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INAUGURATION OF COOPERATIVE HEALTH WORK IN CUBA

Passed Assistant Surg. M. A. Roe, of the United States Public Health Service, has been named traveling representative of the Pan American Sanitary Bureau, and has entered into active cooperation with the National Department of Health of Cuba and the Rockefeller Foundation in making sanitary surveys and in carrying out certain related activities. In connection with this work, Dr. Roe has submitted the following report:

"During the past 5 years, the Republic of Cuba has been emerging from the world-wide depression; more recently, as well, from the effects of the political events of 1933. In the Department of Public Health, officials are attempting not only to repair the immediate damage that has been done during this period of stress, but also to build for the future—to furnish the people of Cuba with the standard of public health administration to which they are entitled. Cooperation from the Pan American Sanitary Bureau and from the Rockefeller Foundation has been requested, thus making available from these organizations such specialized assistance as may be required. With a traveling representative from the Pan American Sanitary Bureau on duty in Cuba, the Bureau is in a position to cooperate not only with the Secretary of Public Health of Cuba, but also with the Rockefeller Foundation. The latter organization is now participating in the activities of the Malaria Commission of Cuba in conjunction with the Finley Institute of Habana. This recent advance of interest taken in public health activities has developed under the sympathetic administration of Dr. Aurelio Ituarte, Secretary of Public Health. Direct liaison between the cooperative agencies has been effected through Dr. Domingo F. Ramos, Director of Public Health of Cuba, who has played an important role in helping to inaugurate the program.

"A general survey of the public health needs of Cuba has been planned. Insofar as possible, this survey will include representative localities in all the provinces. Trips have already been made by interested officials to Pinar del Rio and Santa Clara Provinces. The work done has consisted in making personal contacts with the local health officers, evaluating data having to do with organization and equipment of the local departments, with general sanitary problems,

public health laboratories, sanitation of water supplies, sewage-disposal systems, sanitary nuisances, vital statistics, infectious-disease control, clinics, and similar activities. As many personal inspections as can be made are performed at watersheds, water works, sewer plants, clinics, and other places of sanitary importance. A trained sanitary inspector from the Malaria Commission searches the immediate vicinity for the purpose of discovering the distribution and incidence of mosquito breeding, giving special attention to the occurrence of anopheline larvae. As many public schools as practicable, both urban and rural, are visited. Examinations are made of selected groups of pupils for spleen enlargement, as an indication of malarial infection; blood films are also taken when indicated. Tin boxes are left for the collection of fecal specimens in cases in which hookworm disease is evident. The boxes are picked up on the return trip or are mailed to the laboratory at Habana.

"It has been found that practical suggestions can often be applied for correcting sanitary defects as they are encountered in the field. For example, remedial measures can, in some instances, be taken for correcting overlooked contamination of water supplies. It is believed that it will be relatively easy to institute many such procedures for generally improving sanitation of water supplies, methods of excrement disposal, and measures for rodent and mosquito control. In this connection it is hoped that a certain amount of special instruction may be provided local health officers and sanitary inspectors, who, in some instances, owing to unsettled economic conditions, have not had an opportunity to acquire the desired type of training.

"The future holds unlimited promise and opportunity for the practice of public health sanitation and preventive medicine on a high plane of endeavor in Cuba. The problems that now confront health officials, if of a difficult nature, should lend themselves readily to solution with a continuation of the constructive policy of cooperation already adopted. The people of Cuba should be congratulated on the progressive stand that her health officials are taking, with the end in view of satisfying the sanitary needs of the Republic."

INFLUENZA AND PNEUMONIA MORTALITY IN A GROUP OF ABOUT 95 CITIES IN THE UNITED STATES DURING FOUR MINOR EPIDEMICS, 1930-35, WITH A SUMMARY FOR 1920-35¹

By SELWYN D. COLLINS, *Principal Statistician*, and MARY GOVER, *Associate Statistician, United States Public Health Service*

The influenza epidemic of 1918-19 is generally associated with the extraordinarily high mortality that prevailed during its course. The number of lives lost in the United States alone reached the staggering

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

Some of the data in this paper were published in an article on the epidemic of the winter of 1932-33 (2).

figure of a half-million in excess of the normal expectancy. While these facts are more or less known, the history of respiratory epidemics since the great pandemic is to many either vague or completely unknown. A study of the mortality records since 1918 reveals 10 epidemics of a more or less Nation-wide scope. These 10 outbreaks are estimated to have caused an aggregate mortality from influenza and pneumonia in the United States of about 300,000 in excess of the normal expectancy. The four minor epidemics since 1930 that form the subject of this paper account for about 50,000 of these excess deaths. If all deaths in excess of the normal were counted, the above figures would be considerably increased, because during influenza epidemics exceptionally high rates are recorded for such maladies as heart and kidney ailments, apparently because individuals with chronic diseases become easy victims of influenza (2).

CHARACTER OF DATA AND METHODS OF ANALYSIS

The present paper is based on a record of weekly deaths from influenza and pneumonia from 1930 to August 1935 in groups² of cities in nine geographic sections of the United States; the 15½-year period, January 1, 1920, to August 1, 1935, is summarized for the whole group of 95 cities which represent an aggregate population of approximately 30,000,000. This report supplements an earlier one on influenza and pneumonia mortality in the same group of cities for the period 1920-29 (1).

Figure 1 shows weekly death rates from influenza and pneumonia in the whole group of cities from 1920 to 1935. For epidemiological purposes, the study of a record such as that shown by the continuous line in the upper half of this figure requires the determination of some measure of the normal or expected mortality as a base line from which the excess may be computed. In the period covered by the earlier study, 1920-29, no orderly change was apparent in the level of the rates from year to year, but there was an occasional year with exceptionally low mortality. However, the difference was not great enough to make it impracticable to use the same seasonal norm for each of these years. Since 1930 the death rates from nearly all causes, including influenza and pneumonia, have been appreciably lower than in immediately preceding years, so that in deriving a normal or expected rate it becomes necessary to take account of change in level from year to year as well as seasonal variation.

² The publication for current weeks, of death rates from influenza and pneumonia in a group of cities and in subgroups in each geographic area was begun in the Public Health Reports for February 8, 1924 (data from Jan. 1) and was continued to August 1932, when a reduction in appropriations for printing made it necessary to discontinue the printing of these data. Subsequently the rates were carried back to Jan. 1, 1920, for as many of the cities as had available records, and published in a single article covering the decade 1920-29 (1). The present paper brings this record down to August 1935.

The cities include some rather small places; they were selected by Jason Waterman, statistician for the Division of Sanitary Reports and Statistics of the U. S. Public Health Service, to give representation to each geographic section of the United States insofar as it was possible to find cities that reported regularly to the Public Health Service. An earlier report (1) lists the cities.

The methods of deriving the norms both before and after 1930 are summarized in the Appendix (p. 1681) for those who are interested in the details of the process. It may be seen in figure 1 that the norm represents reasonably well the usual seasonal variation and the change from year to year, inasmuch as the actual rates in interepidemic periods fluctuate within relatively narrow limits above and below the curve of expected rates.

INFLUENZA AND PNEUMONIA MORTALITY IN THE WHOLE GROUP OF CITIES, 1920-35

In the 15½ years from 1920 to 1935 (fig. 1) there were 10 brief periods in which the mortality from influenza and pneumonia was sufficiently above the seasonal expectancy to consider the prevalence of these diseases as epidemic. Each of the periods of excess mortality coincides with a time when unusually large numbers of cases of influenza were reported to health departments throughout the country.

Four of the outbreaks have occurred since 1929, which was the last year included in the earlier report (1). All four epidemics were of a minor character as compared with those of 1920 and the winter of 1928-29, but two of them (1931 and winter of 1932-33) approximate the magnitude of the intervening smaller epidemics. The minor outbreaks of the spring of 1932 and of the winter of 1934-35 occurred at times when mortality was at a low level, and the death rates for the peak weeks hardly reached the level that prior to 1930 would have been considered normal. However, as measured from the general level of mortality at the time of the outbreaks, the periods of excess deaths from influenza and pneumonia in the spring of 1932 and in the winter of 1934-35 are clearly marked.

The best single measure of epidemic mortality is probably the total excess death rate during the whole period when the mortality is above the normal seasonal expectancy. A summation of the excess rates for the various weeks of each outbreak (reducing them from an annual to an actual basis) gives the total excess influenza and pneumonia mortality; these rates are plotted in figure 2. By this measure the epidemic of the winter of 1932-33 falls fifth among the 10 outbreaks that occurred in the 15½-year period. The excess mortality was slightly greater than in the epidemic of 1922 but not as great as in that of 1926 in these same cities. The epidemic of 1931 had a total excess that was slightly less than that of 1922 but greater than the small outbreak of the spring of 1928. The epidemics of the spring of 1932 and of the winter of 1934-35 were the two smallest of the 10 that have occurred since 1920.

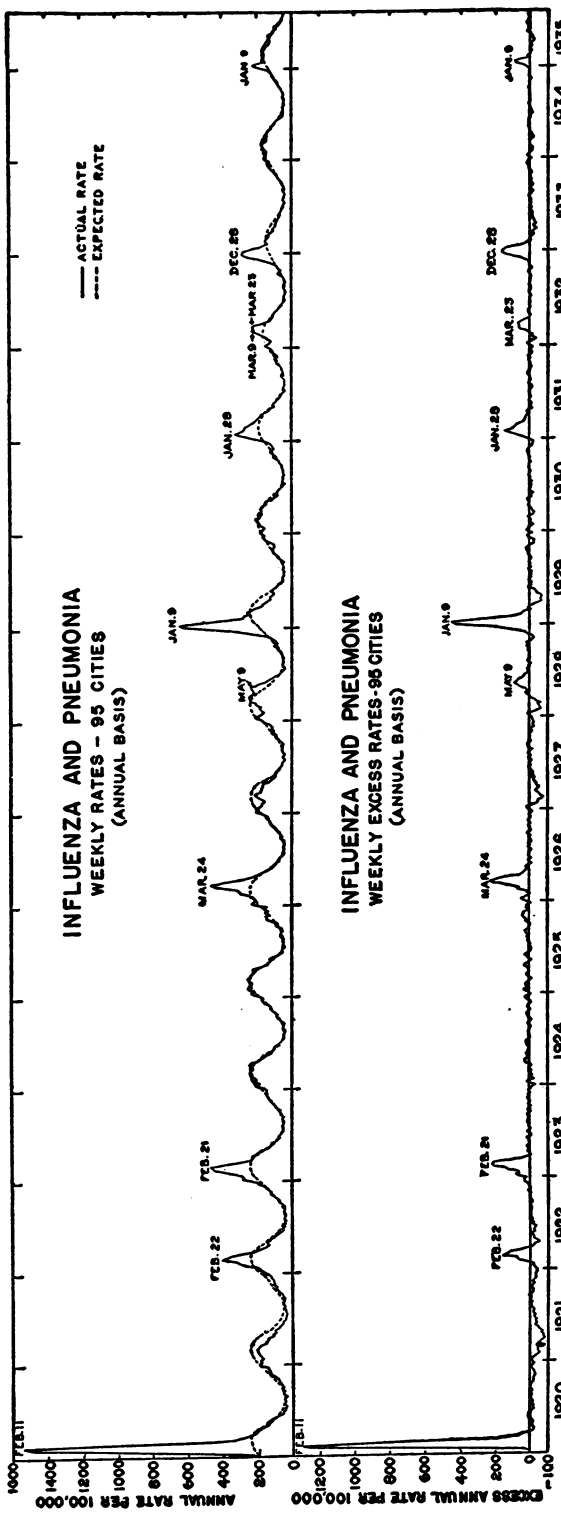


FIGURE 1.—Weekly total and excess mortality from influenza and pneumonia in a group of about 95 cities in the United States, 1920-35. Dates on graph are middle (Wednesday) of peak weeks. (For method of computing excess rates, see Appendix.)

EPIDEMICS SINCE 1930 IN CITIES OF EACH GEOGRAPHIC AREA

Excess influenza and pneumonia mortality was computed for groups of cities in each of the 9 geographic areas of the United States. Figure 3 shows these weekly excess rates from 1928 to 1935 for each region. The chance fluctuations are particularly large in the East and West South Central and the Mountain areas, where the populations under consideration are small; but even in these sections the excess rates during real epidemics stand out clearly above the usual chance variations.

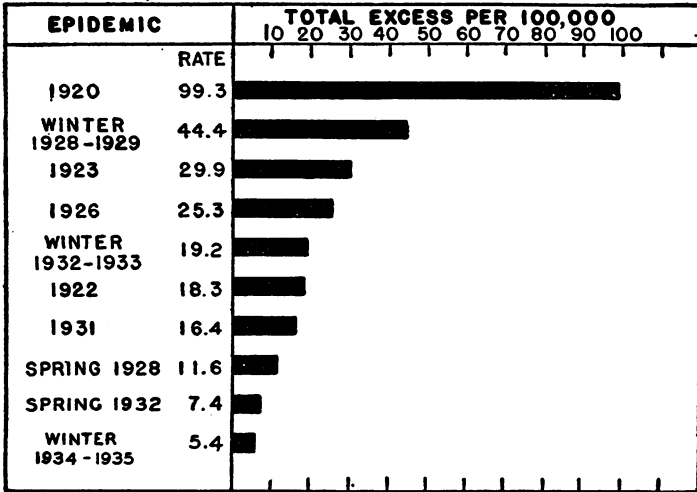


FIGURE 2.—Total excess mortality from influenza and pneumonia during the whole of each epidemic in a group of about 95 cities in the United States, 1920-35. (For method of computing excess rates, see Appendix.)

TABLE 1.—Total excess¹ death rate (actual basis) per 100,000 from influenza and pneumonia during the whole of each epidemic in cities of different geographic sections of the United States, 1920-35

Epidemic	All cities	New England	Middle Atlantic	South Atlantic	East North Central	East South Central	West North Central	West South Central	Mountain	Pacific
1920.....	99.3	96.6	95.2	94.2	109.4	99.1	121.9	91.2	159.5	57.7
1922.....	18.3	29.5	24.7	9.4	11.4	16.0	34.8	14.6	36.2	36.3
1923.....	29.9	36.6	26.5	42.7	32.2	44.0	53.3	6.7	17.6	11.3
1926.....	25.3	30.0	41.2	26.2	22.2	38.2	None	58.8	16.8	9.3
Spring 1928.....	11.6	15.4	20.9	None	17.9	11.9	4.9	13.7	7.7	None
Winter 1928-29.....	44.4	42.3	43.0	47.6	43.7	92.0	42.8	68.2	68.7	43.0
1931.....	16.4	13.8	24.3	27.2	9.7	None	14.0	17.7	None	None
Spring 1932.....	7.4	None	13.5	8.0	4.6	8.6	19.4	7.2	24.1	None
Winter 1932-33.....	19.2	22.8	18.1	22.1	13.8	33.9	42.7	41.1	34.7	16.7
Winter 1934-35.....	5.4	8.1	5.3	14.5	6.3	28.3	11.1	10.7	13.4	None

¹ From 1920 to 1929, inclusive, the excess is measured from the median rates for corresponding weeks for the period 1921-27; the series of 52 medians representing the "normal" or "expected" rates for the different weeks of the year were smoothed by a 5-week moving average before the excesses were computed. From 1930 to 1935, inclusive, the excess is measured from "normal" or "expected" rates that are based on means for corresponding weeks for the period 1930-33, rates for obviously epidemic weeks being replaced by interpolations between adjacent nonepidemic weeks before computing the means. See Appendix for further details.

