sulphate and hydrochloride, ethylmorphine hydrochloride, diacetylmorphine hydrochloride, and apomorphine hydrochloride. Likewise, the 788 grains of cotarnine hydrochloride have been omitted, as the quantity of narcotine which can be extracted from the opium required to manufacture the foregoing alkaloids and their derivatives is more than sufficient (on the 5 per cent basis) to yield this amount. In computing the coca leaf equivalent of the quantity of cocaine hydrochloride used, the yield of anhydrous cocaine has been taken as 0.5 per cent.

TABLE 2.—*Opium equivalents of opiates.*

	Grains of opium.
38,937 grains of opium	= 38,937
28,555 grains (29,410−855) codeine sulphate	= 213,219
22,284 grains morphine sulphate	= 167,130
4,724 grains ethylmorphine hydrochloride	= 36,560
1,940 grains diacetylmorphine hydrochloride	= 13,060
93 grains apomorphine hydrochloride	= 850
10,366 fluid ounces exempt preparations	= 18,906
Total	488,662
	= 69.81 pounds

Coca leaf equivalent of cocaine.

	Grains of coca leaves.
11,485 grains of cocaine hydrochloride	= 2,051,220
	= 293.03 pounds

The per capita consumption of opium for Allegany County on the basis of a population of 69,938 as found for 1920 by the Bureau of the Census, United States Department of Commerce, would therefore be 6.98 grains. In the case of coca leaves, it would be 29.32

grains. To supply the entire United States on this basis, taking the population to be 106,000,000, would require the annual importation of approximately 105,697 pounds of opium and 443,988 pounds of coca leaves.

It is thought that the quantities of narcotics dispensed or used in this county represent fairly accurately the medicinal requirements at present, except in the case of cocaine and the exempt preparations. A census taken for the year July 1, 1923, to June 30, 1924, would no doubt show a much smaller quantity of cocaine used, as most of the dentists who used cocaine in 1922 to 1923 reported that they had since discontinued its use in favor of the synthetic local anesthetics. In the case of exempt preparations (paregoric), it is thought that, although they were sold only in small amounts (in quantities not exceeding 2 fluid ounces), they were dispensed too frequently in some cases to the same individuals. It is also realized that some of the residents of the county may have purchased narcotics outside of the county (in near-by counties for instance); but it is thought that any error in the total amounts resulting from this cause would be counterbalanced by that introduced through the purchases made within the county by non-residents.

Acknowledgments.—It is desired here to thank the officials of the Maryland State board of health for their cooperation in making this survey, and especially for the loan of one of their drug inspectors, Mr. Henry Bernhardt, who assisted in the work throughout.

SMALLPOX AND VACCINATION.

In view of the increasing neglect of vaccination in certain parts of the United States, as evidenced by an increase in the number of smallpox cases and deaths occurring in those sections, and because of the approach of the time of year of increased seasonal prevalence of smallpox, it is deemed advisable to publish a letter sent to the health officers of the several States under date of July 8, 1924:

The text of the letter is as follows:

To all State Health Officers:

The neglect of vaccination in many districts of certain sections of the United States has led to a recrudescence of smallpox, with the corresponding suffering experienced by its victims and a wholly unnecessary sacrifice of human lives in the years 1922 and 1923, amounting to 967 known deaths from smallpox and possibly a number of others which were not reported.

During the first six months of 1924 an additional toll of at least 200 human lives has been taken, every one of which deaths could have been prevented by vaccination and revaccination.

The increasing number of cases of smallpox and the continued spread of this disease from city to city and from State to State will, if not checked, not only augment the number of victims but may bring about a condition which would seriously interfere with the movements of passengers on trains, steamers, automobiles, and other carriers. It is conceivable that this interference might be of a degree that would involve the expenditure of hundreds of thousands of dollars in quarantine, a contingency which might easily be avoided provided our people can be induced to protect themselves by vaccination and revaccination.

The Public Health Service is being importuned at the present time to exercise its authority in enforcing interstate quarantine to prevent the migration of the unvaccinated when there is danger that these persons may have been exposed to smallpox.

It is particularly desirable that the Federal Government may not be forced to interfere in interstate travel, and it is earnestly hoped that the authorities of all States, counties, municipalities, or other units of government will immediately begin campaigns to secure the vaccination or revaccination of all persons who have not been recently successfully vaccinated, particularly in those States where smallpox is prevalent.

Vaccination and revaccination being a perfect protection against smallpox, it might be argued that protection against the disease is a matter which should be left to the discretion of the individual, but there is no more reason for leaving the defense against an enemy of the State, such as smallpox is, to the discretion of the individual, than there would be in leaving the defense of the State against an armed invading force, to the individual. These enemies are equally dangerous. Furthermore, there are a large number of persons who are otherwise good citizens, who, because of indifference, carelessness, and lack of information, and oftentimes because of having been deceived by false propaganda and deliberate misinformation, either fail or refuse to protect themselves and their trusting but helpless children until it is too late. These same children of misinformed or irresponsible parents, being too young to judge for themselves, are entitled to the protection of the State, and certainly the State is derelict in its duties if it allows such unprotected children to be exposed to smallpox.

Respectfully,

H. S. CUMMING,
Surgeon General.

The response to the foregoing letter has been very gratifying. At the same time, much still remains to be done in the way of vaccination and revaccination of our nonimmune population if a recrudescence of this disease is to be forestalled.

6788°—24†—— 2

CURRENT COURT DECISIONS PERTAINING TO PUBLIC HEALTH.

Formation of local health districts upheld.—The organization, under the provisions of chapter 571 of the 1917 session laws of California, of a local health district with boundaries identical with those of a county, has been upheld by the Supreme Court of California. The court held that the legislature had power to provide, as it did, for the organization of such local health districts, and that the particular act in question was constitutional. For an abstract of the same case in the lower court, see Public Health Reports, September 21, 1923, page 2212. (Stuckenbruck *v.* Board of Supervisors of San Joaquin County et al., 225 Pac. 857.)

Ordinance requiring removal of privies and installation of water-closets upheld.—It has been held by the Supreme Court of Missouri, Division No. 1, that an ordinance of the city of St. Louis, providing for the removal of privy vaults and the substitution of water-closets where possible in the city, is within the charter power of the city, and that such requirement is a proper and constitutional exercise of the police power delegated by the State to municipal corporations. It was also held that a municipality may lawfully require a property owner to alter or reconstruct an existing building without compensation where such alteration or reconstruction is reasonably necessary to protect the public health. (City of St. Louis *v.* Nash, 260 S. W. 985.)

Ordinance relating to the slaughtering of animals and the inspection and sale of meat upheld.—The Supreme Court of South Carolina has held that a city has the power to pass an ordinance which not only requires the inspection of meat, but imposes conditions upon the operation of an abbatoir, outside of the city limits, in which the meat intended for sale within the city is prepared, and has also held that a particular ordinance, such as the foregoing, passed by the city of Sumter is valid. (Ex parte Boyle; City of Sumter *v.* Boyle; 123 S. E. 9.)

DEATHS DURING WEEK ENDED AUGUST 30, 1924.

Summary of information received by telegraph from industrial insurance companies for week ended August 30, 1924, and corresponding week of 1923. (From the Weekly Health Index, September 3, 1924, issued by the Bureau of the Census, Department of Commerce.)

	Week ended August 30, 1924.	Corresponding week, 1923.
Policies in force	54, 263, 831	53, 264, 053
Number of death claims	8, 439	8, 043
Death claims per 1,000 policies in force, annual rate	8. 1	7. 9

Deaths from all causes in certain large cities of the United States during the week ended August 30, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, September 3, 1924, issued by the Bureau of the Census, Department of Commerce.)

City.	Week ended Aug. 30, 1924.		Annual death rate per 1,000 corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended Aug. 30, 1924.[2]
	Total deaths.	Death rate.[1]		Week ended Aug. 30, 1924.	Corresponding week, 1923.	
Total (62 cities)	5,537	10.8	[3] 10.6	826	[3] 794	
Akron	18			5	6	53
Albany [4]	28	12.3	16.4	6	4	137
Atlanta	75	17.2	14.7	9	10	
Baltimore [4]	174	11.6	11.4	26	23	77
Birmingham	49	12.7	13.6	4	11	
Boston	200	13.4	12.0	40	26	111
Bridgeport	11			1	2	16
Buffalo	136	13.0	11.3	26	28	110
Cambridge	19	8.9	8.9	3	2	52
Camden	19	7.8	11.3	4	6	66
Chicago [4]	529	9.4	9.1	73	79	68
Cincinnati	114	14.6	13.3	18	23	113
Cleveland	166	9.5	9.5	23	20	58
Columbus	78	15.2	13.4	7	7	66
Dallas	39	10.8	10.3	6	10	
Dayton	44	13.6	10.7	7	6	117
Denver	80			12	10	
Des Moines	30	10.8	13.0	3	1	
Detroit	244			46	43	86
Duluth	25	12.0	6.9	3	3	65
Erie	24			0	3	0
Fall River [4]	24	10.3	12.1	4	10	56
Flint	12			2	9	35
Fort Worth	24	8.4	9.8	6	1	
Grand Rapids	21	7.4	8.9	1	4	16
Houston	37			6	2	
Indianapolis	106	15.8	13.1	18	19	132
Jacksonville, Fla	41	20.9	18.2	6	9	
Jersey City	43	7.2	12.0	7	13	50
Kansas City, Kans	26	11.5	10.4	2	3	39
Kansas City, Mo	82	11.9	10.4	8	13	
Los Angeles	169			18	25	56
Louisville	61	12.3	14.2	10	12	93
Lowell	26	11.7	12.7	10	5	178
Lynn	20	10.1	9.1	3	2	76
Memphis	64	19.4	18.4	10	9	
Milwaukee	70	7.4	7.9	9	10	43
Minneapolis	70	8.7	8.3	5	4	27
Nashville [4]	48	20.3	19.6	9	3	
New Bedford	22	8.7	11.2	7	9	109
New Haven	25	7.4	7.2	3	4	40
New Orleans	130	16.6	16.9	19	14	
New York	1,106	9.6	9.6	171	159	69
Bronx Borough	113	6.8	7.8	13	13	46
Brooklyn Borough	385	9.1	8.0	68	55	72
Manhattan Borough	477	11.0	12.1	70	80	71
Queens Borough	84	7.9	8.6	12	11	60
Richmond Borough	47	18.8	8.2	8	0	146
Newark, N. J	69	8.1	9.5	11	17	52
Norfolk	29	9.2	10.5	4	4	72
Oakland	52	11.0	7.2	6	3	75
Oklahoma City	17	8.5		3		
Omaha	53	13.3	9.7	5	5	54
Paterson	40	14.8	11.6	6	1	102
Philadelphia	406	10.9	10.0	60	52	77
Pittsburgh	147	12.2	11.3	29	25	98
Portland, Oreg	42	7.9	11.2	3	5	31
Providence	48	10.3	13.8	5	14	41
Richmond	32	9.1	10.4	0	7	0
Rochester	66	10.6		14		110
St. Louis	189	12.1	11.6	30	24	
St. Paul	57	12.2	11.0	5	7	43
Salt Lake City [4]	33	13.4	9.1	4	1	80
San Antonio	55	15.0	10.2	11	7	

