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A 10-YEAR RECORD OF ABSENCES FROM WORK ON ACCOUNT OF SICKNESS AND ACCIDENTS[1]

EXPERIENCE OF EMPLOYEES OF THE EDISON ELECTRIC ILLUMINATING CO. OF BOSTON, 1915 TO 1924, INCLUSIVE

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Knowledge of the amount of disabling illness experienced by a sizable group of employees over a considerable period of time is seldom obtainable, because it involves a record of *all* the cases within the definition of a "recordable illness," and not simply those cases which come to the attention of the company physician or the establishment's medical department. A record of all absences for one full working day or longer on account of disability among its employees was inaugurated by the Edison Electric Illuminating Co. of Boston on January 1, 1913, and is still being maintained. In this presentation of the experience the records for the first two years, 1913 and 1914, were omitted, because the sickness rates for each of these two years were found to be considerably below the rates for later years, and thus to suggest that some of the shorter illnesses were not being reported at that time, or that the employees as a whole tended to remain at work during their minor illnesses and only gradually began to take advantage of the liberal sick-leave provisions which were put into effect at the time the sickness records were inaugurated.

AMOUNT OF ABSENCE ON ACCOUNT OF SICKNESS GREATER WHEN SICK LEAVE IS GRANTED

The granting of sick leave undoubtedly affects the frequency and duration of absences due to illness. Many employees are loath to absent themselves from work when absence involves cessation of pay, even though it may be disagreeable to work when physically indisposed. Occasionally this tendency is carried to the extreme. A factory physician in Massachusetts reports that one of his company's employees on a wage basis who was suffering from pneumonia remained at work up to the day of the crisis. On account of such a tendency the sickness rates of wage earners computed from records of

[1] From the Office of Industrial Hygiene and Sanitation in cooperation with the Office of Statistical Investigations of the United States Public Health Service.

absence are lower, usually, than the illness rates for persons whose pay is continued during sickness. An approximate measure of the extent of this tendency is afforded in Table 1 and Figure 1, and is evident from other data, as yet unpublished, in the Statistical Office of the Public Health Service.

TABLE 1.—*Frequency of absences due to disability according to their duration in working days (1922 to 1924) among employees of a company which pays wages during illness compared with a company which does not do so*

Duration of absences in working-days	Males		Females	
	Company which pays wages during disability	Company which does not pay wages during disability	Company which pays wages during disability	Company which does not pay wages during disability
All workdays	1,198	383	2,408	710
1 day lost from work	418	(1)	1,235	(1)
2 days lost from work	239	57	443	115
3 days lost from work	142	55	198	104
4 days lost from work	91	40	99	72
5 days lost from work	56	35	90	59
6 days lost from work	54	33	82	69
7 days lost from work	30	18	28	29
8 days lost from work	17	12	27	22
9 days lost from work	13	12	25	23
10 days lost from work	14	8	15	14
11 days lost from work	12	10	12	17
12 days or more lost from work	112	103	154	186
Years of life under observation	6,129	12,148	1,508	5,374

[1] Unknown.

From other morbidity data [2] it appears that in a large group of people the number of one-day disabilities is normally larger than the number of two-day disabilities, two-day disabilities more numerous than three-day disabilities, etc. The duration curve, therefore, is interesting from the standpoint of the light it may shed upon the extent to which the shorter cases are reported and put into the record. In Figure 1 the curves for the company which does not pay wages during disability appear to be somewhat abnormal, for the males especially, on account of their flatness at the extreme left. One should expect more two-day than three-day sicknesses, for example. Judging roughly from the small amount of data available, the curves for the company which pays wages during disability appear to veer off a little to the other extreme. Their shorter cases, especially the one and two day absences, may be a little too numerous, relatively, to represent the normal disability curve. The true curve probably would lie somewhere between these two experiences; and from the shape of the curves, especially of the curve for the

[2] Cf. "Disabling sickness among employees of a rubber manufacturing establishment in 1918, 1919, and 1920," Reprint No. 804 from the Public Health Reports of Dec. 15, 1922, p. 8.

males, the suggestion is ventured that the disabilities of comparatively short duration reported in the company which pays wages during illness overstated the real amount of sickness to a smaller extent than the other company's records understated the frequency of the shorter illnesses. As the reader probably has inferred, the rates shown in Table 1 and Figure 1 for the company which pays wages during disability represent the experience of the Edison company.

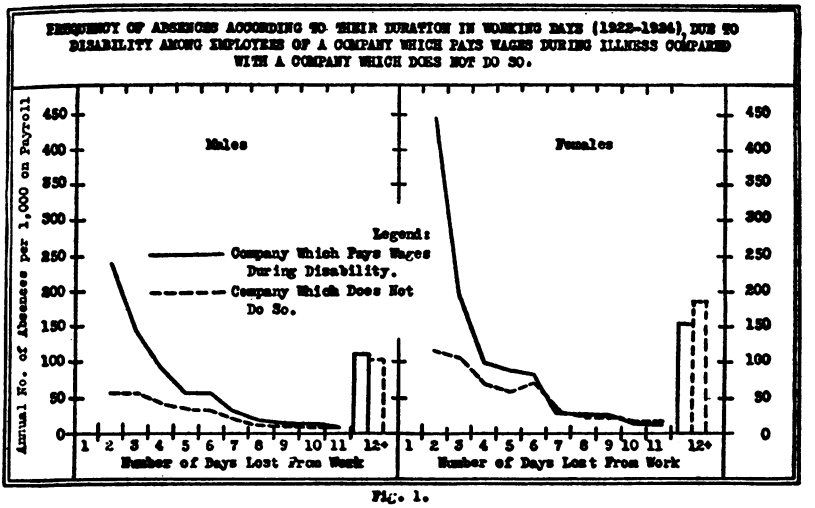

Fig. 1.

SICK-LEAVE PROVISIONS OF THE EDISON COMPANY

The more detailed sick-leave provisions of the Edison Electric Illuminating Co. are as follows: To all employees other than those irregularly employed at irregular hours, there is payable by the departments for which they work an illness allowance at the rate of 1 day per month during the first 12 months of employment. Upon completion of the first year of service the maximum illness allowance at full pay is 2 weeks per calendar year; if disability lasts more than 14 consecutive days the account is transferred to the disablement benefit fund, and full wages are continued up to a maximum of 13 weeks. If disability still continues beyond the fifteenth week (2 weeks paid by the department and 13 weeks by the benefit fund), a certain proportion of the amount of the wages is then paid from the disablement fund, depending upon the employee's length of service with the company. The employees make no contributions to the sickness benefit fund; it is paid in toto by the company.

Disability due to injury arising out of one's employment is paid for in accordance with the terms of the workmen's compensation

act. To the amount so payable the company contributes an additional sum to make up the employee's full pay for a certain period, depending upon the duration of disability.

The only employees who lose their wages when disabled by sickness or accident for a period varying from 1 day to 15 weeks are: (*a*) Those persons who have been with the company for less than 1 year and are disabled after having used up their sick allowance of 1 day for each month on the pay roll, and (*b*) those persons who have been on the pay roll for more than 1 year and are disabled after having used up their sick allowance of 2 weeks (12 working days). Employees in this position must wait 7 days if disabled by industrial accident, and 12 days if incapacitated by sickness before they can again draw full pay through transference of the account to the benefit fund. It is apparent that relatively few employees would be found in either of these two situations, and that the amount of wages lost to employees of the company as a whole through incapacitation is relatively small.

An administrative feature of the plan, as well as a feature of service to disabled employees, is the work of the company physician who makes home calls among those who have reported themselves unable to work on account of illness. Not all of the cases are seen by the company physician, but 81 per cent of those disabilities which lasted two days or more, and 58 per cent of the disablements for one day only were visited in the three years ending December 31, 1924. A matter of importance from the standpoint of interest in the record is the fact that a physician's diagnosis was obtained for so many of the cases.

SELECTION OF EMPLOYEES IN THE INDUSTRY

Since February, 1913, each person upon entering the service of the company has received a physical examination, though no periodic examinations are made. Persons having serious defects of the heart, lungs, or kidneys, and hernias likely to cause trouble, are not accepted for employment.

Aside from this sort of selection made by the employer, there is an important selection of industry on the part of the employee. The disability data being collected by the Public Health Service in a number of different industries indicate that the strongest, most able-bodied, disease-free workers are found in the so-called heavy industries such as iron and steel manufacturing, while the less sturdy and those afflicted with more ailments apparently seek the lighter industries in which the work is of a more sedentary character. This sort of selection is suggested by the wide differences in the sickness rates, and especially in the frequency of certain diseases among the employees of different industries. Reports to the Public Health Service from a group of 27 sick-benefit associations in this country,

of cases causing disability for eight consecutive days or longer show higher than average sickness rates for the men employed by public utilities.[3] Comparatively heavy disability rates for nearly all ailments, and especially for such diseases as pulmonary tuberculosis, grippe (nonepidemic), neuralgia and neuritis, and diseases of the digestive system suggest that in the public utilities a somewhat less healthy type of worker may be found than in certain other industries.

In view of this possibility, and considering that liberal sick leave probably attracts persons most in need of it, it seems reasonable to expect more disabling illness among employees of the public utility under study than occurs in certain industries or occupations which, on account of the nature of the work or other circumstances, appeal only to the more sturdy and healthy persons in the working population. From the data available it was not possible to study this factor, but its importance as shown in other sickness data now being analyzed by the Public Health Service warranted mention of an influence which probably should be considered in all studies of industrial morbidity.

AGE DISTRIBUTION OF EMPLOYEES OF THE PUBLIC UTILITY IN BOSTON

Age is an important factor in the frequency of disabling sickness, and especially in its duration, as shown in Table 8 and Figure 5. A cross section of the age distribution of males and of females on the pay roll of the company as of July 15, 1923, is given in Table 2 and Figure 2.

The per cent of total employees in each age group was also ascertained as of July 15, 1916. A slight increase occurred in the proportion of men who were 45 or more years old (20.3 per cent in 1923 compared with 18.7 in 1916). In age group 35 to 44, and also 25 to 34, there was a smaller proportion in 1923 among both the men and the women, but the widest difference occurred among those who were under 25 years of age. This group constituted 23.4 per cent of the men in 1923 compared with 15.2 per cent in 1916, and nearly one-half of all the women compared with one-fourth of them in the earlier period.