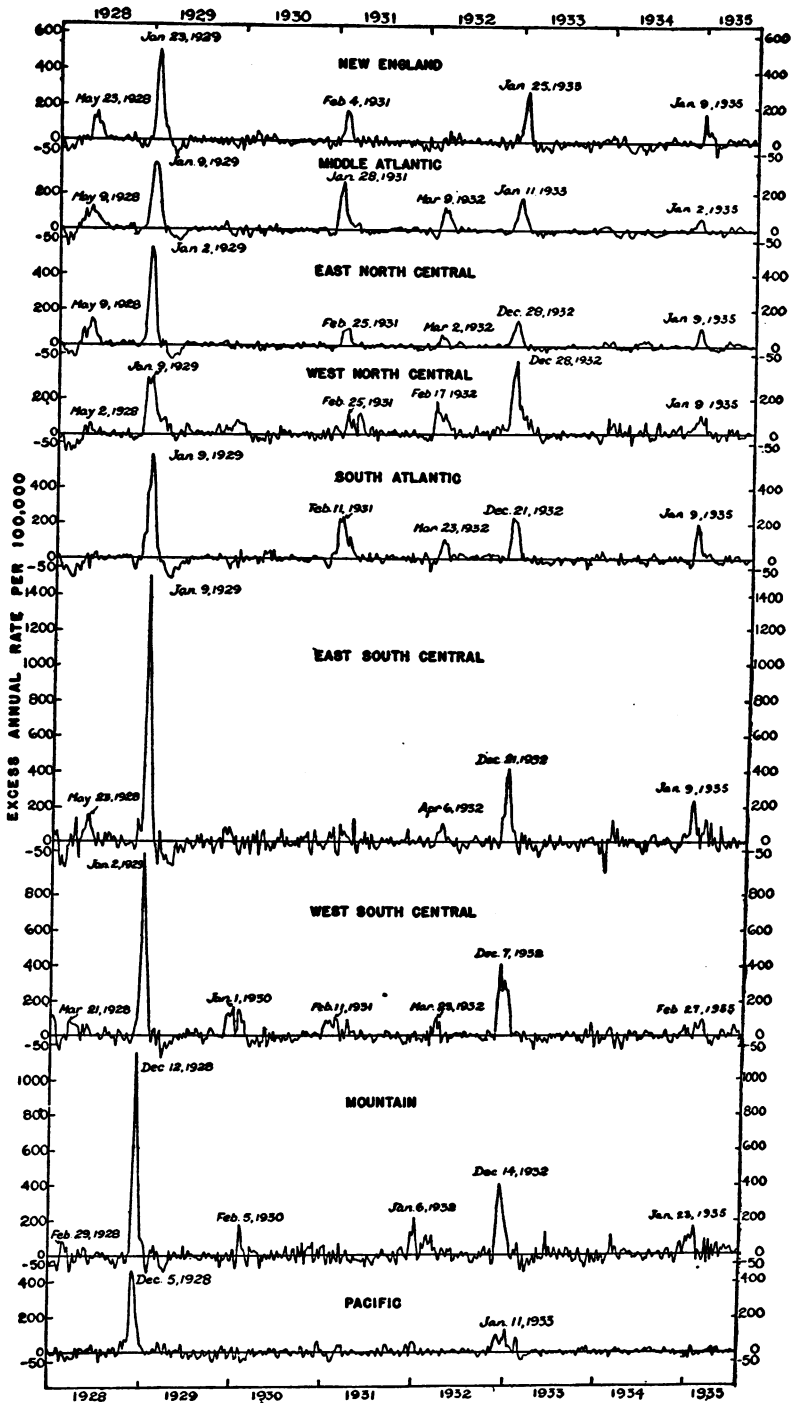


FIGURE 3.—Weekly excess mortality from influenza and pneumonia in a group of cities in each geographic section of the United States, 1928-35. Dates on graph are middle (Wednesday) of peak weeks. (For method of computing excess rates, see Appendix.)

To supplement figure 3, table 1 shows the total excess rates from influenza and pneumonia during the whole of each epidemic in each area. The mortality picture is generally similar in the various regions, but a close examination of the chart and table reveals the following variations in the several areas: (a) On the whole the epidemic of 1928-29 is far greater than any since that time; but in one area, the West North Central, the peak rate in the outbreak of 1932-33 exceeded that of 1928-29 and the total excess rates were almost identical. (b) In general the epidemic of the winter of 1932-33 was greater than that of 1931, but in the cities of the Middle and South Atlantic regions the latter was larger than the former. (c) For the group of cities taken as a whole, the outbreak of the winter of 1934-35 is the smallest one, but the East South Central cities exhibit a total excess rate that equals that of any area in the considerably larger epidemic of 1931. (d) Small outbreaks appear in certain sections when there is no indication of an epidemic elsewhere, viz, the West South Central, with a peak in January 1930 when, with the possible exception of a peak in February in the Mountain cities, there is no other indication of an outbreak in 1930. There was also an outbreak in the West South Central cities with its peak in January 1925, when no other region showed a definite epidemic (1); however, both cases and deaths from influenza were reported in 1925 in greater than the usual frequency in other places without a definite peak. These variations suggest that individual cities have minor outbreaks that do not progress to a nation-wide epidemic.

The area of origin and the direction of spread as well as the magnitudes of the epidemics are shown for the four outbreaks since 1930 in figures 4, 5, and 6. The excess rates have been plotted for each geographic area for each epidemic. The sections are arranged in the order of occurrence of the peak mortality as indicated by a 3-week moving average of the weekly excess rates, and a vertical line has been drawn at the estimated peak³ day for the whole group of 95 cities.

In figure 7 the time of occurrence of the epidemics in each geographic area is illustrated on maps. The areas are shaded from dark to light in the order of the estimated date of the peak mortality. In addition to the estimated modal or peak day, table 2 gives certain other constants of the curves of excess mortality in each epidemic, viz, the dates on which one quarter, one half, and three quarters of the

³ The estimated peak day is computed from the 3-week moving average curve by an adaptation of the difference formula for calculating the mode in a frequency distribution; see footnote to table 2 for the formula and methods of computation.

excess deaths had occurred, and the interquartile range ⁴ or the number of days within which the central half of the excess deaths occurred. The weekly excess death rates for each of the 9 areas for the years 1930 to August 1935 are shown in tables 3 to 7 in the Appendix.

In the outbreak of 1931 the West South Central cities were the earliest affected; the excess curve is rather flat, with a maximum, as judged by the moving average, about the middle of January (fig. 4). However, neither the Mountain and Pacific areas to the west nor the East South Central area to the east of the affected region showed any recognizable epidemic, and the small excess in the West North Central section to the north came about six weeks later, at a time that indicated a spread from the east rather than from the south. Aside from this early but small excess in the West South Central region, the 1931 epidemic manifests itself as definitely an east coast outbreak with its origin in the Middle Atlantic region from which it spread to the south, north, and west, but with only small excess rates in the two North Central regions. In the three regions on the Atlantic coast the mortality is definitely above the normal expectancy and the peaks are sharply defined.

The minor outbreak of the spring of 1932 originated in the Mountain section and spread eastward. The curve of excess rates for the Mountain area is distinctly bimodal, probably because of the widely scattered cities that represent that region. The Mountain, West North Central, and Middle Atlantic areas had the largest total excess rates, and the Pacific and New England sections showed no evidence of an epidemic.

The outbreak of the winter of 1932-33 was of greater magnitude than the two outbreaks previously described. The West South Central section had the earliest peak, and from there it spread rapidly to the west, east, and north. With the exception of the Pacific area, all regions show sharply defined peaks. The highest total excess mortality occurred in the West North Central and West South Central areas, with high rates also in the Mountain and East South Central sections.

The epidemic of the winter of 1934-35 is characterized by its small size, its definiteness in all areas except the Pacific, and the rapidity of its spread. The Middle Atlantic section attained its peak in the week ending January 5, and five neighboring sections had peak mortalities during the succeeding week. The West South Central and the Mountain areas had later and less definite peaks. The largest total excess rates occurred in the East South Central, South Atlantic, and Mountain regions.

⁴ Because of variation in the size of the several regions and in the number and geographic scatter of the cities whose records are included in the data, the interquartile range is not strictly comparable from one section to another. However, the usually short interquartile range (generally 2 to 3 weeks) indicates that the majority of the excess deaths take place within a very short period during which the disease is truly epidemic.

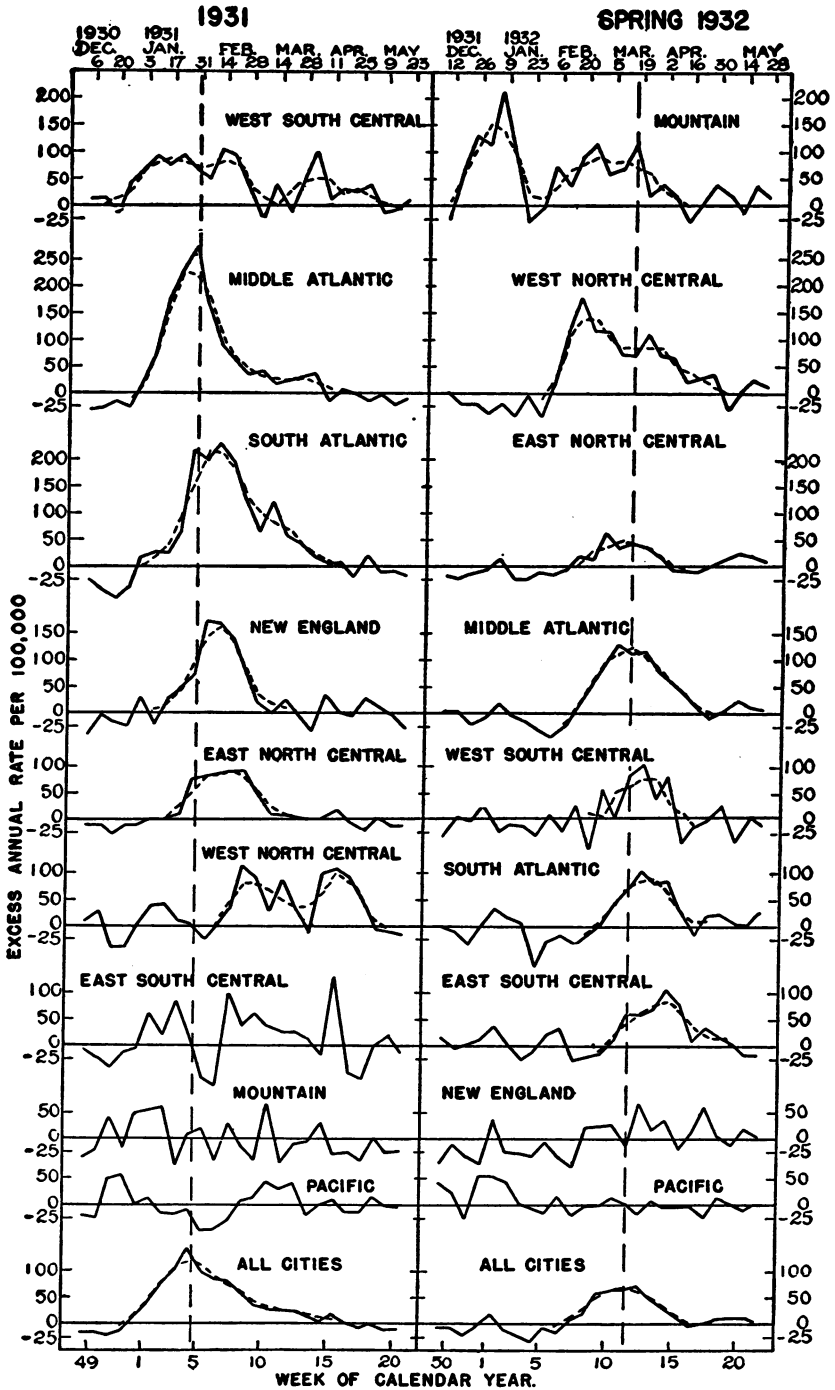


FIGURE 4.—Weekly excess mortality from influenza and pneumonia in a group of cities in each geographic section of the United States during the epidemics of 1931 and of the spring of 1932. Continuous line represents actual excess; broken line, 3-week moving average. Sections arranged in order of dates of peak mortality as indicated by the moving average curve.

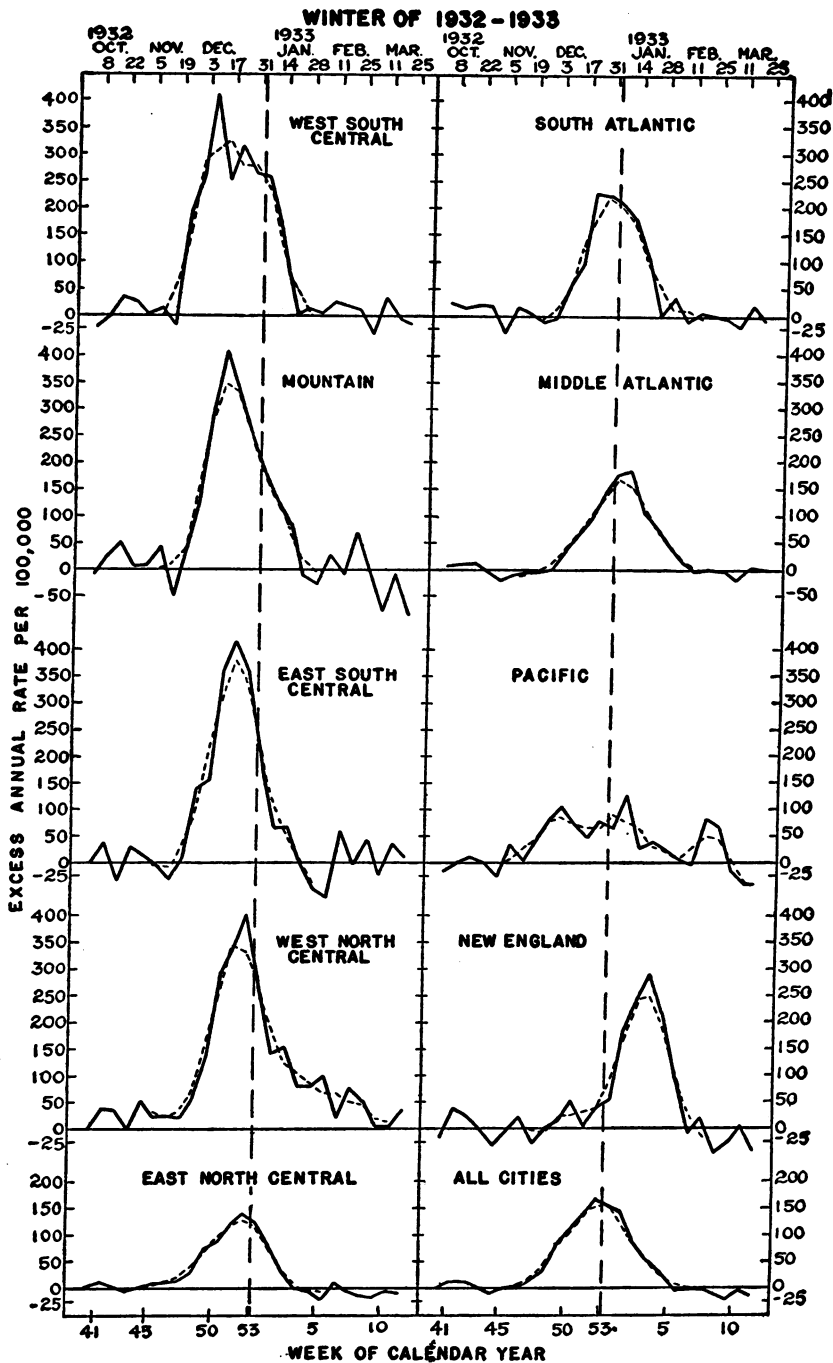


FIGURE 5.—Weekly excess mortality from influenza and pneumonia in a group of cities in each geographic section of the United States during the epidemic of the winter of 1932-33. Continuous line represents actual excess; broken line, 3-week moving average. Sections arranged in order of dates of peak mortality as indicated by the moving average curve.

TABLE 2.—Estimated constants of the curves of excess mortality from influenza and pneumonia in epidemics in cities of different geographic sections of the United States, 1930-35

Year of epidemic and geographic section	Mod 1 or peak day ¹	Day on which the specified proportion of the excess deaths had occurred			Interquartile range (number of days between first and third quartiles)	Total period considered as above normal	
		One-fourth (first quartile) ²	One-half (median) ²	Three-fourths (third quartile) ²		Total number of weeks	Dates (in calendar weeks) of first and last week
<i>1931</i>							
All cities.....	Jan. 29	Jan. 24	Feb. 4	Feb. 22	29	16	1-16
New England.....	Feb. 10	Feb. 2	Feb. 9	Feb. 17	15	8	3-10
Middle Atlantic.....	Jan. 24	Jan. 19	Jan. 28	Feb. 9	21	14	1-14
South Atlantic.....	Feb. 7	Feb. 1	Feb. 12	Feb. 26	25	16	1-16
East North Central.....	Feb. 16	Feb. 4	Feb. 14	Feb. 24	20	10	3-12
East South Central.....						None	
West North Central.....	Feb. 28	Mar. 3	Mar. 25	Apr. 16	44	11	8-18
West South Central.....	Jan. 14	Jan. 13	Feb. 4	Feb. 22	40	16	52-15
Mountain.....						None	
Pacific.....						None	
<i>Spring 1932</i>							
All cities.....	Mar. 16	Mar. 6	Mar. 16	Mar. 26	20	9	8-16
New England.....						None	
Middle Atlantic.....	Mar. 15	Mar. 7	Mar. 17	Mar. 28	21	10	8-17
South Atlantic.....	Mar. 27	Mar. 18	Mar. 25	Apr. 3	16	7	10-16
East North Central.....	Mar. 9	Mar. 2	Mar. 10	Mar. 19	17	7	8-14
East South Central.....	Apr. 4	Mar. 24	Apr. 4	Apr. 12	19	10	11-20
West North Central.....	Feb. 20	Feb. 18	Mar. 3	Mar. 24	35	13	6-18
West South Central.....	Mar. 26	Mar. 15	Mar. 22	Apr. 1	17	6	10-15
Mountain.....	Jan. 1	Jan. 3	Feb. 1	Feb. 29	57	17	51-15
Pacific.....						None	
<i>Winter 1932-33</i>							
All cities.....	Jan. 1	Dec. 18	Dec. 30	Jan. 10	23	11	49- 5
New England.....	Jan. 23	Jan. 13	Jan. 22	Jan. 29	16	10	50- 6
Middle Atlantic.....	Jan. 5	Dec. 26	Jan. 5	Jan. 14	19	11	49- 6
South Atlantic.....	Dec. 29	Dec. 22	Dec. 30	Jan. 9	18	9	50- 5
East North Central.....	Dec. 28	Dec. 14	Dec. 25	Jan. 4	21	12	46- 4
East South Central.....	Dec. 21	Dec. 13	Dec. 21	Dec. 29	16	9	48- 3
West North Central.....	Dec. 24	Dec. 18	Dec. 29	Jan. 15	28	15	48- 9
West South Central.....	Dec. 13	Dec. 5	Dec. 16	Dec. 29	24	8	48- 2
Mountain.....	Dec. 16	Dec. 10	Dec. 18	... do ...	19	9	48- 3
Pacific.....	Jan. 5	do	Jan. 2	Jan. 22	43	15	48- 9
<i>Winter 1934-35</i>							
All cities.....	Jan. 6	Dec. 30	Jan. 6	Jan. 12	13	9	49- 5
New England.....	Jan. 11	Jan. 8	Jan. 14	Jan. 29	21	7	1- 7
Middle Atlantic.....	Dec. 30	Dec. 18	Dec. 28	Jan. 5	18	9	47- 3
South Atlantic.....	Jan. 10	Jan. 6	Jan. 12	Jan. 22	16	10	52- 9
East North Central.....	Jan. 7	Jan. 1	Jan. 7	Jan. 14	13	7	51- 5
East South Central.....	Jan. 8	Jan. 3	Jan. 15	Feb. 24	52	17	48-12
West North Central.....	Jan. 6	Dec. 27	Jan. 9	Jan. 24	28	14	47- 8
West South Central.....	Feb. 25	Dec. 31	Feb. 7	Feb. 25	56	15	48-10
Mountain.....	Jan. 26	Dec. 29	Jan. 15	Jan. 29	31	11	48- 6
Pacific.....							