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1923. Cities left blank are not in the registration area for births.
[3] Data for 60 cities.
[4] Deaths for week ended Friday, Aug. 29, 1924.

Deaths from all causes in certain large cities of the United States during the week ended August 30, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, September 3, 1924, issued by the Bureau of the Census, Department of Commerce)—Continued.

City.	Week ended Aug. 30, 1924.		Annual death rate per 1,000 corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended Aug. 30, 1924.
	Total deaths.	Death rate.		Week ended Aug. 30, 1924.	Corresponding week, 1923.	
San Francisco	123	11.7	12.9	16	10	97
Seattle	45			1	4	10
Somerville	13	6.7	8.4	2	0	54
Spokane	29			2	0	44
Springfield, Mass	28	9.8	9.4	4	8	68
Syracuse	38	10.5	12.2	2	4	25
Tacoma	17	8.6	9.7	0	0	0
Toledo	41	7.7	11.6	8	10	75
Trenton	40	16.1	15.6	8	6	133
Utica	20	9.9	6.6	2	3	44
Washington, D. C	107	11.5	11.8	16	9	93
Waterbury	12			4	1	93
Wilmington, Del	20	8.7	12.8	2	8	45
Yonkers	21	10.0	3.4	4	2	87

PREVALENCE OF DISEASE.

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

UNITED STATES.

CURRENT WEEKLY STATE REPORTS.

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

Reports for Week Ended September 6, 1924.

ALABAMA.

	Cases.
Cerebrospinal meningitis	1
Chicken pox	3
Dengue	1
Diphtheria	23
Dysentery	27
Influenza	15
Lethargic encephalitis	1
Malaria	170
Measles	11
Mumps	16
Pellagra	4
Pneumonia	15
Scarlet fever	9
Smallpox	22
Tetanus	1
Tuberculosis	29
Typhoid fever	83
Whooping cough	9

ARIZONA.

Chicken pox	1
Diphtheria	2
Pneumonia	1
Scarlet fever	1
Typhoid fever	8

ARKANSAS.

Chicken pox	3
Diphtheria	6
Malaria	100
Measles	1
Mumps	1
Paratyphoid fever	1
Pellagra	5
Tuberculosis	4
Typhoid fever	30
Whooping cough	4

COLORADO.

(Exclusive of Denver.)	Cases.
Chicken pox	5
Diphtheria	11
Malaria	2
Mumps	4
Pneumonia	1
Scarlet fever	8
Trachoma	1
Tuberculosis	121
Typhoid fever	10
Whooping cough	13

CONNECTICUT.

Cerebrospinal meningitis	1
Chicken pox	5
Conjunctivitis	1
Diphtheria	15
Dysentery (bacillary)	4
Influenza	1
Lethargic encephalitis	1
Malaria	3
Measles	2
Mumps	5
Pneumonia (lobar)	6
Poliomyelitis	8
Scarlet fever	18
Trachoma	2
Tuberculosis (all forms)	36
Typhoid fever	6
Whooping cough	40

DELAWARE.

Cerebrospinal meningitis	1
Diphtheria	1
Influenza	1
Mumps	1

DELAWARE—continued.

	Cases.
Pneumonia	2
Typhoid fever	5
Whooping cough	4

FLORIDA.

Diphtheria	6
Influenza	2
Malaria	18
Typhoid fever	14

GEORGIA.

Diphtheria	11
Dysentery (bacillary)	1
Hookworm disease	1
Malaria	22
Measles	1
Mumps	2
Pellagra	1
Pneumonia	9
Scarlet fever	5
Septic sore throat	1
Smallpox	1
Tetanus	1
Tuberculosis (pulmonary)	7
Typhoid fever	25
Whooping cough	1

ILLINOIS.

Diphtheria:	
Cook County	43
Scattering	21
Influenza	3
Lethargic encephalitis—Cook County	2
Measles	12
Pneumonia	66
Poliomyelitis:	
Cook County	5
Douglas County	1
Stephenson County	1
Whiteside County	2
Scarlet fever:	
Cook County	33
Scattering	18
Smallpox	6
Tuberculosis	271
Typhoid fever	36
Whooping cough	166

INDIANA.

Cerebrospinal meningitis	2
Chicken pox	3
Diphtheria	39
Measles	8
Mumps	3
Pneumonia	3
Poliomyelitis	1
Scarlet fever	21
Smallpox	15
Trachoma	1
Tuberculosis	25
Typhoid fever	35
Whooping cough	21

[1] Week ended Friday.

IOWA.

	Cases.
Diphtheria	7
Scarlet fever	14
Smallpox	7
Typhoid fever	3

KANSAS.

Chicken pox	5
Diphtheria	17
Dysentery (bacillary)	1
Influenza	3
Malaria	2
Measles	2
Mumps	30
Pneumonia	3
Scarlet fever	21
Smallpox	3
Tetanus	1
Tuberculosis	66
Typhoid fever	21
Whooping cough	31

LOUISIANA.

Diphtheria	4
Hookworm disease	4
Malaria	15
Pneumonia	14
Scarlet fever	1
Smallpox	2
Tuberculosis	40
Typhoid fever	16
Whooping cough	4

MAINE.

Cerebrospinal meningitis	1
Diphtheria	7
Measles	1
Mumps	6
Paratyphoid fever	1
Poliomyelitis	16
Scarlet fever	7
Tuberculosis	3
Typhoid fever	6
Vincent's angina	1
Whooping cough	7

MARYLAND.[1]

Chicken pox	4
Diphtheria	22
Dysentery	11
German measles	2
Influenza	9
Lethargic encephalitis	1
Malaria	3
Measles	9
Mumps	2
Paratyphoid fever	3
Pneumonia (all forms)	14
Poliomyelitis	8
Scarlet fever	9
Tuberculosis	74
Typhoid fever	47
Vincent's angina	1
Whooping cough	33

MASSACHUSETTS.

	Cases.
Cerebrospinal meningitis	2
Chicken pox	5
Conjunctivitis (suppurative)	8
Diphtheria	85
German measles	4
Influenza	1
Lethargic encephalitis	2
Measles	34
Mumps	17
Ophthalmia neonatorum	4
Pneumonia (lobar)	18
Poliomyelitis	15
Scarlet fever	54
Septic sore throat	3
Tuberculosis (all forms)	95
Typhoid fever	16
Whooping cough	58

MICHIGAN.

Diphtheria	47
Measles	25
Pneumonia	32
Scarlet fever	114
Smallpox	6
Tuberculosis	34
Typhoid fever	33
Whooping cough	138

MINNESOTA.

Chicken pox	13
Diphtheria	40
Measles	2
Pneumonia	1
Poliomyelitis	9
Scarlet fever	50
Smallpox	10
Tuberculosis	72
Typhoid fever	6
Whooping cough	18

MISSISSIPPI.

Diphtheria	28
Poliomyelitis	1
Scarlet fever	5
Smallpox	1
Typhoid fever	28

MISSOURI.

Chicken pox	6
Diphtheria	27
Malaria	2
Mumps	5
Poliomyelitis	3
Rabies	4
Scarlet fever	18
Tetanus	1
Trachoma	2
Tuberculosis	46
Typhoid fever	35
Whooping cough	24

NEW JERSEY.

Cerebrospinal meningitis	1
Chicken pox	17
Diphtheria	38

NEW JERSEY—continued.

	Cases.
Dysentery	1
Influenza	2
Malaria	1
Measles	15
Pneumonia	36
Poliomyelitis	6
Scarlet fever	27
Smallpox	5
Typhoid fever	19
Whooping cough	217

NEW MEXICO.

Diphtheria	8
Malaria	1
Measles	2
Mumps	1
Paratyphoid fever	2
Pellagra	1
Scarlet fever	3
Tuberculosis	16
Typhoid fever	8
Whooping cough	2

NEW YORK.