The youth of the personnel in 1923 is striking: One-third of all the women were in age group 20 to 24, and there were more men on the pay roll at these ages than in any other five-year age group. Only 3 per cent of the female employees and 13 per cent of the males were 50 years of age or over. Eighty per cent of the men were between the ages of 15 and 45, while this percentage of the women was restricted to the age group 15 to 35.

[3] "A Study of Sickness Among 133,000 Industrial Employees," Reprint No. 1060 from the Public Health Reports of Jan. 22, 1926, p. 12.

TABLE 2.—*Age distribution of males and of females on the pay roll of the Edison Electric Illuminating Co. of Boston as of July 15, 1923*

Age group	Number		Per cent	
	Males	Females	Males	Females
Under 20	141	75	6.3	13.7
20 to 24	379	183	17.1	33.5
25 to 29	376	129	16.9	23.6
30 to 34	334	52	15.1	9.5
35 to 39	318	31	14.3	5.7
40 to 44	223	40	10.0	7.3
45 to 49	170	20	7.7	3.7
50 to 54	141	8	6.3	1.5
55 to 59	65	7	2.9	1.3
60 to 64	45	0	2.0	----------
65 and over	31	1	1.4	.2
Total	2,223	546	100.0	100.0

At the beginning of the 10-year period, i. e., January, 1915, there were approximately 1,800 men and 150 women on the pay roll. The growth in numbers was fairly steady during the 10 years, except for

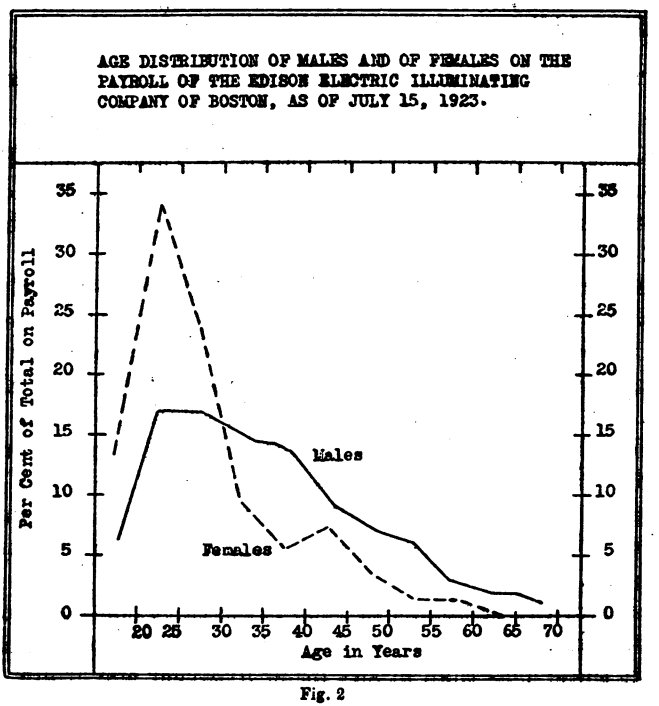

Fig. 2

an intermediary period of decline from April, 1917, to December, 1918. At the end of the 10 years (December, 1924) there were approximately 2,400 men and 600 women in the employ of the company. About 90 per cent was American born.

AVERAGE FREQUENCY OF DISABILITY AND AMOUNT OF TIME LOST IN THE 10 YEARS

Estimates of the average annual time loss to wage earners in the United States on account of sickness usually vary from 6 to 9 days per person.[4] The estimates seldom specify whether the loss is measured in working days or calendar days, nor to which sex it refers. In the present study time losses are expressed in terms of the number of calendar days intervening from the date absence began to the date of return to work.[5] The 10-year record of absences among employees of the Edison company of Boston shows an average annual loss from sickness (exclusive of accidents) of 6.9 calendar days per male on the pay roll and of 12.9 calendar days per female on the pay roll. When accidents, both of industrial and nonindustrial origin are included, the time loss was increased to 8.9 calendar days annually per male, and 14.0 calendar days per female employee.

A comparison of general interest, on account of the organized effort in recent years to prevent industrial accidents, is the relative frequency of absence and time lost from sickness, industrial accidents, and nonindustrial injuries. Over the 10-year period there were 12 times as many absences and 4 times as many days of disability from sickness as from industrial accidents among the men on the pay roll. The records for the women show 171 times as many absences and 42 times as many days of disability from sickness as from industrial accidents. The small number of industrial accidents among the women does not mean that women are so much more careful than men (witness the nonindustrial disability rate by sex), but was due to the fact that about 75 per cent of the women are clerks, and therefore not exposed to any industrial accident hazard.

Comparing industrial and nonindustrial accidents among the men, we find that disabling industrial injuries were 40 per cent more numerous and caused 3½ times as much disability as nonindustrial accidents, while among the women the opposite situation existed, disabling nonindustrial injuries being nearly 8 times as frequent, and causing more than twice as much lost time as industrial accidents.

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[4] Cf. Stecker, Margaret L.: "Some Recent Morbidity Data," published by the Metropolitan Life Insurance Co., New York, 1919, p. 4.

[5] This is in accordance with the recommendations of a group of industrial physicians and surgeons meeting in South Manchester, Conn., Dec. 18, 1923, at the invitation of Howell Cheney. Calendar days were considered a better measure of sickness and accident severity than the number of days actually lost from work.

TABLE 3.—*Frequency and duration of absences from work for one day or longer on account of diseases and conditions specified, among males on the pay roll of the Edison Electric Illuminating Co. of Boston; experience during the 10 years ending December 31, 1924*

Diseases and conditions causing disability (with corresponding title numbers in parentheses from the International List of Causes of Death, third revision, Paris, 1920)	Number of absences	Number of days of disability [1]	Annual number of absences per 1,000 on the pay roll	Calendar days per absence	Annual number of days of disability per male on the pay roll
All disability (1-136, 151-158, 165-203, 205)	21,610	162,503	1,189	7.52	8.943
Sickness, exclusive of accidents (1-136, 151-158, 205)	18,879	125,694	1,039	6.66	6.917
Industrial accidents (165-203)	1,596	28,684	88	17.94	1.576
Nonindustrial accidents (165-203)	1,135	8,175	62	7.20	.450
I. Epidemic, endemic, and infectious diseases (1-42)	1,384	22,318	76	16.13	1.228
Influenza and grippe (11)	919	9,023	51	9.82	.496
Tuberculosis of the respiratory system (31)	41	6,699	2	163.39	.369
Other epidemic, endemic, and infectious diseases (1-10, 12-30, 32-42)	424	6,596	23	15.56	.363
II. General diseases not included in Class I (43-69)	975	9,888	54	10.11	.542
Rheumatism, acute and chronic (51, 52)	935	8,515	52	9.11	.468
Other general diseases (43-50, 53-69)	40	1,343	2	33.58	.074
III. Diseases of the nervous system and of the organs of special sense (70-86)	1,061	13,097	58	12.34	.721
Neuralgia, neuritis, sciatica (82)	279	1,746	15	6.26	.096
Neurasthenia, nervousness, etc. (84)	467	7,162	26	15.34	.394
Other diseases of the nervous system (70-81, 83)	17	2,863	1	168.41	.158
Diseases of the eyes (85)	213	895	12	4.20	.049
Diseases of the ears and of the mastoid process (86)	85	431	4	5.07	.024
IV. Diseases of the circulatory system (87-96)	191	5,139	11	26.91	.283
Diseases of the heart and arteries (87-91)	69	3,417	4	49.52	.188
Diseases of the veins (93)	116	1,705	6	14.70	.094
Other diseases of the circulatory system (92, 94-96)	6	17	1	2.83	.001
V. Diseases of the respiratory system (97-107)	8,033	36,168	442	4.50	1.990
Diseases of the nasal fossæ and their annexa (97)	7,266	24,817	400	3.42	1.366
Diseases of the larynx (98)	101	529	6	5.24	.029
Bronchitis, acute and chronic (99)	336	4,421	18	13.16	.243
Pneumonia, all forms (100, 101)	107	4,261	6	39.82	.234
Pleurisy (102)	169	1,300	9	7.69	.072
Other diseases of the respiratory system (103-107)	54	840	3	15.56	.046
VI. Diseases of the digestive system (108-127)	5,382	25,856	296	4.80	1.423
Diseases of the mouth and annexa (108)	462	1,565	25	3.39	.086
Diseases of the pharynx and tonsils (109)	1,261	6,812	69	5.40	.375
Diseases of the stomach (111, 112)	2,120	7,019	117	3.31	.386
Diarrhea and enteritis (114)	465	1,177	26	2.53	.065
Appendicitis (117)	115	3,543	6	30.81	.195
Other diseases of the digestive system (110, 115, 116, 118-127)	959	5,740	53	5.99	.316
VII. Nonvenereal diseases of the genito-urinary system and annexa (128-136)	155	2,871	9	18.52	.158
IX. Diseases of the skin and cellular tissue (151-154)	528	3,860	29	7.31	.212
X. Diseases of the bones and of the organs of locomotion (155-158)	97	1,375	5	14.18	.076
XV. Ill-defined diseases and unknown causes of disability (205)	1,073	5,152	59	4.80	.284

[1] Number of calendar days from the date disability began to the date of return to work.

Number of years of male life under observation: 18,172.