¹ The modal or peak day was estimated by interpolation within the modal or peak week (determined by inspection) of the excess death rates by the method of differences, the following formula being used:

$$\text{Mode} = L + \left[\frac{\Delta f_1}{\Delta f_1 - \Delta f_2} \right] \text{ in which—}$$

L = Lower limit of modal class (first day of peak week).

f_0 = Frequency (excess rate) in modal or peak week.

f_{-1} = Frequency (excess rate) in week prior to modal or peak week.

f_{+1} = Frequency (excess rate) in week following modal or peak week.

First and second differences (Δ and Δ^2 , respectively) for use in the formula are computed as follows:

$$\Delta f_1 = f_0 - f_{-1}$$

$$\Delta f_2 = (f_{+1} - f_0) - (f_0 - f_{-1})$$

The expression in the formula which is added to the lower limit of the modal class always comes out in the form of a fraction or decimal less than unity and is in usual frequency distributions multiplied by the class interval and added to the lower limit of the class. This was adapted to the weekly intervals by reducing this decimal to sevenths; if it was less than one-seventh, the estimated modal day was the first day of the week; if it was between one-seventh and two-sevenths, the modal day was the second day of the week, etc.

The computations are based on the 3-week moving average of the excess rates rather than the actual value.

² The median and quartile days were determined in the manner in which those constants are determined for a frequency distribution (the excess rates for this purpose being considered as frequencies).

SUMMARY

Weekly records of mortality from influenza and pneumonia in a group of about 95 cities in the United States indicate 10 epidemic periods in the 15½ years from 1920 to August 1935 (fig. 1). Measured by the total excess mortality from influenza and pneumonia during

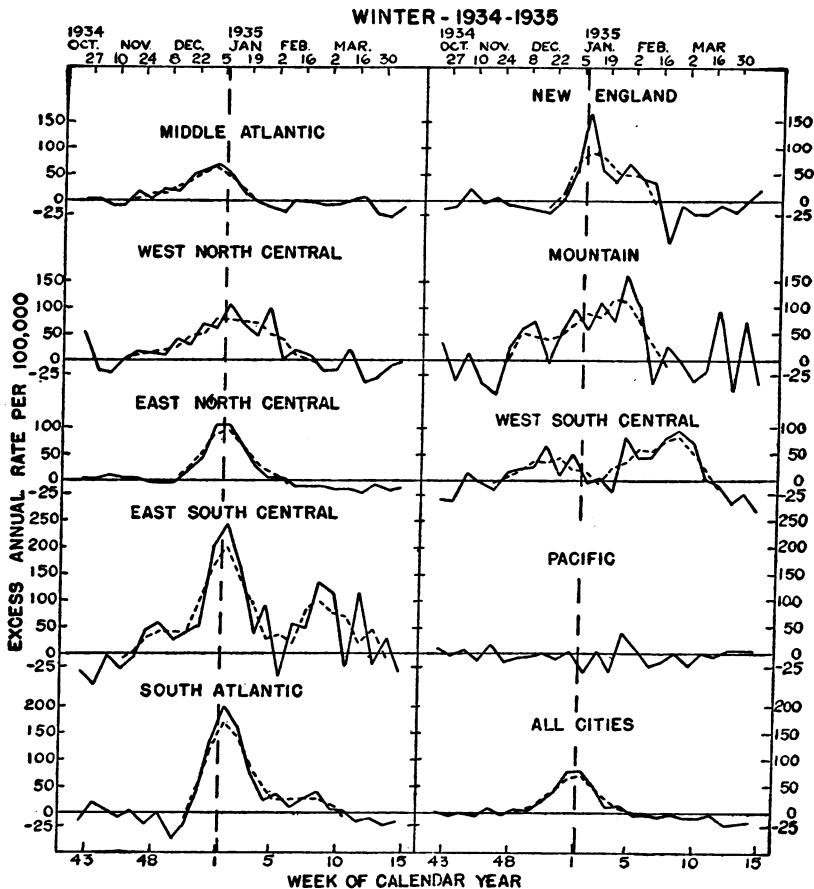


FIGURE 6.—Weekly excess mortality from influenza and pneumonia in a group of cities in each geographic section of the United States during the epidemic of the winter of 1934-35. Continuous line represents actual excess; broken line, 3-week moving average. Sections arranged in order of dates of peak mortality as indicated by the moving average curve.

the whole epidemic, the largest outbreak in this period was in 1920 and the smallest in the winter of 1934-35 (fig. 2).

The four epidemics in the years 1930-35 are relatively small; those of 1931 and the winter of 1932-33 are about the magnitude of the outbreak of 1922. The epidemics of the spring of 1932 and of the winter of 1934-35 are the smallest of the 10 outbreaks. Although the epidemics since 1930 are small, they are clearly defined in the curves for all cities and in those for the separate geographic sections that were affected.

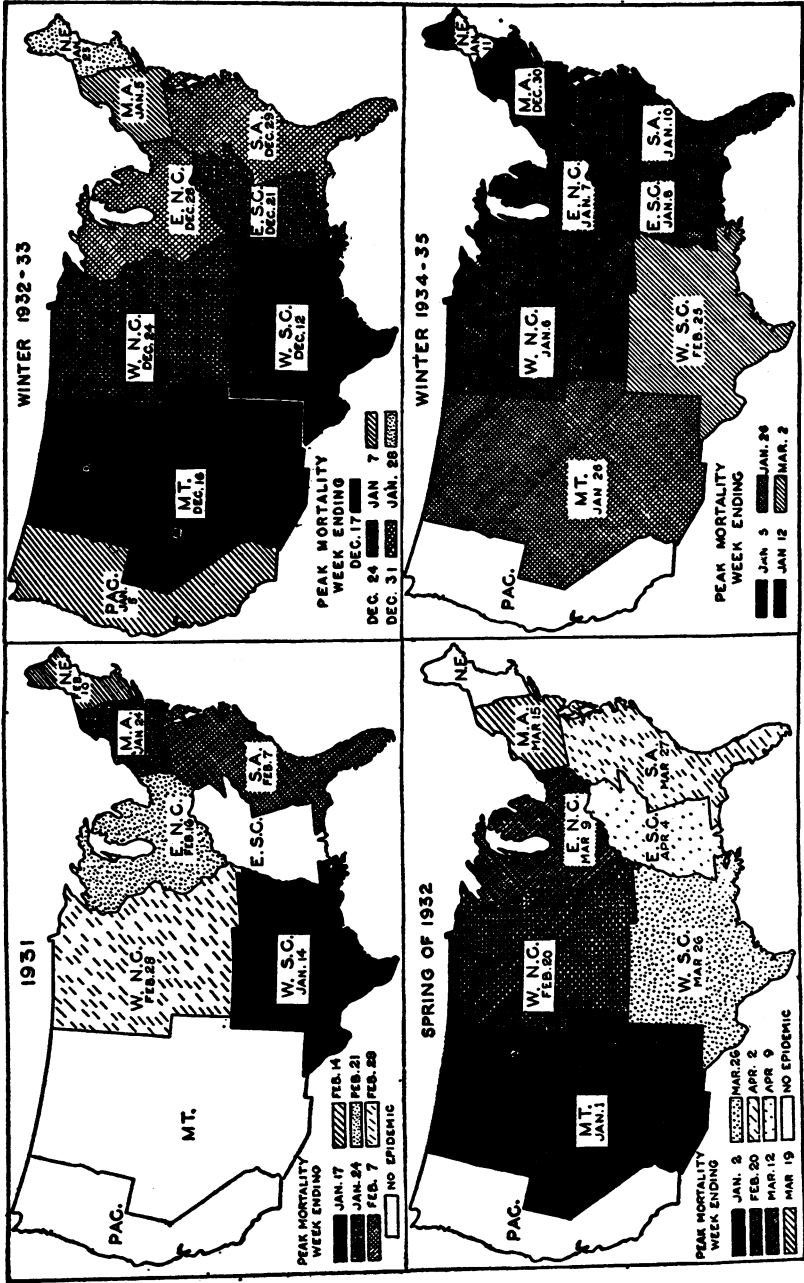


FIGURE 7.—Time of occurrence of peak mortality in 4 influenza epidemics in a group of cities in each geographic section of the United States. (Darkest sections were first and lightest sections were last to be affected. Dates represent estimated peak days for the sections. For details see footnotes to table 2.)

In the epidemic of 1931 the excess rates were highest in the east coast regions, and the Mountain and Pacific sections were unaffected (fig. 4). The outbreak of the spring of 1932 did not affect the Pacific or the New England area (fig. 4). The epidemic of the winter of 1932-33 prevailed in all regions, but the excess rates were low in the Pacific cities (fig. 5). The outbreak of the winter of 1934-35 was largest in the eastern sections, but all areas except the Pacific were definitely affected (fig. 6).

APPENDIX

METHOD OF DERIVING NORMAL OR EXPECTED RATES

The norm used for the years 1920-29 was based on median rates for each week for the 7-year period 1921-27; the 52 weekly medians were smoothed by a 5-week moving average and used for the whole 10-year period without adjustment for change in average annual level of the rates. A more detailed description of the process is included in the earlier paper (1).

Since 1930 the death rates from influenza and pneumonia have been lower than in the preceding decade. The curve of weekly median rates for the period 1921-27 becomes impossible as a norm for the years 1930-34, as it is generally above corresponding weeks of these years except in obviously epidemic periods. Adjustment of the old norm (the series of 52 median rates) to the level of the year under consideration did not make it satisfactory for the new period. It, therefore, seemed advisable to derive a norm from the years following 1929. The analysis was begun before the 1934 data became available, and so there were only 4 years, 3 of which included small epidemics. Under these circumstances a median did not seem feasible. The best solution seemed to be to replace obviously epidemic items by interpolated values and to compute the mean of the rates for corresponding weeks in the 4 years 1930-33. The values substituted for the obviously epidemic rates were obtained by an interpolation between the apparently normal rates just before and after the epidemic periods. The process was to select (by inspection and the aid of the old seasonal curves) the last week preceding the epidemic items and the first week after them that seemed to be approximately normal for the season of the year, and to interpolate on a linear basis between these points. For the whole group of cities, this process involved interpolating between the following weeks:

Winter of 1930-31: From 52d week of 1930 to 11th week of 1931; 10 epidemic weeks replaced by estimated normal values.

Winter of 1931-32: From 8th to 16th week of 1932; 7 epidemic weeks replaced by estimated normal values.

Winter of 1932-33: From 47th week of 1932 to 5th week of 1933; 10 epidemic weeks replaced by estimated normal values.

Although in the 4 years 1930-33 there were 3 epidemics which involved interpolations, they are sufficiently separated in season of occurrence so that interpolated values overlap only 2 weeks as between the first and second epidemics, and only 4 weeks as between the first and third epidemics, while the second and third outbreaks do not overlap at all. Thus there are 6 of the 52 weeks in which 2 of the weekly rates entering into the 4-year average are interpolated values, and 13 other weekly means involving 1 interpolated value and 3 actual values.

The 52 weekly values in these 4-year means obtained as outlined above were smoothed by a 5-week moving average and used as the relative basis for seasonal

expectancy. However, adjustment had to be made for the change from year to year in the average annual influenza and pneumonia death rate. For each of the years ending approximately July 31 (31st week) ratios were computed by dividing the mean of the 52 weekly rates for the year (using the interpolated values for the obviously epidemic weeks) by the mean of the 52 weekly values in the seasonal norm. Each of the 52 weekly values in the seasonal norm were then multiplied by this ratio to adjust the level of the seasonal norm to that of the individual years under consideration. Thus, if the mean for the given year was smaller than the mean of the seasonal norm values, the ratio would be less than unity and the norm would be lowered to the general level of the non-epidemic rates in the year under consideration. On the other hand, if the mean for the given year was larger than the mean of the seasonal norm values, the ratio would be greater than unity and the norm would be raised to the general level of the non-epidemic rates in the year under consideration. Excess rates were obtained by subtracting these expected rates from the actual rates for corresponding weeks of the year.

Tables 3 to 7 include columns of smoothed mean rates (interpolated values replacing epidemic items), and the footnotes contain for each year the ratios by which these seasonal norms are multiplied to adjust to the general level for the year. Thus an expected rate for each week of each year can be computed from the data in the tables, and the actual rates can be obtained by adding algebraically the expected and excess rates or given weeks.

TABLE 3.—*Excess*¹ *weekly death rates (annual basis) per 100,000 from influenza and pneumonia, 1930-1935*

Week of year	About 95 cities ¹ in the United States						About 12 cities ² in the New England States							
	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935
1	146	+18	+13	-3	+156	+19	+75	136	+26	+27	-47	+53	+51	+48
2	153	+9	+38	+18	+142	+10	+78	136	+26	-21	+35	+183	+29	+160
3	160	-11	+76	-10	+82	-5	+45	141	-25	+25	-23	+245	+35	+53
4	163	-24	+99	-21	+51	-12	+7	144	-17	+43	-28	+289	-9	+31
5	165	-4	+145	-33	+32	-13	+12	146	+25	+70	-32	+217	+3	+65
6	170	-3	+101	-6	0	-16	-5	156	-15	+173	-6	+89	+30	+34
7	175	-6	+84	-14	-3	0	-6	166	+5	+168	-36	-11	+53	+28
8	177	-2	+79	+8	+1	-1	-10	174	+53	+141	-52	+20	+21	-87
9	179	+11	+62	+23	-11	+1	-5	178	+36	+78	+25	-47	-5	-14
10	179	-20	+38	+58	-22	-1	-13	180	+39	+20	+24	-28	-12	-30
11	175	-24	+30	+66	-5	-17	-13	180	-33	-1	+28	+7	-36	-30
12	170	-15	+26	+66	-16	-20	-8	174	+17	+24	-13	-42	-39	-8
13	166	-11	+24	+73	-35	-10	-26	170	+31	-3	+67	-43	-46	-25
14	159	-6	+16	+47	-19	-10	-21	161	+3	-35	+17	-9	-44	-2
15	152	+11	+3	+33	-19	0	-17	155	+14	+34	+38	-28	-8	+23
16	143	+3	+18	+10	-27	+1	-3	148	-4	0	-16	-23	-1	+18
17	135	0	-1	-2	-19	+9	-2	142	+34	-6	+12	-53	+7	+4
18	125	+4	-8	+1	-17	-1	+23	131	+16	+27	+61	-34	-24	+17
19	116	+13	-1	+9	-12	+9	+8	123	-1	+10	+5	-8	-17	-21
20	107	-12	-9	+12	-7	+2	+8	115	-20	-2	-13	+23	-51	+21
21	99	-5	-9	+12	-8	+7	+5	102	-4	+27	+20	-2	-1	-9
22	91	-21	+6	+6	-10	+8	+15	94	-10	-25	+4	-12	+1	+14
23	84	-6	-2	+3	-4	+3	+20	85	-17	+35	+9	-26	-26	+30
24	77	+2	+7	+5	+1	-7	+12	78	+1	-20	+9	+16	-25	+16
25	71	-4	-2	0	-2	-14	+8	67	0	+4	+15	-12	-4	+18
26	65	-4	-2	+1	-1	-9	+3	61	-16	0	+5	-12	-8	-14

¹ Excess over a "normal" or "expected" rate for the corresponding week of the year. For details, see note 3 and the appendix.