(Exclusive of New York City.)

Cerebrospinal meningitis	1
Diphtheria	52
Influenza	2
Measles	29
Pneumonia	54
Poliomyelitis	75
Scarlet fever	49
Smallpox	2
Typhoid fever	23
Whooping cough	194

NORTH CAROLINA.

Cerebrospinal meningitis	1
Chicken pox	11
Diphtheria	220
German measles	2
Measles	19
Scarlet fever	25
Septic sore throat	1
Smallpox	10
Typhoid fever	69
Whooping cough	121

OREGON.

Chicken pox	5
Diphtheria:	
Portland	8
Scattering	8
Lethargic encephalitis	[1] 1
Measles	3
Mumps	4
Pneumonia	[1] 2
Scarlet fever	11
Smallpox	3
Typhoid fever:	
Klamath Falls	10
Scattering	5
Whooping cough	2

[1] Deaths.

SOUTH DAKOTA.

	Cases.
Chicken pox	1
Diphtheria	2
Measles	4
Mumps	2
Poliomyelitis	1
Scarlet fever	5
Smallpox	2
Tuberculosis	1
Typhoid fever	6
Whooping cough	11

TEXAS.

Anthrax	4
Chicken pox	38
Dengue	38
Diphtheria	64
Dysentery	101
Influenza	110
Leprosy	2
Lethargic encephalitis	3
Malta fever	20
Measles	74
Mumps	88
Ophthalmia neonatorum	5
Paratyphoid fever	39
Pellagra	82
Pneumonia	31
Poliomyelitis	3
Rabies in man	4
Scarlet fever	41
Smallpox	5
Tetanus	5
Trachoma	19
Tuberculosis	194
Typhoid fever	143
Typhus fever	7
Whooping cough	140

VERMONT.

Chicken pox	1
Diphtheria	2
Measles	1
Mumps	1
Scarlet fever	2
Typhoid fever	1
Whooping cough	4

WASHINGTON.

Cerebrospinal meningitis—Pierce County	1
Chicken pox	13

WASHINGTON—continued.

	Cases.
Diphtheria	15
Measles	6
Mumps	7
Poliomyelitis:	
Chelan County	9
Seattle County	4
Skagit County	2
Snohomish County	1
Scarlet fever	23
Smallpox	29
Tuberculosis	17
Typhoid fever	12
Whooping cough	12

WEST VIRGINIA.

Diphtheria	3
Scarlet fever	5
Smallpox	1
Typhoid fever	14

WISCONSIN.

Milwaukee:	
Cerebrospinal meningitis	1
Chicken pox	6
Diphtheria	2
Measles	3
Scarlet fever	1
Whooping cough	29
Scattering:	
Cerebrospinal meningitis	1
Chicken pox	9
Diphtheria	13
German measles	2
Influenza	4
Measles	2
Pneumonia	1
Poliomyelitis	5
Scarlet fever	37
Smallpox	10
Tuberculosis	18
Typhoid fever	4
Whooping cough	120

WYOMING.

Chicken pox	1
Measles	1
Mumps	1
Scarlet fever	3
Typhoid fever	1

Reports for Week Ended August 30, 1924.

DISTRICT OF COLUMBIA.

	Cases.
Chicken pox	2
Diphtheria	2
Scarlet fever	7
Tuberculosis	22
Typhoid fever	4
Whooping cough	11

NORTH DAKOTA.

	Cases.
Diphtheria	1
Scarlet fever	11
Trachoma	1
Tuberculosis	3
Whooping cough	2

SUMMARY OF MONTHLY REPORTS FROM STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever
July, 1924.										
Iowa	2	47			41			45	22	40
Maine	1	30	1					50	2	63

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES.

Diphtheria.—For the week ended August 23, 1924, 35 States reported 965 cases of diphtheria. For the week ended August 25, 1923, the same States reported 1,228 cases of this disease. Ninety-seven cities, situated in all parts of the country and having an aggregate population of more than 28,200,000, reported 490 cases of diphtheria for the week ended August 23, 1924. Last year for the corresponding week they reported 577 cases. The estimated expectancy for these cities was 600 cases. The estimated expectancy was based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty States reported 433 cases of measles for the week this year and 1,018 cases for the week last year. Ninety-seven cities reported 133 cases of measles for the week this year and 265 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-five States—this year, 726 cases; last year, 781 cases. Ninety-seven cities—this year, 284 cases; last year, 265 cases; estimated expectancy, 248 cases.

Smallpox.—For the week ended August 23, 1924, 35 States reported 191 cases of smallpox. Last year for the corresponding week they reported 112 cases. Ninety-seven cities reported smallpox for the week as follows: 1924, 70 cases; 1923, 22 cases; estimated expectancy, 26 cases. The cities reported 7 deaths from smallpox for the week ended August 23, 1924.

Typhoid fever.—Seven hundred and sixty-eight cases of typhoid fever were reported for the week ended August 23, 1924, by 34 States. For the corresponding week of 1923 the number was 876 cases. Ninety-seven cities reported 233 cases of typhoid fever for the week this year and 216 cases of this disease for the corresponding week last year. The estimated expectancy for these cities was 231 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 97 cities as follows: 1924, 253 deaths; 1923, 290 deaths.

City reports for week ended August 23, 1924.

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

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

Division, State, and city.	Chicken pox, cases reported	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
NEW ENGLAND.										
Maine:										
Lewiston	0	1	0	0	0	0	0	0	1	0
Portland	0	1	0	0	0	0	2	2	1	0
New Hampshire:										
Concord	0	0	0	0	0	0	0	0	0	0
Vermont:										
Barre	0	1	0	0	0	0	0	0	1	0
Massachusetts:										
Boston	1	34	28	0	0	18	2	4	12	13
Fall River	0	2	1	0	0	1	0	0	1	1
Springfield	1	2	1	0	0	1	1	0	1	0
Worcester	----	3	4	0	0	0	----	1	2	5
Rhode Island:										
Pawtucket	0	1	0	0	0	0	0	1	0	0
Providence	0	5	4	0	0	0	0	2	2	3
Connecticut:										
Bridgeport	0	4	4	0	0	1	0	0	1	4
Hartford	0	4	4	0	0	0	0	0	1	0
New Haven	0	2	2	0	0	2	0	2	1	2
MIDDLE ATLANTIC.										
New York:										
Buffalo	0	13	5	0	0	0	0	5	5	4
New York	20	96	108	5	1	21	12	63	22	19
Rochester	----	4	3	0	0	1	----	2	3	3
Syracuse	1	5	2	0	0	3	0	1	3	2
New Jersey:										
Camden	1	1	0	0	0	1	0	0	1	2
Newark	2	7	8	1	0	11	3	4	3	4
Trenton	4	3	0	0	0	0	0	2	1	0
Pennsylvania:										
Philadelphia	10	33	47	----	----	8	8	14	16	8
Pittsburgh	12	20	12	----	----	1	2	11	6	13
Reading	1	2	4	----	----	0	2	0	0	0
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati	2	7	1	0	0	4	1	3	3	2
Cleveland	10	20	13	0	0	12	5	3	9	9
Columbus	0	2	1	0	0	1	0	1	2	1
Toledo	3	5	6	0	1	3	0	0	5	2
Indiana:										
Fort Wayne	----	1	0	0	0	0	----	----	0	2
Indianapolis	----	8	2	0	0	1	----	3	2	1
South Bend	0	1	1	0	0	0	0	0	1	1
Terre Haute	0	1	2	0	0	0	0	2	0	2
Illinois:										
Chicago	11	68	35	1	1	10	5	17	27	19
Cicero	0	2	0	0	0	0	0	0	0	0
Springfield	----	1	0	0	0	0	----	0	1	0
Michigan:										
Detroit	5	36	20	1	0	4	2	12	21	15
Flint	1	5	3	0	0	0	0	1	2	11
Grand Rapids	0	2	1	0	0	0	2	0	1	2
Saginaw	0	1	0	0	0	0	0	0	1	0