TABLE 4.—*Frequency and duration of absences from work for one day or longer on account of diseases and conditions specified, among females on the pay roll of the Edison Electric Illuminating Co., of Boston; experience during the 10 years ending December 31, 1924*

Diseases and conditions causing disability (with corresponding title numbers in parentheses from the International List of Causes of Death, third revision, Paris, 1920)	Number of absences	Number of days of disability [1]	Annual number of absences per 1,000 on the pay roll	Calendar days per absence	Annual number of days of disability per female on the pay roll
All disability (1–158, 165–203, 205)	8,608	52,332	2,296	6.08	13.950
Sickness, exclusive of accidents (1–158, 205)	8,191	48,333	2,185	5.90	12.892
Industrial accidents (165–203)	48	1,154	13	24.04	.308
Nonindustrial accidents (165–203)	369	2,845	98	7.71	.759
I. Epidemic, endemic, and infectious diseases (1–42)	353	6,377	94	18.07	1.701
Influenza and grippe (11)	222	3,535	59	15.92	.943
Tuberculosis of the respiratory system (31)	11	1,783	3	162.09	.476
Other epidemic, endemic, and infectious diseases (1–10, 12–30, 32–42)	120	1,059	32	8.83	.282
II. General diseases not included in Class I (43–69)	162	2,725	43	16.82	.727
Rheumatism, acute and chronic (51, 52)	123	1,449	33	11.78	.387
Other general diseases (43–50, 53–69)	39	1,276	10	32.72	.340
III. Diseases of the nervous system and of the organs of special sense (70–86)	891	8,060	238	9.05	2.150
Neuralgia, neuritis, sciatica (82)	133	978	36	7.35	.261
Neurasthenia, nervousness, etc. (84)	558	5,942	149	10.65	1.585
Other diseases of the nervous system (70–81, 3)	4	51	1	12.75	.014
Diseases of the eyes (85)	151	725	40	4.80	.193
Diseases of the ears and of the mastoid process (86)	45	364	12	8.09	.097
IV. Diseases of the circulatory system (87–96)	32	1,625	9	50.78	.433
Diseases of the heart and arteries (87–91)	15	1,496	4	99.73	.399
Diseases of the veins (93)	11	109	3	9.91	.029
Other diseases of the circulatory system (92, 94–96)	6	20	2	3.33	.005
V. Diseases of the respiratory system (97–107)	2,813	11,932	750	4.24	3.183
Diseases of the nasal fossæ and their annexa (97)	2,572	8,046	686	3.13	2.146
Diseases of the larynx (98)	77	306	21	3.97	.082
Bronchitis, acute and chronic (99)	99	1,967	26	19.87	.525
Pneumonia, all forms (100, 101)	18	867	5	48.17	.231
Pleurisy (102)	32	204	8	6.38	.054
Other diseases of the respiratory system (103–107)	15	542	4	36.13	.145
VI. Diseases of the digestive system (108–127)	2,173	11,040	580	5.08	2.945
Diseases of the mouth and annexa (108)	218	616	58	2.83	.164
Diseases of the pharynx and tonsils (109)	640	3,437	171	5.37	.917
Diseases of the stomach (111, 112)	755	1,916	202	2.54	.511
Diarrhea and enteritis (114)	89	276	24	3.10	.074
Appendicitis (117)	69	3,011	18	43.64	.803
Other diseases of the digestive system (110, 115, 116, 118–127)	402	1,784	107	4.44	.476
VII. Nonvenereal diseases of the genito-urinary system and annexa (128–142)	1,177	3,878	314	3.29	1.034
Dysmenorrhea and kindred conditions (141)	1,148	2,790	306	2.43	.744
Other diseases and conditions in this group (128–140, 142)	29	1,088	8	37.52	.290
VIII. The puerperal state (143–150)	3	230	1	76.67	.061
IX. Diseases of the skin and cellular tissue (151–154)	141	769	38	5.45	.205
X. Diseases of the bones and of the organs of locomotion (155–158)	13	51	3	3.92	.014
XV. Ill-defined diseases and unknown causes of disability (205)	433	1,646	115	3.80	.439

[1] Number of calendar days from the date disability began to the date of return to work.

Number of years of female life under observation: 3,749.

TABLE 5.—*Ratio of female to male disability; experience of employees on the pay roll of the Edison Electric Illuminating Co. of Boston, 1915–1924*

[Male rate=100]

Diseases and conditions causing disability (with corresponding title numbers in parentheses from the International List of Causes of Death, third revision, Paris, 1920)	Ratio of female to male disability		
	Annual number of absences per 1,000 persons	Number of days of disability per absence [1]	Annual number of days of disability per person
All disability (1–158, 165–203, 205)	193	81	156
Sickness, exclusive of accidents (1–158, 205)	210	89	186
Industrial accidents (165–203)	15	134	20
Nonindustrial accidents (165–203)	158	107	169
1. Epidemic, endemic, and infectious diseases (1–42)	124	112	139
Influenza and grippe (11)	116	162	190
Tuberculosis of the respiratory system (31)	150	99	129
Other epidemic, endemic, and infectious diseases (1–10, 12–30, 32–42)	139	57	78
II. General diseases not included in Class I (43–69)	80	166	134
Rheumatism, acute and chronic (51, 52)	63	129	83
Other general diseases (43–50, 53–69)	500	97	459
III. Diseases of the nervous system and of the organs of special sense (70–86)	410	73	298
Neuralgia, neuritis, sciatica (82)	240	117	272
Neurasthenia, nervousness, etc. (84)	573	69	402
Other diseases of the nervous system (70–81, 83)	100	8	9
Diseases of the eyes (85)	333	114	394
Diseases of the ears and of the mastoid process (86)	300	160	404
IV. Diseases of the circulatory system (87–96)	82	189	153
Diseases of the heart and arteries (87–91)	100	201	212
Diseases of the veins (93)	50	67	31
Other diseases of the circulatory system (92, 94–96)	200	118	500
V. Diseases of the respiratory system (97–107)	170	94	160
Diseases of the nasal fossæ and their annexa (97)	172	92	157
Diseases of the larynx (98)	350	76	283
Bronchitis, acute and chronic (99)	144	151	216
Pneumonia, all forms (100, 101)	83	121	99
Pleurisy (102)	88	83	75
Other diseases of the respiratory system (103–107)	133	232	315
VI. Diseases of the digestive system (108–127)	196	106	207
Diseases of the mouth and annexa (108)	232	83	191
Diseases of the pharynx and tonsils (109)	248	99	245
Diseases of the stomach (111, 112)	173	77	132
Diarrhea and enteritis (114)	92	123	114
Appendicitis (117)	300	142	412
Other diseases of the digestive system (110, 115, 116, 118–127)	202	74	151
VII. Nonvenereal diseases of the genito-urinary system and annexa, except dysmenorrhea and kindred conditions (128–140, 142)	89	203	184
IX. Diseases of the skin and cellular tissue (151–154)	131	75	97
X. Diseases of the bones and of the organs of locomotion (155–158)	60	28	18
XV. Ill-defined diseases and unknown causes of disability (205)	195	79	155

[1] Number of calendar days from the date disability began to the date of return to work.

IMPORTANCE OF RESPIRATORY DISEASES

Respiratory diseases caused approximately one-half of all the absences and 40 per cent of all the time lost on account of sickness among the men. Relatively, the respiratory diseases were not quite so important among the women, causing 42 per cent of female absences and 36 per cent of their total time lost on account of illness. The respiratory frequency rate, however, was considerably higher among the women, but the proportion of respiratory to all diseases was lower, on account of dysmenorrhea and certain other conditions which tend to reduce the relative importance of respiratory diseases in the female experience.

Colds caused far more absences and much more lost time than any other specific disease or condition. Among the men colds accounted for 39 per cent of all the absences on account of sickness, and among the women, 31 per cent. Colds disabled 4 out of 10 men annually and 7 out of 10 women per year, causing a time loss equivalent to 1.4 days per year for every man on the pay roll, and 2.1 days per annum per female employee. Small wonder that we call it the *common* cold!

ABSENCE ON ACCOUNT OF THE MENSTRUAL FUNCTION

It is sometimes assumed that the amount of absence from work on account of the menstrual function is large. The records, however, do not always sustain such an assumption. The average frequency shown for this cause during the 10-year period was 306 absences annually per 1,000 women on the pay roll, equivalent to 1 disability per year among 3 out of every 10 women. The time lost amounted to only three-fourths of a day per year per female employed.

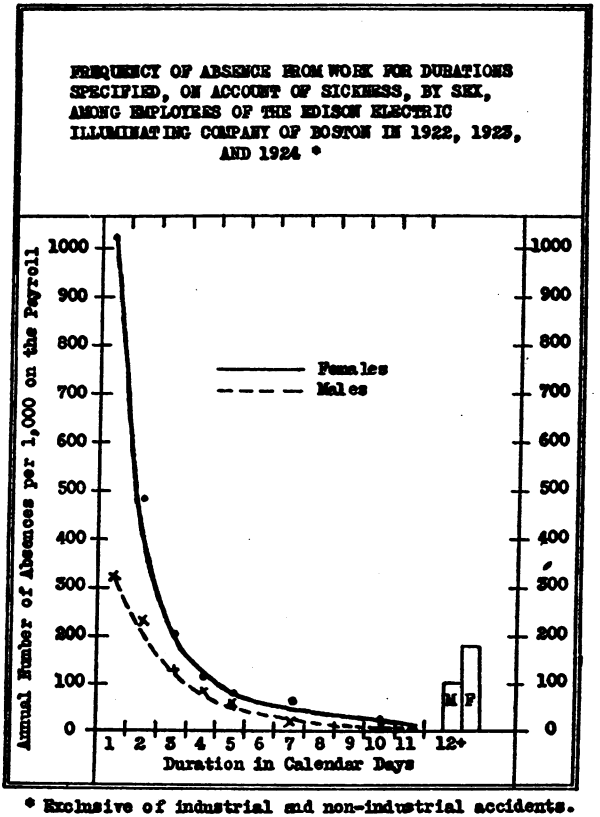
DISABLING SICKNESS AMONG MALE AND FEMALE EMPLOYEES COMPARED

In a comparison of the sickness rates of the men and women, the difference in the age distribution of the two sexes must be taken into account. Absences due to illness are more numerous in early adult life, but the duration of incapacitation increases with age, as shown in Table 8 and Figure 5. The age factor, however, only partially explains why there were so many more absences from sickness among the women. After adjusting the illness rates for differences in the age distribution of the two sexes it was found that there were still 202 absences from sickness (exclusive of accidents) among the women to every 100 males absences.

The difference in the frequency of some of the diseases among females compared with males was much greater than for all sicknesses combined. Among these may be mentioned neurasthenia, nervousness, etc. (5.7 times male rate); diseases of the larynx (3.5 times male rate); diseases of the eyes (3.3 times male rate); diseases of the ears (3 times male rate); appendicitis (3 times male rate); diseases of the pharynx and tonsils (2.5 times male rate); neuralgia, neuritis, sciatica (2.4 times male rate); and diseases of the mouth and annexa, mostly dental conditions (2.3 times male rate). The respiratory diseases were considerably more frequent among the women, with two notable exceptions: pneumonia and pleurisy. Diseases such as rheumatism, the circulatory diseases, certain nonvenereal diseases of the genito-urinary system, and diseases of the bones and organs of locomotion showed a lower incidence rate among the women, probably on account of the small proportion of women at the ages at which these diseases norm ally occur.