² See earlier report (1) for a list of the cities in each geographic area. When a city failed to report, its population was deducted from the group total and the rate computed on the remaining population. Because of continued irregularity of reports, Norfolk, Va., Greenville, S. C., Louisville, Ky., and St. Louis, Mo., are omitted from the years 1930-35 and Covington, Ky., is omitted from the years 1933-35.

³ The series of "smoothed means" shown in tables 3 to 7 for the different geographic areas are based on the means of the 4 weekly death rates for corresponding weeks of the 4 years 1930-33; rates for obviously epidemic weeks were replaced by interpolations between adjacent non-epidemic weeks before computing the means. The 52 weekly means were then smoothed by a 5-week moving average. To adjust these smoothed means to the level of the rates in a given year and obtain the series of weekly "normal" or "expected" rates used for that year, multiply the smoothed means by the following factors:

TABLE 3.—*Excess weekly death rates (annual basis) per 100,000 from influenza and pneumonia, 1930-1935—Continued*

Week of year	About 95 cities in the United States						About 12 cities in the New England States							
	Smoothed mean (1930-33)	1930	1931	1932	1933	1934	1935	Smoothed mean (1930-33)	1930	1931	1932	1933	1934	1935
27	59	-9	+1	+1	-4	-8	+3	56	-28	-21	+4	-3	+18	-10
28	55	-5	-1	-1	+3	-1	+7	50	-13	+30	+2	0	+12	+1
29	52	-13	-9	-2	-3	-2	+2	47	-15	+2	+33	+5	+11	+26
30	50	+2	-11	+5	+2	+8	0	47	-10	+7	+16	-9	-8	0
31	49	-3	-4	+4	+9	+1	-5	44	-9	-2	-4	+21	-22	-14
32	49	+1	+4	+3	-2	-4	0	42	-1	-7	+7	+6	+9	0
33	49	+1	+2	0	-3	0	0	42	-5	-14	+7	-8	+7	0
34	49	-6	+4	-1	-9	-3	0	42	+8	-5	-7	+4	+9	0
35	50	+1	+3	+6	-1	-2	0	43	+3	+2	+1	-5	+6	0
36	51	+1	+4	+3	-4	+2	0	47	+3	-22	+22	-11	+36	0
37	53	-1	+9	+2	-5	0	0	48	+13	+11	-10	-17	+13	0
38	54	+1	+12	-3	-5	+2	0	48	+4	+3	+12	+17	0	0
39	57	-3	-1	-1	+1	+7	0	53	-17	+13	-4	-10	+8	0
40	61	-5	-1	-2	-4	-1	0	62	-23	-4	-9	-42	-10	0
41	67	+3	-5	+1	-1	+3	0	67	0	+10	-17	+24	+10	0
42	74	-4	0	+13	0	+2	0	76	+9	-1	+38	+5	+16	0
43	81	+4	-3	+12	+7	-1	0	82	+9	-32	+24	+1	-16	0
44	89	+11	+3	0	-4	-5	0	89	+6	-9	0	+18	-14	0
45	97	+5	+4	-10	0	-1	0	93	-11	-17	-32	-18	+20	0
46	102	+14	-2	+3	0	-8	0	94	+12	+18	-5	+10	-5	0
47	106	+12	+9	0	+13	+5	0	95	+25	-7	+22	+14	+3	0
48	111	-3	-11	+12	+12	-3	0	103	-32	-7	-31	-18	-12	0
49	115	-16	-12	+33	+25	+6	0	109	-41	-19	0	+30	-17	0
50	119	-14	-6	+80	+20	+1	0	113	-2	-44	+13	+31	-22	0
51	128	-19	-6	+107	+14	+19	0	123	-17	-10	+53	+21	-27	0
52	138	-13	-19	+137	+1	+37	0	133	-25	-36	+6	+29	-3	0
53				+164							+38			

Geographic section	1st week of 1930 to 31st week of 1930	32d week of 1930 to 31st week of 1931	32d week of 1931 to 31st week of 1932	32d week of 1932 to 31st week of 1933	32d week of 1933 to 31st week of 1934	32d week of 1934 to 31st week of 1935
All cities	1. 1543	1. 1164	0. 9382	0. 8604	0. 9729	0. 9493
New England	1. 0581	1. 0202	1. 0269	. 8565	1. 0902	1. 0174
Middle Atlantic	1. 1792	1. 1750	. 9008	. 8014	. 9371	. 8331
South Atlantic	1. 0326	1. 1751	. 9508	. 8541	1. 0141	1. 0299
East North Central	1. 2116	1. 1200	. 9407	. 8422	1. 0470	1. 0482
East South Central	1. 3097	1. 2396	. 8021	. 7653	1. 0367	. 9096
West North Central	1. 0443	1. 0925	. 9452	. 9920	1. 0799	1. 0693
West South Central	1. 2144	1. 0734	. 8718	. 9589	. 9896	1. 0317
Mountain	1. 1091	1. 1417	. 9128	. 9842	. 8050	. 9448
Pacific	1. 1258	1. 0657	1. 0072	. 9552	. 8204	. 8918

The details of the method of deriving the smoothed means and this series of multiplying factors are given above in the Appendix.

TABLE 4.—*Excess*¹ weekly death rates (annual basis) per 100,000 from influenza and pneumonia, 1930-35

Week of year	About 10 cities ² in the Middle Atlantic States							About 21 cities ² in the South Atlantic States						
	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935
1	153	+11	+19	-7	+177	+12	+65	196	+37	+17	+6	+210	-5	+139
2	158	+20	+76	+18	+184	+6	+48	207	-6	+28	+34	+180	0	+202
3	165	-13	+176	-4	+104	-17	+13	216	-31	+24	+15	+111	+9	+162
4	167	-48	+227	-16	+78	-18	-6	215	+5	+65	+6	+3	-3	+71
5	168	-17	+272	-31	+41	-19	-16	217	+5	+217	-78	+36	+5	+25
6	173	-3	+158	-44	+9	-25	-22	219	-17	+197	-27	-10	+1	+38
7	181	+4	+90	-26	-5	-5	+1	221	-3	+231	-18	+5	+1	+11
8	184	-1	+62	+9	-1	+6	-3	225	-9	+198	-33	0	+29	+28
9	189	+24	+35	+53	-3	+5	-12	230	+4	+121	-15	-6	+39	+41
10	189	-19	+39	+93	-19	+14	-11	232	-4	+65	+8	-23	-4	+8
11	186	-3	+18	+130	+3	-19	-3	230	-43	+119	+44	+21	-22	+4
12	183	-34	+24	+112	-1	-28	+5	222	0	+57	+71	-13	-22	-14
13	179	-3	+30	+118	-31	-24	-28	215	-13	+42	+104	-30	-7	-19
14	173	+5	+37	+81	-4	-11	-31	204	-25	+20	+80	-28	+1	-23
15	167	+19	-16	+59	-13	+9	-13	190	+39	+6	+84	+13	-5	-15
16	160	+16	+4	+41	-6	+3	-4	181	+18	+7	+24	-31	+10	-30
17	152	-2	-2	+9	-14	+6	0	169	+28	-21	-14	-21	+8	+2
18	144	+12	-16	-7	-3	-3	+20	154	+43	-19	+22	-23	-7	+30
19	136	+35	-5	+5	-17	-1	+15	139	-18	-11	+23	-26	+29	-10
20	126	-12	-20	+25	-7	-11	-8	128	+42	-8	+6	-29	+14	+32
21	117	+7	-11	+11	-1	+15	+11	113	-11	-18	+1	-27	-11	-13
22	107	-28	-14	+5	+1	-2	+23	104	-21	-28	+31	-25	-13	0
23	97	-4	-7	-1	+8	+2	+31	94	+5	-19	+23	-2	-20	+20
24	88	+2	-11	+20	+5	-13	+17	89	-17	-16	+23	-2	-35	+19
25	80	-7	-14	+8	+1	-18	+5	79	-16	0	+9	+7	+4	+24
26	73	-9	-8	+2	+6	-17	+3	72	-3	+24	+11	-11	0	-4
27	65	-15	-8	+6	-4	-23	+1	65	-7	-5	-8	-19	+14	-1
28	61	-11	-9	+10	+9	-10	+4	62	-7	+2	+8	-2	+39	-6
29	59	-11	-8	-6	-5	-12	-1	59	-12	-26	+7	+6	+14	-18
30	57	+6	-11	+2	+11	-9	-1	62	+19	-28	+16	-5	+15	-15
31	56	-4	-3	-3	+16	+1	-12	62	+1	-2	-2	+3	-8	-4
32	56	-5	+3	0	+4	-8	0	61	+3	+21	+21	-3	-22	-----
33	56	+8	+9	-2	+5	0	-----	61	-4	+3	+1	-9	-2	-----
34	56	-8	+8	+4	-9	-2	-----	62	-18	+10	-10	-30	-21	-----
35	57	-4	+11	+6	+6	0	-----	60	-12	+18	+10	-7	-1	-----
36	57	+4	+12	+6	-4	+1	-----	61	-3	+5	+7	+12	+3	-----
37	59	+2	+16	+1	-5	-4	-----	64	-20	+4	+14	-9	-4	-----
38	60	-1	+15	-6	-6	+1	-----	63	-23	+1	+21	+9	+25	-----
39	62	+5	0	+1	0	+7	-----	66	-23	-8	+30	+5	+1	-----
40	66	-13	+4	+5	+6	-6	-----	69	-31	-5	-16	-4	+2	-----
41	74	-2	-7	+7	0	+3	-----	75	-7	+8	+22	+2	+23	-----
42	81	-17	-4	+10	+15	+3	-----	86	-8	+5	+15	-56	+1	-----
43	89	+10	0	+13	+23	+1	-----	99	+13	-17	+19	-24	-16	-----
44	99	+8	+11	-3	-10	+1	-----	110	+10	+12	+20	+10	+22	-----
45	108	+8	+18	-19	+6	-10	-----	126	0	+1	-30	-3	+5	-----
46	112	+13	+15	-11	+23	-9	-----	137	+1	-27	+18	-1	-10	-----
47	116	+12	+18	-6	+25	+15	-----	143	-3	+28	+6	+31	+4	-----
48	119	-4	0	-5	+29	0	-----	153	-6	-17	-9	+16	-23	-----
49	122	-30	-11	+3	+31	+20	-----	158	-24	+2	-3	-2	0	-----
50	123	-28	+5	+40	+30	+15	-----	161	-44	-1	+58	+48	-50	-----
51	131	-16	+4	+65	+29	+43	-----	174	-60	-11	+97	+22	-22	-----
52	143	-25	-21	+95	+16	+56	-----	186	-38	-33	+229	+5	+39	-----
53	-----	-----	-----	+146	-----	-----	-----	-----	-----	-----	+225	-----	-----	-----

For footnotes, see table 3.

TABLE 5.—Excess¹ weekly death rates (annual basis) per 100,000 from influenza and pneumonia, 1930-36

Week of year	About 16 cities ² in the East North Central States						About 6 cities ² in the East South Central States							
	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935
1.....	105	+3	-10	-5	+123	+18	+98	188	+34	-6	+14	+189	+22	+205
2.....	110	+1	-1	+15	+81	+30	+99	202	-64	+59	+38	+65	-60	+245
3.....	116	-15	+3	-22	+32	+9	+64	217	-78	+21	+2	+73	-171	+165
4.....	119	-16	+11	-23	+1	-18	+18	221	-9	+85	-26	-3	+22	+40
5.....	123	-7	+74	-9	-2	-9	+1	231	+28	+17	-10	-51	+18	+92
6.....	130	-6	+82	-14	-23	-14	-1	240	-41	-59	+21	-64	+15	-37
7.....	137	-19	+85	-6	+9	-23	-19	243	-2	-74	+31	+60	+127	+61
8.....	140	-1	+91	+19	-6	-13	-18	244	+33	+102	-27	-1	+38	+53
9.....	144	+22	+93	+12	-16	-18	-18	252	-72	+35	-20	+40	+3	+140
10.....	144	-19	+47	+64	-18	-17	-23	246	-13	+61	-15	-29	+77	+119
11.....	140	-33	+10	+38	-4	-10	-24	245	+40	+37	+10	+32	-17	-21
12.....	136	-6	+8	+45	-9	-26	-31	237	-8	+27	+61	+5	+4	+120
13.....	130	-29	+4	+38	-26	-13	-16	232	+64	+27	+59	-31	+36	-16
14.....	123	+7	0	+21	-16	+2	-20	226	-75	+16	+69	-40	-18	+29
15.....	114	-4	+4	-6	-7	+16	-16	212	+2	-18	+106	-9	+17	-32
16.....	107	-2	+18	-7	-29	-3	+16	190	+53	+130	+80	-38	-21	-46
17.....	99	+3	-7	-8	-10	+20	+8	177	+70	-49	+9	-82	+19	-47
18.....	92	+4	-21	+4	-13	+15	+35	162	-50	-62	+34	-44	+15	+95
19.....	86	-2	-2	+15	+1	+16	+21	136	-1	+1	+16	-31	+21	-10
20.....	80	-25	-11	+24	+1	+25	+12	127	-26	+19	+5	+23	+17	-22
21.....	74	-5	-10	+21	-1	+12	+13	122	-50	-12	-17	-20	-17	-44
22.....	67	-23	+5	+9	-13	+24	+21	115	-4	+59	-17	-8	-17	+9
23.....	62	-12	-8	+5	+2	+12	+19	103	-39	-14	+26	+48	-12	-34
24.....	56	+5	+1	-7	-7	+14	+18	101	-7	+33	-44	+3	-37	-5
25.....	53	-7	+6	-4	+1	-13	+8	94	+25	-35	-62	-5	-63	+28
26.....	49	0	+2	0	-9	-10	+13	83	+9	+42	-5	-31	+16	+11
27.....	44	-10	+13	-2	-1	-4	+15	74	+72	+9	-15	+3	-50	-33
28.....	40	-7	+4	-3	0	-2	+10	70	+4	-31	-22	-8	+9	+10
29.....	38	-12	-7	-3	-8	-7	0	63	-24	-34	-31	+45	+10	-10
30.....	36	-3	-6	0	-2	+14	-2	57	+28	-27	-12	-4	+43	+1
31.....	34	+4	-6	+10	+8	-1	+10	57	-16	-8	+9	-4	+43	-11
32.....	34	+10	+4	0	-6	-5	-----	60	-22	+28	+10	+5	+47	-----
33.....	35	-11	+6	-3	-11	+1	-----	61	-17	+7	+15	-3	-9	-----
34.....	34	-9	+2	+2	-6	-6	-----	64	-5	+6	+39	-19	-24	-----
35.....	34	+16	+5	+8	-3	-3	-----	64	-20	+19	+20	-19	+17	-----
36.....	37	-3	-1	+2	-9	+5	-----	65	+22	-8	+13	-1	-12	-----
37.....	38	+3	+3	+1	-2	+7	-----	62	-26	+32	+1	+10	+26	-----
38.....	39	+2	+11	+1	-7	-1	-----	67	+27	+3	-17	-9	-14	-----
39.....	41	+4	+2	-5	-3	+13	-----	73	-1	-21	-15	-49	+36	-----
40.....	44	+6	-4	-4	-8	+4	-----	85	+28	+1	+24	-28	+18	-----
41.....	48	+4	-8	+3	-4	+3	-----	90	+28	+3	-1	+26	0	-----
42.....	53	-4	-3	+13	-2	-6	-----	94	+55	-8	+36	-2	-27	-----
43.....	59	-10	-1	+3	+5	-1	-----	115	-40	+16	-33	-26	-30	-----
44.....	64	+22	+9	-5	-6	-2	-----	130	-72	+3	+30	+18	-57	-----
45.....	70	+3	+3	0	-9	+7	-----	141	+9	+7	+14	0	+1	-----
46.....	74	+12	-16	+9	-2	+2	-----	156	+65	+26	-3	+25	-27	-----
47.....	78	+1	+1	+9	+2	+3	-----	163	+12	+77	-30	+24	-5	-----
48.....	84	-9	-22	+13	0	-9	-----	165	-21	-12	+10	+35	+47	-----
49.....	87	-11	-20	+29	+25	-11	-----	159	-5	+5	+137	-12	+58	-----
50.....	90	-10	-16	+75	+21	-7	-----	155	-23	+14	+154	-1	+28	-----
51.....	96	-28	-21	+86	+8	+12	-----	164	-41	-6	+357	+3	+41	-----
52.....	101	-10	-13	+119	-11	+37	-----	177	-13	+3	+417	-65	+56	-----
53.....	-----	-----	+140	-----	-----	-----	-----	-----	-----	+359	-----	-----	-----	-----

For footnotes, see table 3.

