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CURRENT PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES ¹

February 24–March 23, 1935

The prevalence of certain important communicable diseases, as indicated by weekly telegraphic reports from State health departments to the United States Public Health Service, is summarized in this report. The underlying statistical data are published weekly in the Public Health Reports, under the section entitled "Prevalence of Disease."

Meningococcus meningitis.—During the past 20 years there have been two periods of high incidence of meningococcus meningitis in the United States, with maxima in 1918 and 1929. These peak years do not stand out as distinct epidemic periods, but are preceded by several years of gradually increasing rates and followed by other years of gradually declining rates. The cases for the whole reporting area declined from a maximum of 9,854 for the year 1929 to a minimum of 2,303 for the year 1934, each year having fewer cases than the preceding one. During the first 12 weeks of 1935, a total of 1,478 cases was reported, as compared with 762 in 1934, 1,062 in 1933, 937 in 1932, 1,865 in 1931, 3,154 in 1930, and 3,023 in 1929. For this 12-week period the 1935 cases totaled more than twice those of 1934 and amounted to nearly half the number of the high 1929 and 1930 records for the same weeks.

Considering all States, the weekly reports for the present winter have rather consistently exceeded those for the corresponding weeks of the preceding year since early in December. For the 4 weeks ended March 23, the number of cases reported this year (646) amounted to nearly three times the number for last year (225) and was higher than in the corresponding period for any year since 1931 (682).

Each geographic area reported appreciable increases for the present 4-week period. In the South Atlantic region the current incidence

¹ From the Office of Statistical Investigations, U. S. Public Health Service. The numbers of States included for the various diseases are as follows: Typhoid fever, 48; poliomyelitis, 48; meningococcus meningitis, 48; smallpox, 48; measles, 47; diphtheria, 48; scarlet fever, 48; influenza, 44 States and New York City. The District of Columbia is counted as a State in these reports. These summaries include only the 8 important communicable diseases for which the Public Health Service receives regular weekly reports from the State health officers.

(121 cases) was more than four times that for this period last year, while the Middle Atlantic, West North Central, and Mountain and Pacific regions each reported more than three times last year's figures. The New England, East North Central, and South Central areas reported smaller increases, the numbers of cases for those sections being only about twice those reported last year. States in the various areas reporting a large number of cases in comparison with preceding years were Illinois, 77; New York, 61; Ohio and Missouri, 48 each; District of Columbia, 38; Tennessee, 28; Texas, South Carolina, and California, 23 each.

Meningococcus meningitis cases reported in each geographic area during recent weeks of 1934-35, with comparative data for corresponding weeks of the 3 preceding years

Year	Week ended—																
	1934				1935												
	Dec. 8	Dec. 15	Dec. 22	Dec. 29	Jan. 5	Jan. 12	Jan. 19	Jan. 26	Feb. 2	Feb. 9	Feb. 16	Feb. 23	Mar. 2	Mar. 9	Mar. 16	Mar. 23	Mar. 30
Total: ¹	50	43	47	62	67	70	74	96	127	104	134	160	154	174	159	159	173
1934-35	50	43	47	62	67	70	74	96	127	104	134	160	154	174	159	159	173
1933-34	62	43	36	31	42	65	54	49	56	48	57	66	47	49	49	80	64
1932-33	45	57	62	77	98	87	101	76	85	83	75	64	110	95	96	92	89
1931-32	82	69	50	79	82	72	74	86	83	69	81	94	78	77	76	65	112
N. E. and M. Atl.:	14	11	12	7	12	5	15	10	15	12	10	15	28	27	24	32	32
1934-35	14	11	12	7	12	5	15	10	15	12	10	15	28	27	24	32	32
1933-34	16	8	9	5	7	13	12	6	11	9	11	9	5	14	8	15	8
1932-33	14	6	13	10	14	14	23	7	19	14	17	8	24	18	9	12	15
1931-32	27	21	11	12	24	22	22	23	23	16	17	27	20	16	21	13	33
E. N. C.:	8	3	12	21	20	18	19	22	25	24	34	37	45	32	44	28	49
1934-35	8	3	12	21	20	18	19	22	25	24	34	37	45	32	44	28	49
1933-34	15	12	7	11	10	22	11	17	14	15	12	17	17	9	10	22	27
1932-33	14	19	19	29	36	24	25	30	21	25	20	20	29	30	36	42	32
1931-32	18	18	17	32	30	21	24	30	25	21	17	26	19	27	22	28	41
W. N. C.:	6	5	7	9	6	8	3	16	23	8	27	23	22	18	26	22	23
1934-35	6	5	7	9	6	8	3	16	23	8	27	23	22	18	26	22	23
1933-34	6	6	4	3	5	4	4	3	3	4	11	13	5	4	3	14	12
1932-33	2	10	8	10	15	16	15	7	15	8	7	9	20	12	23	8	10
1931-32	3	9	7	6	12	3	1	7	10	4	18	7	4	9	6	8	10
S. Atl.:	5	13	1	6	10	15	15	14	23	23	15	32	23	39	32	27	30
1934-35	5	13	1	6	10	15	15	14	23	23	15	32	23	39	32	27	30
1933-34	10	8	7	8	6	4	9	6	10	4	3	7	4	5	10	10	8
1932-33	3	8	5	10	10	10	10	11	9	18	8	8	9	6	7	4	8
1931-32	8	7	4	5	7	7	10	8	5	7	11	6	12	10	5	7	10
E. & W. S. C.:	12	5	9	9	10	19	14	24	28	22	34	40	25	42	19	28	28
1934-35	12	5	9	9	10	19	14	24	28	22	34	40	25	42	19	28	28
1933-34	8	3	6	2	10	15	11	12	9	9	15	14	9	13	15	14	4
1932-33	6	8	11	9	14	18	23	13	16	11	15	14	14	16	15	15	14
1931-32	13	7	7	14	4	9	11	9	11	11	13	18	7	5	16	2	9
M. & Pac.: ¹	5	6	6	10	9	5	8	10	13	15	14	13	11	16	12	22	12
1934-35	5	6	6	10	9	5	8	10	13	15	14	13	11	16	12	22	12
1933-34	7	6	3	3	4	7	7	5	9	7	5	6	7	4	3	5	8
1932-33	6	6	6	9	9	5	5	8	5	7	8	5	14	13	6	11	10
1931-32	13	7	4	10	5	10	6	9	9	10	6	10	16	10	6	7	9

¹ Exclusive of Nevada.

The table shows by geographic regions the number of cases reported for recent weeks in comparison with the experience of the 3 preceding years. A study of the data shows that since early in February the weekly incidence in every geographic area has not only been higher than that of last year but has been the highest in the 4 years included in the table.

Scarlet fever.—The number of cases of scarlet fever reported for the 4 weeks ended March 23 was 31,833—approximately 7,000 above the incidence for this period in each of the 6 preceding years. The current high incidence, however, did not prevail over the entire reporting area but was confined to certain sections and in some instances only to certain States within the area. The disease has been unusually prevalent in each of the East North Central States, except Indiana; and in the West North Central group, Minnesota, Nebraska, and North Dakota reported large numbers of cases. Each State in the South Atlantic group, except South Carolina, reported an excess over last year; but Maryland, with 405 cases, the District of Columbia, with 364 cases, and West Virginia, with 502 cases, raised the incidence in that area about 50 percent above that of last year. In the Mountain region Colorado reported 1,262 cases, as compared with 142 for the same period last year and 143 in 1933, and Utah reported 429 as against 26 and 53 for the years 1934 and 1933, respectively. Other States in the areas mentioned, as well as those in other areas, reported about the normal seasonal incidence.

Poliomyelitis.—For the country as a whole the number of cases (93) of poliomyelitis was considerably above the average for the season.

The increase was mostly due to the incidence in California, where the disease has continued relatively high since the outbreak there almost a year ago. There were 38 cases reported in California for the current period, which was more than twice last year's figure for the same period and six times the number in 1933. In other regions the current incidence was about on a level with that of last year.

Measles.—The number of cases of measles rose from 91,667 for the 4 weeks ended February 23 to 132,261 for the current 4-week period. The number was slightly above the level for the corresponding period last year when the incidence exceeded that of 1926, a year when measles was unusually prevalent. Each geographic area reported appreciable increases over the preceding period. In relation to the preceding year the incidence in the New England and Middle Atlantic regions was 1.3 times that for the corresponding period last year; in each of the North Central areas it was more than twice last year's figure; in the South Atlantic and South Central sections it was only about 30 percent of that for last year; and the Mountain and Pacific sections reported about a 10-percent decline. In each region, however, the current incidence was the highest in recent years, excluding 1934.

Influenza.—Influenza continued to decline during the 4 weeks ended March 23, but the number of cases (19,456) was still about 75 percent in excess of that for the corresponding period in 1934 and 1933. For this period in 1932 and 1931 the cases totaled 36,361 and 25,635, respectively. Each geographic area reported a higher inci-

dence than at this time last year, and the disease is still quite prevalent in the South Central and Western regions; but the epidemio-like wave that has been in evidence for several weeks had passed its peak in all regions, and the incidence is declining rapidly.

Smallpox.—The number of cases of smallpox dropped from 883 for the preceding 4-week period to 695 for the 4 weeks ended March 23. The figure was slightly above that for the corresponding period last year. The increase, however, has not been general, but has been mostly confined to certain States; Nebraska and Kansas in the West North Central section, Wyoming in the Mountain region, and Washington in the Pacific area, have reported cases considerably above the seasonal expectancy for several weeks. For this period in 1933 and 1932 the cases totaled 810 and 1,414, respectively.

Typhoid fever.—The incidence of typhoid fever was the lowest for this period in recent years—383 cases, as compared with 508, 545, and 693, for the corresponding period in the years 1934, 1933, and 1932, respectively. Decreases from last year's figures in the various geographic areas ranged from 10 percent in the Mountain and Pacific sections to 35 percent in the South Atlantic region. The West North Central States reported about the same incidence as last year.

Diphtheria.—For the country as a whole, the incidence of diphtheria was the lowest for this period in the 7 years for which data are available. The number of cases was 2,533, as compared with approximately 2,800 for the corresponding period in 1934 and 1933 and about 4,000 in each of the 2 preceding years. Ohio and Illinois seemed mostly responsible for a 50-percent increase over last year in the West North Central area, and slight increases in certain States in the Mountain and Pacific areas put the total for those regions slightly above that of last year. Other sections reported very significant decreases.

Mortality, all causes.—The average mortality rate from all causes in large cities for the 4 weeks ended March 23, as reported by the Bureau of the Census, was 12.7 per 1,000 inhabitants (annual basis). The rate was 12.8, 11.8, and 13.5 in 1934, 1933, and 1932, respectively.

AGE INCIDENCE OF ILLNESS AND DEATH CONSIDERED IN BROAD DISEASE GROUPS¹

Based on Records for 9,000 White Families in 18 States Visited Periodically
for 12 Months, 1928-31

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In recent years considerable thought has been given to the scrutinizing of two indexes of ill health, namely, the rate of mortality and the rate of sickness. One of the immediate results of the consideration of the significance of these orthodox tools of the epidemiologist was the observation, pointed out some years ago by Sydenstricker (6), that the pictures resulting from their simultaneous application to a given population were by no means identical. Another result was the recognition of the inadequacy of the rate of mortality as an index of ill health. This inadequacy has become widely known but has had no appreciable effect on current statistical practice for the obvious reason that sickness records of any useful magnitude have remained nonexistent.