DURATION OF DISABILITIES

It has been pointed out that disabling illnesses among the women were shorter, on the average, than among the men. At first glance Figure 3 may appear to contradict this statement, inasmuch as the frequency of absence was higher among the women for each duration specified, including illnesses lasting 12 or more days. However, an analysis of the 12-day and longer disabilities would undoubtedly



* Exclusive of industrial and non-industrial accidents.

Fig. 3.

reveal such a preponderance of the very long cases among the men as to more than counterbalance the time lost by the women from their more numerous absences of shorter duration. Amazing differences are shown in the rates by sex for disabling illnesses of 1 and 2 days' duration, the 1-day cases among the women being 3.2 times as numerous and the 2-day absences 2.1 times as frequent as among the males.

In Figure 4 the duration curves of a few diseases are shown separately for each sex. The relative severity as well as the frequency of

attacks according to sex is thus pictured. It appears that the severity of colds and other diseases of the nasal fossæ, as measured by their duration, and of diseases of the stomach is no greater among women

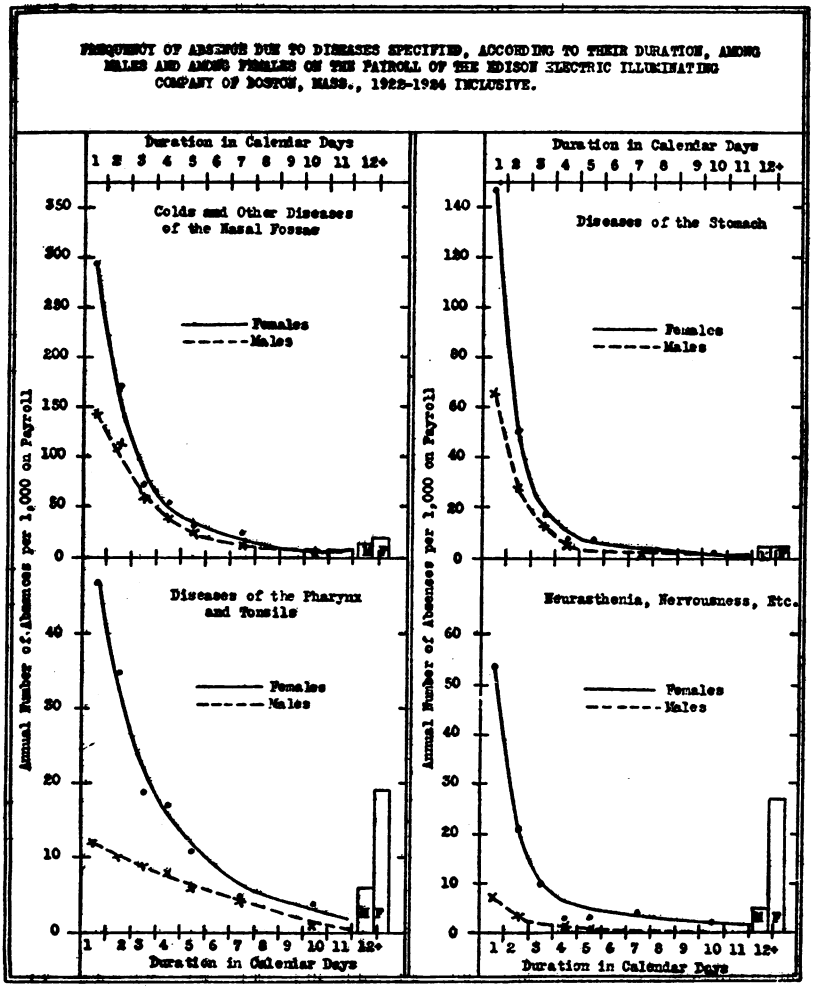


FIG. 4

than among men; but that women not only are much more liable to disablement from certain other causes such as neurasthenia and diseases of the pharynx and tonsils, but they suffer decidedly longer incapacitation than the men from these diseases.

TABLE 6.—*Frequency of absence of different duration on account of disabilities specified; experience of employees of the Edison Electric Illuminating Co., of Boston, in 1922, 1923, and 1924*

Duration of absence in calendar days [1]	Sickness [2]	Industrial accidents	Nonindustrial accidents	Influenza and grippe (11)	Diseases of the nasal fossæ (97)	Diseases of the pharynx and tonsils (109)	Diseases of the mouth and annexa (108)	Diseases of the stomach (111, 112)	Neurasthenia, nervousness, etc. (84)	Diseases of the skin (151-154)	Rheumatism, acute and chronic (51, 52)
	Number of absences among males										
All durations	6,399	486	457	347	2,751	409	169	799	133	168	256
1 day	1,938	61	116	28	874	73	72	411	45	39	49
2 days	1,377	41	92	48	692	64	39	173	20	20	66
3 days	782	42	61	44	365	54	17	82	12	18	36
4 days	509	39	40	35	248	47	12	37	7	14	26
5 days	351	40	23	37	153	37	6	24	6	16	10
6 to 8 days	624	55	57	63	259	67	7	31	6	26	29
9 to 11 days	222	30	11	34	67	28	3	11	6	11	13
12 or more days	596	178	57	58	93	39	13	30	31	24	27
	Number of absences among females										
All durations	3,475	18	139	84	1,107	265	121	367	203	52	44
1 day	1,541	2	42	9	442	70	62	223	82	13	10
2 days	724	3	43	10	260	53	29	77	32	12	13
3 days	299	1	12	10	109	29	10	26	15	7	3
4 days	185	4	9	7	82	26	4	12	4	2	5
5 days	110	2	4	4	46	17	3	10	4	3	1
6 to 8 days	258	2	14	15	112	24	7	9	19	9	1
9 to 11 days	95	0	4	12	23	17	3	3	7	2	3
12 or more days	263	4	11	17	33	29	3	7	40	4	8
	Annual number of absences per 1,000 males on the pay roll										
All durations	1,044	79	75	57	449	67	28	130	22	27	42
1 day	316	10	19	5	143	12	12	67	7	6	8
2 days	225	7	15	8	113	10	6	28	3	3	11
3 days	128	7	10	7	60	9	3	13	2	3	6
4 days	83	6	7	6	40	8	2	6	1	2	4
5 days	57	6	4	6	25	6	1	4	1	3	2
Average, 6 to 8 days	34	3	3	3	14	4	0	2	0	1	2
Average, 9 to 11 days	12	2	1	2	4	1	0	1	0	1	1
Total, 12 or more days	97	29	9	9	15	6	2	5	5	4	4
	Annual number of absences per 1,000 females on the pay roll										
All durations	2,304	12	92	56	734	176	80	243	135	34	29
1 day	1,022	1	28	6	293	47	41	148	54	9	7
2 days	480	2	28	7	172	35	19	51	21	8	9
3 days	198	1	8	7	72	19	7	17	10	5	2
4 days	123	3	6	5	54	17	3	8	3	1	3
5 days	73	1	3	3	31	11	2	7	3	2	1
Average, 6 to 8 days	57	0	3	3	25	5	2	2	4	2	0
Average, 9 to 11 days	21	0	1	3	5	4	1	1	2	0	1
Total, 12 or more days	174	3	7	11	22	19	2	5	27	3	5

Equivalent number of persons under observation for 1 year: Males, 6,129; females, 1,508.

[1] Number of calendar days intervening between the date absence began and the date employee returned to work.

[2] Not including industrial or nonindustrial accidents.

SICKNESS RATES AT DIFFERENT AGES

In order to express sickness among employees in terms of rates per 100 or per 1,000 at different ages, the number of persons on the pay roll in each age group must be ascertained. The most accurate method of doing this is to add the number of days which each em-

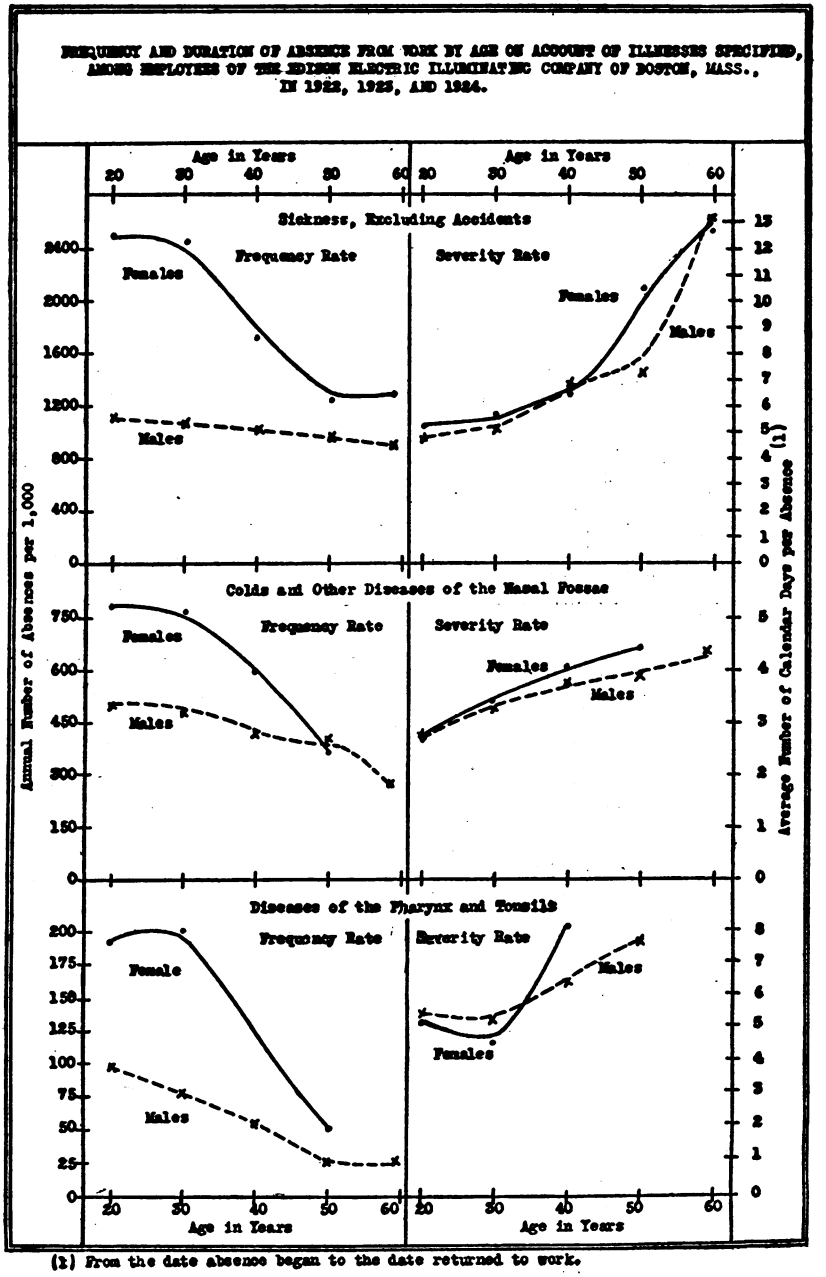
ployee was on the pay roll during the period selected, and divide the total by the number of days in the calendar year. The quotient thus obtained represents the equivalent number of employees on the pay roll for a full year, and, in actuarial parlance, is the "years of exposure." On account of the impracticability of such a procedure in the present instance, the following approximation of years of exposure was resorted to: The age distribution as of July 15, 1923, was obtained from the personnel records, and the percentage in each age group was computed separately for each sex. This sort of cross section of the personnel was obtained as of July, 1923, because it represented the approximate mid-point of the three years, 1922 to 1924, selected for an analysis according to age. The average number on the pay roll during each of the three years was then summed, and the per cent of total persons in each age group applied to this three-year total, separately for each sex. The results are given in Table 7, and appear to approximate the years of exposure fairly well, judging from studies in which the accuracy of the method could be tested. In the analysis by age we have what is equivalent to a record of 6,100 males and 1,500 females for one full year.