Dates of end (Saturday) of first calendar week of the year

Year	First week ended	Year	First week ended	Year	
				Year	First week ended
1920.....	Jan. 10	1926.....	Jan. 9	1932.....	Jan. 2
1921.....	Jan. 8	1927.....	Jan. 8	1933.....	Jan. 7
1922.....	Jan. 7	1928.....	Jan. 7	1934.....	Jan. 6
1923.....	Jan. 6	1929.....	Jan. 5	1935.....	Jan. 5
1924.....	Jan. 5	1930.....	Jan. 4	1936.....	Jan. 4
1925.....	Jan. 10	1931.....	Jan. 3	1937.....	Jan. 9

TABLE 6.—*Excess¹ weekly death rates (annual basis) per 100,000 from influenza and pneumonia, 1930-35*

Week of year	About 10 cities ² in the West North Central States						About 7 cities ² in the West South Central States							
	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935	Smoothed mean (1930-33) ³	1930	1931	1932	1933	1934	1935
1.....	159	+56	+6	-38	+261	+86	+58	195	+171	+67	+27	+263	+36	+47
2.....	168	+47	+37	-19	+140	+28	+103	207	+23	+92	-22	+176	-41	-8
3.....	173	+53	+41	-42	+156	+45	+66	215	+41	+76	-9	+1	-5	0
4.....	173	-15	+11	-4	+79	+63	+46	219	+155	+93	-13	+16	-12	-24
5.....	168	+3	+4	-43	+81	-4	+100	220	+135	+67	-30	+6	-16	+78
6.....	165	+6	-24	+16	+101	-15	+2	221	+77	+50	+9	+28	-1	+37
7.....	165	-51	0	+114	+21	+63	+20	215	+88	+104	-22	+21	+32	+40
8.....	165	-9	+35	+178	+78	-4	+9	216	-1	+93	+27	+13	+48	+75
9.....	165	-21	+112	+117	+52	-15	-20	212	+11	+38	-53	-32	+45	+89
10.....	168	-45	+93	+114	+4	+14	-18	210	-49	-25	+60	+32	+30	+71
11.....	166	-25	+28	+73	+3	+10	+18	208	-54	+38	+4	-5	-69	-3
12.....	163	-37	+84	+70	+34	-14	-39	211	-15	-11	+82	-18	+17	+13
13.....	161	-29	+30	+110	-4	+53	-34	205	-39	+46	+104	-10	-1	-44
14.....	160	-43	-13	+70	-29	-63	-9	194	-22	+99	+43	-31	-44	-25
15.....	154	-4	+100	+66	-45	-24	-3	187	-5	+13	+82	-18	-74	-57
16.....	151	+14	+108	+20	-39	-9	0	175	-56	+30	-42	-76	+9	-16
17.....	142	-59	+93	+29	-10	-2	-37	163	-29	+25	-11	+18	+4	+1
18.....	133	-18	+47	+34	-30	-7	+41	143	-32	+37	+2	-32	-24	-12
19.....	121	+1	-5	-32	-14	+17	+3	131	+48	+13	+24	+5	+38	-23
20.....	113	-9	-11	+1	-18	+15	+38	119	-57	-7	+40	-22	+13	+39
21.....	105	-27	-15	+26	-1	-14	-4	107	-34	+10	+8	-37	+8	+32
22.....	100	-33	+33	+13	-16	+61	+13	95	+19	+40	-9	-6	+30	+8
23.....	95	+43	+40	-17	-29	+13	+33	95	-20	-6	+11	-25	+33	-9
24.....	88	0	-19	-10	-1	+4	-19	92	+22	-17	+14	-38	-24	+18
25.....	82	+23	+22	-20	-38	-43	-15	90	-32	-7	+16	+9	-2	+6
26.....	74	+9	-43	-9	+18	-19	-16	88	-4	+3	-3	-15	-13	-2
27.....	67	-8	+13	+1	+8	-34	-20	84	-3	+10	+18	+11	+4	+71
28.....	63	+14	+19	-25	+3	-30	+2	81	-6	+6	-11	-9	+27	+42
29.....	61	-26	+7	-17	-18	+33	+16	76	-31	-34	+25	+15	+19	+21
30.....	56	+1	-8	+20	-5	+65	+1	68	+5	-18	-21	-2	+13	+34
31.....	51	-6	-9	+39	+3	0	-6	66	-19	-12	-5	+16	+13	-12
32.....	49	-7	+10	-5	-10	-11	-----	64	-12	+9	0	-24	+18	-----
33.....	47	-21	+3	-3	-8	-9	-----	63	+24	+4	+14	-10	-18	-----
34.....	45	-14	+4	-1	-21	+19	-----	65	-5	+2	+2	-5	0	-----
35.....	46	-9	+10	+12	-16	0	-----	70	-29	-2	+5	+26	-2	-----
36.....	48	+4	+20	-1	-9	-16	-----	70	-10	+32	-4	+3	-15	-----
37.....	52	-13	+4	+15	-16	-15	-----	73	-17	+26	+14	-3	-5	-----
38.....	58	+11	-5	-29	-9	+25	-----	74	-21	+28	-7	-1	-12	-----
39.....	62	-33	-15	+11	+10	+27	-----	76	-1	-14	-9	+26	+12	-----
40.....	70	+5	+5	+24	-10	-2	-----	79	+3	-3	-25	+8	+42	-----
41.....	80	+5	-20	-3	-20	+16	-----	88	+36	+6	-20	-31	0	-----
42.....	88	-40	+17	+38	-24	+31	-----	94	+3	-9	-2	+6	-26	-----
43.....	94	-35	+5	+35	+15	+53	-----	102	+33	+25	+33	-22	-38	-----
44.....	99	-4	-19	-2	+6	-19	-----	110	+16	-10	+26	-37	-39	-----
45.....	106	-27	-14	+52	-14	-23	-----	119	+6	-21	0	+1	+13	-----
46.....	106	-33	-6	+23	-20	+3	-----	123	+10	-45	+13	+45	-6	-----
47.....	110	+22	+17	+25	-22	+16	-----	137	+14	-30	-23	-8	-21	-----
48.....	116	-35	-1	+19	-54	+13	-----	145	+24	-43	+191	-5	+12	-----
49.....	121	+10	-20	+61	-34	+10	-----	152	+13	+9	+257	+80	+18	-----
50.....	124	+31	+1	+136	0	+38	-----	161	+15	-29	+408	-18	+22	-----
51.....	137	-40	-20	+292	-9	+28	-----	175	-16	+6	+253	-61	+61	-----
52.....	150	-40	-21	+338	-8	+67	-----	181	+43	-3	+321	-2	+5	-----
53.....	-----	-----	-----	+404	-----	-----	-----	-----	-----	-----	+266	-----	-----	-----

For footnotes, see table 3.

TABLE 7.—*Excess*¹ weekly death rates (annual basis) per 100,000 from influenza and pneumonia, 1930–35

Week of year	About 9 cities ² in the Mountain States							About 4 cities ³ in the Pacific States						
	Smoothed mean (1930-33) ⁴	1930	1931	1932	1933	1934	1935	Smoothed mean (1930-33) ⁴	1930	1931	1932	1933	1934	1935
1.....	201	-26	+49	+113	+176	-42	+84	132	-18	-1	+56	+68	+3	+2
2.....	203	+41	+56	+211	+123	+26	+47	134	+11	+13	+55	+128	+7	-36
3.....	214	+38	+61	+89	+77	-35	+97	135	+32	-16	+48	+27	-14	+2
4.....	219	-72	-49	-27	-12	-13	+56	134	-38	-18	+2	+37	-6	-38
5.....	213	-4	+9	-4	-24	-8	+149	130	-29	-10	-6	+26	+6	+36
6.....	212	+177	+19	+73	+29	-50	+91	125	+28	-49	-14	+4	-18	+4
7.....	213	+133	-43	+38	-6	-16	-56	126	+11	-48	+17	-6	-10	-26
8.....	202	+42	+30	+92	+73	+1	+14	121	-50	-33	-17	+82	+5	-17
9.....	195	+41	-15	+115	+6	+6	-13	119	-45	+5	-2	+71	+2	-2
10.....	188	-29	-40	+60	-83	+115	-49	114	-33	+14	-1	-15	-30	-25
11.....	178	-60	+67	+71	-5	+8	-31	109	-40	+45	+15	-40	-6	-2
12.....	176	+54	-44	+115	-88	+45	+82	98	-6	+31	-6	-43	+3	-6
13.....	177	+27	-10	-19	-47	+39	-65	91	+15	+42	-15	-20	+4	+3
14.....	164	+24	-4	+40	-17	-12	+76	82	-15	-20	+7	-20	+21	+5
15.....	157	+32	+29	+20	-62	-31	-45	73	+22	+1	-2	-19	+3	+6
16.....	138	+19	-28	-31	-43	+26	+41	63	-22	+10	-2	-9	+15	+9
17.....	128	+21	-25	+4	+1	+26	-23	62	-9	-15	-2	-8	-7	+29
18.....	111	-63	-40	+37	-50	+32	+49	60	-10	-16	-23	+7	-10	-29
19.....	108	0	+2	-21	+46	+13	+52	58	+8	+15	+14	-8	-9	+16
20.....	100	-25	-27	-13	-22	+14	-25	57	+9	+1	+3	+10	+6	+24
21.....	104	+14	-23	+36	-9	+19	+31	56	-14	-5	-10	-2	+3	-7
22.....	100	-17	-27	+16	-22	+14	+9	54	+6	-10	+2	-10	-19	0
23.....	101	+9	-28	+37	-6	-12	+42	52	-16	0	+3	-30	-2	+2
24.....	94	-18	-37	-34	+136	-7	+14	52	+18	-7	-6	+8	-3	-10
25.....	89	+30	-15	-29	-12	-12	+27	51	+17	-15	+4	+3	-5	+5
26.....	81	-13	-57	-5	+47	+12	+34	51	+1	-11	+7	-9	+11	+7
27.....	72	-20	-1	-6	-12	+3	+9	46	+21	+2	0	-9	+12	-10
28.....	67	+29	-15	-9	-7	-2	-3	41	+18	-13	-4	+6	-2	+13
29.....	61	-8	-35	+5	+41	-32	+2	40	-21	-19	-8	-7	+4	+9
30.....	62	+8	-54	+21	+6	-15	+26	38	-31	+5	-1	-7	+8	+3
31.....	63	-10	-28	-6	-29	-17	-9	36	+8	+5	+18	-1	+21	+7
32.....	61	+16	-12	+9	+36	+19	-----	40	+6	+3	+8	-4	+10	-----
33.....	58	+54	+8	+12	+4	-3	-----	42	+4	-26	-3	+3	+30	-----
34.....	63	-12	-14	-10	+8	-26	-----	38	+18	+22	-6	+9	+22	-----
35.....	66	-24	+1	-39	-11	-1	-----	38	+18	-7	+18	-6	-2	-----
36.....	67	-16	+35	-43	+39	-11	-----	41	-10	-20	-7	-16	+7	-----
37.....	70	+40	+6	-9	+37	+14	-----	43	-15	+5	+7	+3	-1	-----
38.....	79	+39	+6	-17	-5	+5	-----	43	+3	+43	-6	-4	-1	-----
39.....	80	-40	-3	-19	+29	-33	-----	47	+5	+39	-11	+3	-5	-----
40.....	88	+55	-19	+17	-37	-40	-----	51	-2	+2	-28	+5	-8	-----
41.....	95	-5	-35	-7	-26	-13	-----	53	-7	+7	-14	-8	-10	-----
42.....	106	+77	+25	+25	-26	+21	-----	52	+34	+18	-1	+8	+28	-----
43.....	118	-49	-21	+48	+41	+27	-----	55	+24	+7	+8	-23	+9	-----
44.....	137	+24	-56	+3	+5	-43	-----	63	-24	-15	+3	-10	-3	-----
45.....	141	+37	+27	+8	-30	+5	-----	64	-7	-6	-24	+22	+5	-----
46.....	152	+50	+36	+40	-29	-49	-----	69	+15	+13	+34	+8	-14	-----
47.....	158	+43	+47	-53	-68	-72	-----	78	-13	-24	+2	+25	+15	-----
48.....	157	+70	+5	+35	-25	+15	-----	84	+5	-4	+43	0	-17	-----
49.....	158	-34	-13	+129	+24	+49	-----	91	-20	+4	+80	+30	-9	-----
50.....	161	-21	-25	+291	-45	+63	-----	101	-25	+42	+103	-7	-9	-----
51.....	167	+41	+65	+405	+10	-11	-----	110	+51	+25	+72	-1	-4	-----
52.....	182	-19	+130	+329	-37	+43	-----	121	+58	-26	+48	-12	-13	-----
53.....	-----	-----	-----	+242	-----	-----	-----	-----	-----	-----	+77	-----	-----	-----

For footnotes, see table 3.

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Excess mortality from causes other than influenza and pneumonia during influenza epidemics. By Selwyn D. Collins. *Pub. Health Rep.*, Nov. 11, 1932. (Reprint 1553.)

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DEATHS DURING WEEK ENDED NOV. 9, 1935

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

	Week ended Nov. 9, 1935	Correspond- ing week, 1934
Data from 86 large cities of the United States:		
Total deaths.....	7,730	7,966
Deaths per 1,000 population, annual basis.....	10.8	11.1
Deaths under 1 year of age.....	475	574
Deaths under 1 year of age per 1,000 estimated live births.....	44	53
Deaths per 1,000 population, annual basis, first 45 weeks of year.....	11.3	11.3
Data from industrial insurance companies:		
Policies in force.....	67,689,195	67,043,800
Number of death claims.....	10,029	10,802
Death claims per 1,000 policies in force, annual rate.....	7.7	8.4
Death claims per 1,000 policies, first 45 weeks of year, annual rate.....	9.6	9.3

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 November 16, 1935, and November 17, 1934

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Nov. 16, 1935, and Nov. 17, 1934

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934
New England States:								
Maine.....	1	2	-----	2	85	18	1	0
New Hampshire.....	-----	-----	-----	-----	-----	28	0	0
Vermont.....	1	4	-----	-----	49	3	0	0
Massachusetts.....	8	9	-----	-----	80	73	2	1
Rhode Island.....	1	3	-----	-----	19	1	0	0
Connecticut.....	3	3	3	4	52	209	1	0
Middle Atlantic States:								
New York.....	24	48	17	20	350	702	5	8
New Jersey.....	20	30	9	13	14	41	3	2
Pennsylvania.....	62	57	-----	-----	69	429	2	0
East North Central States:								
Ohio.....	89	132	52	59	63	159	4	1
Indiana.....	75	72	23	58	18	137	1	1
Illinois.....	73	112	24	22	14	318	8	4
Michigan.....	36	21	1	-----	13	46	3	2
Wisconsin.....	3	8	43	9	42	136	0	2
West North Central States:								
Minnesota.....	7	6	1	1	45	140	1	0
Iowa.....	23	13	3	-----	5	92	1	0
Missouri.....	76	84	73	33	31	99	1	2
North Dakota.....	1	5	5	2	11	43	0	0
South Dakota.....	5	4	-----	1	2	12	0	1
Nebraska.....	17	31	-----	-----	47	9	0	0
Kansas.....	26	27	8	1	3	131	0	0
South Atlantic States:								
Delaware.....	-----	1	-----	-----	125	-----	0	0
Maryland ¹	21	18	2	6	8	44	3	1
District of Columbia.....	15	11	1	1	1	1	6	0
Virginia ²	72	73	-----	-----	26	139	0	1
West Virginia.....	42	77	20	33	14	109	1	0
North Carolina ³	74	73	8	1	9	94	2	2
South Carolina.....	15	13	147	328	1	13	0	0
Georgia ⁴	41	45	-----	-----	-----	-----	0	0
Florida.....	21	16	1	1	4	6	0	0
East South Central States:								
Kentucky.....	44	96	1	33	7	218	0	0
Tennessee ⁵	61	65	16	34	4	19	3	1
Alabama ⁶	44	76	31	92	6	122	4	0
Mississippi ⁷	10	30	-----	-----	-----	-----	0	0
West South Central States:								
Arkansas.....	12	3	13	13	-----	-----	0	0
Louisiana.....	32	25	6	4	10	4	1	0
Oklahoma ⁸	25	20	50	35	-----	6	0	2
Texas ⁹	156	58	92	127	14	7	1	2

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Nov. 16, 1935, and Nov. 17, 1934—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934
Mountain States:								
Montana.....		1	3	4	22	36	0	0
Idaho.....	1		1	3	3		0	0
Wyoming.....	3				5	2	1	0
Colorado.....	13	7			3	107	2	0
New Mexico.....	6	5			18	41	0	2
Arizona.....	1	4	32	1	1	18	2	1
Utah ¹		2		2	3	23	0	0
Pacific States:								
Washington.....		1			92	104	2	0
Oregon.....	1	1	28	31	153	26	2	0
California ²	49	56	52	37	140	50	0	2
Total	1,309	1,448	756	1,011	1,631	4,015	63	33
First 46 weeks of year	31,702	34,015	110,893	56,510	707,296	637,530	5,001	2,029