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Chicken pox, cases reported	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
EAST NORTH CENTRAL—continued.										
Wisconsin:										
Madison	0	0	2	1	1	1	4	0	0	4
Milwaukee	8	12	6	0	0	4	2	6	10	5
Racine	1	1	1	0	0	0	----	----	1	0
Superior	0	1	0	0	0	0	----	0	1	0
WEST NORTH CENTRAL.										
Minnesota:										
Duluth	----	3	----	----	0	----	----	2	3	----
Minneapolis	4	12	8	0	0	0	0	0	6	16
St. Paul	----	11	12	0	0	0	----	5	3	8
Iowa:										
Sioux City	2	0	0	0	----	0	0	----	1	0
Waterloo	0	0	0	0	----	0	0	----	1	0
Missouri:										
Kansas City	0	4	2	0	0	1	1	4	2	7
St. Joseph	0	1	0	0	0	0	0	0	1	0
St. Louis	4	25	20	0	0	2	4	----	6	42
North Dakota:										
Fargo	0	0	0	0	0	0	0	0	1	0
Grand Forks	1	0	0	0	----	0	0	----	1	0
South Dakota:										
Sioux Falls	0	1	0	0	0	0	0	0	0	0
Nebraska:										
Lincoln	0	0	1	0	0	0	0	0	1	0
Omaha	0	6	7	0	0	1	0	1	1	1
Kansas:										
Topeka	0	1	0	0	0	0	5	0	2	1
Wichita	0	1	0	0	0	0	0	1	1	0
SOUTH ATLANTIC.										
Delaware:										
Wilmington	0	1	0	0	0	0	0	0	1	0
Maryland:										
Baltimore	0	11	8	1	1	8	1	15	6	4
Cumberland	----	1	0	0	0	0	----	0	1	0
Frederick	----	1	1	----	1	0	----	0	0	0
District of Columbia:										
Washington	0	3	8	0	0	1	0	4	3	7
Virginia:										
Lynchburg	0	1	1	0	0	0	4	1	0	0
Norfolk	0	1	0	0	0	1	1	----	1	0
Richmond	0	5	6	0	0	0	0	3	3	1
Roanoke	0	2	2	0	0	0	0	0	1	1
West Virginia:										
Charleston	2	2	0	0	0	0	0	0	1	0
Huntington	0	1	0	0	0	0	0	0	1	0
Wheeling	1	1	1	0	0	0	0	1	1	0
North Carolina:										
Raleigh	----	1	0	----	----	0	----	1	0	0
Wilmington	----	1	0	0	0	0	----	1	0	0
Winston-Salem	0	1	7	0	0	0	0	1	0	1
South Carolina:										
Charleston	0	1	0	0	0	0	0	1	1	1
Columbia	0	1	0	0	0	0	0	2	0	1
Greenville	0	1	0	0	0	0	0	0	0	0
Georgia:										
Atlanta	0	3	4	0	0	0	0	8	4	5
Brunswick	0	0	0	0	0	0	0	0	0	0
Savannah	0	1	0	0	0	0	2	0	1	0
Florida:										
St. Petersburg	0	0	0	0	1	0	0	0	0	0
Tampa	0	1	1	0	0	0	0	0	1	0

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Chicken pox, cases reported	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
EAST SOUTH CENTRAL.										
Kentucky:										
Covington	0	1	0	0	0	0	0	0	0	0
Louisville	2	4	3	0	0	1	1	0	1	2
Tennessee:										
Memphis	-------	6	2	0	0	0	-------	2	2	1
Nashville	-------	1	0	0	0	4	-------	3	2	0
Alabama:										
Birmingham	3	4	4	1	0	0	3	0	3	10
Mobile	0	1	0	0	0	0	0	-------	0	0
Montgomery	0	1	0	0	0	0	4	0	0	0
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith	0	0	0	0	-------	0	0	-------	1	4
Little Rock	0	1	0	0	0	1	1	1	0	0
Louisiana:										
New Orleans	0	8	4	-------	1	0	0	4	1	0
Shreveport	0	-------	1	0	0	0	0	3	-------	0
Oklahoma:										
Oklahoma	1	2	0	0	0	0	0	1	2	0
Tulsa	0	1	0	0	-------	0	0	-------	1	0
Texas:										
Dallas	0	3	4	0	0	0	0	1	1	0
Galveston	0	0	2	0	0	0	0	0	0	0
Houston	-------	2	2	0	0	0	-------	1	1	1
San Antonio	0	1	2	0	0	0	0	0	1	0
MOUNTAIN.										
Montana:										
Billings	0	0	0	0	0	0	3	1	0	0
Great Falls	0	1	1	0	0	1	0	0	0	0
Helena	0	0	0	0	0	0	0	0	0	0
Missoula	0	0	0	0	0	0	0	0	0	0
Idaho:										
Boise	1	1	1	0	0	0	0	0	1	0
Colorado:										
Denver	0	7	8	0	0	0	1	7	2	2
Pueblo	1	3	2	0	0	0	0	1	0	2
New Mexico:										
Albuquerque	-------	0	1	0	0	0	-------	0	1	0
Utah:										
Salt Lake City	2	3	3	0	0	1	1	2	2	0
Nevada:										
Reno	0	0	0	0	0	0	0	0	1	0
PACIFIC.										
Washington:										
Seattle	8	2	5	-------	-------	0	0	-------	2	4
Spokane	0	2	0	-------	-------	0	0	-------	2	2
Tacoma	-------	1	-------	-------	-------	-------	-------	-------	1	-------
Oregon:										
Portland	1	2	12	0	0	0	0	3	2	3
California:										
Los Angeles	2	17	17	0	0	6	4	11	5	5
Sacramento	0	2	3	0	0	0	0	1	1	1
San Francisco	4	15	18	1	0	3	7	1	6	4

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Population July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
NEW ENGLAND.										
Maine:										
Lewiston	33,790	0	0	0	0	1	0	0	0	3
Portland	73,129	0	0	0	0	2	2	0	0	17
New Hampshire:										
Concord	22,408	0	0	0	1	1	0	0	0	5
Vermont:										
Barre	[1] 10,008	0	0	0	0	0	0	0	0	2
Massachusetts:										
Boston	770,400	0	0	0	14	5	1	0	11	166
Fall River	120,912	0	0	0	3	1	0	0	3	28
Springfield	144,227	0	0	0	0	1	0	0	2	27
Worcester	191,927	0	0	0	2	1	0	0	----	----
Rhode Island:										
Pawtucket	68,799	0	0	0	1	1	0	0	0	13
Providence	242,378	0	0	0	7	2	1	0	1	58
Connecticut:										
Bridgeport	[1] 143,555	0	0	0	2	0	1	0	6	26
Hartford	[1] 138,036	0	0	0	0	2	0	0	1	24
New Haven	172,967	0	0	0	1	3	3	0	6	38
MIDDLE ATLANTIC.										
New York:										
Buffalo	536,718	0	0	0	3	3	3	0	17	109
New York	5,927,625	0	0	0	105	43	46	5	224	1,074
Rochester	317,867	0	0	0	6	1	0	0	----	52
Syracuse	184,511	0	0	0	0	0	0	0	4	39
New Jersey:										
Camden	124,157	0	1	2	2	2	1	1	0	28
Newark	438,699	0	0	0	6	3	0	0	90	71
Trenton	127,390	0	1	0	3	2	0	0	4	38
Pennsylvania:										
Philadelphia	1,922,788	0	0	0	35	16	12	1	72	339
Pittsburgh	613,442	0	1	0	4	4	2	1	12	130
Reading	110,917	0	0	0	1	1	1	0	11	30
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati	406,312	0	1	0	12	3	2	1	4	109
Cleveland	888,519	1	3	0	15	5	4	0	30	138
Columbus	261,082	0	0	0	6	1	1	0	4	49
Toledo	268,338	1	3	4	4	3	0	0	23	47
Indiana:										
Fort Wayne	93,573	0	0	0	0	1	1	0	----	15
Indianapolis	342,718	0	3	0	4	3	1	0	----	92
South Bend	76,709	0	0	0	0	1	0	0	0	11
Terre Haute	68,939	0	0	0	1	0	0	0	0	16
Illinois:										
Chicago	2,886,121	0	0	0	41	6	9	0	106	498
Cicero	55,968	0	0	0	0	0	0	0	0	3
Springfield	61,833	0	0	----	----	1	0	----	----	16
Michigan:										
Detroit	995,668	2	4	1	22	5	2	0	78	225
Flint	117,968	1	3	0	0	3	0	0	1	22
Grand Rapids	145,947	0	0	0	3	1	2	0	2	24
Saginaw	69,754	0	0	0	----	1	1	0	3	12
Wisconsin:										
Madison	42,519	0	0	0	0	0	0	1	6	7
Milwaukee	484,595	1	1	0	0	1	0	0	46	78
Racine	64,398	0	1	0	0	0	0	0	0	8
Superior	[1] 39,671	1	4	0	0	0	0	0	0	4
WEST NORTH CENTRAL.										
Minnesota:										
Duluth	106,289	1	----	0	1	0	----	0	----	11
Minneapolis	409,125	2	1	0	6	1	0	0	0	62
St. Paul	241,891	1	3	0	2	0	0	0	----	57
Iowa:										
Sioux City	79,662	1	1	----	----	0	0	----	0	----
Waterloo	39,667	0	0	----	----	0	0	----	2	----

[1] Population Jan. 1, 1920.