TABLE 7.—*Approximate number of years of life under observation according to age and sex; employees of the Edison Electric Illuminating Co. of Boston in 1922, 1923, and 1924*

Age group	Males	Females	Age group	Males	Females
All ages	6,129	1,508	35 to 44	1,490	196
			45 to 54	858	77
15 to 24	1,434	712	55 and over	392	22
25 to 34	1,955	501			

The frequency of absence for one day or longer on account of sickness declined gradually as age advanced among the men. It is interesting to observe that the decrease in the occurrence of certain diseases was considerably greater than the decrease in the average for all illnesses. Colds, for example, and diseases of the pharynx and tonsils disabled older men less often than men in the twenties and thirties. Diseases of the mouth and annexa (mostly conditions of the teeth), and diseases of the stomach exhibited the same tendency, but the curve for rheumatism mounted steadily upward from the twentieth to the fiftieth year. Industrial accidents failed to decrease in frequency until after age 50, though the nonindustrial accident rate showed a gradual decline from age 20 onward. Industrial accidents caused disability to the men oftener than nonindustrial accidents at all ages except 15 to 24. There was very little variation according to age in the incidence rate of diseases of the skin and in neurasthenia among the men.

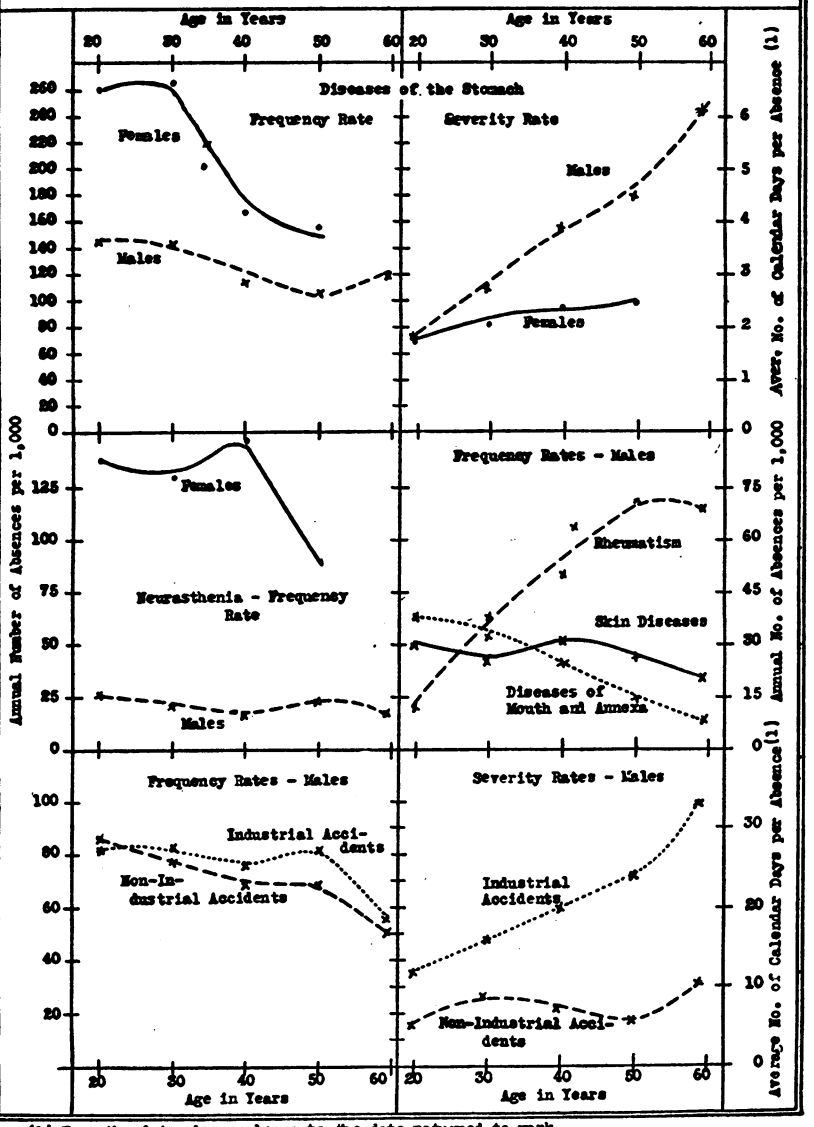
It is sometimes assumed that the youngest employees, being the most inexperienced, are especially liable to disablement by industrial injuries. The age curve for industrial accidents among the male employees of this company, however, indicates no such tendency.



(1) From the date absence began to the date returned to work.

FIG. 5

FIGURE 5. CONTINUED - FREQUENCY AND DURATION OF ABSENCE FROM WORK BY AGE ON ACCOUNT OF ILLNESSES SPECIFIED, AMONG EMPLOYEES OF THE EDISON ELECTRIC ILLUMINATING COMPANY OF BOSTON, MASS., in 1922, 1923, AND 1924.



(1) From the date absence began to the date returned to work.

Fig. 5. Continued.

In comparison with the male age curves, sickness frequency among the women declined in the older ages with striking abruptness. In Figure 5 it is seen that the decline was especially sharp for colds, diseases of the pharynx and tonsils, and diseases of the stomach. It is questionable whether these diseases normally decline in frequency so rapidly after age 30 among women. Quite possibly in this company the older women were a more selected group than the younger women; that is to say, the less healthy may have gradually dropped out, leaving a group above age 30 or 35 possessing greater resistance to colds, tonsillitis, stomach disorders, etc., than the group as a whole at the younger ages. Doubtless more light will be shed upon this point (if it is found to be a common experience) by other studies in the industrial morbidity field.

The severity rates indicate a definite increase in the duration of incapacitation as age advances. A slight lessening of recuperative ability appears to manifest itself even in the early thirties, and to about the same extent in either sex. In fact, the duration curves for each sex, plotted for sickness exclusive of accidents, almost tread upon each other up to age 40, and do not diverge much after that age. There appears to be a considerable difference, however, in the relative severity of diseases of the stomach according to sex, the men experiencing longer disabilities, especially in middle age. Attention is called to the greater severity of industrial than nonindustrial accidents in each age group among the men.

TABLE 8.—*Disability according to age; experience of employees on the pay roll of the Edison Electric Illuminating Co. of Boston in 1922, 1923, and 1924*

Age group	Males					Females				
	Number of absences	Number of days of disability	Annual number of absences per 1,000 on pay roll	Number of days per absence	Annual number of days of disability per person on pay roll	Number of absences	Number of days of disability	Annual number of absences per 1,000 on pay roll	Number of days per absence	Annual number of days of disability per person on pay roll
	Sickness, exclusive of accidents									
All ages	6,399	39,582	1,044	6.19	6.458	3,475	19,771	2,304	5.69	13.111
15 to 24	1,606	7,674	1,120	4.78	5.351	1,779	9,096	2,499	5.11	12.775
25 to 34	2,121	10,901	1,085	5.14	5.576	1,233	7,042	2,461	5.71	14.056
35 to 44	1,512	10,486	1,015	6.94	7.038	339	2,256	1,730	6.65	11.510
45 to 54	826	6,055	963	7.33	7.057	96	1,018	1,247	10.60	13.221
55 and over	334	4,466	852	13.37	11.393	28	359	1,273	12.82	16.318
	Industrial accidents									
All ages	486	8,660	79	17.82	1.413	18	396	12	22.00	0.263
15 to 24	118	1,422	82	12.05	.992	9	106	13	11.78	.149
25 to 34	163	2,611	83	16.02	1.336	4	14	8	3.50	.028
35 to 44	113	2,210	76	19.56	1.483	2	221	10	110.50	1.128
45 to 54	70	1,685	82	24.07	1.964	2	5	26	2.50	.065
55 and over	22	732	56	33.27	1.867	1	50	45	50.00	2.273

TABLE 8.—*Disability according to age; experience of employees on the pay roll of the Edison Electric Illuminating Co. of Boston in 1922, 1923, and 1924*—Contd.