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934
New England States:								
Maine.....	3	1	12	20	0	0	0	4
New Hampshire.....	1	1	10	5	0	0	0	0
Vermont.....	1	0	13		0	0	4	1
Massachusetts.....	10	2	175	125	0	0	1	5
Rhode Island.....	5	0	12	10	0	0	0	1
Connecticut.....	3	0	27	34	0	0	2	0
Middle Atlantic States:								
New York.....	22	4	390	288	0	0	11	12
New Jersey.....	8	0	95	134	0	0	7	6
Pennsylvania.....	2	3	395	400	0	0	14	23
East North Central States:								
Ohio.....	0	8	441	721	0	3	11	10
Indiana.....	4	1	176	188	2	0	0	7
Illinois.....	3	3	451	513	3	1	6	15
Michigan.....	6	6	171	252	0	0	3	9
Wisconsin.....	2	4	311	313	16	17	5	6
West North Central States:								
Minnesota.....	1	4	238	80	0	10	1	1
Iowa.....	2	1	84	64	2	1	9	3
Missouri.....	2	2	125	92	4	6	3	19
North Dakota.....	0	0	48	39	2	0	2	0
South Dakota.....	1	0	35	25	6	1	0	3
Nebraska.....	0	4	77	31	72	0	0	1
Kansas.....	0	1	140	79	11	1	7	5
South Atlantic States:								
Delaware.....	0	0	6	5	0	0	3	2
Maryland ¹	1	2	80	102	0	0	12	15
District of Columbia.....	0	0	8	26	0	0	1	1
Virginia ²	2	1	74	127	0	0	16	2
West Virginia.....	0	1	132	148	1	0	6	19
North Carolina ³	7	1	56	127	0	0	3	6
South Carolina.....	0	0	11	12	0	0	5	4
Georgia ⁴	1	0	43	25	0	0	6	2
Florida.....	0	0	11		0	0	4	3
East South Central States:								
Kentucky.....	3	2	59	93	0	0	14	21
Tennessee ⁵	4	0	96	92	1	0	11	14
Alabama ⁶	2	0	27	38	0	0	10	7
Mississippi ⁷	0	1	13	19	0	0	6	5
West South Central States:								
Arkansas.....	0	0	7	2	0	0	2	4
Louisiana.....	2	2	8	20	0	1	11	11
Oklahoma ⁸	1	0	13	18	0	1	11	30
Texas ⁹	0	2	66	49	0	6	27	65

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Nov. 16, 1935, and Nov. 17, 1934—Continued

Division and State	Polio-myelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934	Week ended Nov. 16, 1935	Week ended Nov. 17, 1934
Mountain States:								
Montana.....	0	3	120	17	277	0	4	0
Idaho.....	0	0	63	4	0	0	2	1
Wyoming.....	0	1	44	17	2	3	1	0
Colorado.....	4	0	86	173	7	9	3	0
New Mexico.....	0	1	23	26	0	0	9	14
Arizona.....	0	1	17	17	0	0	0	3
Utah ¹	0	0	83	31	0	0	0	0
Pacific States:								
Washington.....	1	4	52	36	33	20	3	3
Oregon.....	6	3	53	39	0	0	5	6
California ²	12	21	250	164	0	1	14	14
Total.....	122	91	4, 927	4, 840	439	80	275	383
First 46 weeks of year.....	10, 269	6, 962	216, 896	183, 828	6, 313	4, 412	16, 271	19, 303

¹ New York City only.

² Week ended earlier than Saturday.

³ Typhus fever: Virginia, 1; North Carolina, 1; Georgia, 9; Tennessee, 1; Alabama, 13; Texas, 3; California, 2.

⁴ Exclusive of Oklahoma City and Tulsa.

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	Mala-ria	Mea-sles	Pella-gra	Polio-mye-litis	Scarlet fever	Small-pox	Ty-phoid fever
<i>August 1935</i>										
Idaho.....			3		6		1	16	1	17
<i>September 1935</i>										
Colorado.....	2	41			22		6	168	5	16
<i>October 1935</i>										
Arkansas.....	2	59	36	195	2	33	1	36	0	22
Florida.....	1	81	5	173	19	3	1	23	0	6
Maine.....	1	11	5		121		32	57	0	11
Michigan.....	8	62	15	9	101		82	543	0	41
Minnesota.....	10	75	2		52		12	777	4	13
New Jersey.....	3	79	18	32	63		96	289	0	13
Ohio.....	20	407	122	3	217		10	1, 331	6	107
Pennsylvania.....	21	234		4	282		43	1, 209	0	116
Rhode Island.....	2	4			126		56	49	0	1
South Carolina.....		332	691	1, 460	10	74	3	45	0	29

<i>August 1935</i>		<i>October 1935—Continued</i>		<i>October 1935—Continued</i>	
Idaho:	Cases	Epidemic encephalitis:	Cases	Tetanus—Continued.	Cases
Chicken pox.....	5	Michigan.....	2	Pennsylvania.....	2
Epidemic encephalitis.....	1	New Jersey.....	5	South Carolina.....	3
Mumps.....	4	Pennsylvania.....	6	Trachoma:	
Rocky Mountain spotted fever.....	2	South Carolina.....	1	Arkansas.....	3
Septic sore throat.....	10	Food poisoning:		New Jersey.....	3
Whooping cough.....	4	Ohio.....	6	Ohio.....	3
		German measles:		Pennsylvania.....	1
<i>September 1935</i>		Maine.....	15	Trichinosis:	
Colorado:		Michigan.....	19	Maine.....	1
Chicken pox.....	31	New Jersey.....	47	Minnesota.....	2
Impetigo contagiosa.....	6	Ohio.....	21	New Jersey.....	2
Mumps.....	70	Pennsylvania.....	81	Ohio.....	2
Vincent's infection.....	5	Rhode Island.....	1	Rhode Island (delayed report).....	1
Whooping cough.....	42	Hookworm disease:		Tularaemia:	
		South Carolina.....	66	Minnesota.....	5
<i>October 1935</i>		Lead poisoning:		South Carolina.....	1
Anthrax:		Michigan.....	2	Typhus fever:	
New Jersey.....	2	Ohio.....	14	Florida.....	4
Pennsylvania.....	1	Mumps:		South Carolina.....	3
Chicken pox:		Arkansas.....	19	Undulant fever:	
Arkansas.....	20	Florida.....	39	Arkansas.....	3
Florida.....	9	Maine.....	137	Florida.....	2
Maine.....	129	Michigan.....	131	Maine.....	3
Michigan.....	856	New Jersey.....	186	Michigan.....	5
Minnesota.....	536	Ohio.....	378	Minnesota.....	7
New Jersey.....	637	Pennsylvania.....	787	New Jersey.....	2
Ohio.....	980	Rhode Island.....	80	Ohio.....	6
Pennsylvania.....	1,757	South Carolina.....	55	Pennsylvania.....	10
Rhode Island.....	35	Ophthalmia neonatorum:		Vincent's infection:	
South Carolina.....	13	Ohio.....	68	Maine.....	2
Dengue:		Pennsylvania.....	8	Michigan.....	41
Florida.....	3	South Carolina.....	13	Whooping cough:	
South Carolina.....	5	Paratyphoid fever:		Arkansas.....	15
Diarrhea:		Ohio.....	3	Florida.....	21
South Carolina.....	224	South Carolina.....	3	Maine.....	61
Ohio (under 2 years, including enteritis).....	16	Puerperal septicemia:		Michigan.....	886
Dysentery:		Ohio.....	5	Minnesota.....	106
Michigan (amoebic).....	3	Rabies in animals:		New Jersey.....	375
Minnesota (bacillary).....	1	Michigan.....	4	Ohio.....	420
New Jersey (bacillary).....	1	New Jersey.....	6	Pennsylvania.....	1,108
Ohio (amoebic).....	1	South Carolina.....	49	Rhode Island.....	79
Ohio (bacillary).....	1	Septic sore throat:		South Carolina.....	38
Pennsylvania (amoebic).....	1	Michigan.....	48		
Pennsylvania (bacillary).....	3	Minnesota.....	2		
Rhode Island (bacillary).....	4	Ohio.....	94		
		Rhode Island.....	5		
		Tetanus:			
		Michigan.....	2		
		New Jersey.....	1		

SMALLPOX IN VALLEY COUNTY, MONT.

A report dated November 20, 1935, stated that since September 15, 1935, there had been 261 cases of smallpox in Valley County, Mont. Most of the cases were in or near Glasgow. The disease was mild.

CASES OF VENEREAL DISEASES REPORTED FOR SEPTEMBER 1935

These reports are published monthly for the information of health officers in order to furnish current data as to the prevalence of the venereal diseases. The figures are taken from reports received from State and city health officers. They are preliminary and are therefore subject to correction. It is hoped that the publication of these reports will stimulate more complete reporting of these diseases.

Reports from States

State	Syphilis		Gonorrhoea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
Alabama.....	802	2.96	316	1.17
Arizona.....	54	1.18	159	3.48
Arkansas ¹	286	1.82	110	.59
California.....	1,306	2.12	1,392	2.26
Colorado ²				
Connecticut.....	171	1.03	143	.86
Delaware.....	101	4.17	45	1.86
District of Columbia.....	145	2.92	156	3.14
Florida.....	208	1.32	75	.48
Georgia.....	1,155	3.97	431	1.48
Idaho.....	0	0	0	0
Illinois.....	1,293	1.64	1,183	1.50
Indiana.....	190	.58	226	.68
Iowa ¹	135	.54	227	.91
Kansas.....	93	.49	87	.46
Kentucky.....	190	.72	300	1.13
Louisiana.....	72	.33	93	.43
Maine.....	24	.30	46	.57
Maryland.....	731	4.37	261	1.56
Massachusetts.....	462	1.07	553	1.28
Michigan.....	494	.95	643	1.26
Minnesota.....	373	1.43	388	1.49
Mississippi.....	1,326	6.45	2,091	10.17
Missouri.....	565	1.54	195	.53
Montana ¹	36	.67	88	1.64
Nebraska.....	52	.37	96	.60
Nevada ²				
New Hampshire.....	18	.38	26	.55
New Jersey.....	431	1.02	383	.91
New Mexico ¹	96	2.20	145	3.32
New York ¹	5,062	3.88	1,244	.95
North Carolina.....	1,065	3.23	353	1.07
North Dakota.....	71	1.03	12	.17
Ohio.....	593	.87	271	.40
Oklahoma ¹	156	.63	183	.74
Oregon.....	30	.30	139	1.40
Pennsylvania.....	284	.29	202	.21
Rhode Island.....	86	1.22	63	.80
South Carolina ²				
South Dakota.....	5	.07	35	.60
Tennessee.....	951	3.55	526	1.97
Texas.....	352	.58	74	.12
Utah ²				
Vermont.....	17	.47	33	.91
Virginia ¹	310	1.27	227	.93
Washington.....	94	.58	167	1.04
West Virginia.....	263	1.47	148	.83
Wisconsin ⁴	30	.10	211	.70
Wyoming ¹				
Total.....	20,168	1.64	13,746	1.12

¹ Incomplete.² Not reporting.³ No report for current month.⁴ Only cases of syphilis in the infectious stage are reported.

Reports from cities of 200,000 population or over

State	Syphilis		Gonorrhea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
Akron, Ohio.....	23	0.85	44	1.62
Atlanta, Ga.....	226	7.87	134	4.67
Baltimore, Md.....	414	5.02	173	2.10
Birmingham, Ala.....	148	5.24	70	2.48
Boston, Mass.....	181	2.29	209	2.64
Buffalo, N. Y. ¹				
Chicago, Ill.....	866	2.43	817	2.29
Cincinnati, Ohio.....	63	1.35	63	1.35
Cleveland, Ohio.....	230	2.47	101	1.09
Columbus, Ohio.....	63	2.06	23	.75
Dallas, Tex.....	84	2.90	16	.55
Dayton, Ohio.....	3	.14	0	0
Denver, Colo.....	26	.88	8	.27
Detroit, Mich.....	116	.67	193	1.11
Houston, Tex. ²	183	5.46	47	1.40
Indianapolis, Ind.....	29	.77	39	1.03
Jersey City, N. J.....	0	0	2	.05
Kansas City, Mo.....	69	1.64	17	.40
Los Angeles, Calif.....	419	2.93	362	2.53
Louisville, Ky.....	207	6.39	330	10.19
Memphis, Tenn.....	173	6.48	61	2.28
Milwaukee, Wis.....	4	.07	19	.31
Minneapolis, Minn.....	100	2.06	123	2.53
Newark, N. J.....	230	4.96	156	3.37
New Orleans, La. ³				
New York, N. Y.....	1,012	1.39	263	.36
Oakland, Calif.....	35	1.15	30	.99
Omaha, Nebr.....	26	1.18	17	.77
Philadelphia, Pa.....	144	.72	51	.26
Pittsburgh, Pa. ¹				
Portland, Oreg.....	11	.35	83	2.64
Providence, R. I.....	32	1.24	24	.93
Rochester, N. Y.....	83	2.46	45	1.33
St. Louis, Mo.....	760	9.09	230	2.75
St. Paul, Minn.....	38	1.35	39	1.38
San Antonio, Tex. ³				
San Francisco, Calif.....	128	1.91	155	2.31
Seattle, Wash.....	69	1.82	91	2.40
Syracuse, N. Y. ⁴	25	1.15	36	1.65
Toledo, Ohio.....	57	1.87	38	1.25
Washington, D. C. ⁵	145	2.92	156	3.14

¹ No report for current month.

² Data for Jefferson Davis and Hermann Hospitals; physicians of Houston are not compelled to report venereal diseases.

³ Not reporting.

⁴ Reported by dispensary and clinics.

⁵ Reported by Social Hygiene Clinic.

WEEKLY REPORTS FROM CITIES

City reports for week ended Nov. 9, 1935

This table summarizes the reports received weekly from a selected list of 140 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	Cases	Deaths									
Maine:													
Portland.....	0	0	0	0	0	2	0	0	0	0	0	6	17
New Hampshire:													
Concord.....	0	0	0	0	0	2	1	0	0	0	0	0	6
Manchester.....	0	0	0	0	0	2	0	0	1	0	0	0	9
Nashua.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermont:													
Barre.....	1	0	0	0	0	0	0	0	0	0	0	0	3
Burlington.....	0	0	0	0	0	0	0	0	0	0	0	0	10
Rutland.....	0	0	0	0	0	0	1	0	0	0	0	0	4
Massachusetts:													
Boston.....	3	1	6	6	16	39	0	0	8	0	5	5	214
Fall River.....	1	0	0	0	3	1	0	0	0	0	0	0	28
Springfield.....	0	0	0	0	4	4	0	0	0	0	0	0	30
Worcester.....	0	0	0	1	6	18	0	2	0	0	3	3	41
Rhode Island:													
Pawtucket.....	0	0	1	5	2	0	3	0	0	5	5	48	
Providence.....	0	0	0	0	3	1	0	1	0	3	3	29	
Connecticut:													
Bridgeport.....	0	0	0	3	0	0	0	0	1	12	12	41	
Hartford.....	0	0	0	0	0	0	0	0	0	8	8	37	
New Haven.....	0	1	0	0	0	0	0	1	0	0	0	0	
New York:													
Buffalo.....	2	1	7	14	32	0	5	0	6	6	6	114	
New York.....	28	5	4	43	101	64	0	80	10	78	1,305	67	
Rochester.....	0	0	1	1	0	0	1	0	0	12	12	67	
Syracuse.....	0	0	6	3	0	0	1	0	8	8	8	46	
New Jersey:													
Camden.....	1	0	0	2	4	0	0	1	5	5	5	33	
Newark.....	0	2	1	2	5	16	0	7	0	32	32	82	
Trenton.....	1	0	0	2	0	0	2	0	2	2	2	30	
Pennsylvania:													
Philadelphia.....	6	2	2	28	21	61	0	14	4	62	62	414	
Pittsburgh.....	2	3	1	27	47	0	6	0	24	24	24	170	
Reading.....	0	0	0	0	5	0	2	0	1	1	1	23	
Scranton.....	0	0	1	2	0	0	0	0	0	0	0	0	
Ohio:													
Cincinnati.....	11	2	2	7	15	0	4	0	5	5	5	133	
Cleveland.....	4	18	0	13	25	0	8	0	45	45	45	180	
Columbus.....	8	2	2	2	16	0	5	0	3	3	3	95	
Toledo.....	0	0	2	2	13	0	3	0	11	11	11	55	
Indiana:													
Anderson.....	2	0	0	2	4	0	0	0	6	6	6	10	
Fort Wayne.....	14	0	0	2	9	0	0	0	0	0	0	21	
Indianapolis.....	9	0	1	8	12	0	7	0	19	19	19	108	
Muncie.....	0	0	3	1	3	0	1	0	0	0	0	12	
South Bend.....	0	0	0	1	2	0	0	0	0	0	0	18	
Terre Haute.....	0	0	0	0	2	0	0	0	0	0	0	18	
Illinois:													
Alton.....	7	0	0	0	6	0	0	1	0	0	0	5	
Chicago.....	18	2	2	10	46	175	0	35	3	74	74	672	
Elgin.....	0	0	0	1	4	0	0	0	0	0	0	11	
Moline.....	0	0	0	1	0	0	0	0	0	1	1	9	
Springfield.....	0	0	0	1	3	0	0	0	1	1	1	19	
Michigan:													
Detroit.....	10	1	0	5	13	41	0	16	0	124	124	212	
Flint.....	2	0	0	4	12	0	2	0	0	0	0	24	
Grand Rapids.....	0	0	3	2	10	0	1	0	2	2	2	27	
Wisconsin:													
Kenosha.....	1	0	1	0	5	0	0	0	14	14	14	3	
Milwaukee.....	0	0	1	6	37	0	3	0	113	113	113	91	
Racine.....	0	0	1	1	18	0	1	0	3	3	3	11	
Superior.....	0	0	0	1	3	0	0	0	0	0	0	11	
Minnesota:													
Duluth.....	0	0	0	4	3	0	1	0	5	5	5	27	
Minneapolis.....	7	2	4	4	67	0	2	1	8	8	8	94	
St. Paul.....	0	0	0	8	31	0	2	0	5	5	5	56	