The acquisition of new and more extensive data on sickness makes it possible to compare and contrast in greater detail than heretofore the pictures indicated by the two indexes. Reference is made, in particular, to the consideration of more or less specific causes of illness and death related to persons of specific ages. A previous report (1) presented the causes of illness at all ages; another (4) gave the extent of illness and mortality from all causes at specific ages, with a consideration of the diagnosis composition of the case and death loads at the various ages. The present paper continues by comparing the age curves of illness and mortality from 18 broad disease groups and includes an approximation of case fatalities at specific ages for

¹ From the Office of Statistical Investigations, U. S. Public Health Service.

This is the fifth of a series of papers on sickness and medical care in this group of families (1, 2, 3, 4). The survey of these families was organized and conducted by the committee on the costs of medical care; the tabulation was done under a cooperative arrangement between the committee and the Public Health Service. Committee publications based on the results deal primarily with costs and Public Health Service publications primarily with the incidence of illness and the extent and kind of medical care, without regard to cost. As costs are meaningless without some knowledge of the extent and nature of the service received, there is inevitably some overlapping. The committee staff, particularly Dr. I. S. Falk and Miss Margaret Klem, cooperated in the tabulation of the data.

Special thanks are due to Dr. Mary Gover, who assisted in the analysis; to Miss Lily Vanzee, who was in immediate charge of tabulating the data; to Drs. Amanda L. Stoughton and R. R. Jones, for advice and assistance in classifying the causes of sickness and death; and to other members of the statistical staff of the Public Health Service for advice and assistance in the preparation of the study.

each group; succeeding reports will consider in a similar way causes of illness and death that are more specific.

SOURCE OF THE DATA

Illness.—The data included in the present paper are the results of periodic canvasses of 8,758 white families living in 130 localities in 18 States and including 39,185 individuals. Each family was visited at intervals of 2 to 4 months for a period long enough to obtain a sickness record for 1 year. On the first call a record was made of the number of members of the household, together with data about sex, age, marital status, and communicable-disease history of each person. On succeeding visits the canvasser recorded all illness that had occurred since the preceding call, with such pertinent facts about each case as the date of onset, the duration of disability and of confinement to bed, the nature of such medical service as was obtained, and the termination of the case. Thus there are available certain facts about the observed population and the illnesses suffered in the course of 12 months.²

Mortality.—The surveyed population of nearly 40,000 persons is sufficient in number to give a fair degree of reliability to the sickness rates, but the number of deaths in a group of this size is so small that they afford little indication of the expected mortality from different causes at specific ages. These nearly 9,000 families were living in rural, urban, and metropolitan areas of 18 States; in many other respects they were found to be similar to the general white population of the United States (1). In the comparison of illness and death, mortality data from the registration States were used because of insufficient numbers of deaths within the surveyed group. That this substitution is justifiable is indicated in a preceding paper (4), where a comparison was made of the death rates in the two groups. The illness data, as previously stated, apply to a 12-month period for each household, but the total time of observation extended over about 3 years, the record for the first family beginning in February 1928 and for the last one ending in June 1931. Most of the observations, however, were made in 1929 and 1930. For this reason mortality data for the registration States for the years 1929 and 1930 are used.

DEFINITION OF AN ILLNESS AND THE CLASSIFICATION OF ITS CAUSES

Illness as here used refers to both injury and disease. What was actually included as cases, however, was necessarily influenced not only by the informant's (usually the housewife's) conception of illness but also by her memory. With visits as infrequent as 2 to 4 months, it is inevitable that many of the nondisabling illnesses would be ter-

² For more details on the method of collecting the data and the characteristics and geographic distribution of the surveyed population, see the first report in the series (1).

minated and forgotten before the next visit of the enumerator. However, if the record includes most of the real illnesses and excludes only the minor disorders, it may be as useful as a more complete one.

Illnesses that originated prior to the study and caused sickness during the year are included with those having their onset within the period of observation; 93 percent had their onset within and 7 percent prior to the year. The inclusion of these illnesses of prior onset is necessary to give proper representation to chronic ailments. A large proportion of the cases of such diseases as tuberculosis, cancer, diabetes, and cardiorenal affections originated prior to the study. A preceding paper shows for each diagnosis the number of cases with prior onset (1).

Considering an illness in the sense of a continuous period of sickness, one finds only 4.3 percent designated as due to more than one cause. In general the more important or more serious cause was used as primary, except where a disease like pneumonia is commonly recognized as following measles or influenza; in such cases the antecedent condition was taken as primary.³ In the present series of papers, illness rates for all causes and for the broad disease groups are always based on sole or primary causes only, so that a continuous period of sickness is never counted as two illnesses. Later papers will consider the incidence of specific diseases such as tonsillitis, whooping cough, and cancer, and in these studies all cases with the given diagnosis will be counted, whether it was the sole, primary, or contributory cause of the illness. Whenever case rates are related to or compared with death rates, only the sole or primary causes can be used, because contributory causes are not available in the mortality data for the registration States.

The broad disease groups used in this paper are based on the International List of the Causes of Death. Although not identical with Pearl's (5) organological classification, most of the disease classes approximate slightly more detailed organ-system groups than those used by him. The following 13 of the 18 classes used are based obviously on anatomical location or the nature of the tissues affected: Respiratory, digestive, teeth and gums, nervous, eyes, ears, circulatory, skin, bones and organs of locomotion, kidney and bladder, male genital, female genital, and puerperal. The other five classes used are based on etiology or are miscellaneous: Communicable, other general, accidents, malformations and early infancy, and ill-defined diseases.

The comparison of sickness and death rates and their age curves for such broad diagnosis classes, and particularly the computation of estimated case fatalities at different ages, may seem inadvisable

³ Further details on the method of classifying the causes of illness are included in the first report in the series (1).

because of the diverse character of diseases included in a group. For example, respiratory illnesses are predominantly the common cold, whereas respiratory deaths are largely pneumonia and tuberculosis, which enter into the total of respiratory cases in relatively small numbers. Similarly, cancer and diabetes are important in deaths from the affections designated as general diseases, but among the illnesses allocated to this rubric, rheumatism occurs much more frequently than either cancer or diabetes. On the other hand, the very breadth of the diagnosis classes insures similar classification of cases and deaths. Later papers will consider case and death rates and estimated case

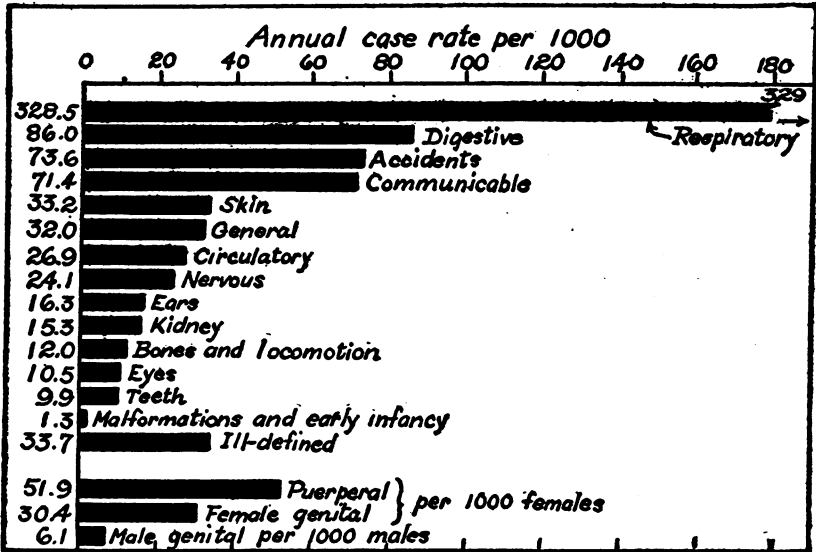


FIGURE 1.—Incidence of illness from broad disease groups among canvassed white families in 18 States during 12 consecutive months, 1928-31. (Rates adjusted to the age distribution of white persons in the registration States.)

fatalities for some of the specific diseases, such as pneumonia and appendicitis, that are important as causes of both illness and death.

ILLNESS, DEATH, AND CASE-FATALITY RATES AT ALL AGES ⁴

A previous paper (4) emphasized the difference between the relative importance of the various disease groups as causes of illness and as causes of death. There is a vast difference also in the actual frequency of occurrence of the different broad causes of illness.

⁴ Sickness rates shown in this paper have been adjusted to the age distribution of the white population in the registration States, so that they may be compared with mortality rates in those States. A rate so adjusted represents the rate that would obtain if the age-specific rates in the surveyed families had prevailed in a population with the age distribution of that in the registration States. This age distribution to which the rates were adjusted is shown in a preceding paper (4). The death rates in the registration States are based on the age distribution to which the case rates are adjusted, so the crude and adjusted death rates are the same.

Figure 1 shows graphically the illness rate per 1,000 persons in the surveyed population for each of the 18 disease groups. Respiratory diseases, including everything from the common cold to pneumonia and respiratory tuberculosis, are the outstanding causes of illness, constituting 40 percent of all the cases and occurring nearly four times as often as the digestive diseases, which is the next group in the order of frequency. If consideration is limited to the cases that caused loss of time from school, work, or other activities for one or more days, the respiratory diseases are also outstanding as causes of illness, occurring more than four times as frequently as communi-

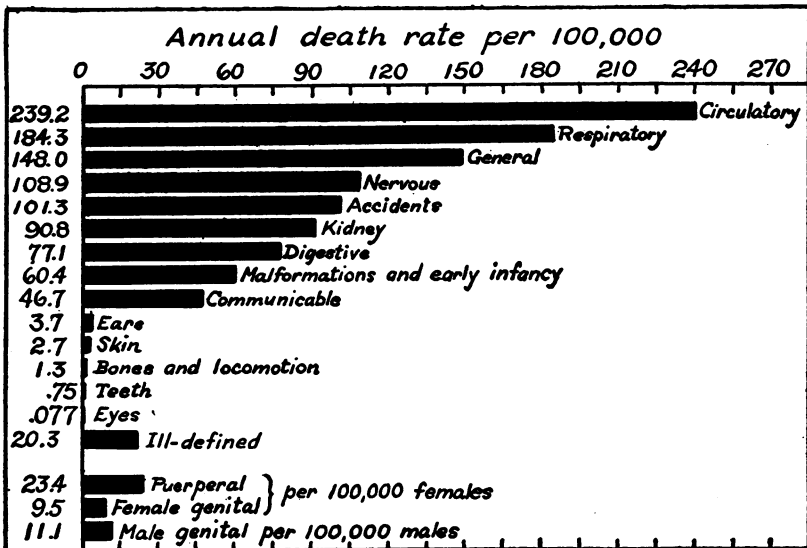


FIGURE 2.—Mortality from broad disease groups among white persons in the registration States, 1929-30.

cable diseases, the second most frequent cause of disabling illness. Accidents are also frequent causes of illness, and among females the puerperal conditions and diseases of the female genital organs are important.