Age group	Males					Females				
	Number of absences	Number of days of disability	Annual number of absences per 1,000 on pay roll	Number of days per absence	Annual number of days of disability per person on pay roll	Number of absences	Number of days of disability	Annual number of absences per 1,000 on pay roll	Number of days per absence	Annual number of days of disability per person on pay roll
	Nonindustrial accidents									
All ages	457	3,282	75	7.18	0.535	139	684	92	4.92	0.454
15 to 24	123	641	86	5.21	.447	73	288	103	3.95	.404
25 to 34	152	1,366	78	8.99	.699	40	244	80	6.10	.487
35 to 44	103	742	69	7.20	.498	15	64	77	4.27	.327
45 to 54	59	328	69	5.56	.382	6	23	78	3.83	.299
55 and over	20	205	51	10.25	.523	5	65	227	13.00	2.956
	Influenza and grippe (11)									
All ages	347	2,668	57	7.69	0.435	84	963	56	11.46	0.639
15 to 24	68	376	47	5.53	.262	36	313	51	8.69	.440
25 to 34	111	653	57	5.88	.334	31	384	62	12.39	.766
35 to 44	95	975	64	10.26	.654	9	123	46	13.67	.628
45 to 54	47	407	55	8.66	.474	7	117	91	16.71	1.519
55 and over	26	257	66	9.88	.656	1	26	45	26.00	1.182
	Colds and other diseases of the nasal fossæ (97)									
All ages	2,751	9,229	449	3.35	1.506	1,107	3,527	734	3.19	2.339
15 to 24	730	2,019	509	2.77	1.408	558	1,547	784	2.77	2.173
25 to 34	928	2,993	475	3.23	1.531	391	1,331	780	3.40	2.657
35 to 44	641	2,423	430	3.78	1.626	116	469	592	4.04	2.393
45 to 54	342	1,317	399	3.85	1.535	28	123	364	4.39	1.597
55 and over	110	477	281	4.34	1.217	14	57	636	4.07	2.591
	Bronchitis, acute and chronic (99)									
All ages	137	1,771	22	12.93	0.289	47	1,112	31	23.66	0.737
15 to 24	27	345	19	12.78	.241	22	358	31	16.27	.503
25 to 34	36	353	18	9.81	.181	19	645	38	33.95	1.287
35 to 44	29	364	19	12.55	.244	4	51	20	12.75	.260
45 to 54	30	400	35	13.33	.466	2	58	26	29.00	.753
55 and over	15	309	38	20.60	.788	0	0	0	0	0
	Diseases of the pharynx and tonsils (109)									
All ages	409	2,281	67	5.58	0.372	265	1,355	176	5.11	0.899
15 to 24	140	749	98	5.35	.522	137	697	192	5.09	.979
25 to 34	155	809	79	5.22	.414	101	454	202	4.50	.906
35 to 44	81	507	54	6.26	.340	22	177	112	8.05	.903
45 to 54	22	169	26	7.68	.197	4	20	52	5.00	.260
55 and over	11	47	28	4.27	.120	1	7	45	7.00	.318
	Diseases of the mouth and annexa (108)									
All ages	169	780	28	4.62	0.127	121	322	80	2.66	0.214
15 to 24	54	126	38	2.33	.088	67	171	94	2.55	.240
25 to 34	63	303	32	4.81	.155	44	83	88	1.89	.166
35 to 44	37	306	25	8.27	.205	7	34	36	4.86	.173
45 to 54	12	24	14	2.00	.028	2	10	26	5.00	.130
55 and over	3	21	8	7.00	.054	1	24	45	24.00	1.091

TABLE 8.—*Disability according to age; experience of employees on the pay roll of the Edison Electric Illuminating Co. of Boston in 1922, 1923, and 1924*—Contd.

Age group	Males					Females				
	Number of absences	Number of days of disability	Annual number of absences per 1,000 on pay roll	Number of days per absence	Annual number of days of disability per person on pay roll	Number of absences	Number of days of disability	Annual number of absences per 1,000 on pay roll	Number of days per absence	Annual number of days of disability per person on pay roll
	Diseases of the stomach (111,112)									
All ages	799	2,523	130	3.16	0.412	367	834	243	2.27	0.553
15 to 24	209	387	146	1.85	.270	186	328	261	1.76	.461
25 to 34	282	771	144	2.73	.394	134	272	267	2.03	.543
35 to 44	170	664	114	3.91	.446	33	77	168	2.33	.393
45 to 54	91	412	106	4.53	.480	12	29	156	2.42	.377
55 and over	47	289	120	6.15	.737	2	128	91	64.00	5.818
	Diarrhea and enteritis (114)									
All ages	178	486	29	2.73	0.079	37	101	25	2.73	0.067
15 to 24	38	92	26	2.42	.064	19	39	27	2.05	.055
25 to 34	54	132	28	2.44	.068	16	52	32	3.25	.104
35 to 44	51	112	34	2.20	.075	1	1	5	1.00	.005
45 to 54	28	114	33	4.07	.133	1	9	13	9.00	.117
55 and over	7	36	18	5.14	.092	0	0	0	0	0
	Neurasthenia, nervousness, etc. (84)									
All ages	133	2,099	22	15.78	0.342	203	2,503	135	12.33	1.669
15 to 24	38	293	26	7.71	.204	100	1,306	140	13.06	1.834
25 to 34	41	524	21	12.78	.268	65	840	130	12.92	1.677
35 to 44	26	822	17	31.62	.552	30	147	153	4.90	.750
45 to 54	21	337	24	16.05	.393	7	128	91	18.29	1.662
55 and over	7	123	18	17.57	.314	1	82	45	82.00	3.727
	Diseases of the skin and cellular tissue (151–154)									
All ages	168	1,215	27	7.23	0.198	52	229	34	4.40	0.152
15 to 24	43	267	30	6.21	.186	29	117	41	4.03	.164
25 to 34	49	223	25	4.55	.114	15	71	30	4.73	.142
35 to 44	46	376	31	8.17	.252	5	19	26	3.80	.097
45 to 54	22	227	26	10.32	.265	3	22	39	7.33	.286
55 and over	8	122	20	15.25	.311	0	0	0	0	0
	Rheumatism, acute and chronic (51, 52)									
All ages	256	1,890	42	7.38	0.308	44	473	29	10.75	0.314
15 to 24	19	181	13	9.53	.126	13	101	18	7.77	.142
25 to 34	75	447	38	5.96	.229	17	206	34	12.12	.411
35 to 44	74	574	50	7.76	.385	8	82	41	10.25	.418
45 to 54	61	376	71	6.16	.438	6	84	78	14.00	1.091
55 and over	27	312	69	11.56	.796	0	0	0	0	0
	Dysmenorrhea and kindred conditions (141)									
All ages						546	853	362	1.56	0.566
15 to 24						310	429	435	1.38	.603
25 to 34						203	369	405	1.82	.737
35 to 44						28	46	143	1.64	.235
45 and over						5	9	51	1.80	.091

FUTURE STUDIES

Some of the more general results observable from the tabulations covering a 10-years' sickness experience of employees of a public utility have been presented in the present article. It is the intention in later studies to analyze the accumulating data (for the records are still being continued) from the standpoint of endeavoring to throw as much light as possible upon specific medical and administrative questions. From these and other studies it is hoped that a contribution may be made to the fundamental information needed for an acceleration of progress in the field of industrial hygiene. A study of sickness among persons in different occupations of the electric illuminating company is in preparation and will be presented in an early issue of the Public Health Reports.

SUMMARY

In an analysis of a 10-year record of absences from work due to disability among employees of an electric light and power company in Boston the following points, among others, were observed:

1. Sickness rates covering the shorter illnesses, i. e., those lasting less than six or seven working days, computed from records of absence among persons whose pay is continued during sickness are not comparable with sickness rates covering the shorter disabilities among wage earners who lose their pay when incapacitated by illness.

2. The age distribution of the personnel, and especially of the female personnel, showed a very high proportion at the younger ages.

3. The toll of sickness and accidents during the 10 years reviewed was equivalent to an annual experience of 8.9 calendar days of disability per male, and 14.0 calendar days of disability per female on the pay roll.

4. Among the men sickness caused twelve times as many absences as industrial accidents, while among the women the ratio was 171 sicknesses to 1 industrial accident.

5. Respiratory diseases caused approximately one-half of all the absences and 40 per cent of all the time lost on account of sickness among the men. The percentages for respiratory diseases among the women were not quite so high.

6. Colds and other diseases of the nasal fossæ incapacitated, on the average, 4 out of 10 men annually and 7 out of 10 women; and the days of disability were equivalent to 1.4 per year per man and 2.1 per annum per female employee.

7. There were 202 absences from sickness, exclusive of accidents, among the women to every 100 male absences, after adjusting for differences in the age distribution of the two sexes.

8. The frequency of absence for one day or longer on acount of sickness decreased as age advanced among persons of either sex, but the duration of incapacitation definitely increased with age, especially in the higher age groups.

ACKNOWLEDGMENTS

We are indebted to the Edison Electric Illuminating Co. of Boston for making the data available and for generous assistance in the work of tabulation, and especially to Mr. Herbert W. Moses, Superintendent, Employment Bureau, for his cooperation and advice on various questions which arose in the course of analyzing the statistical material.

ADMINISTRATIVE MEASURES FOR INFLUENZA CONTROL IN GREAT BRITAIN

Revised Memorandum Issued by the British Minister of Health

In view of the prevalence of influenza in Europe, the control measures recommended in a revised memorandum issued by the British Minister of Health may be of especial interest to health officers in this country. The original memorandum was issued in December, 1919, but as there has been little progress made in influenza research since that time, the changes from the earlier recommendations are slight and consist principally of some deletions and a "toning down of former hopes."

The following is taken from The Medical Officer for January 29, 1927, which, commenting editorially on the memorandum, states that with no specific means of prevention or of treatment available, it is all the more incumbent upon us to employ all the means we possess in combating the disease; "for, feeble as they are, they are not negligible, and their judicious application produces results not to be despised."

In view of the prevalence of influenza in certain countries abroad, the Minister of Health has considered it desirable to draw the attention of local authorities to the memorandum on influenza which was issued by his department in December, 1919. The memorandum has now been revised in certain respects, especially in reference to the administrative measures suggested in Part III. In Circular 50, which was issued on the 20th December, 1919, the Minister's general sanction was given to the provision by local authorities of medical assistance (including nursing and the dispensing of doctors' prescriptions) for the poorer inhabitants of their districts who are suffering from influenza. The Minister is advised that neither the incidence of, nor the mortality from, influenza in this country is at present such as to cause serious anxiety; but in view of the possibility of the disease again becoming epidemic, he suggests that local authorities should give consideration to the facilities which they can provide for assisting persons suffering from influenza, with a view to those facilities being available

if and when they are required. He also advises that preparation should be made for the local publication, if necessary, of full information respecting the facilities provided, and of leaflets, posters, etc., setting out the precautions to be adopted to minimize the risk of infection and complications.

The administrative measures recommended in the revised memorandum are as follows:

Quarantine.—The question of the prevention by quarantine of the importation of influenza from abroad has been considered and may be dismissed as impracticable.