City reports for week ended Nov. 9, 1935—Continued

State and city	Diph- theria cases	Influenza		Mea- sles 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								
Iowa:											
Cedar Rapids.....	0		0	0	0	4	0	0	0	1	
Davenport.....	1		0	0	0	5	0	0	0	0	
Des Moines.....	2		0	0	0	6	0	0	0	2	29
Sioux City.....	0		0	0	0	2	0	0	0	0	
Waterloo.....	7		0	1	0	9	0	0	0	1	
Missouri:											
Kansas City.....	3		0	0	8	6	0	2	0	1	82
St. Joseph.....	4	0	0	0	1	2	0	1	0	0	5
St. Louis.....	16	1	0	3	7	22	0	3	0	5	184
North Dakota:											
Fargo.....	1		1	0	0	8	1	0	0	0	9
Grand Forks.....	0		0	0	0	4	0	0	0	2	
Minot.....	0		0	0	0	0	0	0	0	0	7
South Dakota:											
Aberdeen.....	0		0	0	0	1	0	0	0	3	
Nebraska:											
Omaha.....	5		0	2	4	21	2	1	0	0	58
Kansas:											
Lawrence.....	0		0	0	0	1	0	0	0	0	3
Topeka.....											
Wichita.....	1		0	1	5	1	0	1	0	1	38
Delaware:											
Wilmington.....	0		0	0	0	1	0	0	0	3	22
Maryland:											
Baltimore.....	4	2	0	2	9	24	0	11	1	12	194
Cumberland.....	3		0	0	0	2	0	1	0	0	9
Frederick.....	0		0	0	0	0	0	0	0	0	4
District of Col.:											
Washington.....	18	1	1	2	12	10	0	8	1	1	152
Virginia:											
Lynchburg.....	1		0	0	0	0	0	0	0	6	10
Norfolk.....	1		0	3	3	3	0	2	0	0	27
Richmond.....	5		1	0	5	4	0	5	0	0	51
Roanoke.....	2		0	0	0	4	0	0	0	0	9
West Virginia:											
Charleston.....	4	1	1	0	2	1	0	0	0	4	20
Huntington.....	1		0	0	0	10	0	0	0	0	
Wheeling.....	1		0	0	5	5	0	0	0	0	11
North Carolina:											
Gastonia.....	1		0	0	1	0	0	0	0	0	5
Raleigh.....	0		0	1	1	0	0	0	0	0	11
Wilmington.....	0		0	0	1	0	0	0	0	1	11
Winston-Salem.....	0		0	0	2	4	0	0	0	0	14
South Carolina:											
Charleston.....	0		1	0	2	0	0	2	0	0	24
Columbia.....											
Florence.....	1		0	0	0	0	0	0	0	0	5
Greenville.....	0		0	0	3	1	0	0	0	0	9
Georgia:											
Atlanta.....	9	10	0	0	8	14	0	1	0	0	
Brunswick.....	0		0	0	0	1	0	0	0	0	4
Savannah.....	3		0	6	3	2	0	2	1	0	33
Florida:											
Miami.....	3		2	0	2	2	0	2	0	0	24
Tampa.....	1		0	0	3	3	0	1	0	0	27
Kentucky:											
Ashland.....	6			0	0	2	0		1	0	
Covington.....	0		0	0	0	2	0	1	0	1	7
Lexington.....	2		0	0	2	1	0	1	2	2	18
Tennessee:											
Knoxville.....	5		1	0	2	0	0	2	0	0	37
Memphis.....	3		2	0	5	9	0	6	3	7	86
Nashville.....	4		0	1	3	6	0	0	1	0	39
Alabama:											
Birmingham.....	7		1	0	4	2	0	3	0	0	55
Mobile.....	5		0	0	3	2	0	2	1	1	20
Montgomery.....	2			0	0	1	0		0	1	
Arkansas:											
Fort Smith.....	1			0	0	0	0		0	0	
Little Rock.....	2		0	0	4	4	0	2	0	0	6
Louisiana:											
New Orleans.....	15	3	2	9	12	5	0	15	2	14	128
Shreveport.....	0		0	0	5	1	0	4	0	0	40

City reports for week ended Nov. 9, 1935—Continued.

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								
Oklahoma:											
Oklahoma City.....	2	17	0	0	5	3	0	0	0	0	38
Texas:											
Dallas.....	13	1	1	0	10	8	0	3	0	1	78
Fort Worth.....	15	0	1	5	7	0	0	0	0	0	38
Galveston.....	1	0	0	0	0	0	0	1	0	0	14
Houston.....	12	0	1	3	8	0	4	0	0	0	69
San Antonio.....	2	0	0	0	4	4	0	9	0	0	55
Montana:											
Billings.....	0	0	0	0	0	16	0	0	0	1	12
Great Falls.....	0	0	0	0	0	0	0	0	0	1	2
Helena.....	0	0	0	0	0	0	0	0	0	0	5
Missoula.....	0	0	0	11	1	33	0	0	0	0	11
Idaho:											
Boise.....	0	0	0	0	1	1	0	0	0	0	8
Colorado:											
Colorado Springs.....	0	0	0	1	2	13	0	0	0	3	12
Denver.....	5	0	0	2	6	11	1	1	0	3	89
Pueblo.....	1	0	0	0	0	20	0	1	0	3	7
New Mexico:											
Albuquerque.....	0	0	0	0	1	4	0	4	0	0	11
Utah:											
Salt Lake City.....	0	0	0	3	4	42	0	2	0	9	32
Nevada:											
Reno.....											
Washington:											
Seattle.....	0	1	0	2	6	19	0	3	0	0	67
Spokane.....	0	0	0	4	2	3	1	1	0	7	46
Tacoma.....	0	0	0	0	3	2	0	0	0	0	28
Oregon:											
Portland.....	0	1	0	12	8	14	0	5	0	0	97
Salem.....	0	0	0	0	0	3	0	0	0	1	
California:											
Los Angeles.....	10	16	2	12	17	45	0	14	3	9	318
Sacramento.....	9	0	0	0	4	16	0	2	0	1	33
San Francisco.....	0	9	1	16	9	14	0	6	0	19	178

State and city	Meningococcus meningitis		Poliomyelitis cases	State and city	Meningococcus meningitis		Poliomyelitis cases
	Cases	Deaths			Cases	Deaths	
Massachusetts:				Kansas:			
Boston.....	0	0	8	Wichita.....	0	0	1
Fall River.....	0	0	2	Maryland:			
Worcester.....	0	0	1	Baltimore.....	2	2	1
Rhode Island:				District of Columbia:			
Providence.....	0	0	1	Washington.....	2	0	1
New York:				Virginia:			
Buffalo.....	1	0	0	Richmond.....	1	0	0
New York.....	8	4	9	Georgia:			
Syracuse.....	0	0	4	Atlanta.....	3	0	1
New Jersey:				Tennessee:			
Newark.....	0	0	6	Memphis.....	0	1	0
Pennsylvania:				Louisiana:			
Philadelphia.....	3	0	5	New Orleans.....	2	0	1
Ohio:				Texas:			
Cincinnati.....	2	0	0	Galveston.....	0	2	0
Columbus.....	0	1	0	Montana:			
Illinois:				Missoula.....	1	0	0
Chicago.....	7	3	0	Colorado:			
Michigan:				Colorado Springs.....	0	0	1
Detroit.....	1	1	1	Washington:			
Iowa:				Tacoma.....	0	0	1
Waterloo.....	0	1	0	California:			
Missouri:				Los Angeles.....	1	0	1
Kansas City.....	1	0	0	San Francisco.....	0	0	2
St. Louis.....	1	0	1				

Epidemic encephalitis.—Cases: Springfield, Mass., 1; Pittsburgh, 1; Chicago, 1; Detroit, 1.
 Pellagra.—Cases: Winston-Salem, 1; Atlanta, 1; Savannah, 2; San Francisco, 1.
 Typhus fever.—Cases: Charleston, S. C., 2; Atlanta, 8; Savannah, 2.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—2 weeks ended November 2, 1935.—During the 2 weeks ended November 2, 1935, cases of certain communicable diseases were reported by the Department of Pensions and National Health of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Cerebrospinal meningitis			1	1	1	1				4
Chicken pox	1		42	250	801	170	63	44	119	1,490
Diphtheria		3	6	89	14	14	11	2	3	142
Dysentery					2					2
Erysipelas				9	7	3		1	3	24
Influenza		11	2		104	2			27	146
Lethargic encephalitis										1
Measles	13		292	300	507	13	61	14	105	1,395
Mumps		30			228	121	971	3	99	1,452
Paratyphoid fever	1	2			3					6
Pneumonia					27				16	43
Poliomyelitis				2	3	4	2	5		16
Scarlet fever	5	22	7	306	341	104	36	38	54	913
Smallpox									1	1
Trachoma					1				1	2
Tuberculosis	3	2	19	92	100	30		5	25	276
Typhoid fever		2	12	81	16	11	5	2	1	130
Undulant fever				1	3				1	5
Whooping cough		29	32	96	267	53	63	10	28	578

JAMAICA

Communicable diseases—4 weeks ended November 2, 1935.—During the 4 weeks ended November 2, 1935, cases of certain communicable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Chicken pox	1	3	Puerperal fever		1
Dysentery	14	1	Tuberculosis	29	71
Erysipelas		2	Typhoid fever	19	106
Leprosy		1			

(1699)

NEWFOUNDLAND

Vital statistics—1934.—Following are vital statistics as published in the annual report of the Registrar General of Births, Marriages, and Deaths, for Newfoundland, for 1934:

	Num-ber	Rate per 1,000 popula-tion		Num-ber	Rate per 1,000 popula-tion
Population.....	293,923		Deaths from—Continued.		
Total births.....	6,805	23.49	Congenital debility.....	296	1.00
Live births.....	6,746		Gastro-enteritis (under 2 years).....	60	.20
Stillbirths.....	159		Heart disease.....	198	.67
Deaths.....	3,652	12.42	Infantile convulsions.....	154	.52
Deaths under 1 year ¹	706	2.40	Influenza.....	47	.16
Deaths from:			Meningitis.....	59	.20
Apoplexy, paralysis, and epilepsy.....	185	.63	Nephritis.....	32	.11
Bronchitis.....	48	.16	Pneumonia.....	235	.79
Cancer.....	246	.84	Tuberculosis.....	552	1.88

¹ Deaths under 1 year per 1,000 births, 102.82.

PERU

Lima—Influenza.—According to information dated September 27, 1935, the third epidemic of influenza this year had occurred in the Lima district. Many cases of illness with high fever and attacks in the throat and bronchial tubes were prevalent. However, schools had been reopened after having been closed for 1 week.

Place	May 1935			June 1935			July 1935			August 1935			September 1935	
	1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20
	S. <i>Berberia</i> at Calcutta.....		1											
S. <i>S. Rajah</i> at Penang.....		1												
S. <i>S. Rajah</i> at Calcutta.....		1												
S. <i>S. Sarda</i> at Raugoon from Calcutta.....			1											
S. <i>S. Kuala</i> at Penang from Moulinein.....			1											
S. <i>S. Cape St. Francis</i> at Raugoon from Calcutta.....			1											
S. <i>S. Cape St. Andrew</i> at Calcutta.....			1											
Indo-China (French) (see also table above):														
Cambodia †.....	17	8	1	8	9	6	2	6	1	2	2	3	2	1
Cochin-China ‡.....	12	5	5	3	6	11	7	6	11	2	2	3	2	1
	3			7	5	3	7	3	3	2	2	2	2	1
	2			7	7	3	7	3	3	2	2	2	2	1

‡ During the period Apr. 20 to July 9, 1935, 98 cases of cholera with 95 deaths were reported in Kanchansapuri Province, Siam.

† Suspected.

‡ Reports incomplete.

Egypt:																			
Alexandria.....	C																		
Plague-infected rats.....																			
Asyut.....	C			12															
Girga.....	C		4	1															
Minya.....	C			1															
Qena.....	C			1															
Hawaii Territory: Plague-infected rats—	C																		
Hawaii Island—Hamakua district.....				1															
Kaolapa.....				1															
Kauai.....				3															
Panama.....				1															
Panalo.....				1															
Pouaka.....				1															
Mauli Island—Makawao district—Kahului (9-10 miles from)				1		2													
India:			6, 172	2, 570	176	90	102	215	228	252	312	330							
Bassain.....	D		3, 907	2, 087	183	61	101	118	103	100	110	133							
Bombay Presidency.....	C	8	4	4	4	3	1	1	1	1	1	2							
Central Provinces and Berar.....	C	306	93	14	22	11	28	45	37	30	38	43	27	55	116	112			
Madras Presidency.....	C	164	46	8	36	11	11	24	15	18	27	23	16	28	60	82			
Moulmein.....	C	597	71	6	1	18	42	74	120	141	121	127	94	131	25	308			
Punjab.....	C	8	1	5	9	4	4	13	16	12	18	36	21						
Rangoon.....	D	10	2	2	2	1	3	7	10	9	13	12							
Indo-China (see also table below):																			
Plague-infected rats.....																			
Angkor.....	D	2	1	1															
Funjab.....	D	434	548	40															
Rangoon.....	D	223	327	31	2	2	2	2	2										
Indo-China (see also table below):																			
Plague-infected rats.....																			
Angkor.....	D	1	2	2	8	2	2	2	2										
Funjab.....	D	1	2	2	2	1	1	1	1										
Indo-China (see also table below):																			
Plague-infected rats.....																			
Angkor.....	C																		
Longuyen.....	C																		
Phnom-Penh.....	C																		
Saigon and Cholon.....	C																		
Tanghal Island.....	C																		
Tay Ninh.....	C	12																	

1 Including plague in the United States and its possessions.

2 A report dated Aug. 8, 1935, states that 4 cases of plague occurred at Leventue, Pampa Territory, Argentina, during 2 months.

3 A report dated Aug. 2, 1935, states that 4 cases of plague-infected rats are present at San Luis, Argentina.

4 Reports of plague in Brazil have been received under the dates indicated, as follows: July 26, 1935, 4 cases at Vicosas, Alagoas State; July 2, about 10 deaths in Fiera Santanna, Bahia State since Jan. 1; Oct. 15, 7 cases near Bomfim, Bahia State, during September; during October 1935, 3 cases at Taquinho, Santa Barbara, Bahia State; July 26, 10 cases in Ceara State since Jan. 1; Sept. 10, 204 cases with 72 deaths in Pernambuco State up to Aug. 24; Oct. 8, 4 cases and 1 death at Faulista, Piauby State.

5 Imported.

6 A report dated July 4, 1935, states that 76 cases of plague with 68 deaths were reported at Chuanchow, Province of Fukiang, China.

7 A report dated Sept. 21, 1935, states that up to Sept. 17, 144 deaths from plague were reported in the provinces of Kirin, Lungkiang, Fengtien, and South Hsingan, Manchuria.

8 During the week ended Nov. 2, 1935, 2 plague-infected rats were reported at Nakalan, Hamakua District, Hawaii Island, Hawaii Territory.