Figure 2 shows for the registration States the annual death rates per 100,000 for the same 18 broad disease groups, the diagnoses being arrayed according to the magnitude of the death rates. Unlike the illness picture in figure 1, there is no one organ system that overshadows all others, the circulatory being first, with respiratory as a fairly close second. General diseases (including cancer and diabetes), nervous ailments (including cerebral hemorrhage), and accidents all stand fairly high as causes of death.

The case fatality of the different disease groups may be roughly approximated by computing the ratio of the mortality rate in the registration States to the corresponding sickness rate in the surveyed

population. Figure 3 shows the estimated case fatalities computed in this way. At the top with the highest fatality stands congenital malformations and other diseases of early infancy. The recorded sickness rate for these maladies would include only such malformations and diseases as caused actual illness, and it is possible that even these were not completely recorded. It is reasonable, however, that affections of this kind should show a high fatality, since they involve children in the early months of life, when resistance is low. Next in order come the circulatory diseases, which are highly concentrated in the older ages where resistance is also at a minimum, and there is no specific remedy for degenerative maladies. The fatality is

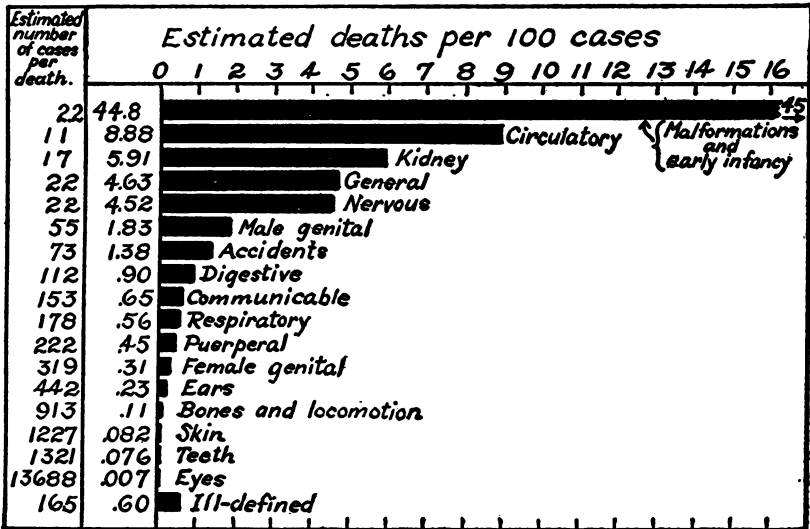


FIGURE 3.—Estimated case fatality of broad disease groups—ratio of the death rate in the registration States to the illness rate in canvassed families.

approximately the same for the next three disease groups, kidney and bladder ailments, general diseases (including cancer and diabetes), and nervous affections (including cerebral hemorrhage); the degenerative diseases of old age are an important element in all three of these groups.

The fatality in the other groups drops to a figure of less than 2 percent, the majority being well under 1 percent. At the bottom stands diseases of the skin, of the teeth, and of the eyes, where the ratio of deaths to cases is very small. The estimated fatality for all illness is 1.35 percent, or about 74 cases of illness for each death.

On the left side of the chart are figures on the reciprocal relation in the form of estimated cases of illness per death.

ILLNESS, DEATH, AND CASE-FATALITY RATES AT SPECIFIC AGES

Table 1 and figures 4, 5, 6, 7 show for each of the 18 broad disease groups the age incidence of all cases of illness, of fatal cases (deaths in the registration States), and the estimated case fatality, or ratio of the death rate to the case rate in corresponding age groups. Because of the great variation in the size of the rates for the several causes, as indicated by figures 1, 2, and 3, it is impracticable to plot the different diseases on the same scale. Each diagnosis has its own rate scale, but it is so made that an interval on it that corresponds to 20 years on the horizontal age scale is equal to the adjusted rate for all ages. Thus the curves for the disease groups are like curves plotted on a relative basis, that is, like curves of the ratio of the rate in each age to the rate for all ages. In this way the relative variability with age is comparable from one disease group to another and in addition the relative variability with age in the case rates, the death rates, and the case fatality rates are also roughly comparable. Curves for incidence, mortality, and case fatality for a given disease group are in adjacent sections of the same graph.

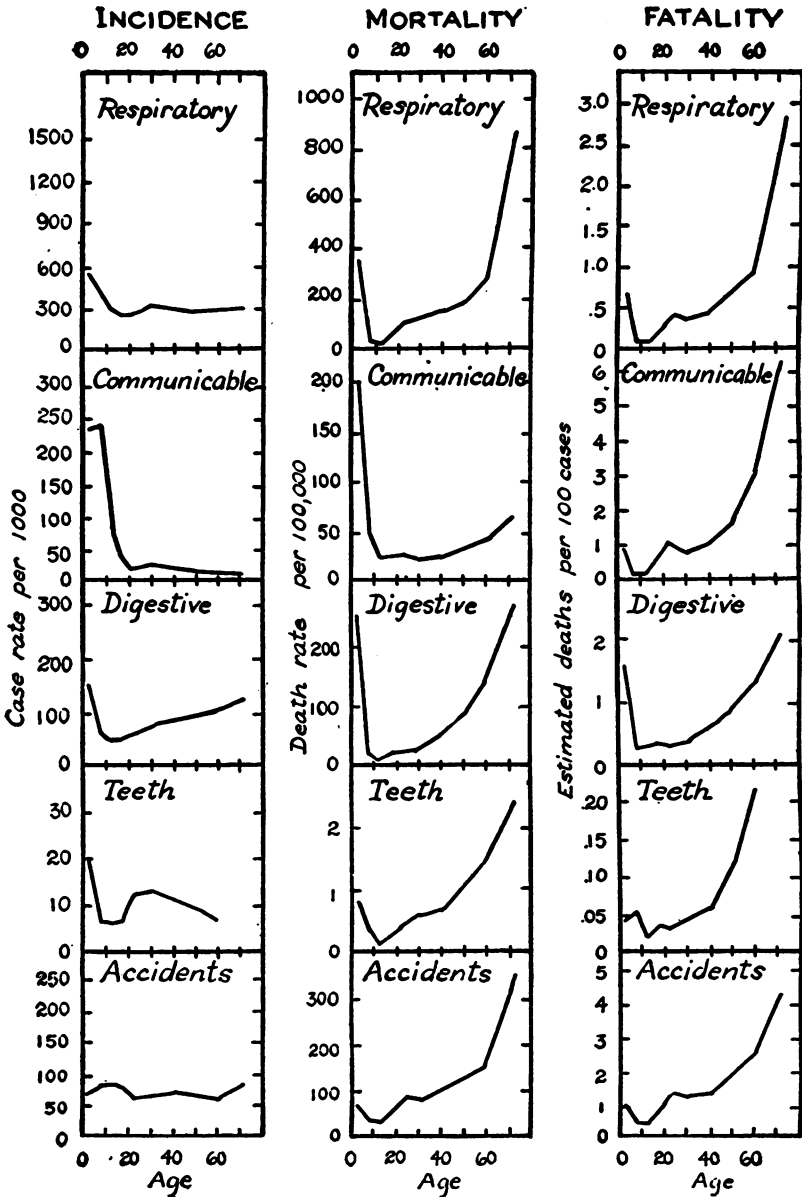


FIGURE 4.—Incidence, mortality, and estimated case fatality at specific ages for broad disease groups—illness in canvassed white families in 18 States during 12 consecutive months, 1928-31, and mortality among white persons in the registration States, 1929-30. (Scales are so made that the adjusted rate for all ages represents an interval on the vertical rate scale that corresponds to 20 years on the horizontal age scale.)

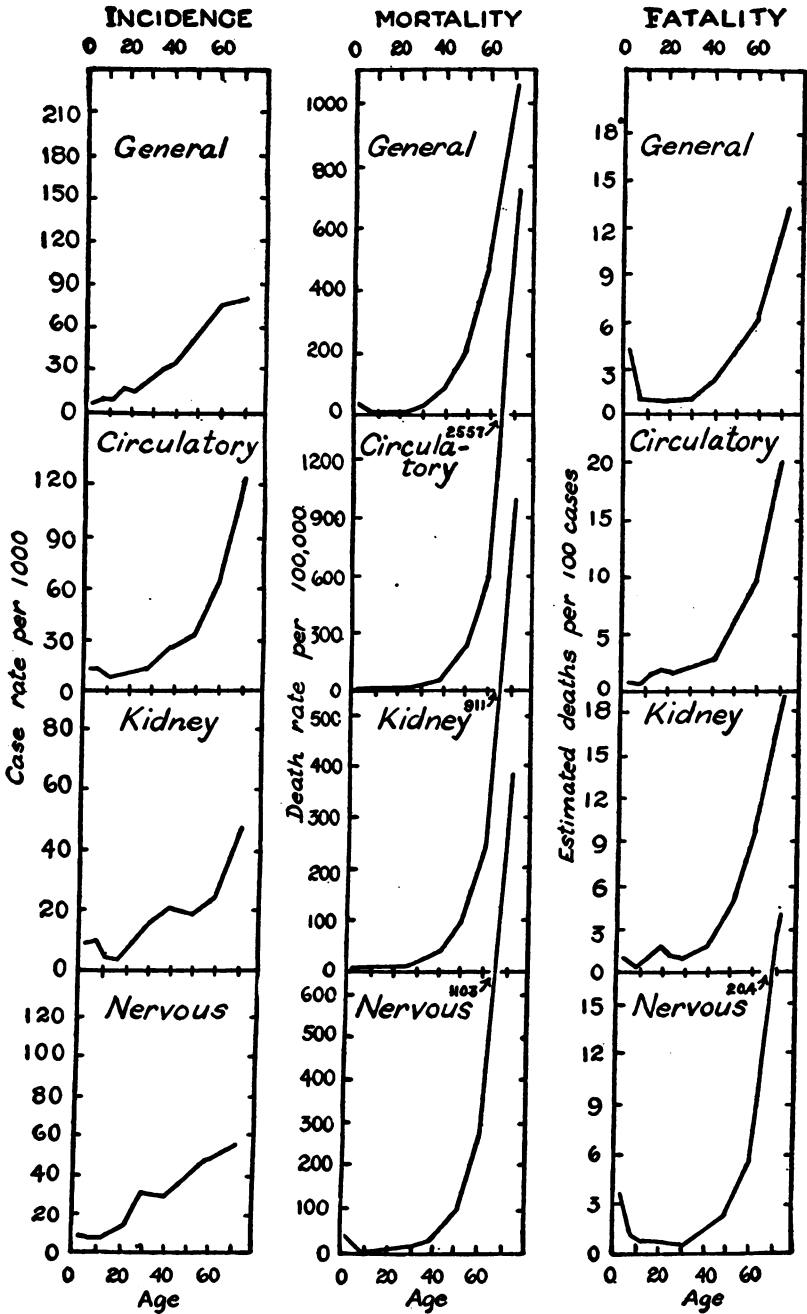


FIGURE 5.—Incidence, mortality, and estimated case fatality at specific ages for broad disease groups. (See fig. 4 for source of data and details about scales.)