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Population July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
WEST NORTH CENTRAL—contd.										
Missouri:										
Kansas City	351,819	0	0	0	0	3	4	1	7	92
St. Joseph	78,232	1	0	0	1	0	0	0	0	26
St. Louis	803,853	0	0	0	13	8	11	2	7	200
North Dakota:										
Fargo	24,841	0	0	0	1	0	0	0	0	5
Grand Forks	14,547	0	0	------	------	0	0	------	0	------
South Dakota:										
Sioux Falls	29,206	0	0	0	0	0	0	0	0	3
Nebraska:										
Lincoln	58,761	0	0	0	0	1	0	0	0	9
Omaha	204,382	1	0	0	------	0	0	0	1	39
Kansas:										
Topeka	52,555	0	0	0	------	1	1	0	8	9
Wichita	79,261	1	0	0	3	2	1	0	3	20
SOUTH ATLANTIC.										
Delaware:										
Wilmington	117,728	0	0	0	------	1	3	0	------	20
Maryland:										
Baltimore	773,580	0	0	0	13	11	5	0	59	186
Cumberland	32,361	0	0	0	0	0	0	0	0	8
Frederick	11,301	0	0	0	0	1	0	0	------	3
District of Columbia:										
Washington	[1] 437,571	0	0	0	7	5	1	0	7	88
Virginia:										
Lynchburg	30,277	0	0	0	0	1	2	0	0	7
Norfolk	159,089	0	0	0	3	2	2	0	1	------
Richmond	181,044	0	0	0	1	3	4	0	3	35
Roanoke	55,502	0	0	0	0	3	2	3	2	18
West Virginia:										
Charleston	45,597	0	0	0	1	2	0	0	1	15
Huntington	57,918	0	0	0	0	1	0	0	0	------
Wheeling	[1] 56,208	0	0	0	0	1	3	0	1	14
North Carolina:										
Raleigh	29,171	0	0	0	0	1	0	0	0	17
Wilmington	35,719	0	0	0	0	1	0	0	0	7
Winston-Salem	56,230	0	1	0	3	3	0	0	3	24
South Carolina:										
Charleston	71,245	0	0	0	2	2	8	1	0	24
Columbia	39,688	0	0	0	1	2	0	1	1	30
Greenville	25,789	0	3	0	0	0	0	0	0	3
Georgia:										
Atlanta	222,963	1	0	0	4	5	4	2	1	60
Brunswick	15,937	0	0	0	0	0	0	0	1	2
Savannah	89,448	0	0	0	1	2	0	0	3	29
Florida:										
St. Petersburg	24,403	0	0	0	0	0	0	0	0	8
Tampa	56,050	0	0	0	1	0	1	0	1	14
EAST SOUTH CENTRAL.										
Kentucky:										
Covington	57,877	0	0	0	2	0	1	0	0	20
Louisville	257,671	0	1	0	1	6	4	1	0	60
Tennessee:										
Memphis	170,067	0	0	0	8	3	22	1	------	78
Nashville	121,128	0	0	0	7	6	11	2	------	49
Alabama:										
Birmingham	195,901	0	13	0	5	6	9	2	5	49
Mobile	63,858	0	0	0	1	1	0	1	0	19
Montgomery	45,383	0	0	0	1	0	2	1	0	------
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith	30,635	0	0	------	------	0	1	------	1	------
Little Rock	70,916	1	0	0	6	1	6	5	0	------

[1] Population Jan. 1, 1920.

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Population July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
WEST SOUTH CENTRAL—continued.										
Louisiana:										
New Orleans	404,575	0	0	0	8	4	8	0	1	125
Shreveport	54,590	----	0	0	0	----	0	0	0	34
Oklahoma:										
Oklahoma	101,150	1	2	0	3	2	3	0	0	19
Tulsa	102,018	0	1	----	----	3	0	----	0	----
Texas:										
Dallas	177,274	0	1	0	8	4	13	0	14	45
Galveston	46,877	0	0	0	0	0	1	0	1	7
Houston	154,970	1	0	0	1	1	0	0	----	32
San Antonio	184,727	0	0	0	5	0	0	1	0	60
MOUNTAIN.										
Montana:										
Billings	16,927	1	0	0	0	0	0	1	0	15
Great Falls	27,787	0	0	0	0	1	0	0	0	6
Helena	[1] 12,037	0	0	0	0	0	0	0	0	----
Missoula	[1] 12,668	0	0	0	1	1	0	0	0	9
Idaho:										
Boise	22,806	0	2	0	0	0	0	0	0	4
Colorado:										
Denver	272,031	2	0	0	12	3	1	1	13	74
Pueblo	43,519	0	0	0	0	0	0	0	0	21
New Mexico:										
Albuquerque	16,648	0	0	0	4	1	2	0	----	8
Utah:										
Salt Lake City	126,241	2	0	0	2	1	6	0	3	27
Nevada:										
Reno	12,429	0	0	0	0	1	1	0	0	2
PACIFIC.										
Washington:										
Seattle	[1] 315,685	1	0	----	----	1	2	----	6	----
Spokane	104,578	1	1	----	----	0	0	----	5	----
Tacoma	101,731	0	----	----	----	1	----	----	----	----
Oregon:										
Portland	273,621	4	8	0	3	1	0	0	1	60
California:										
Los Angeles	666,853	1	17	0	23	4	9	0	13	180
Sacramento	69,950	0	3	0	3	1	0	0	0	17
San Francisco	539,038	1	1	0	12	2	2	1	6	126

[1] Population Jan. 1, 1920.

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Cerebrospinal meningitis.		Dengue.		Lethargic encephalitis.		Pellagra		Poliomyelitis (infantile paralysis).			Typhus fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases, estimated, expectancy.	Cases.	Deaths.	Cases.	Deaths.
NEW ENGLAND.													
Maine:													
Portland	0	0	0	0	0	0	0	0	0	1	0	0	0
Massachusetts:													
Boston	2	0	0	0	1	0	1	0	1	5	1	0	0
Connecticut:													
Bridgeport	0	0	0	0	0	0	0	0	0	1	0	0	0
Hartford	0	0	0	0	0	0	0	0	0	2	0	0	0
MIDDLE ATLANTIC.													
New York:													
Buffalo	1	0	0	0	0	0	0	0	0	0	0	0	0
New York	5	2	0	0	5	3	0	0	5	8	4	0	0
Syracuse	0	0	0	0	0	0	0	0	0	12	0	0	0
New Jersey:													
Newark	0	0	0	0	0	0	0	0	0	1	0	0	0
Pennsylvania:													
Philadelphia	1	0	0	0	0	0	1	1	1	1	0	0	0
Pittsburgh	0	0	0	0	0	0	0	0	1	1	0	0	0
EAST NORTH CENTRAL.													
Ohio:													
Cleveland	0	0	0	0	0	0	0	0	1	1	0	0	0
Columbus	0	0	0	0	1	0	0	0	0	0	0	0	0
Indiana:													
Fort Wayne	0	0	0	0	0	0	0	0	0	2	0	0	0
Illinois:													
Chicago	0	0	0	0	0	0	0	0	6	2	0	0	0
Michigan:													
Detroit	1	1	0	0	1	0	0	0	1	23	2	0	0
Wisconsin:													
Milwaukee	2	2	0	0	0	0	0	0	1	0	0	0	0
WEST NORTH CENTRAL.													
Missouri:													
Kansas City	0	0	0	0	1	1	0	0	0	0	0	0	0
St. Louis	0	0	0	0	0	0	0	0	1	4	1	0	0
SOUTH ATLANTIC.													
Maryland:													
Baltimore	1	1	0	0	0	2	0	0	1	4	2	0	0
Cumberland	0	0	0	0	0	0	0	0	0	1	0	0	0
Virginia:													
Norfolk	2	0	0	0	0	0	0	0	0	0	0	0	0
South Carolina:													
Charleston	0	0	0	0	0	0	0	2	---	0	0	0	0
Columbia	0	0	0	0	0	0	1	3	0	0	0	0	0
Georgia:													
Savannah	0	0	0	0	0	0	0	1	0	0	0	0	0
Florida:													
St. Petersburg	0	1	1	0	0	0	0	0	0	0	0	0	0
EAST SOUTH CENTRAL.													
Kentucky:													
Louisville	0	0	0	0	0	1	0	0	0	0	0	0	0
Alabama:													
Birmingham	0	0	0	0	0	0	1	1	0	0	0	1	0
Texas:													
Dallas	0	0	0	0	0	0	0	0	0	1	1	0	0
Galveston	0	0	0	0	0	0	0	1	---	0	0	0	0
San Antonio	0	0	0	0	0	0	0	0	0	1	1	0	0
MOUNTAIN.													
Montana:													
Missoula	0	0	0	0	0	0	0	0	0	10	3	0	0
New Mexico:													
Albuquerque	0	0	0	0	0	0	0	0	0	1	0	0	0
PACIFIC.													
California:													
Los Angeles	0	0	0	0	1	0	0	0	1	0	0	1	0
San Francisco	0	0	0	0	1	0	0	0	0	0	0	0	0

The following table gives a summary of the reports from 105 cities for the 10-week period ended August 23, 1924. The cities included in this table are those whose reports have been published for all 10 weeks in the Public Health Reports. Eight of these cities did not report deaths. The aggregate population of the cities reporting cases was estimated at nearly 29,000,000 on July 1, 1923, which is the latest date for which estimates are available. The cities reporting deaths had more than 28,000,000 population on that date. The number of cities included in each group and the aggregate population are shown in a separate table below.

Summary of weekly reports from cities, June 15 to August 23, 1924.

DIPHTHERIA CASES.

	1924, week ended—									
	June 21.	June 28.	July 5.	July 12.	July 19.	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.
Total	885	891	666	693	652	560	477	538	456	494
New England	97	78	64	55	71	59	47	60	47	48
Middle Atlantic	368	387	296	301	274	222	188	197	149	189
East North Central	135	136	101	135	120	99	83	103	91	88
West North Central	65	36	50	52	36	37	40	43	38	49
South Atlantic	31	20	17	19	26	21	28	22	40	39
East South Central	4	8	1	3	2	6	3	6	7	9
West South Central	16	15	19	5	5	15	12	7	13	15
Mountain	30	30	19	36	25	14	5	10	22	14
Pacific	139	181	99	87	93	87	71	90	49	43

MEASLES CASES.

Total	2,302	1,857	1,186	987	676	528	406	253	178	136
New England	168	120	90	66	52	59	41	11	23	23
Middle Atlantic	1,051	774	535	422	283	204	160	97	65	46
East North Central	568	565	288	295	202	155	126	75	51	37
West North Central	87	63	46	29	35	22	16	11	7	4
South Atlantic	220	187	141	91	55	43	34	36	16	10
East South Central	26	19	15	15	13	6	3	2	4	5
West South Central	2	5	1	7	3	5	3	0	1	1
Mountain	33	35	22	11	7	6	7	3	1	1
Pacific	147	89	48	51	26	28	16	18	10	9

SCARLET FEVER CASES.