Place	April 1935	May 1935	June 1935	July 1935	August 1935	Sep-tember 1935	Place	April 1935	May 1935	June 1935	July 1935	August 1935	Sep-tember 1935
Argentina (see also table above):							Peru—Continued						
Jujuy Province.....				1			Lima Department.....	12	6	4	2	5	2
Pampa Territory—Victoria			2				Callao.....			1		3	
Santiago de Estero Province—							D.....			1		2	
Frias.....							Plague-infected rats.	P	0	0	1	5	
Azores.....			1		3		C.....	9	4	1	1	2	
Bolivia.....					11 4		D.....	7	4	1			
China: Kwangchowan.....	20	7					Plague-infected rats.	P					
Ecuador: Loja Province.....	13	9					Senegal:						
Indo-China (see also table above):	0	4					Bacol ".....	5	10	19	25	16	8
Cambodia.....							D.....	4	8	13	16	2	2
Cochin-China.....	2	1			1	1	C.....					1	
Nootchao Island.....	18		9				Louga ".....						
Madagascar (central region).....	209	128	95	112	138		Ruisque ".....	17	10	8	2	4	
Peru.....	199	124	92	102	133		Thels ".....	3	19	20	17	22	
Lambayeque Department.....	13	10	4	4	10	3	Tivaouane ".....	5	30	48	42	46	11
Libertad Department.....	1	1	1	2		1	South-West Africa: Ovamboland.....		11 34		11 24		

¹ For 2 weeks.

² Plague-infected wood rat.

³ Includes 1 suspected plague-infected squirrel.

⁴ One of these cases was a member of the crew and the other was a stowadore believed to have worked on the vessel. Several plague-infected rats were reported found on board the vessel.

⁵ Suspected.

⁶ Incomplete reports.

⁷ For 2 months.

Several plague-infected rats were reported found on board

Mexco.....	2	1	3																					
Nanking.....	12	12	2																					
Shanghai.....	3	3																						
Singapore.....	8	7																						
Tientsin.....	13	3																						
Tungsho.....	2	7																						
Chosen. (See table below.)	18	3																						
Colombia.....	25	44																						
Barranquilla.....	1																							
Bogota.....	3																							
Dahomey. (See table below.)	1																							
Zanzibar. (See table below.)	3																							
Egypt.....																								
Dakhliya.....	20	2																						
Gharbiya.....	1	1																						
Provinces.....	1	1																						
Eritrea.....																								
Asmara.....																								
France. (See table below.)																								
French Somaliland.....	1	1																						
Great Britain: England and Wales.....	1	64																						
Greece: Salomika.....																								
Gualaquilma. (See table below.)																								
Honduras: Tela.....																								
India.....																								
Assam.....	10,497	7,958	5,046	2,273	409	491	313	235	230	251	186	169	142	148										
Bassein.....	1,970	1,430	957	471	91	81	76	60	55	49	28	28	28	28										
Bombay Presidency.....	45,558	30,153	13,440	2,599	2,662	1,984	1,894	1,801	1,560	1,824	1,340													
Bombay.....	9,937	8,423	7,225	3,320	612	711	517	508	387	432	322													
Bombay.....	32	56	28	6	7	11	17	57	8	11	5													
Bombay.....	\$1																							
Bombay.....	10,497	7,958	5,046	2,273	409	491	313	235	230	251	186	169	142	148										
Bombay.....	1,970	1,430	957	471	91	81	76	60	55	49	28	28	28	28										
Bombay.....	455	284	239	102	20	12	10		12	10	6	6	5	4										
Bombay.....	257	176	159	69	10	8	6		10	6	4	4	3	2										
Bombay.....	433	246	128	56	7	14	11	11	10	6	7	5	6	3										
Bombay.....	326	188	109	40	4	9	4	4	8	2	5	5	2	2										
Bombay.....	3,100	2,213	2,345	651	117	60	35	40	85	37	37	12	28	35										
Bombay.....	2																							
Bombay.....	43	23	26	7	2	2																		
Bombay.....	4,366	2,694	3,190	2,615	623	607	716	857	657	604	537	516												
Bombay.....	720	559	720	402	107	101	118	135	112	119	106	93												
Bombay.....	47	22	24	10	1	3	2	2	1	1	5	2												
Bombay.....	1	5	6	6	2	4	4	8	4	4	4	2												
Bombay.....	20	13	8	6	13	1																		
Bombay.....				9	9	1																		
Bombay.....	133	443	430	168	30	12	10	14	6	9	16	37	17	30										
Bombay.....	95	59	25	16	1	2	2	2	2	2	1	1	1	1										
Bombay.....	28	5	11	19	8	3	3	9	5	6	4	1	1	2										
Bombay.....	119	68	40	14	6	1	1	2	5	1	2	10	1	1										

A report dated Oct. 25, 1935, states that 19 cases of smallpox had been reported in Entre Rios Province, Argentina.
 * For 2 weeks.
 † Imported.

Nyasaland. (See table below.)																				
Palestine.....																				
Peru.....					1					1										
Poland. (See table below.)																				
Portugal (see also table below):																				
Lisbon.....				1																
Oporto.....				1																
Portuguese East Africa.....																				
Salvador. (See table below.)																				
Saudi Arabia.....																				
Siam: Bangkok.....								105												
Sierra Leone.....								2												
Freetown.....					7			6												
Spain.....					14			7												
Straits Settlements: Singapore								6												
Sudan (Anglo-Egyptian).....					64			47		165										
SYRIA.....					31			0		2										
Latakia.....								0		1										
Freetown.....								38		2										
Spain:																				
Barcelo.....					38			0		2										
Catalun.....					0			2		1										
Madr....					6			16		2										
Pamplun.....					0			2		3										
Valencia.....					2			2		3										
Syria.....																				
Latakia.....																				
Tripoli.....																				
Tunisia.....																				
Turkey. (See table below.)																				
Union of Soviet Socialist Republics. (See table below.)																				

For 2 weeks.
 A report dated June 11, 1935 states that 10 deaths from smallpox had occurred at Mizuna Mifigu Prefecture, Japan.
 For 3 weeks.

On vessels:	Date	Number of cases	Name of vessel	Origin	Date	Number of cases	Name of vessel	Origin
S. S. Jinkai Maru at Singapore from Milke.....	Apr. 3, 1935	1 case	S. S. Anshun at Singapore from Hong Kong.....	June 1, 1935	1 case	S. S. Premier at Singapore from Amoy.....	June 4, 1935	1 case
S. S. Ozarda at Puloerun from Akwab.....	Apr. 3, 1935	1 case	S. S. Omer at Singapore from Amoy.....	June 4, 1935	1 case	S. S. Van Heutz at Singapore from Amoy.....	June 16, 1935	1 case
S. S. Ekra at Rangoon from Calcutta.....	Apr. 12, 1935	1 case	S. S. Chitose Maru at Nagasaki from Dalren.....	July 2, 1935	2 cases	S. S. Ferrata at Aden from Massawa.....	July 13, 1935	1 case
S. S. Iyon at Penang from Singapore.....	Apr. 12, 1935	1 case	S. S. Englishman at Rangoon from Gopalpore.....	July 13, 1935	1 case	S. S. Hong Kieng at Singapore from Amoy.....	July 30, 1935	1 case
S. S. Hong Feng at Singapore from Amoy.....	Apr. 17, 1935	1 case	S. S. Barenfels at Gibraltar.....	Aug. 1, 1935	2 cases	S. S. Telambe at Rangoon from Madras.....	Aug. 9, 1935	1 case
S. S. Anni at Singapore from Hong Kong.....	Apr. 18, 1935	1 case						
S. S. Annapal at Rangoon from Chitagon.....	Apr. 18, 1935	1 case						
S. S. Nagasaki Maru at Nagasaki from Shanghai.....	Apr. 19, 1935	1 case						
S. S. Akroa at Singapore from Calcutta.....	May 10, 1935	1 case						
	May 29, 1935	1 case						

On vessels—Continued.

S. S. Anshun at Singapore from Hong Kong.....	June 1, 1935	1 case
S. S. Omer at Singapore from Amoy.....	June 4, 1935	1 case
S. S. Van Heutz at Singapore from Amoy.....	June 16, 1935	1 case
S. S. Chitose Maru at Nagasaki from Dalren.....	July 2, 1935	2 cases
S. S. Ferrata at Aden from Massawa.....	July 13, 1935	1 case
S. S. Englishman at Rangoon from Gopalpore.....	July 30, 1935	1 case
S. S. Hong Kieng at Singapore from Amoy.....	Aug. 1, 1935	2 cases
S. S. Barenfels at Gibraltar.....	Aug. 1, 1935	2 cases
S. S. Telambe at Rangoon from Madras.....	Aug. 9, 1935	1 case

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

SMALLPOX—Continued

[C indicates cases; D, deaths; F, present]

Place	April 1935	May 1935	June 1935	July 1935	August 1935	September 1935	Place	April 1935	May 1935	June 1935	July 1935	August 1935	September 1935
Belgian Congo.....	151	165	106	197	261	303	Mexico—Continued.			1	1		
Bolivia.....	36	33	44	47	30	57	Mexico State.....	C		140	54	35	
Chosen.....	211	187	102	47			Mexico D. F.....	C	126	118	41	31	
Dahomey.....	C	C	C	7	2		Mexico city.....	C		1			
Ecuador.....	19	20	14				Moravia State.....	C		7			
Quito.....	11	3	8				Nuevo Leon State.....	C	5	2		23	
Finland.....	C	C	1				Oaxaca State.....	C					
France.....	8	15	57	60	1	6	Puebla State.....	C	7		2		
Guatemala.....	C	C	C			4	Puebla.....	C		6	2	1	
Indo-China (see also table above).....	522	303	210	203	188	103	Queretaro State.....	C		5			
Japan (see also table above).....	92	53	57	31	30	16	San Luis Potosi State.....	C		5	5	5	
Mexico (see also table above):	6	45	26				San Luis Potosi.....	C		5	3	5	
Aguascalientes.....	C	C	C				Vera Cruz State.....	C				3	
Campeche State.....	C	8	3	3			Vera Cruz.....	C	8	12	5	1	1
Chihuahua State.....	C	2	2	1			Morocco.....	C					
Chihuahua.....	C	4	4				Mozambique.....	C	246	797	174	209	2
Chihuahua State.....	C	3	3				Niger Territory.....	C		37	35		
Guanajuato State.....	C	4	4	4	2		Nyassaland.....	C	2	1			
Leon.....	C	13	2	2	2		Peru.....	C	15	28	3	10	154
Hidalgo State.....	C	7	10	10	10		Portugal (see also table above).....	C	25	41	76	38	
Jalisco State.....	C	1	1	10	1		D.....	C	1	6	2	2	
Guadalajara.....	C	10	5	2	1		C.....	C		6	35	2	
Lower California.....	C	6	2	3			C.....	C	1	13	30	9	
	C						Union of Soviet Socialist Republics.....	C	144	255			

TYPHUS FEVER

[C indicates cases; D, deaths; F, present]

Place	Mar. 31-Apr. 27, 1935	Apr. 28-May 21, 1935	May 22-June 24, 1935	Week ended—													
				July 1935				August 1935				September 1935				October 1935	
				6	13	20	27	3	10	17	24	31	7	14	21	28	5
Algeria:																	
Algiers Department.....	C	18	38	43	5	11	2					1					1
Algiers.....	C	2	2														
Constantine Department.....	C	84	23	97	17	6	8	5		1	1		2	1	1	3	1
Bone.....	C												1				
Constantine.....	C	3	2														1
Philippeville.....	C			5	1	1	1										
Oran Department.....	C	3	2	4	2	2	15										
Southern Territories.....	C	3	20						1								
Australia: Queensland.....	C				1	1	11										1
Belgium Congo.....	C																
Basutoland.....	C																
Bolivia.....	C																
Bulgaria (See table below.).....	C	2															
Chile.....	C	333	414	363	89	107	86	67	69	82	82	82	82	106	106	106	10
Concepcion.....	C	28	42	18	16				41	11							
Iquique.....	C																
Santiago.....	C	207	215	182	49	38	24	45	44	82	82	82	82	106	106	106	10
Valparaiso.....	C	3	5			1		2	2	1	3						
China:																	
Canton.....	C		1														
Hankow.....	C			2													
Hankow.....	C			1													
Harbin.....	C			2													
Harbin.....	C	5	20														
Hong Kong.....	C																
Nanking.....	C		2	1					1	1							
Shanghai.....	C		1	2		1	1			2	1						
South Manchuria Railway Zone.....	C																
Tientsin.....	C		5	5						1	1						
Tsingtau.....	C	2		1							4						
Chosen. (See table below.).....	C																

* For 3 weeks.

* For 2 weeks.

* For 4 weeks.

* For 4 weeks.

* A report dated June 25, 1935, states that about 400 cases of typhus fever occurred at Harbin, Manchuria, China.

* A report dated June 9, 1935, 11 cases of typhus fever were reported at San Jose nitrate camp about 42 miles from Iquique, Chile.

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

TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place	Mar. 31-Apr. 27, 1935	Apr. 28-May 26, 1935	May 27-June 25, 1935	Week ended—														
				July 1935			August 1935				September 1935			October 1935				
				6	13	20	27	3	10	17	24	31	7	14	21	28	5	12
Czechoslovakia. (See table below.)																		
Egypt:																		
Alexandria.....	21	20	12	1	2	1												
Aswan.....	9	41	2	1														
Asyut.....	1			1														
Behira.....	243	161	59	8	4	5	1	1	1	1	1	1	1	1	1	1	1	2
Beni-Suef.....	1	2	2	1														
Cairo.....	6	5	1	1														
Caro.....	14	4	2	2														
Dakhliya.....																		
Damieta.....																		
Faiyum.....																		
Gharbiya.....	180	98	119	10	18	4	4	3	4	3	1	2	2	3	1	2	2	3
Girga.....	2																	
Minufiya.....	125	44	27	3	9	3	5	1	1	1	1	1	1	1	1	1	1	1
Minya.....	4			1														
Port Said.....	4	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Qena.....	1	3	1	1														
Sharkiya.....	20	6	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Provinces.....	675	502	255	26	46	17	15	8	11	8	8	6	4	4	2	7	3	1
France. (See table below.)																		
Greece. (See table below.)																		
Guatemala. (See table below.)																		
Hawai Territory—Honolulu.....																		
Hungary.....	4	17	5	1														
Iran.....	132	88	98	7	16	6	4	3	6	7	9	9	6	3	3	2	2	2
Iraq.....	1	15	22	4	5	5	5											
Baghdad.....																		
Basra liwa.....																		
Sulaimani liwa.....	42	14	9															
Irish Free State:																		
Cork County.....	1																	
Waterford County—Lismore.....																		
Japan: Tokyo.....																		
Latvia. (See table below.)																		
Lithuania.....	42	37	21	1	6	3	2	3	3	3	3	2	3	2	1	2	1	2

Mexico (see also table below):																								
Yucatán	D	40	1	14	20	1	60						36	33	43	38	42	26	30					
Mexico, D. F.	C												30						1					
Torreón	C	112	86	14	24	16	8	10	5	1	2	1	1	2	1		1		2					1
Morocco	C																							
Palestine:	C	2	3										2	1	74		6	3	2	1	3	1		
Haifa	C	1	3																					
Jaffa	C																							
Panama Canal Zone. (See table below.)	D				1																			
Paraguay: Asunción.	D																							
Peru. (See table below.)	C	597	445	48	52	41	34	33	30	22	24	21	14	19	9	14	10	9	14	29	30	28		
Poland.	C	33	42	21	1	3	1	2	4	1	2	1	1	1			1			2		1		
Portugal. (See table below.)	D																							
Rumania. (See table below.)	C																							
Saudi Arabia.	C	3																						
Straits Settlements: Singapore.	C	3																						
Trans-Jordan.	C	17	11	13																	1	1		
Tunisia:	C																							
Tunis.	C	32	9	3						1														
Provinces.	C	225	158	115	13	34	16	17	15	15	9		12	9		3	4			1			1	
Turkey. (See table below.)	C																							
Union of South Africa. (See table below.)	C																							
Union of Soviet Socialist Republics. (See table below.)	C																							
Yugoslavia. (See table below.)	C																							
On vessel: S. S. <i>Agamemnon</i> at London.	C																				1			

* Imported.

† Includes 3 imported cases.

YELLOW FEVER

[C indicates cases; D, deaths; P, present

Place	Mar. 31- Apr. 27, 1935	Apr. 28- May 25, 1935	May 26- June 29, 1935	Week ended—												
				July 1935			August 1935			September 1935			October 1935			
				6	13	20	27	3	10	17	24	31	7	14	21	28
Bolivia: Santa Cruz Department—Chucho. ¹																
Brazil:																
Goyaz State.....			6													
Maranhao State.....	10	6														
Mato Grosso State.....			1													
Mato Grosso State.....			2													
Minas Geraes State.....			14													
Minas Geraes State.....			4													
Para State.....		9	8													
Para State.....		1	1													
Sao Paulo State.....			1													
Colombia:																
Intendencia of Meta.....																
Acacias.....																
Restrepo.....		1														
Dahomey:																
Parakou.....																
Porto Novo.....			1													
Gold Coast:																
Bawku.....																
Cape Coast.....																
Tamale.....																
Sudan (French): Koutiala. ²																
Togo:																
Agoneve.....		1														
Kouma.....		1														
Sokode.....		1														

¹ During the month of June 1935, 1 case of yellow fever was reported at Chucho, Santa Cruz Department, Bolivia.² Suspected.³ During the week ended Oct. 26, 1935, 1 suspected case of yellow fever was reported at Koutiala, French Sudan.

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