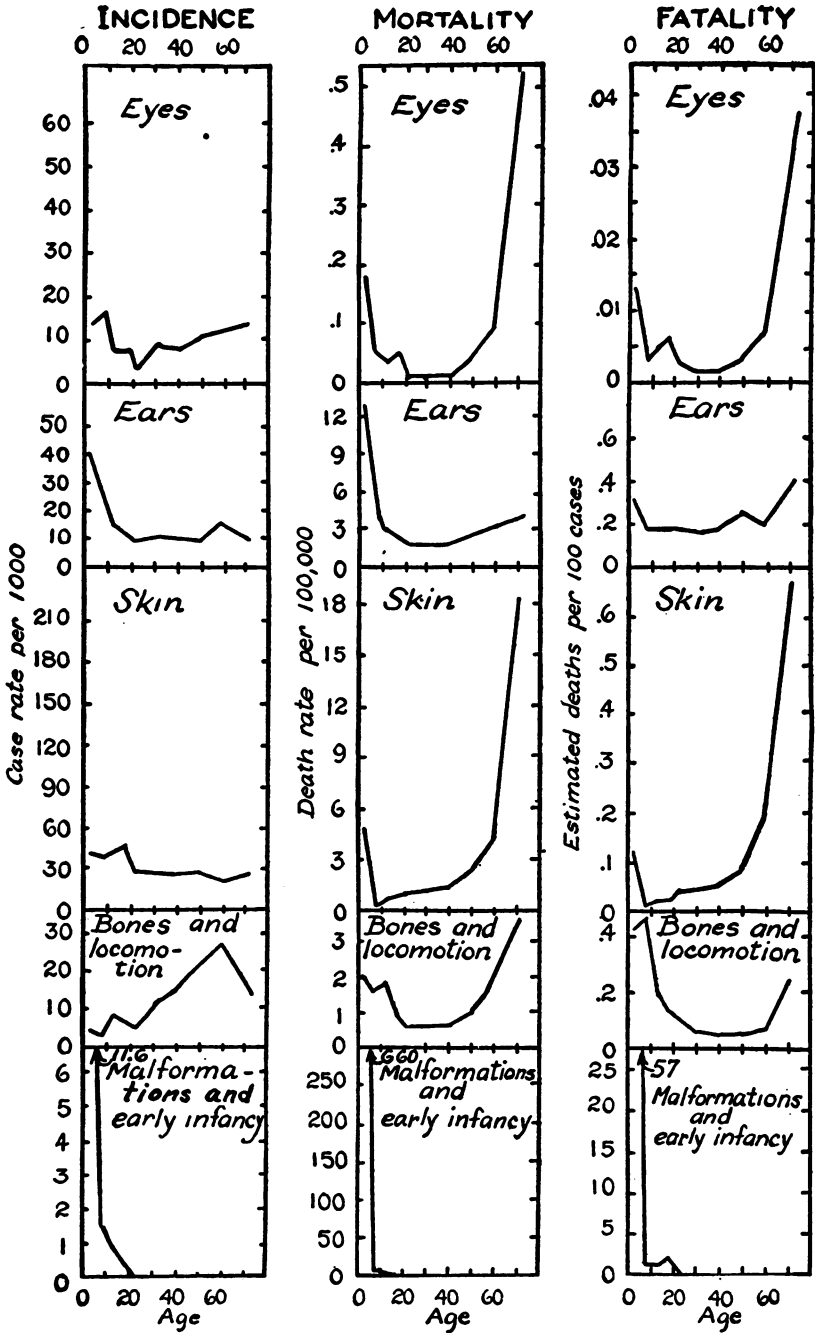


FIGURE 6.—Incidence, mortality, and estimated case fatality at specific ages for broad disease groups. (See fig. 4 for source of data and details about scales.)

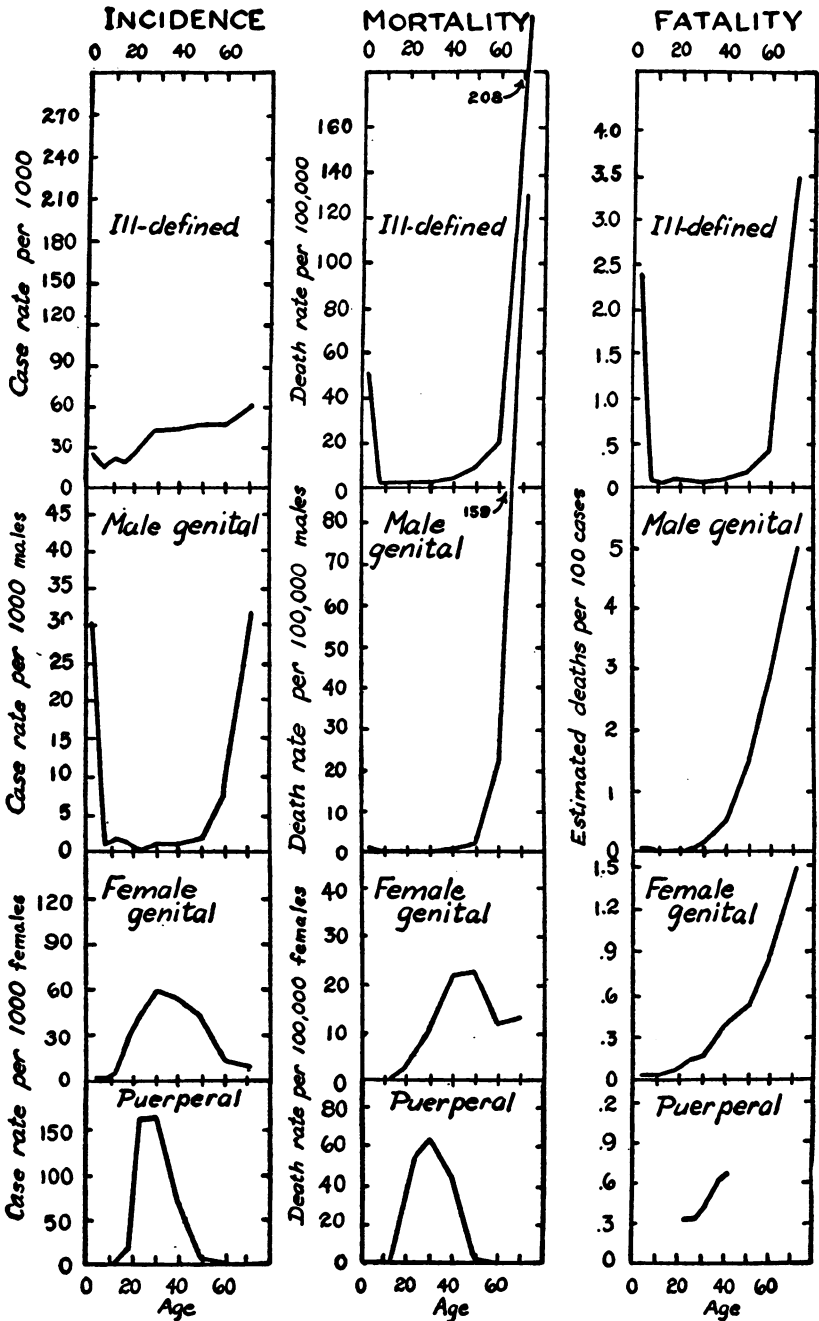


FIGURE 7.—Incidence, mortality, and estimated case fatality at specific ages for broad disease groups. (Fatality of puerperal cases is shown in 5-year age groups from 20 to 44 only; case incidence and mortality are in the usual 5- and 10-year groups shown in table 1. See fig. 4 for source of data and details about scales.)

Circulatory system (87-90)	239.21	14.18	10.68	15.71	19.53	21.98	32.82	78.17	221.67	612.33	2,568.89
Teeth and gums (part of 108)	76	.81	.40	.15	.26	.43	.61	.69	1.11	1.48	2.42
Digestive system (part of 108, 110-127)	97.07	248.37	21.27	17.54	20.67	23.06	30.55	51.43	85.79	141.05	266.02
Kidneys and urinary system (128-134)	90.77	9.47	3.90	4.71	6.71	9.60	16.33	36.38	92.63	237.22	911.44
Male genital (nonvenereal) per 100,000 males (135-136)	11.10	.67	.03		.02	.09	.17	.50	2.36	21.86	196.47
Female genital (nonvenereal) per 100,000 females (137-142) *	9.64	.10	.05	.28	2.22	5.62	11.04	21.89	22.64	11.85	13.50
Puerperal state per 100,000 females (143-150) †	23.37	5.04	.35	.35	24.20	53.98	63.37	44.04	2.23	4.19	18.28
Skin and cellular tissue (151-154)	2.71	2.02	1.65	1.89	.97	.62	1.16	1.37	2.35	1.83	3.64
Bones and organs of locomotion (155-158)	1.31							.64	1.03		
Congenital malformations and early infancy (159-163)	60.42	659.97	1.80	1.04	.65	.57	.29	.19	.11	.03	.02
Accidents and other external (165-203)	101.29	71.32	42.26	34.43	63.82	86.59	84.88	100.55	128.58	164.86	357.49
Other and ill defined (164, 204, 205)	20.34	51.42	1.34	.90	1.34	1.95	2.13	3.92	8.12	18.49	207.74

Estimated case fatality (deaths per 100 illnesses) †

All causes	1.35	1.41	0.20	0.21	0.40	0.50	0.49	0.79	1.45	2.73	7.67
Respiratory (11, 31, 97-107, 109)	.56	.67	.083	.081	.25	.41	.39	.49	.67	.93	2.84
Epidemic, endemic and infectious (1-42, 43, 44, 51, 53)	.65	.85	.20	.24	.63	1.13	.83	1.10	1.69	3.14	6.30
Other general (43-60)	4.63	4.28	.99	.96	.80	.90	1.17	2.38	4.08	6.52	13.17
Nervous system (70-84)	4.52	3.64	1.15	.84	.77	.73	.51	1.31	2.62	5.93	20.38
Eyes and ears (85)	.0073	.013	.0032	.0049	.0059	.0029	.0016	.0017	.0038	.0072	.037
Ears and mastoid process (86)	.23	.32	.18	.18	.19	.18	.18	.18	.25	.21	.41
Circulatory system (87-96)	8.88	1.01	.80	1.71	1.99	1.86	2.18	2.92	6.52	9.61	20.25
Teeth and gums (part of 108)	.076	.043	.057	.023	.038	.035	.046	.062	.12	.20	2.09
Digestive system (part of 108, 110-127)	.90	1.59	.31	.34	.38	.35	.39	.60	.92	1.20	1.90
Kidneys and urinary system (128-134)	5.01	.99	.30	.98	1.88	1.20	1.07	1.85	4.70	9.71	18.95
Male genital (nonvenereal) (135, 136)	1.85	.022	.026	.08	.016	.14	.14	.40	1.16	2.63	4.68
Female genital (nonvenereal) (137-142) *	.31	.043	.036	.049	.077	.13	.18	.40	1.53	.88	1.82
Puerperal state (143-150) †	.48		.086	.016	.010	.088	.041	.63	(*)	.082	.68
Skin and cellular tissue (151-154)	.11	.45	.082	.21	.14	.10	.056	.041	.047	.10	.24
Bones and organs of locomotion (155-158)	44.76	58.85	1.03	1.18	1.97	1.35	1.30	1.36	1.94	2.50	4.25
Congenital malformations and early infancy (159-163)	1.38	1.01	.49	.40	.79	.071	.082	.092	.18	.41	3.45
Accidents and other external (165-203)	.60	2.38	.062	.043	.072						
Other and ill defined (164, 204, 205)											

† Registration States included all States except Texas and South Dakota in 1929 and all except Texas in 1930.