Total	973	713	563	561	441	340	369	360	248	291
New England	111	92	59	50	39	38	40	36	24	28
Middle Atlantic	331	226	186	144	114	90	73	85	49	55
East North Central	238	161	132	168	102	90	126	108	57	74
West North Central	128	102	68	100	93	65	65	61	61	75
South Atlantic	63	43	30	47	33	15	20	21	12	21
East South Central	6	1	1	7	7	7	2	3	10	13
West South Central	9	7	11	8	5	9	11	5	9	5
Mountain	13	12	16	4	14	5	7	12	5	4
Pacific	74	69	60	33	34	21	25	29	21	16

SMALLPOX CASES.

Total	346	239	159	169	158	108	116	106	93	76
New England	0	0	0	1	0	0	0	0	0	0
Middle Atlantic	10	16	19	16	17	9	9	7	8	3
East North Central	121	61	44	33	44	36	28	23	16	20
West North Central	34	41	23	47	33	13	18	15	28	5
South Atlantic	35	12	9	3	5	3	3	4	6	4
East South Central	65	36	23	21	18	13	16	8	13	14
West South Central	8	7	1	1	0	0	2	0	0	1
Mountain	10	9	5	6	4	2	2	1	1	2
Pacific	63	57	35	41	37	32	38	48	21	22

Summary of weekly reports from cities, June 15 to August 23, 1924—Continued.

TYPHOID FEVER CASES.

	1924, week ended—									
	June 21.	June 28.	July 5.	July 12.	July 19.	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.
Total	132	91	128	142	197	191	191	250	232	238
New England	8	4	2	6	7	6	4	6	15	8
Middle Atlantic	58	41	46	34	50	59	59	63	63	65
East North Central	11	11	9	20	20	17	20	30	29	22
West North Central	4	5	15	12	10	11	9	22	22	17
South Atlantic	16	10	23	25	36	25	31	44	37	35
East South Central	13	3	8	10	31	29	36	40	24	49
West South Central	8	4	8	21	26	22	17	19	26	29
Mountain	4	3	6	5	4	7	4	5	9	0
Pacific	10	10	11	9	13	15	11	21	7	13

INFLUENZA DEATHS.

Total	22	13	9	11	5	3	13	8	8	7
New England	0	1	1	0	0	1	2	0	0	0
Middle Atlantic	8	3	2	5	1	0	6	3	4	1
East North Central	2	3	2	1	1	0	0	2	2	2
West North Central	1	0	0	0	1	1	2	0	0	0
South Atlantic	5	4	3	2	1	1	1	2	0	3
East South Central	3	2	1	3	0	0	1	0	0	0
West South Central	3	0	0	0	0	0	0	1	0	1
Mountain	0	0	0	0	0	0	0	0	0	0
Pacific	0	0	0	0	1	0	1	0	2	0

PNEUMONIA DEATHS.

Total	521	432	358	318	307	304	292	269	271	251
New England	28	22	19	16	14	16	17	14	14	12
Middle Atlantic	214	200	167	141	127	126	131	121	115	102
East North Central	130	91	62	55	53	58	50	51	48	48
West North Central	34	11	15	22	17	13	14	9	17	13
South Atlantic	50	50	39	39	37	35	36	29	32	38
East South Central	12	15	14	9	12	15	12	10	10	5
West South Central	24	12	16	16	22	20	11	14	12	10
Mountain	9	12	8	10	4	7	4	8	7	10
Pacific	20	19	18	10	21	14	17	13	16	13

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

Group of cities.	Number of cities reporting cases.	Number of cities reporting deaths.	Aggregate population of cities reporting cases.	Aggregate population of cities reporting deaths.
Total	105	97	28,898,350	28,140,934
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	17	17	7,032,535	7,032,535
West North Central	14	11	2,515,330	2,381,454
South Atlantic	22	22	2,566,901	2,566,901
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	3	1,797,830	1,275,841

FOREIGN AND INSULAR.

ECUADOR.

Plague—July 16–31, 1924.

During the period July 16 to 31, 1924, a case of plague was reported at Puna, Ecuador.

Plague-Infected Rats—Guayaquil.

During the period under report, 8,891 rats were reported taken at Guayaquil, of which 11 were found plague infected.

EGYPT.

Status of Plague.

Plague has been reported in Egypt as follows: Week ended July 22, 1924—cases, 8, distributed in four districts. Week ended July 29, 1924—cases, 4, distributed in two districts, with a total from January 1 to July 29, of 340 cases, as compared with 1,258 cases reported for the corresponding period of the year 1923. Total reported from January 1 to July 31, 1924—cases, 341; deaths, 170.

INDO-CHINA.

Cholera—Plague—Smallpox—January–March, 1924.

During the three-month period ended March 31, 1924, cholera, plague, and smallpox were reported in Indo-China as follows:

Cholera.—January, 1924—cases, 7; deaths, 5. Corresponding month of previous year, cases, 8; deaths, 1. February, 1924—cases, 9 (European, 1); death, 1. Corresponding month of preceding year, cases, 11 (European, 2); deaths, 7. March, 1924—cases, 11; deaths, 7. Corresponding month of preceding year, cases, 38; deaths, 19.

Plague.—January, 1924—cases, 8; deaths, 3. February, 1924—cases, 49 (European, 1); deaths, 38. Corresponding month of preceding year, cases, 127; deaths, 121. March, 1924—cases, 97; deaths, 65. Corresponding month of preceding year, cases, 156 (European, 2); deaths, 141 (European, 1).

Smallpox.—January, 1924—cases, 703 (European, 8); deaths, 212. Corresponding month of preceding year, cases, 137; deaths, 24. February, 1924—cases, 941 (European, 1); deaths, 253. Corresponding period preceding year, cases, 235; deaths, 72. March, 1924—cases, 1,414; deaths, 456. Corresponding month of preceding year, cases, 536; deaths, 126.

ITALY.

Measures Against Arrivals from Corfu, Greece.

According to information dated August 9, 1924, vessels arriving at Italian ports from Corfu, Greece, have been declared subject to the provisions of the sanitary code against plague.

JAMAICA.

Smallpox (Reported as Alastrim).

During the week ended August 9, 1924, 22 new cases of smallpox (reported as alastrim) were reported in the Island of Jamaica. Of this number five cases were reported for the Parish of Kingston.

MADAGASCAR.

Plague.

Plague has been reported in the Island of Madagascar as follows: Month of June, 1924, 22 cases with 20 deaths occurring in the Province of Tananarive, including one case and one death occurring at the town of Tananarive, situated in the interior of the island. During the period June 1 to 15, 1924, two cases with two deaths were reported at Tamatave, a seaport town. The types of the disease were stated to be bubonic, pneumonic, and septicemic.

MEXICO.

Typhoid Fever—Colima City.

Epidemic outbreak of typhoid fever at Colima City, capital of the State of Colima, Mexico, was reported under date of August 26, 1924. Colima City is situated in the interior of the State and about 60 miles distant from the port of Manzanillo.

PANAMA CANAL.

Communicable Diseases—July, 1924.

During the month of July, 1924, communicable diseases were reported in the Panama Canal Zone, Colon, and Panama, as follows:

Disease.	Canal Zone.	Colon.	Panama.	Non-resident.	Total.
Chicken pox	3	5	2		10
Diphtheria	1		10		11
Dysentery			1		1
Hookworm disease	100	6	49	47	202
Malaria	133	4	4	60	201
Measles	13	8	5		26
Meningitis			1		1
Mumps	35			1	36
Pneumonia	6	7	19		32
Tuberculosis	7	6	14		27
Typhoid fever			2		2
Whooping cough	2	1			3

PERU.

Mortality from Certain Diseases—Arequipa—January-June, 1924.

During the six-month period ended June 30, 1924, there were reported at Arequipa, Peru, 5 deaths from smallpox, 4 deaths from typhus fever, and 91 deaths from tuberculosis. The last death from smallpox and typhus fever occurred each in the month of May. The deaths from tuberculosis were stated to have been for the most part of hospital cases. The total number of deaths reported was 343, the greatest number occurring in January, viz, 69, and the lowest in April, viz, 38. Population, estimated, 40,000.

Plague—June-July, 1924.

Plague has been reported in Peru as follows: Month of June, 1924—four cases with one death; month of July, 1924—six cases with three deaths. The occurrence was reported in three localities. For distribution of occurrence according to locality, see page 2382.

UNION OF SOUTH AFRICA.

Plague—Orange Free State.

During the week ended July 12, 1924, two fatal plague cases were reported in the Orange Free State, Union of South Africa. The cases occurred in natives on two farms in the Smithfield district.

Plague-Infected Rodent.

During the same period a plague-infected house mouse was found in a wagon house on a farm in the Kroonstad district, Orange Free State.

Smallpox—Typhus Fever—June, 1924.

During the month of June, 1924, 34 cases of smallpox and 74 cases of typhus fever with 10 deaths were reported in the Union of South Africa. The occurrence for both diseases was among the colored population. For distribution of typhus fever occurrence according to States, see page 2383.

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

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

Reports Received During Week Ended September 12, 1924.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India				June 22-28, 1924: Cases, 7,600; deaths, 4,132.
Do				June 29-July 5, 1924: Cases, 7,826; deaths, 4,272.
Bombay	July 6-12	1	1	
Calcutta	July 19-26	17	13	
Madras	July 19-Aug. 2	11	6	
Indo-China				Jan. 1-Mar. 31, 1924: Cases, 27; deaths, 13.