Education.—Health authorities should endeavor to inform the public, by means of leaflets, posters, notices in the press, lectures in the schools, etc., as to the nature and gravity of the malady, how to prevent infection, and the precautions to be observed in case of attack. The leaflets should advise ordinary prudence in diet and general mode of life, the avoidance of crowded gatherings, the importance of free ventilation, early isolation of the sick, cleanliness, the disinfection of discharges from the nose and mouth, and other precautions calculated to maintain the health and resistance of the individual and to diminish the opportunities of infection.

In this connection it is particularly desirable that authorities should make widely known full and exact information respecting the local facilities which have been provided in the district. Thus—

How to apply for nursing assistance.
Special arrangements, if any, for the provision of domiciliary medical attendance.
How to apply for "home help" for an influenza-stricken household.
Special arrangements made during an epidemic at public kitchens, crèches, etc.
Hospitals available for sudden or severe cases.
Ambulance service or first-aid available.
Or other necessary local information.

Notification.—On a balance of the considerations involved, the ministry have decided that it is not advisable to make influenza a disease which is compulsorily notifiable throughout the country. Better prevention of this disease can not be expected as a result of its notification; while the notification of all "influenza" does not help local authorities to the knowledge of those cases where assistance to the individual patient or his household is most needed.

Moreover, regarded merely from the statistical standpoint, the value of influenza notification returns is limited, both on account of the numberless unnotified cases not seen by a doctor and of the uncertainties often attaching to the significance of the term "influenza."

Notification of severe cases.—In some places it may, however, be possible to make a useful arrangement with local practitioners whereby all cases in which the assistance of the local authority is required, in the form of nursing, home help, or institutional treatment, are notified voluntarily to the medical officer of health. Elsewhere, health visitors may be employed to obtain knowledge of all such cases in the ordinary course of their district visiting. Under the public health (pneumonia, malaria, dysentery, etc.) regulations, acute primary pneumonia and acute influenzal pneumonia are now compulsorily notifiable in all districts in England and Wales.

Efforts to lessen the opportunities for infection.—Notwithstanding the wide distribution of advice, the importance of isolation of the patient and of protection of those in attendance on him appears to be only imperfectly realized. One of the most tragic features of the last pandemic was the high mortality in hospital staffs. It is possible that some of this might have been prevented by the observance of the precautions ordinarily adopted in nursing acute infectious diseases.

Closure of schools.—This measure may sometimes be employed with advantage, particularly in rural and small urban districts, where the excluded children have few opportunities of coming in contact with each other outside the school; the measure is of little utility in densely populated urban areas. Where the closure of day schools is resolved upon, the Sunday schools should also be closed. Children showing symptoms of influenza should be excluded from school during the period of attack, and should not be readmitted until a careful medical examination of the heart and lungs has been made to eliminate possible latent complications and sequelæ.

Public places of entertainment are justifiably regarded as important foci of the spread of the disease. By the terms of their license, the proprietors of many cinema theaters are compelled, under certain circumstances, to exclude from their performances children of school age, and to provide intervals for the efficient perflation and ventilation of the building. Regulations issued by the local government board in November, 1918, made these conditions apply to all places of public entertainment throughout the country. These emergency regulations, which were admittedly incomplete in certain respects, were withdrawn in May, 1919, with the subsidence of the winter wave, and no sufficient justification has yet been advanced for their reissue.

Other centers of overcrowding.—The overcrowding of trains and trams was held largely responsible for the spread of the disease in 1918, and, in the light of further experience, the ministry are disposed to indorse this opinion. It must be remembered that the intensity of such congestion is usually greater than in even grossly overcrowded tenements. The fact that it is only endured for short continuous periods is not a barrier to successful passage of a highly infective virus from person to person. As regards busses and trams, permanent thorough ventilation should be generally advocated and adopted.

Disinfection.—The routine disinfection of premises and articles after use by influenza patients is not called for, but a thorough washing and cleansing of rooms and their contents and of washable articles, bedding, or apparel is desirable. The practice of spraying halls and places of public resort with a disinfectant fluid is of doubtful utility, and only tends to create a false sense of security.

Organization of domiciliary medical and nursing service and division of district into areas for this purpose.—Where in serious epidemics difficulty is experienced in securing early and adequate professional treatment of the cases as they arise, there is sometimes advantage in forming a "pool" of unattached medical men whose services can be placed at the disposal of practitioners as required. In the larger areas part of such a "pool" may be formed by the use of the health authorities' own medical staff.

Shortage of nurses is often a more serious problem, but much may be accomplished by subdividing the distrcts into small areas and using one or more nurses in each area as a nucleus round which a service of voluntary helpers can be gathered. In extreme emergencies it may even be advisable for a local authority to suspend temporarily its maternity and child welfare work and to liberate its health visitors for domiciliary nursing. The cooperation of the local district nursing association, if such exists, should be enlisted in carrying out any scheme of nursing which may be decided upon. Much can also be done in the way of providing home assistance. All cases coming to the notice of the health visitors may be carefully investigated, note being made as to the amount and kind of assistance needed. In certain districts it may be found desirable, during a period of special stress, that emergency kitchens should be improvised for the supply of food to affected households; it is often advisable to establish crèches for the reception of children from households where the parents are stricken with the disease.

Provision of institutional treatment.—Often a local authority will find it helpful to use one or more wards of the isolation hospitals to supplement the accommodation provided by the general hospitals and poor-law infirmaries, but care is required in the selection of cases for removal to hospital. It should be remembered that, as a rule, patients with pulmonary complications bear removal badly, and, therefore, it should only be attempted with the concurrence and under the supervision of the medical practitioner in attendance. In hospital, the patient should be isolated by screening or otherwise, and ambulance and nursing attendants should observe all precautions usual in treating an acutely infectious respiratory disease.

The importance of rest, warmth, and free ventilation in the treatment of influenza should always be emphasized. By the establishment of emergency hospitals in schools, halls, and large unoccupied private houses, the supply of doctors and nurses—particularly the latter—may be considerably economized.

Drugs, etc.—Attempts to induce an increased resistance to infection by administration of commercially advertised medicinal remedies appear to have been justly deprecated or actually discountenanced as likely to do more harm than good.

Summarizing the recommendations of the memorandum, Sir George Newman points out it is evident that in some directions

local authorities can do much good by energetic action during a wave of epidemic prevalence. He adds: "Measures can be taken which in the aggregate may reduce the opportunities of exposure to infection, and by thus helping to space out the epidemic something is done to prevent the serious dislocation of the ordinary life of the community which it produces—a dislocation which itself increases the danger by making proper care of the sick difficult. The most important services which can be rendered, however, consist in the *organization of the available nursing service and the provision of assistance to influenza-stricken households.*"

DEATH RATES IN A GROUP OF INSURED PERSONS

RATES FOR PRINCIPAL CAUSES OF DEATH, DECEMBER, 1926, AND THE YEARS 1916-1926, INCLUSIVE

The accompanying tables are taken from the Statistical Bulletin for January, 1927, issued by the Metropolitan Life Insurance Co. They present the mortality experience of the industrial insurance department of the company by principal causes of death for December, 1926, and a comparison of the rates for the years 1916 to 1926, inclusive. The rates for 1925 and 1926 are based on a strength of approximately 17,000,000 insured persons in the United States and Canada.

DECEMBER, 1926

The death rate for December (9.2) was a little higher than the rate for the same month last year (8.9), but was about the average for that month for this group of persons.

Increased rates as compared with December, 1925, were noted, especially for whooping cough, diphtheria, influenza, cancer, diabetes, heart disease, and Bright's disease—the mortality from diphtheria and cancer being higher than in any other month of 1926.

Decreases were shown for tuberculosis, pneumonia, and diarrheal diseases. The drop in the pneumonia death rate concurrently with a rise in influenza mortality is interpreted as indicating that, in December at least, the influenza prevailing was not the type which quickly develops into pneumonia.

Death rates (annual basis) for principal causes per 100,000 lives exposed, November and December, 1926, and year 1925

[Industrial department, Metropolitan Life Insurance Co.]

Cause of death	Rate per 100,000 lives exposed [1]			
	Dec. 1926	Nov. 1926	Dec. 1925	Year 1925
Total, all causes	918.6	837.5	893.8	907.5
Typhoid fever	4.0	6.1	4.4	4.6
Measle	3.3	1.2	4.4	3.3
Scarlet fever	2.4	3.2	3.2	3.5
Whooping cough	5.7	6.0	4.3	7.7
Diphtheria	15.3	12.7	11.3	10.6
Influenza	18.4	13.3	16.8	22.0
Tuberculosis (all forms)	88.4	84.6	90.2	98.1
Tuberculosis of resp'y system	78.9	75.2	81.4	85.9
Cancer	77.2	71.2	72.1	70.5
Diabetes mellitus	19.9	15.8	16.4	15.2
Cerebral hemorrhage	53.9	49.8	55.1	53.6
Organic diseases of heart	137.7	123.6	133.2	126.6
Pneumonia (all forms)	95.9	70.6	101.4	86.5
Other respiratory diseases	15.0	11.6	15.6	13.2
Diarrhea and enteritis	17.1	27.3	19.3	36.7
Bright's disease (chronic nephritis)	76.8	69.4	72.5	69.8
Puerperal state	12.6	11.0	13.1	16.5
Suicides	7.3	7.9	6.1	6.9
Homicides	7.2	7.2	6.6	7.2
Other external causes (excluding suicides and homicides)	61.3	61.7	54.7	64.3
Traumatism by automobiles	14.1	19.5	15.3	16.6
All other causes	199.3	183.4	193.2	190.7

[1] All figures include infants insured under one year of age.

YEAR 1926, AND 1916–1926

Health conditions in this group were good in 1926, the death rate being 8.8 [1] per 1,000, identical with the rate for 1922, but slightly higher than the rates for 1921, 1924, and 1925—years of record low mortality. As an indication of the progress in preventive medicine, attention is called to the fact that had the rate of 1911 prevailed in 1926 there would have occurred 63,330 more deaths than were actually reported in this group of persons.

The year was given a bad start from a health standpoint by an early increased prevalence of influenza and pneumonia, excess mortality from Bright's disease and cerebral hemorrhage, increased prevalence of measles, and higher mortality from whooping cough. Marked improvement began in May, however, and in June the death rate from all causes was lower than that for the corresponding month of 1925. During the remainder of the year health conditions in general were as favorable as during the record health year 1925.