* "All ages" includes a few of unknown age.

† Illness rates for all ages are adjusted to the age distribution of the white population of the registration States, i. e., the population on which the death rates are based, so no adjustment for age is necessary in the latter rates. The population of the registration States (years of life, 1929-30) is given for specific ages in table 1 of the preceding paper (4).

‡ Chronic results of preceding childbirths, such as laceration of the cervix and displacement of the uterus are included with diseases of the female genital organs, in conformity with the usual method of classifying deaths.

§ Percentage that death rate in registration States is of case rate in surveyed population; for all ages the adjusted case rate is used in making the computation.

¶ Puerperal cases for women under 20 and over 45 years of age are too few to give reliable rates. The estimated case fatalities plotted in figure 7 are computed in 5-year age groups from 20 to 45 years only.

The age curves of case incidence are rarely like those of mortality. The case incidence of respiratory affections (fig. 4), of accidents (fig. 4), and of skin disorders (fig. 6) varies relatively little with age, with practically no increase among older people. The death curves for all three of these diagnosis groups vary with age a great deal more than the case incidence, and all show definitely increasing rates in the older ages; respiratory and skin diseases also show high death rates under 5 years that have little or no counterpart in the incidence curves. Other diagnosis groups that show marked differences between the age curves of case incidence and mortality are diseases of the teeth and gums (fig. 4), of the eyes (fig. 6), of the bones and other organs of locomotion (fig. 6), and ill-defined diseases (fig. 7). In general, the case incidence of these affections varies relatively little with age and does not increase markedly in the older ages; the death rates for all of them increase sharply in the older ages, reflecting a relatively greater fatality at that period.

In the diseases of old age (fig. 5), such as the circulatory, the kidney and bladder, the general (including cancer and diabetes), and the nervous diseases (including cerebral hemorrhage), the age curves of cases and deaths are similar except for greater variability with age in the mortality rates. The more rapid rise with age in the death rates from these diseases again indicates an increased fatality in the older ages.

The age curves for cases and deaths are similar for digestive diseases (fig. 4) except for greater variability with age in the death rates; both rise as age increases after childhood and both show high rates under 5 years.

The illness and mortality curves for puerperal conditions and non-venereal diseases of the female genital organs (fig. 7) are similar except for relatively higher death rates from female diseases at the close of and immediately following the childbearing ages. Both cases and deaths from diseases of the female genital organs are largely confined to the childbearing ages.

The incidence curve for nonvenereal disorders of the male genital organs (fig. 7) is similar to the mortality curve except for a high case rate under 5 years which marks the time of circumcision. Both case and death rates are high in the older ages.

Malformations and diseases of early infancy (fig. 6) virtually disappear after 5 years as a cause of death (largely after 1 year), but a residue of chronic cases appears in the incidence curve up to 20 years of age.

Both case and death rates for the communicable diseases (fig. 4) are exceptionally high under 10 years of age. The curves differ, however, in that the case incidence for children under 5 is about the same as for those 5 to 9 years of age; but the death rate under 5 is more than

four times the rate at 5 to 9 years, again reflecting the lack of resistance in the very young. Even these communicable diseases with the incidence largely confined to children show some rise in the death rate as age increases above 40 years, whereas the case rate actually declines to the end of the life span.

Diseases of the ear and mastoid process show a similar picture; the case incidence is practically constant after 20 years of age, but the death rate rises after 40. Unlike the communicable diseases, however, the case incidence is considerably higher under 5 than at 5 to 9 years of age.

In considering the dissimilarity of the illness and mortality curves, it might be thought that the elimination of minor cases would reduce, somewhat at least, the differences noted. Age-specific rates for disabling sickness (causing loss of time from work, school, or other activities) are shown in table 2. The curves for disabling cases were plotted but are not shown in this report; they are very similar to those for all illness of corresponding diagnosis groups, although the disabling constitute only 60 percent of the total cases. The similarity of curves for disabling illnesses to the mortality curves is little greater than was true of curves for all illness. Since 84 percent of the disabling cases were in bed for one or more days, the curves for cases in bed would be about the same as those for all disabling cases.

TABLE 2.—Age incidence of disabling¹ illness from groups of diseases—convassed white families in 18 States during 12 consecutive months, 1928-31 (disabling illness—sole or primary causes only)

Disease group with the International List numbers, 1920 revision	All ages *		Age										55-64	65 and over	
	Number of cases	Crude	Ad-justed †	Under 5	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64			65 and over
All causes	19,887	516.0	491.56	663.9	724.8	480.5	372.1	429.9	488.7	427.2	393.3	426.3	540.1		
Respiratory (11, 31, 97-107, 109)	9,196	238.6	221.41	339.0	342.1	243.2	183.0	183.1	201.8	190.4	175.2	177.9	178.4		
Epidemic, endemic, and infectious (1-42, exc. 11, 31)	2,824	73.3	55.23	144.2	212.1	87.6	32.8	14.2	21.3	16.4	13.4	10.2	6.0		
Other general (48-69)	466	11.8	14.39	4.2	5.7	4.6	7.2	6.1	10.1	16.7	20.9	33.0	39.1		
Nervous system (70-84)	390	10.1	11.93	3.4	3.6	4.4	3.9	6.6	12.9	12.8	19.7	21.1	36.1		
Eyes and annexa (86)	157	4.1	3.55	3.5	3.6	6.0	3.6	1.4	3.0	3.7	3.6	1.7	2.0		
Ears and mastoid process (86)	366	9.5	7.58	20.9	21.2	9.2	8.2	4.3	3.6	1.7	2.4	1.4	2.0		
Circulatory system (87-96)	424	11.0	13.99	7.8	8.8	5.7	4.9	6.1	6.9	11.5	14.3	31.9	75.2		
Teeth and gums (part of 108)	107	2.8	2.53	5.4	2.3	2.4	2.3	2.8	3.4	2.2	2.4	2.7	1.4		
Digestive system (part of 108, 110-127)	1,853	61.5	60.99	78.9	60.9	41.6	40.3	43.4	46.6	44.5	48.1	58.4	78.2		
Kidneys and urinary system (128-134)	1,275	7.1	8.56	3.6	5.3	2.2	2.0	3.8	6.9	11.8	10.7	11.5	36.1		
Male genital (nonvenereal) per 1,000 males (135, 136)	80	4.2	3.87	20.3	.4	1.7	1.3	-----	.8	-----	1.1	8.7	20.6		
Female genital (nonvenereal) per 1,000 females (137-142)	289	14.7	16.00	1.1	-----	3.5	14.5	23.7	28.1	29.5	25.2	7.5	7.1		
Puerperal state per 1,000 females (143-150)	953	48.6	50.30	8.2	-----	13.1	19.7	193.4	161.5	67.8	4.0	-----	-----		
Skin and cellular tissue (151-154)	381	9.9	9.50	8.2	-----	15.1	16.4	7.1	8.3	6.6	7.2	6.1	9.0		
Bones and organs of locomotion (155-158)	172	4.5	5.00	1.8	-----	1.2	2.0	3.3	4.6	7.4	9.9	10.2	6.0		
Congenital malformations and early infancy (159-163)	47	1.2	.79	7.8	-----	.4	-----	-----	-----	-----	-----	-----	-----		
Accidents and other external (165-203)	1,356	36.0	36.89	17.2	-----	40.6	41.0	35.9	35.5	40.0	34.6	38.7	44.1		
Other and ill defined (164, 204, 205)	401	10.4	11.01	7.1	-----	6.8	5.9	6.6	14.5	13.2	13.7	12.2	20.0		
Population (years of life)		\$ 38,544	-----	5,513	5,715	4,568	3,050	2,119	5,640	5,930	3,351	1,473	998		

¹ Disabling illness refers to cases that caused loss of time from work, school, or other usual activities for 1 or more days during the study year; 84 percent of all disabling cases were in bed for 1 or more days during the year.

² "All ages" includes a few of unknown age.

³ Illness rates for all ages are adjusted to the age distribution of the white population of the registration States; this population (years of life, 1928-30) is given for specific ages in table 1 of the preceding paper (4).

⁴ Chronic results of preceding childbirths, such as laceration of the cervix and displacement of the uterus are included with diseases of the female genital organs, in conformity with the usual method of classifying deaths.

The third section in each of these charts shows for specific ages the ratio of deaths to cases in the form of an estimated case fatality or deaths per 100 cases. Like the other age curves, the vertical rate scales are made so that the relative curves are comparable from diagnosis to diagnosis, and from case fatality to mortality and to sickness.⁵

In general, the fatality curves resemble the mortality more closely than the incidence curves. In the majority of the disease groups they reach a minimum from 5 to 15 years with a continuous rise thereafter; diseases of the bones and organs of locomotion (fig. 6), however, have a higher fatality in the younger ages than in those above 65 years. Fatality is high under 5 years in most of the diagnoses; contrary to this general rule, however, the circulatory and kidney diseases (fig. 5), the disorders of the teeth and gums (fig. 4), the male genital and the female genital affections (fig. 7) do not show high fatality rates among young children.

The incidence and mortality for diseases of the female genital organs (fig. 7) both decline after the period of childbearing, but the fatality of the cases that do occur is higher in the older ages, exhibiting a continuously rising curve. The incidence and mortality curves for puerperal conditions (fig. 7) are plotted in the same 5- and 10-year age groups used for the other diseases. For computing fatality rates, however, both the sickness and death data have been classified in 5-year groups and fatalities computed from 20 to 44 years only; the numbers of cases before and after those ages are too few in the surveyed population to use as a basis for reliable rates.⁶ The fatality of puerperal conditions exhibits a continuously rising curve from 20 to 44 years, in agreement with the age curve of maternal mortality within these ages. Using births in the registration States as the basis for the computation, the fatality is also low at 15 to 19 years but is higher for the few births to mothers under 15 years of age.

With some exceptions the relative variability in the case-fatality curves is less than in the mortality but more than in the sickness curves. Thus in the degenerative diseases (fig. 5), like heart and cir-

⁵ On the fatality charts, an interval equal to 20 years on the horizontal age scale is equal to a weighted mean of the age-specific fatality rates, the weights being proportional to the white population for the respective age groups in the registration States. Such a weighted mean is comparable to the mortality mean for all ages and to the adjusted mean case rate for all ages; thus all three curves are on the same relative basis. This weighted mean fatality which was used for making the fatality rate scales is not the fatality for all ages that appears in table 1; the fatality included there is the ratio of the death rate at all ages to the adjusted case rate at all ages, a figure which indicates the estimated fatality of all cases of a given disease group regardless of the ages at which the cases occurred. No age adjustment seems proper in the case fatalities because the age of attack is a typical characteristic of many of the disease groups. However, the case rate and the death rate that enter into the computation of the estimated case fatality are as they occur in populations of the same age distribution, viz, that of the registration States to which the case rate is adjusted.