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

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

Reports Received During Week Ended September 12, 1924—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	July 13–26	3	3	
Ecuador:				
Guayaquil				July 16–31, 1924: Rats taken, 3,891; found infected, 11. June 1–30, 1924: Cases, 4; deaths, 1. Rats taken, 15,858; found infected, 51.
Puná	July 16–31	1		
India				June 22–28, 1924: Cases, 1,958; deaths, 1,665.
Do				June 29–July 5, 1924: Cases, 832; deaths, 744.
Bombay	July 6–12	2	1	
Indo-China				Jan. 1–Mar. 31, 1924: Cases, 154; deaths, 106.
Madagascar:				
Tamatave	June 1–15	2	2	Bubonic.
Tananarive Province				June 1–30, 1924: Cases, 22; deaths, 20. Bubonic, pneumonic, septicemic.
Tananarive Town	June 16–30	1	1	Pneumonic.
Peru				June 1–30, 1924: Cases, 4; deaths, 1.
Do				July 1–31, 1924: Cases, 6; deaths, 3.
Locality—				
Callao	June 1–30	1		
Do	July 1–31	2		
Huaral	June 1–30	1		
Do	July 1–31	1		
Lima	June 1–30	2	1	
Do	July 1–31	3	2	On country estate, 1 death
Union of South Africa:				
Orange Free State	June 6–12	2	2	Natives. One plague-infected house rodent found in the Kroonstad district.

SMALLPOX.

Canada:				
New Brunswick—				
Westmoreland County	Aug. 17–23	1		
India				June 22–28, 1924: Cases, 2,128; deaths, 627.
Do				June 29–July 5, 1924: Cases, 1,549; deaths, 733.
Bombay	July 6–12	23	18	
Calcutta	July 19–26	13	6	
Karachi	July 27–Aug. 2	7	3	
Madras	July 20–Aug. 2	17	7	
Indo-China				Jan. 1–Mar. 31, 1924: Cases, 3,958; deaths, 921.
Jamaica				Aug. 3–9, 1924: Cases, 22 (reported as alastrim).
Kingston	Aug. 3–9	5		Reported as alastrim.
Mexico:				
Mexico City	Aug. 2–16	13		Including municipalities in Federal district.
Peru:				
Arequipa	Jan. 1–June 30		5	
Portugal:				
Oporto	Aug. 3–9	3	1	
Spain:				
Malaga	Aug. 10–16		3	
Tunis:				
Tunis	Aug. 5–11	2	2	
Union of South Africa				June 1–30, 1924: Cases, 34 In colored population.

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

Reports Received During Week Ended September 12, 1924—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria				Year 1923. Cases, 1,166, of which 27 were in the military population.
Mexico:				
Mexico City	Aug. 3–16	13		Including municipalities in Federal district.
Peru:				
Arequipa	Jan. 1–June 30		4	
Union of South Africa				June 1–30, 1924: Cases, 74; deaths, 10.
Cape Province				June 1–30, 1924: Cases, 46; deaths, 6.
Do	July 6–12			Outbreaks.
Natal				June 1–30, 1924: Cases, 9; deaths, 2.
Orange Free State				June 1–30, 1924: Cases, 19; deaths, 2.

Reports Received from June 28 to September 5, 1924.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Apr. 20–June 21, 1924: Cases, 73,435; deaths, 52,608.
Bombay	May 4–10	1		
Do	June 29–July 5	1		
Calcutta	May 11–June 28	293	259	
Do	June 29–July 19	63	58	
Madras	June 1–21	7	6	
Do	June 29–July 5	1		
Rangoon	May 11–June 28	98	76	
Do	June 29–July 19	16	15	
Indo-China:				
Saigon	Apr. 27–June 28	6	4	Including 100 square kilometers of surrounding country.
Philippine Islands				June 15–28, 1924: 33 cases, 22 deaths, including suspects. June 29–July 5, 1924: 4 cases, 4 deaths.
Manila	June 22–28	1		Suspect. Occurring in a nonresident.
Do	July 6–12	1	1	
Province—				
Batangas	July 1	2	2	
Bulacan	June 21	1	1	
Do	June 28–July 4	1		
Cagayan	Mar. 30–Apr. 5	1	1	
Laguna	May 18–24	1	1	
Rizal	July 3	1	1	
Siam:				
Bangkok	May 4–June 28	21	18	
Do	June 29–July 5	2		
Straits Settlements:				
Penang	June 1–7	1	1	
Singapore	June 15–28	9	6	
Do	June 29–July 5	2	1	
On vessel:				
S. S. Argalia		1		At Bassein, Lower Burma, India. Case in European member of crew. Case removed to hospital. Vessel left May 16, 1924, arrived June 8 at Durban, South Africa; left Durban June 10 for Trinidad and Cuba.

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

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

Reports Received from June 28 to September 5, 1924—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Mostaganem	July 21-28	4		Seaport.
Argentina:				
Chaco Territory				April, 1924: Cases reported.
British East Africa:				
Kenya—				
Tanganyika Territory	Feb. 24-June 7	1	2	
Canary Islands:				
Teneriffe—				
La Laguna	June 20	1		
Ceylon:				
Colombo	May 11-June 28	11	7	Ten plague rodents.
Do	June 29-July 12	2	1	
Chile:				
Antofagasta	June 1-16	4		
China:				
Amoy	June 15-28		4	
Do	June 29-July 19		10	
Foochow	May 4-June 21		25	Cases not reported.
Ecuador:				
Eloy Alfaro	May 16-31	1		
Guayaquil	May 16-June 15	2		Rats taken, 14,987; found infected, 88.
Do	July 1-15			Rats taken, 8,546; found plague-infected, 20.
Posorja	do	1		
Egypt				June 11-30, 1924: Cases, 36. July 2-15, 1924: Cases, 8. Total Jan. 1-July 15, 1924—cases, 328 (corresponding period, preceding year—cases, 1,190).
City—				
Alexandria	Apr. 2	1	1	
Port Said	Apr. 24-May 31	2	1	
Suez	Jan. 2-June 26	11	5	
Do	June 27-July 5	2		
Province—				
Assiout	Apr. 1-June 18	40	31	
Beni-Suef	June 21	3	3	
Charkieh	Jan. 31	1	1	
Fayoum	Feb. 18-June 19	105	32	
Gharbia	Apr. 21-June 17	2	1	
Ghirga	Jan. 17-May 13	10	3	
Kalioubieh	Jan. 6-May 22	10	1	
Kena	Apr. 9-May 17	44	26	
Menoufieh	Jan. 2-June 12	48	31	
Mina	Feb. 5-June 26	39	20	
Greece:				
Kalamata				Reported July 15, 1924: Cases, 29; deaths, 6.
Patras	July 7	36		
Saloniki	July 3-4	2		
Hawaii Territory				July 15, 1924: Near Kukuihaele Island of Hawaii, one plague rat.
India				Apr. 20-June 21, 1924: Cases, 100,916; deaths, 82,991.
Bombay	May 4-June 21	50	44	
Do	June 29-July 5	1	2	
Calcutta	May 11-June 14	10	10	
Karachi	May 18-June 21	16	13	
Madras Presidency	May 18-31	7	2	
Rangoon	May 11-June 28	77	72	
Do	June 29-July 19	64	57	
Indo-China:				
Saigon	May 4-June 28	10	2	Including 100 square kilometers of surrounding country.
Iraq:				
Bagdad	Apr. 20-June 21	121	60	
Japan:				
Shizuoka Prefecture—				
Higashi				To June 20, 1924: Cases, 2; death, 1.
Java:				
East Java—				
Soerabaya	June 8-21	14	14	
Madagascar:				
Diego Suarez	July 4			Present.
Tamatave	June 2-8		2	Apr. 1-May 31, 1924: Cases, 116; deaths, 108.
Tananarive Province				
Tananarive Town	Apr. 1-May 31	11	11	
Other localities	do	105	97	

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

Reports Received from June 28 to September 5, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Persia:				
Abadan	May 1-31	20	12	
Bander Abbas	do	11	6	
Bushire	do	1	1	Landed at quarantine.
Mohammerah	do	111	78	
Peru				May 1-31, 1924: Cases, 5; deaths, 5.
Lima (city)	May 1-31	3	4	
Lima (country)	do	1		
Mollendo	do	1	1	
Siam:				
Bangkok	May 4-June 14	3	3	
Syria:				
Beirut	Aug. 4			Present.
Union of South Africa				Apr. 27-June 7, 1924: Cases, 28; deaths, 14. Dec. 16, 1923, to May 31, 1924: Cases, 347; deaths, 208 (white, 51 cases, 26 deaths; native, 296 cases, 182 deaths.
Orange Free State				May 11-June 14, 1924: Cases, 19; deaths, 7. June 22-28, 1924: Plague-infected mouse found in Kroonstad District.
On vessel:				
S. S. Amboise	July 10	1		At Marseille, France; removed to quarantine station. Case occurred in an Arab fireman embarked at Aden. Vessel left Yokohama May 30 and Colombo, Ceylon, June 22, 1924.

SMALLPOX.