⁶ Puerperal cases as here used are composed of births, stillbirths, miscarriages, and abortions and also puerperal albuminuria and other disturbances of pregnancy without the loss of the fetus; chronic results of childbirth such as lacerations and displacements are not included as puerperal conditions but are classified as disorders of the female genital organs.

culatory affections, kidney ailments, nervous disorders (including cerebral hemorrhage), and the general diseases (including cancer and diabetes), the mortality curves rise more sharply in the older ages than the fatality curves.

The mortality rate for circulatory diseases varies from 11 per 100,000 at 5 to 9 years to 2,557 at 65 years and over, a maximum that is 232 times the minimum rate. The fatality curve of the same disease group varies from 0.8 percent at 5 to 9 years to 20.2 percent at 65 years and over, a maximum that is 25 times the minimum. In the case rates, the maximum for persons 65 years old and over is 14 times the minimum rate that occurs at 10 to 14 years of age.

Similarly in the general group (including cancer and diabetes), the maximum mortality rate of 1,069 at 65 years and over is nearly 100 times the minimum rate of 11 at 5 to 9 years, as compared with a ratio of maximum to minimum of 16 for case fatality rates and 8 for case incidence rates.

In the communicable diseases of childhood the death rate varies in the different ages from 22 to 200 per 100,000, a maximum under 5 years that is 9 times the minimum at 25 to 34 years. The case fatality varies from 0.2 percent at 5 to 9 years to 6.3 at 65 years and over, a maximum that is 31 times the minimum. Corresponding data for sickness show a rate of 10 for persons over 65 years and 241 per 1,000 at 5 to 9 years, a maximum that is 24 times the minimum.

SUMMARY

Records of illness were obtained on 8,758 white families in 130 localities in 18 States for a period of 12 consecutive months between February 1928 and June 1931. Each family was visited at intervals of 2 to 4 months to obtain the data.

The surveyed families include representation from nearly all geographic sections, from rural, urban, and metropolitan areas, from all income classes, and of both native- and foreign-born persons. The proportions of these various elements included are not identical with those in the population of the United States, but the variations are not generally large. In other respects also the surveyed group is not dissimilar to families in the general white population of the United States.

Mortality in the white population of the registration States for the years 1929-30 was used to supplement the sickness data. A comparison with the deaths in the canvassed families indicated that the use of the larger mortality experience was justifiable.

Diagnoses are considered in broad disease groups the majority of which represent organ systems. For all ages taken together, data are shown for case incidence, mortality, and an estimated case fatality for each of 18 disease groups (figs. 1, 2, and 3).

For the same 18 disease groups, age curves are shown for case incidence, mortality, and estimated case fatality. There is great variation from one diagnosis to another in the incidence curves, in the mortality curves, and in the fatality curves. There are also marked differences for a given disease group in the age curves of case incidence, mortality, and case fatality. Contrast rather than similarity is the rule as between the curves of case incidence and mortality. The fatality curve usually resembles the mortality more closely than the incidence curve (figs. 4, 5, 6, and 7).

REFERENCES

- (1) COLLINS, SELWYN D.: Causes of illness in 9,000 families, based on Nation-wide periodic canvasses, 1928-31. Pub. Health Rep., March 24, 1933 (Reprint 1563).
- (2) ——— Frequency of health examinations in 9,000 families, based on Nation-wide periodic canvasses, 1928-31. Pub. Health Rep., March 9, 1934 (Reprint 1618).
- (3) ——— Frequency of eye refractions in 9,000 families, based on Nation-wide periodic canvasses, 1928-1931. Pub. Health Rep., June 1, 1934 (Reprint 1627).
- (4) ——— A general view of the causes of illness and death at specific ages, based on records for 9,000 families in 18 States visited periodically for 12 months, 1928-1931. Pub. Health Rep., February 22, 1935 (Reprint 1673).
- (5) PEARL, RAYMOND: The biology of death. J. B. Lippincott Co., 1922.
- (6) SYDENSTRICKER, EDGAR: The prevalence of ill health. Bulletin of the New York Academy of Medicine, February 1928.

COURT DECISION ON PUBLIC HEALTH

City held liable for typhoid fever contracted from drinking water.— (Montana Supreme Court; *Safransky v. City of Helena*, 39 P.(2d) 644; decided Jan. 3, 1935.) An action was brought to recover damages from the city of Helena, the plaintiff alleging that he had contracted typhoid fever as a result of drinking contaminated water furnished by the city. A jury returned a verdict for the plaintiff and the judgment entered thereon was affirmed by the supreme court. The appellate court in its opinion reviewed the evidence in the case and stated that it "was ample to sustain a finding by the jury that defendant had failed to use reasonable care to see that the water which it supplied for human consumption was pure." "This", said the court, "was the duty enjoined upon the city when it undertook to furnish water to its inhabitants."

Farther along in the opinion the court spoke as follows:

It is true that in the operation and management of its sewerage system the city acts in a governmental capacity and is ordinarily not liable for errors of judgment. [Citations.] But it does not follow that it can furnish water to its inhabitants which it knew, or in the exercise of reasonable care should have

known, was polluted with sewage escaping from a defective sewer pipe, without assuming liability for damages occasioned thereby. The governmental function in caring for the sew[er]age system cannot be so completely divorced from the proprietary function of furnishing water to the people of the city as to render the city immune from liability.

The protection of the water from pollution and the correction of a condition brought about by the negligent care of a sewer main became a part of the corporate duty of the city in carrying out its proprietary function of furnishing wholesome water. [Citations.]

DEATHS DURING WEEK ENDED MARCH 23, 1935

[From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Mar. 23, 1935	Correspond- ing week, 1934
Data from 86 large cities of the United States:		
Total deaths.....	9,014	8,972
Deaths per 1,000 population, annual basis.....	12.6	12.5
Deaths under 1 year of age.....	624	620
Deaths under 1 year of age per 1,000 estimated live births.....	57	58
Deaths per 1,000 population, annual basis, first 12 weeks of year.....	12.8	12.7
Data from industrial insurance companies:		
Policies in force.....	67,600,038	67,654,813
Number of death claims.....	14,055	14,905
Death claims per 1,000 policies in force, annual rate.....	10.8	11.5
Death claims per 1,000 policies, first 12 weeks of year, annual rate.....	10.9	11.1

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 Weeks Ended Mar. 30, 1935, and Mar. 31, 1934

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Mar. 30, 1935, and Mar. 31, 1934

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934
New England States:								
Maine.....	2		27		132	13	0	0
New Hampshire.....						125	0	0
Vermont.....	1				1	72	0	0
Massachusetts.....	11	15			489	2,223	1	2
Rhode Island.....		3			123	2	1	0
Connecticut.....	7	6	28	1	1,448	34	0	0
Middle Atlantic States:								
New York.....	28	37	118	124	2,867	1,179	23	6
New Jersey.....	29	22	31	9	1,471	429	2	0
Pennsylvania.....	36	41			5,414	3,059	5	0
East North Central States:								
Ohio.....	84	52	119	137	2,627	1,294	14	6
Indiana.....	14	19	28	28	475	855	6	1
Illinois.....	67	22	40	26	3,132	1,869	23	15
Michigan.....	9	22	6	9	5,103	146	4	1
Wisconsin.....	6	1	59	48	1,794	1,813	2	4
West North Central States:								
Minnesota.....	10	5	1	3	1,341	232	1	1
Iowa.....	13	6	8	17	1,302	151	1	5
Missouri.....	39	45	118	63	653	699	12	4
North Dakota.....	3		18	2	19	85	0	0
South Dakota.....	2	3	5	6	67	498	0	1
Nebraska.....	3	3			1	580	221	0
Kansas.....	13	4	23	7	1,785	411	8	1
South Atlantic States:								
Delaware.....		2	3		14	131	0	0
Maryland.....	3	10	66	18	89	1,102	6	0
District of Columbia.....	14	9	4	1	52	596	13	1
Virginia.....	12	21			1,127	976	7	4
West Virginia.....	20	4	42	74	622	104	3	4
North Carolina.....	10	16	36	81	271	2,886	1	1
South Carolina.....	8	18	235	693	32	902	0	0
Georgia.....	4	14	124			1,444	0	0
Florida.....	4	6	14	6	57	476	0	0

Footnotes at end of table

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Mar. 30, 1935, and Mar. 31, 1934—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934
East South Central States:								
Kentucky.....	12	16	102	47	969	691	6	0
Tennessee.....	11	8	87	74	142	1,314	4	1
Alabama ¹	11	25	126	82	354	765	3	0
Mississippi ²	8	6					0	0
West South Central States:								
Arkansas.....	1	3	28	57	241	388	3	0
Louisiana.....	28	18	34	3	99	223	1	0
Oklahoma ⁴	5	13	96	66	128	680	8	1
Texas ⁵	68	91	345	389	165	1,372	3	2
Mountain States:								
Montana ⁴	2	2			457	24	0	0
Idaho ⁴		1	3		69	109	0	1
Wyoming.....					58	112	0	0
Colorado.....	9	9			676	367	0	0
New Mexico.....	4	11	10	11	17	201	1	0
Arizona.....	1		21	12	27	16	1	0
Utah ⁴				6	8	768	0	0
Pacific States:								
Washington.....	3	1	3	2	190	173	0	0
Oregon ¹		1	69	48	186	52	0	0
California.....	38	45	77	39	1,046	798	10	2
Total.....	653	656	2,064	2,090	37,919	32,082	173	64
First 13 weeks of year.....	9,445	11,154	91,311	35,199	316,204	308,237	1,652	718

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934
New England States:								
Maine.....	1	0	9	11	0	0	2	28
New Hampshire.....	0	1	12	18	0	0	0	0
Vermont.....	0	0	6	10	0	0	0	0
Massachusetts.....	1	1	272	266	0	0	1	0
Rhode Island.....	0	0	14	14	0	0	1	0
Connecticut.....	1	0	116	65	0	0	3	0
Middle Atlantic States:								
New York.....	0	0	1,309	862	0	0	7	10
New Jersey.....	2	0	221	185	0	0	4	0
Pennsylvania.....	2	0	689	622	0	0	3	4
East North Central States:								
Ohio.....	3	1	1,270	1,204	0	0	6	6
Indiana.....	1	0	161	274	1	3	3	1
Illinois.....	1	2	1,360	612	0	3	5	4
Michigan.....	1	0	448	805	0	0	1	3
Wisconsin.....	0	1	483	234	51	28	4	7
West North Central States:								
Minnesota.....	1	1	263	57	13	1	0	0
Iowa.....	0	0	94	62	6	6	4	1
Missouri.....	0	1	72	126	4	6	2	4
North Dakota.....	0	0	60	52	2	0	0	0
South Dakota.....	0	0	23	29	3	5	0	1
Nebraska.....	0	0	39	39	23	9	0	0
Kansas.....	0	0	73	58	0	1	0	0
South Atlantic States:								
Delaware.....	0	0	16	7	0	0	1	2
Maryland ¹	0	0	125	90	0	0	4	2
District of Columbia.....	0	0	118	16	0	0	0	0
Virginia.....	0	1	54	42	0	1	2	3
West Virginia.....	1	0	105	101	0	0	2	2
North Carolina ¹	0	1	31	22	0	0	3	4
South Carolina.....	0	0	5	5	0	3	0	4
Georgia ¹	0	0	11	19	4	1	6	6
Florida.....	0	0	2	2	0	0	2	3

Footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Mar. 30, 1935, and Mar. 31, 1934—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934	Week ended Mar. 30, 1935	Week ended Mar. 31, 1934
East South Central States:								
Kentucky.....	1	1	47	79	1	0	3	2
Tennessee.....	0	1	16	27	0	0	2	6
Alabama ¹	0	1	7	9	2	0	6	0
Mississippi ²	0	0	14	11	1	2	10	4
West South Central States:								
Arkansas.....	0	0	5	5	2	0	0	1
Louisiana.....	1	0	5	15	0	1	18	6
Oklahoma ³	0	0	23	26	0	2	9	4
Texas ⁴	2	1	63	117	13	27	6	17
Mountain States:								
Montana ⁵	0	0	9	4	0	0	1	0
Idaho ⁶	0	0	2	6	0	13	0	0
Wyoming.....	0	0	16	14	2	2	0	0
Colorado.....	0	0	260	23	7	13	0	0
New Mexico.....	0	1	17	31	5	4	3	1
Arizona.....	0	0	79	17	0	1	1	1
Utah ⁷	0	0	108	12	0	0	0	0
Pacific States:								
Washington.....	0	1	45	53	15	12	2	2
Oregon ⁸	0	0	38	22	0	16	0	1
California.....	7	3	280	159	4	1	4	8
Total.....	26	19	8,495	6,539	159	161	131	148
First 13 weeks of year.....	335	256	92,435	78,669	2,488	1,888	1,666	1,933

¹ New York City only.

² Week ended earlier than Saturday.

³ Typhus fever, week ended Mar. 30, 1935, 16 cases, as follows: North Carolina, 5; Georgia, 3; Alabama, 4; Texas, 4.

⁴ Exclusive of Oklahoma City and Tulsa.

⁵ Rocky Mountain spotted fever, week ended Mar. 30, 1935, 5 cases, as follows: Montana, 2; Idaho, 1; Oregon, 2.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Menin- gococ- cus menin- gitis	Diph- theria	Influ- enza	Malaria	Measles	Pel- lagra	Polio- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
<i>February 1935</i>										
Alabama.....	9	67	7,473	109	1,807	18	3	66	3	15
California.....	24	210	1,057	2	2,411	8	44	1,120	22	16
Florida.....	5	35	264	7	228	12	2	35	0	3
Kansas.....	17	50	152	-----	4,940	-----	1	425	26	3
New York.....	21	160	-----	5	6,636	-----	5	3,060	0	28
Puerto Rico.....	-----	62	82	1,367	74	-----	2	2	0	26
Virginia.....	22	72	6,166	3	3,785	8	8	231	1	82
Washington.....	7	13	246	-----	685	-----	2	226	118	9

February 1935		February 1935—Continued		February 1935—Continued	
Anthrax:	Cases	Granuloma, coccidioidal:	Cases	Tetanus, infantile	Cases
New York	2	California	9	Puerto Rico	2
Puerto Rico	1	Leprosy:		Trachoma:	
Botulism:		California	3	California	13
California	3	Mumps:		Puerto Rico	1
Washington	4	Alabama	270	Trichinosis:	
Chicken pox:		California	1,057	California	6
Alabama	350	Florida	115	New York	32
California	3,112	Kansas	640	Tularaemia:	
Florida	171	Puerto Rico	83	Alabama	1
Kansas	499	Virginia	234	New York	2
New York	3,096	Washington	348	Virginia	3
Puerto Rico	167	Ophthalmia neonatorum:		Typhus fever:	
Virginia	299	California	1	Alabama	2
Washington	481	New York	6	Florida	4
Dysentery:		Puerto Rico	8	New York	3
Alabama (amoebic)	2	Paratyphoid fever:		Undulant fever:	
California (amoebic)	24	California	3	Alabama	1
California (bacillary)	9	Florida	1	California	6
New York (amoebic)	4	New York	1	Florida	1
New York (bacillary)	20	Puerperal septicaemia:		Kansas	1
Puerto Rico	32	Puerto Rico	7	New York	20
Virginia (amoebic)	1	Rabies in animals:		Virginia	1
Washington (amoebic)	4	Alabama	95	Washington	7
Dysentery and diarrhea:		California	60	Vincent's infection:	
Virginia	36	Kansas	3	Kansas	2
Epidemic encephalitis:		Washington	6	New York ¹	76
California	1	Rabies in man:		Washington	1
Florida	1	Alabama	1	Whooping cough:	
New York	10	Scabies:		Alabama	155
Virginia	1	Kansas	2	California	436
Washington	1	Septic sore throat:		Florida	30
Filariasis:		California	10	Kansas	256
Puerto Rico	1	Kansas	5	New York	2,583
Food poisoning:		New York	48	Puerto Rico	264
California	16	Virginia	7	Virginia	516
German measles:		Tetanus:		Washington	115
Alabama	4	California	5		
California	615	Kansas	1		
Kansas	3,218	New York	3		
New York	5,449	Puerto Rico	13		
Washington	1,077				

¹ Exclusive of New York City.

WEEKLY REPORTS FROM CITIES

City reports for week ended Mar. 23, 1935

[This table summarizes the reports received regularly from a selected list of 121 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference]

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0	0	3	1	2	0	1	1	2	23	
New Hampshire:											
Concord	0	2	0	2	0	0	1	0	0	17	
Nashua	0	0	0	0	1	0	0	0	0		
Vermont:											
Barre	0	0	3	0	0	0	0	0	6	4	
Burlington	1	0	36	0	11	0	0	0	6	10	
Massachusetts:											
Boston	1	0	35	27	39	0	12	0	27	259	
Fall River	2	0	44	2	1	0	3	0	0	40	
Springfield	0	0	207	2	18	0	0	0	5	39	
Worcester	0	0	3	9	17	0	3	0	7	53	
Rhode Island:											
Pawtucket	0	0	0	0	3	0	0	0	0	21	
Providence	0	0	62	11	5	0	2	0	9	69	
Connecticut:											
Bridgeport	0	1	0	6	3	11	0	2	0	38	
Hartford	0	0	93	6	13	0	1	0	2	64	
New Haven	0	1	0	357	6	0	0	0	0	49	
New York:											
Buffalo	2	0	181	21	71	0	10	0	20	143	
New York	33	17	8,145	184	703	0	83	2	275	1,659	
Rochester	0	0	267	10	21	0	0	0	17	86	
Syracuse	0	0	283	8	15	0	0	0	19	57	

City reports for week ended Mar. 23, 1935—Continued

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
New Jersey:											
Camden	6	2	1	0	4	15	0	0	1	3	26
Newark	0	2	0	321	11	15	0	4	0	113	95
Trenton	1	1	0	28	2	12	0	1	0	1	35
Pennsylvania:											
Philadelphia	6	8	4	17	59	110	0	29	2	105	525
Pittsburgh	7	8	6	769	38	36	0	4	0	21	173
Reading	0	0	0	17	3	12	0	1	0	4	27
Scranton	0			240		3	0		0	2	
Ohio:											
Cincinnati	5		3	4	14	16	0	4	0	1	146
Cleveland	10	46	2	371	21	53	0	12	0	44	209
Columbus	6	3	3	149	8	46	0	3	4	4	99
Toledo	1	6	5	66	5	17	0	3	0	10	84
Indiana:											
Fort Wayne	2		0	25	1	8	0	0	0	0	23
Indianapolis	4		0	99	14	23	0	2	0	11	
South Bend	0		0	4	3	3	0	0	0	0	26
Terre Haute	0	1	1	0	0	2	0	0	0	0	29
Illinois:											
Chicago	23	7	3	1,538	56	670	0	32	0	104	697
Springfield											
Michigan:											
Detroit	6	6	4	1,777	40	214	0	22	0	86	304
Flint	1		0	475	2	6	0	0	0	2	22
Grand Rapids	0		0	176	2	12	0	1	0	11	46
Wisconsin:											
Kenosha	0		2	238	1	18	0	1	0	9	12
Madison	0		0	11	1	6	0	0	0	3	9
Milwaukee	0	1	1	426	6	152	0	4	0	59	118
Racine	0	1	0	45	1	18	1	0	0	13	15
Superior	0		0	167	0	1	0	0	0	0	4
Minnesota:											
Duluth	0		0	400	2	4	0	0	0	0	24
Minneapolis	0		3	990	3	93	0	2	1	35	105
St. Paul	0		0	10	12	50	0	1	0	12	70
Iowa:											
Davenport	1					4	0		0	0	
Des Moines	0			444		2	0		0	0	29
Sioux City	0			6		0	0		1	2	
Waterloo	3			4		11	0		0	1	
Missouri:											
Kansas City	2		0	119	8	15	0	2	0	3	115
St. Joseph	0		0	6	1	1	0	1	0	2	18
St. Louis	13		1	15	11	22	0	8	0	7	190
North Dakota:											
Fargo	0		0		1	17	0	1	0	0	19
Grand Forks	0			0		0	0		0	0	
South Dakota:											
Aberdeen	0			19		1	0		0	0	
Nebraska:											
Omaha	1		1	50	10	9	0	4	0	2	67
Kansas:											
Topeka											
Wichita	0	2	1	716	2	2	0	1	0	1	24
Delaware:											
Wilmington	0		0	6	6	9	0	0	0	0	35
Maryland:											
Baltimore	2	6	6	20	35	54	0	9	2	27	233
Cumberland	0	1	0	9	2	1	0	1	0	1	14
Frederick	0		0	0	0	0	0	0	0	0	5
District of Columbia:											
Washington	19	4	1	77	20	144	0	10	0	5	166
Virginia:											
Lynchburg	1		0	80	0	2	0	0	1	9	6
Norfolk	0	3	0	118	14	4	0	3	0	29	57
Richmond	1		1	137	10	2	0	4	0	0	64
Roanoke	4		0	28	0	1	0	0	0	2	9
West Virginia:											
Charleston											
Huntington	2			10		2	0		0	0	
Wheeling	0		0	116	0	12	0	3	0	8	19
North Carolina:											
Raleigh	0		0	8	0	0	0	0	0	4	6
Wilmington	0		0	0	2	1	0	2	0	8	10
Winston-Salem	1	1	0	2	2	2	0	1	0	22	10