Bolivia:				
La Paz	May 1-June 30	10	9	
Do	July 1-31	5	3	
Brazil:				
Bahia	May 18-24	1		
Porto Alegre	May 18-June 28	1	2	
Rio de Janeiro	May 18-24	2		
Do	July 20-26	1		
British East Africa:				
Kenya—				
Mombasa	May 4-31	3		
British South Africa:				
Northern Rhodesia	May 6-June 30	74	1	Natives.
Do	July 1-7	2		Do.
Canada:				
British Columbia—				
Vancouver	June 15-28	11		
Do	June 29-July 26	18		Not including suburbs.
Victoria	Aug. 3-9	1		
Manitoba—				
Winnipeg	July 13-Aug. 1	3		
New Brunswick—				
Restigouche County	June 1-30	7		
Do	July 6-Aug. 16	19		
Ontario				June 1-30, 1924: Cases, 24. July 1-31: Cases, 7.
Sarnia	July 20-26	1		
Windsor	June 22-28	1		
Quebec—				
Montreal	June 8-14	1		
Ceylon:				
Colombo	July 6-12	1		
Chile:				
Antofagasta	June 11			Under treatment at lazaretto, 2 cases.
Valparaiso	June 1-7		1	This report covers the two principal districts of Valparaiso.
China:				
Amoy	May 11-June 28			Present.
Do	June 29-July 19			Do.
Antung	June 9-29	41	3	
Do	July 7-13	4		

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

Reports Received from June 28 to September 5, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Chungking	May 11–June 28			Present.
Do	May 29–July 12			Do.
Foochow	May 18–June 28			Do.
Do	July 6–12			Do.
Hongkong	May 4–June 28	30	24	
Do	June 29–July 12	3	3	
Manchuria—				
Dairen	May 12–June 29	22	7	
Do	June 29–July 6	1	1	
Harbin	May 13–June 23	2		
Nanking	May 18–June 28			Do.
Do	July 6–19			Do.
Shanghai	May 25–31		1	
Tientsin	May 4–June 28	11	1	British municipality.
Chosen:				
Fusan	May 1–31	1		
Denmark:				
Copenhagen	May 18–31	3	1	
Egypt:				
City—				
Alexandria	June 4–10	1		
Cairo	Feb. 19–May 20	100	25	
Port Said	June 18–24	1	2	
Do	June 25–July 8	3		
France:				
Limoges	Apr. 1–May 31		2	
Marseille	May 1–31		1	
Paris	May 21–31	2		
Gibraltar	July 21–27	1		
Great Britain:				
England and Wales				May 25–June 28, 1924: Cases, 342. June 29–July 26, 1924: Cases, 213.
Counties—				
Derby	May 25–June 28	159		
Do	June 29–July 26	66		
London	do	1		
Northumberland	May 25–June 28	61		
Do	June 29–July 26	39		
Nottingham	May 25–June 28	29		
Do	June 29–July 26	32		
Yorks (North Riding).	May 25–June 28	54		
Do	June 29–July 26	27		
Yorks (West Riding).	May 25–June 28	5		
Do	June 29–July 26	27		
Greece:				
Saloniki	Apr. 21–May 4	7	2	
Haiti:				
Port au Prince	July 6–12	2		Developed at Cape Haitien.
India				Apr. 20–June 21, 1924: Cases, 26,258; deaths, 6,126.
Bombay	May 4–June 28	432	299	
Do	June 29–July 5	37	25	
Calcutta	May 11–June 28	36	32	
Do	July 6–19	14	10	
Karachi	May 18–June 28	51	18	
Do	June 29–July 26	8	7	
Madras	May 18–June 28	32	10	
Do	June 29–July 19	14	2	
Rangoon	May 11–June 28	53	21	
Do	June 29–July 19	11	5	
Indo-China:				
Saigon	Apr. 27–June 28	145	79	Including 100 sq. km. of surrounding country.
Iraq:				
Bagdad	Apr. 20–May 24	8	1	
Italy:				
Messina	May 26–June 1	1		
Jamaica				June 1–28, 1924: Cases, 141. June 29–Aug. 2, 1924: Cases, 132. (Reported as alastrim.)
Kingston	June 1–28	6		Reported as alastrim.
Do	June 29–July 19	7		
Japan:				
Kobe	May 26–June 21	3		
Nagoya	June 8–14	2		
Tokio	do	1		

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

Reports Received from June 28 to September 5, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Java:				
East Java—				
Madoera Residency—				
Sampang	May 22			Epidemic.
Malang	May 25-31	5	1	
Soerabaya	Apr. 13-June 28	501	143	
West Java—				
Batavia	May 31-June 27	3		
Do	July 6-12	1		
Latvia				Apr. 1-May 31, 1924: Cases, 2.
Mexico:				
Durango	June 1-30		2	
Guadalajara	May 1-June 30	9	4	
Do	July 8-14		1	
Mexico City	May 4-June 28	96		Including municipalities in Federal district.
Do	June 29-Aug. 2	34		
Salina Cruz	May 25-31	1	1	
Tampico	June 14-20	2		
Do	July 1-31	7	6	
Tuxtepec	July 3-18	3	1	State of Oaxaca.
Palestine				June 17-23, 1924: 20 cases in northern district.
Samaria Province—				
Samak	May 27-June 2	1		
Paraguay:				
Asuncion	June 2			Present.
Encarnacion	do			Many cases reported.
Poland				Mar. 30-June 7, 1924: Cases, 261; deaths, 21.
Portugal:				
Lisbon	May 25-June 28	7	2	
Do	June 29-July 19	4	1	
Oporto	May 11-June 28	18	16	
Do	June 29-Aug. 2	10	10	
Russia				Jan. 1-31, 1924: 2,243 cases.
Siam:				
Bangkok	Apr. 27-June 14	3	5	
Spain:				
Barcelona				Year 1923: Cases, 160.
Malaga	June 29-Aug. 9		13	
Valencia	June 8-21	3		
Do	July 13-19	1		
Straits Settlements:				
Singapore	May 4-24	2	1	
Sumatra:				
Medan	Jan. 1-31	5		
Switzerland:				
Berne	May 25-June 28	22		
Do	June 29-July 26	9		
Syria:				
Damascus	May 28-June 12	12		
Tunis:				
Tunis	May 27-June 30	17	4	
Do	July 1-Aug. 4	6	8	
Turkey:				
Constantinople	June 1-7	1		
Union of South Africa				Mar. 1-May 31, 1924: Cases, 133 (white, 15; native, 118). June 29-July 5, 1924: Outbreaks.
Cape Province	May 4-31			Outbreaks.
Orange Free State	May 4-10			Do.
Transvaal	May 4-31			Do.
Johannesburg	July 6-12	1		
On vessel:				
S. S. Karoa	May 7	1		At Durban, South Africa, from Bombay, India. Vessel left Bombay Apr. 16, 1924. Patient, European.
S. S. Mount Evans	July 8	1		At Key West, Fla., from Manchester, England.

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

Reports Received from June 28 to September 5, 1924—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	May 1–June 30	24	9	
Bolivia:				
La Paz	July 1–31		1	
Brazil:				
Porto Alegre	June 1–7		1	
Chile:				
Antofagasta				June 16, 1924: Two cases in Lazaretto.
Concepcion	May 20–26		3	
Do	July 8–21		3	
Iquique	June 22–28		1	
Talcahuano	May 25–31	2		
Do	June 29–July 26	16	4	
Valparaiso	May 25–June 21		11	
Do	June 29–July 19		5	
China:				
Antung	June 2–16	6		
Chungking	May 11–June 14			Present.
Chosen:				
Chemulpo	May 1–June 30	10		
Seoul	do	43	5	
Egypt:				
Alexandria	June 25–July 22	3		
Cairo	Feb. 19–May 20	38	9	
Port Said	July 24–29	2		
Esthonia				Apr. 1–May 31, 1924: Cases, 32.
Germany:				
Coblenz	July 13–19	2		
Great Britain:				
Ireland—				
Dublin	June 8–14	1		
Do	July 13–19	1		
Lismore	July 19	1		
Longford	do	1		
Greece:				
Saloniki	Apr. 20–May 4	6		
Iraq:				
Bagdad	Apr. 27–May 10	2		
Latvia				Apr. 1–May 31, 1924: Cases, 82.
Mexico:				
Durango	July 1–31		2	
Guadalajara	May 1–June 30	2	2	
Mexico City	May 4–June 28	59		Including municipalities in Federal district.
Do	June 29–Aug. 2	40		Do.
Torreon	July 1–31		2	
Palestine:				
Jaffa	June 17–23	1		
Do	July 8	1		
Jerusalem	July 1–28	2		
Kantara	July 15–21	1		
Poland				Mar. 30–June 7, 1924: Cases, 2,616; deaths, 252.
Portugal:				
Oporto	June 15–21		1	
Russia				Jan. 1–31, 1924: 14,275 cases.
Spain:				
Barcelona	July 10–16		1	
Syria:				
Aleppo	June 8–14	1		
Tunis:				
Tunis	May 27–June 9	4		
Turkey:				
Constantinople	May 18–June 21	7	2	
Do	July 6–19	1	1	
Union of South Africa				Mar. 1–May 31, 1924: Cases, 344; deaths, 35 (white, cases, 20; deaths, 1; native, cases, 324; deaths, 34).
Cape Province				Mar. 1–May 31, 1924: Cases, 203; deaths, 17.
Do				June 1–7: Outbreaks.
Natal				Mar. 1–May 31, 1924: Cases, 18; deaths, 3.
Do				June 1–7: Outbreaks.
Durban	Apr. 20–26	1		

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

Reports Received from June 28 to September 5, 1924—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Orange Free State				Mar. 1–May 31, 1924: Cases, 64; deaths, 9.
Do				June 1–July 5: Outbreaks.
Transvaal				Mar. 1–May 31, 1924: Cases, 39 deaths, 5.
Johannesburg	May 11–24	2		
Do	June 29–July 5	1		

YELLOW FEVER.

Brazil:				
Pernambuco	May 11–17	2	1	
Salvador:				
San Salvador	June 10–Aug. 25			Present in San Salvador and vicinity.