City reports for week ended Mar. 23, 1935—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
South Carolina:											
Charleston.....	0	12	0	1	5	0	0	1	0	1	21
Columbia.....											
Greenville.....	0		0	1	12	0	0	2	0	0	33
Georgia:											
Atlanta.....	5	18	4	0	8	5	0	3	11	0	90
Brunswick.....	0	1	1	0	1	0	0	0	0	0	2
Savannah.....	0	11	0	0	1	0	0	0	0	2	28
Florida:											
Miami.....	1	1	0	1	1	0	0	2	0	1	37
Tampa.....	2	2	2	16	1	0	0	1	0	0	32
Kentucky:											
Ashland.....	0	3		1		2	0		0	0	
Lexington.....	0		0	25	2	1	0	2	0	1	17
Louisville.....	2	6	0	263	9	15	0	1	0	8	94
Tennessee:											
Memphis.....	1		5	1	20	4	0	11	0	6	108
Nashville.....	0		0	7	7	1	0	3	1	0	46
Alabama:											
Birmingham.....	0	9	6	29	10	3	0	8	0	2	85
Mobile.....	1		0	1	2	1	0	1	0	0	24
Montgomery.....	1	1		24		2			0	0	
Arkansas:											
Fort Smith.....	1			5		0	0		0	0	
Little Rock.....	0		0	53	0	2	0	0	0	5	
Louisiana:											
New Orleans.....	21	2	2	76	10	11	0	12	1	1	165
Shreveport.....	1		0	5	8	0	0	2	0	0	41
Oklahoma:											
Oklahoma City.....	2	17	0	3	11	3	0	2	0	0	57
Tulsa.....	0			22		3	0		0	1	
Texas:											
Dallas.....	5	3	3		11	6	0	1	0	7	57
Fort Worth.....	1		0	1	15	4	0	5	0	0	40
Galveston.....	0		0	1	5	0	0	0	0	0	19
Houston.....	17		2	2	12	4	0	8	1	0	73
San Antonio.....	0		0	1	9	0	0	6	1	0	67
Montana:											
Billings.....	2		0	4	0	3	0	0	0	0	8
Great Falls.....	0		0		4	0	0	0	0	5	11
Helena.....	0		0	38	0	1	0	0	0	1	1
Missoula.....	0		0	30	4	1	0	0	0	0	8
Idaho:											
Boise.....	0		0	0	1	0	0	0	0	0	8
Colorado:											
Denver.....	4	49	0	196	10	210	0	3	1	70	82
Pueblo.....	0		0	157	1	8	0	0	0	5	5
New Mexico:											
Albuquerque.....	0		0	0	3	0	0	3	0	18	23
Utah:											
Salt Lake City.....	0		2	11	6	125	0	0	0	67	43
Nevada:											
Reno.....	0		0	1	1	3	0	0	0	0	9
Washington:											
Seattle.....	0		2	39	6	12	2	6	0	3	90
Spokane.....	0	2	2	164	2	2	0	1	0	0	32
Tacoma.....	0		0	3	2	3	5	0	0	0	32
Oregon:											
Portland.....	0		2	114	5	10	0	4	0	0	95
Salem.....	0			1		0	0		0	0	
California:											
Los Angeles.....	21	46	3	34	16	62	2	22	1	11	336
Sacramento.....	0		0	35	2	8	0	2	1	0	28
San Francisco.....	1	4	2	25	11	20	0	9	0	18	166

City reports for week ended Mar. 23, 1935—Continued

State and city	Meningococcus meningitis		Polio- mye- litis cases	State and city	Meningococcus meningitis		Polio- mye- litis cases
	Cases	Deaths			Cases	Deaths	
Massachusetts:				Maryland:			
Worcester.....	1	0	0	Baltimore.....	3	1	0
Rhode Island:				Cumberland.....	0	1	0
Providence.....	4	3	0	District of Columbia:			
New York:				Washington.....	12	1	0
New York.....	13	9	0	West Virginia:			
New Jersey:				Wheeling.....	2	1	0
Trenton.....	0	0	1	Georgia:			
Pennsylvania:				Atlanta.....	1	0	0
Philadelphia.....	3	2	0	Kentucky:			
Pittsburgh.....	1	1	0	Louisville.....	1	3	0
Ohio:				Tennessee:			
Cincinnati.....	3	4	0	Memphis.....	2	2	0
Toledo.....	0	1	0	Nashville.....	0	1	0
Indiana:				Alabama:			
Terre Haute.....	1	0	0	Birmingham.....	1	1	0
Illinois:				Louisiana:			
Chicago.....	10	8	0	New Orleans.....	0	0	1
Michigan:				Oklahoma:			
Detroit.....	4	1	1	Oklahoma City.....	6	0	0
Wisconsin:				New Mexico:			
Milwaukee.....	3	3	0	Albuquerque.....	0	1	0
Missouri:				Oregon:			
Kansas City.....	3	1	0	Portland.....	3	4	0
St. Joseph.....	2	1	0	California:			
St. Louis.....	3	3	0	Los Angeles.....	0	0	3
Nebraska:				San Francisco.....	0	0	1
Omaha.....	3	3	0				

Epidemic encephalitis.—Cases: Philadelphia, 1; Pittsburgh, 1; Cleveland, 2; Huntington, W. Va., 1; Louisville, 15.

Pellagra.—Cases: Baltimore, 1; Atlanta, 1; Savannah, 3; Miami, 1; Tampa, 1; New Orleans, 1; Los Angeles, 2.

Rabies in man: Chicago, 1 death.

Typhus fever.—Cases: New York, 1; Tampa, 1. Deaths: Tampa, 1.

FOREIGN AND INSULAR

CUBA

Provinces—Notifiable diseases—4 weeks ended March 9, 1935.—During the 4 weeks ended March 9, 1935, cases of certain notifiable diseases were reported in the Provinces of Cuba, as follows:

Disease	Pinar del Río	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer.....	1			4		1	6
Chicken pox.....			3			7	10
Diphtheria.....		1	1	1	1	3	7
Hookworm disease.....				3			3
Leprosy.....				1			1
Malaria.....	208	20	371	962	146	1,946	3,663
Measles.....		9	1	23	1	1	35
Poliomyelitis.....			1				1
Tuberculosis.....	4	21	26	46	16	10	123
Typhoid fever.....		5	6	24	10	26	71

CZECHOSLOVAKIA

Communicable diseases—January 1935.—During the month of January 1935 certain communicable diseases were reported in Czechoslovakia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	4		Paratyphoid fever.....	4	1
Cerebrospinal meningitis.....	9	4	Poliomyelitis.....	5	1
Chicken pox.....	277		Puerperal fever.....	41	13
Diphtheria.....	4,218	275	Scarlet fever.....	2,409	33
Dysentery.....	6		Trachoma.....	98	
Influenza.....	433	8	Typhoid fever.....	453	42
Lethargic encephalitis.....	2		Typhus fever.....	15	
Malaria.....	3				

DENMARK

Communicable diseases—October–December 1934.—During the months of October, November, and December 1934 cases of certain communicable diseases were reported in Denmark as follows:

Disease	October	November	December	Disease	October	November	December
Cerebrospinal meningitis.....	7	7	4	Paratyphoid fever.....	12	4	5
Chicken pox.....	9	23	37	Poliomyelitis.....	1,207	362	122
Diphtheria and croup.....	266	323	377	Puerperal fever.....	21	19	17
Epidemic encephalitis.....	7	6	1	Scabies.....	824	954	816
Erysipelas.....	361	325	290	Scarlet fever.....	809	989	592
German measles.....	3	4	3	Syphilis.....	84	82	71
Gonorrhoea.....	978	820	671	Tetanus neonatorum.....	4	1	5
Influenza.....	5,295	4,650	4,338	Tetanus, traumatic.....	2		3
Malaria.....	5	15	7	Typhoid fever.....	19	4	6
Measles.....	501	1,255	4,373	Undulant fever (Bact. abort. Bang).....	42	54	29
Mumps.....	278	316	336	Whooping cough.....	1,734	1,794	1,735
Paratyphoid fever.....	90	25	15				

ITALY

Communicable diseases—4 weeks ended September 16, 1934.—During the 4 weeks ended September 16, 1934, certain communicable diseases were reported in Italy, as follows:

Disease	Au. 20-26		Aug. 27-Sept. 2		Sept. 3-9		Sept. 10-16	
	Cases	Com-munes affected	Cases	Com-munes affected	Cases	Com-munes affected	Cases	Com-munes affected
Anthrax.....	38	31	53	43	33	27	33	26
Cerebrospinal meningitis.....	4	4	13	12	6	6	5	5
Chicken pox.....	60	35	65	46	55	32	33	25
Diphtheria and croup.....	363	203	413	229	405	247	421	216
Dysentery.....	45	20	75	22	40	19	31	19
Lethargic encephalitis.....	1	1	1	1	3	3	1	1
Measles.....	482	191	499	189	479	182	396	146
Poliomylitis.....	17	15	23	20	18	16	21	16
Scarlet fever.....	239	109	270	137	262	124	274	121
Typhoid fever.....	1,253	611	1,265	593	1,073	523	1,093	533

PUERTO RICO

Notifiable diseases—4 weeks ended March 23, 1935.—During the 4 weeks ended March 23, 1935, cases of certain notifiable diseases were reported in Puerto Rico, as follows:

Disease	Cases	Disease	Cases
Anthrax.....	1	Mumps.....	83
Chicken pox.....	108	Ophthalmia neonatorum.....	10
Diphtheria.....	48	Pellagra.....	5
Dysentery.....	12	Puerperal fever.....	1
Erysipelas.....	1	Syphilis.....	12
Filariasis.....	1	Tetanus.....	9
Influenza.....	46	Tuberculosis.....	814
Malaria.....	1,324	Typhoid fever.....	29
Measles.....	85	Whooping cough.....	253

YUGOSLAVIA

Communicable diseases—February 1935.—During the month of February 1935 certain communicable diseases were reported in Yugoslavia, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	31	5	Paratyphoid fever.....	6	1
Cerebrospinal meningitis.....	10	5	Scarlet fever.....	206	3
Diphtheria and croup.....	559	73	Sepsis.....	9	8
Dysentery.....	19	2	Tetanus.....	14	40
Erysipelas.....	142	2	Typhoid fever.....	261	7
Influenza.....	4,625	5	Typhus fever.....	83	
Measles.....	2,748	185			

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

(NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for Mar. 29, 1935, pp. 454-467. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued Apr. 26, 1935, and thereafter, at least for the time being, in the issue published on the last Friday of each month.)

Plague

Bolivia—Tomina Province—Chuquisaca Department.—During the months of January and February 1935, eight cases of plague were reported in Chuquisaca Department, Tomina Province, Bolivia.

Typhus Fever

On vessel—S. S. "Nosa Prince."—On March 24, 1935, one case of typhus fever was reported on the vessel S. S. *Nosa Prince* at San Francisco from Central America and Mexican ports via San Pedro, Calif.

Yellow Fever

Colombia—Intendencia of Meta—Restrepo.—During the week ended March 2, 1935, two cases of yellow fever were reported at Restrepo, Intendencia of Meta, Colombia.

Ivory Coast—Bassam (near).—During the period March 10-20, 1935, 1 case of yellow fever with 1 death was reported near Bassam, Ivory Coast.