New low records were established for a number of diseases of major public-health interest. Typhoid fever, which had shown a continuous decline for many years up to 1924 (followed by a slight rise in 1925), established a new minimum rate of 4.2 per 100,000;

[1] It should be borne in mind that the death rates in the group of persons here considered are uniformly lower than the rates for the general population, varying between 82 and 87 per cent of the rate for the registration area from 1911 to 1919, inclusive, and from 72 to 75 per cent in the years 1920 to 1925, inclusive. In 1924 and 1925 the rates for the insured group were 72 per cent of the rates for the registration area.

scarlet fever repeated its minimum rate of 3.4 for 1925; diphtheria established a new low point with a rate of 9.5; diarrheal diseases declined to a minimal figure of 10.5; and diseases of pregnancy and childbirth showed a decline to a rate of 15.6 per 100,000—well below the former minimum of 16.9 established in 1925.

For the second time in the records of this group the tuberculosis death rate was below 100 per 100,000, although there was a slight increase to 99.2 as compared with 98.2 in 1925.

The combined death rate for measles, scarlet fever, whooping cough, and diphtheria in 1926 was 25.8 per 100,000 (the lowest recorded except for 1925, which was 19. 7) as compared with 58.9 in 1911, and with a rate of 27.3 for diphtheria alone in 1911 and of 22.8 for typhoid fever in that year. With regard to the decline in the diphtheria rate the Bulletin states:

> The new minimum rate for diphtheria is perhaps the greatest single sanitary accomplishment of 1926. There is no good reason why the continuous drop in the diphtheria rate which we have observed since 1921 should not go on through coming years until the mortality from this dreaded scourge of childhood becomes a negligible item in our mortality record. We now know how to recognize susceptibles and how to protect them. Every year the attack upon diphtheria is becoming more thoroughgoing. Demonstrations in a number of communities have shown beyond a doubt that diphtheria can be stamped out. The time has come when we can say that, with the increasing administration of toxin-antitoxin to school children and to those of preschool age, the outlook is indeed good for the virtual control of this disease.

While the gross death rate and the rates for most of the important communicable diseases for 1926 are favorable, there are some unsatisfactory mortality factors. Cancer caused 12,830 deaths in this group in 1926, equivalent to a rate of 74.9 per 100,000—the highest death rate for this disease recorded in the history of the company. Cancer deaths constituted 8.5 per cent of all the deaths in 1926.

Diabetes recorded the highest death rate since 1922, and, with the exception of that year, the highest ever recorded among these policyholders.

The death rates for the principal degenerative diseases all increased in 1926. The mortality from organic heart disease increased 5.7 per cent in 1926 as compared with 1925, and smaller increases were recorded for chronic nephritis and cerebral hemorrhage. It is stated that rises in these death rates were, in part at least, reflexes of the influenza outbreak early in the year. Heart disease, as in every year since 1921, was the leading cause of death.

The rate for alcoholism rose to 3.7 per 100,000 as compared with 3 in 1925. The rate for this cause was the highest since 1917 (4.9). In the pre-war years, 1911–1916, the highest rates were 5.3 and 5.2 and the lowest 4 and 4.1.

The death rate for cirrhosis of the liver was 6.9 per 100,000 in 1926 as compared with 6.7 in 1925 and with 5.8 in both 1924 and 1923.

Automobile fatalities again record a new maximum, having increased without interruption since 1911. The death rate from this cause has increased 39.3 per cent in 5 years, 129.7 per cent in 10 years, and 639.1 per cent since 1911.

INCREASE IN LIFE EXPECTANCY

The life expectancy of the industrial policyholders has increased 8.9 years during the period 1911–1925. The expectancy of life at birth in 1925 was 55.5 years.

Death rates per 100,000 for principal causes of death, 1911, and 1916 to 1926, ages one and over

[Industrial department, Metropolitan Life Insurance Co.]

Cause of death	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1911
All causes of death	883.4	846.3	848.0	897.1	882.9	870.6	989.4	1063.0	1559.2	1161.1	1168.1	1253.0
Typhoid fever	4.2	4.6	4.4	5.2	5.7	6.7	6.7	7.3	11.5	12.1	13.0	22.8
Communicable diseases of childhood	25.8	19.7	26.2	33.1	29.8	37.9	43.1	31.5	41.6	46.8	40.8	58.9
Measles	8.0	2.5	5.7	8.4	4.3	3.2	8.5	3.5	8.6	11.1	9.9	11.4
Scarlet fever	3.4	3.4	4.3	4.4	4.9	7.0	6.0	3.9	3.6	6.9	4.1	13.1
Whooping cough	5.0	3.6	3.5	4.8	2.6	3.9	6.6	3.2	10.1	5.1	5.8	7.1
Diphtheria	9.5	10.2	12.7	15.5	18.0	23.8	22.1	20.9	19.3	24.6	21.0	27.3
Influenza and pneumonia	105.3	88.3	84.4	107.7	95.3	76.5	159.5	214.1	542.2	135.4	138.1	131.2
Influenza	27.3	19.4	14.2	30.1	21.7	8.7	53.5	96.9	272.4	14.4	23.8	15.9
Pneumonia	78.0	69.0	70.2	77.6	73.7	67.8	106.1	117.2	269.8	121.0	114.3	115.3
Tuberculosis, all forms	99.2	98.2	104.4	110.5	114.2	117.4	137.9	156.5	189.0	188.9	190.2	224.6
Tuberculosis of respiratory system	87.7	87.0	93.4	100.6	103.6	105.6	124.0	141.6	171.2	172.3	172.8	203.0
Cancer, all forms	74.9	71.8	71.5	72.7	72.0	71.7	69.8	67.0	67.2	70.9	70.3	68.0
Diabetes mellitus	17.0	15.5	15.1	16.2	17.2	15.5	14.1	13.4	14.0	15.3	15.9	13.3
Alcoholism	3.7	3.0	2.9	3.0	2.1	.9	.6	1.4	1.8	4.9	5.1	4.0
Cerebral hemorrhage, apoplexy	56.4	54.4	61.1	61.9	62.9	62.1	61.3	59.8	64.0	66.8	68.7	64.2
Diseases of heart	136.0	128.7	125.2	128.7	126.7	117.4	117.0	113.9	141.7	142.0	140.2	141.8
Diarrhea and enteritis	10.5	12.3	11.3	11.1	10.8	14.2	15.8	16.9	23.4	25.5	26.2	28.0
Chronic nephritis (Bright's disease)	74.7	71.2	66.5	69.6	70.3	68.0	70.8	73.5	86.8	95.7	99.0	95.0
Puerperal state, total	15.6	16.9	17.2	17.9	19.0	19.8	23.0	20.0	27.4	18.2	17.6	19.8
Puerperal septicemia	6.0	6.6	6.6	6.9	7.4	8.5	8.6	6.7	7.3	7.5	7.2	8.8
Puerperal albuminuria and convulsions	3.6	3.8	4.3	4.2	4.7	4.9	5.0	4.8	4.9	5.1	5.0	4.7
Accidents of pregnancy	1.7	1.6	1.6	1.8	1.7	1.6	3.1	3.0	6.9	1.6	1.4	1.7
Total external causes	77.0	78.3	76.9	77.8	71.8	72.0	72.0	94.2	128.9	106.7	99.5	97.9
Suicides	7.8	7.0	7.3	7.4	7.5	7.6	6.1	6.8	7.6	9.3	9.8	13.3
Homicides	7.1	7.4	7.2	7.3	6.3	6.7	5.8	6.9	6.2	7.4	6.9	7.2
Accidents, total	62.1	63.9	62.4	63.0	58.0	57.5	59.6	63.8	75.5	76.5	73.2	77.4
Accidental burns	6.1	6.1	6.4	6.3	6.1	6.6	8.1	8.1	9.0	8.9	8.8	8.8
Accidental drowning	6.3	6.5	7.3	6.7	7.3	8.2	6.7	8.6	9.4	8.7	9.7	10.2
Accidental trauma, by fall	7.9	8.1	7.7	8.4	7.3	7.1	7.3	8.0	10.4	11.9	13.1	13.2
Accidental trauma, by machine	1.4	1.3	1.3	1.7	1.6	1.0	1.7	1.6	2.4	2.0	1.7	1.8
Railroad accidents	4.2	4.0	4.0	4.9	4.1	3.9	5.2	5.7	7.8	8.5	7.9	9.5
Auto accidents	17.0	16.8	15.9	15.4	13.6	12.2	11.1	10.7	10.3	9.7	7.4	2.3
All other accidents	19.4	21.2	19.7	19.5	18.0	18.5	19.5	21.2	26.1	26.8	24.6	31.6
War deaths	(1)	(1)	(1)	------	.1	.1	.5	16.6	39.7	13.5	9.6	------
Other diseases and conditions	183.1	183.4	180.9	181.7	185.1	190.5	197.8	193.5	219.7	231.9	243.5	283.5

(1) Death rate less than 0.05 per 100,000.

PROPOSED NEW YORK LAW RELATING TO WATER SUPPLIES

The following article, quoted from the February 7, 1927, issue of the weekly Health News, published by the New York State Department of Health, discusses a proposed law providing that where the State commissioner of health certifies that a public water supply constitutes a menace to public health and recommends emergency measures to be applied to such water supply, failure to carry out such recommendations, or to take other approved steps in lieu thereof, shall constitute presumptive evidence of negligence in the event of action being brought to recover damages for sickness traceable to the use of such water.

The Webb-Lattin water bill, senate print No. 176 and assembly print No. 243, fixing responsibility for failure to take necessary steps to protect public health when a water supply is known to be dangerously polluted, is worthy of thoughtful consideration and active support.

This bill, introduced at the request of the State department of health and entitled "An act to amend the public-health law in relation to emergency recommendations by the commissioner of health affecting a water supply," would add to the public-health law the following section:

"SEC. 88. *Emergency recommendations by commissioner of health.*—When the State commissioner of health, after investigation of the condition of any public water supply used for drinking or other domestic purposes, whether maintained and operated by a municipality, water district, or private corporation, company or individual, shall certify to the board, corporation, company, officer, or person in charge of the maintenance and operation of such water supply that, in his opinion, such water supply is so polluted or subject to pollution as to constitute a menace to the public health and shall recommend emergency measures to be applied to such water supply for the protection of public health, failure on the part of such municipality, water district, or private corporation, company, or individual maintaining and operating such water supply to carry out such emergency recommendations or to take such other steps in lieu thereof as may be approved by the State commissioner of health shall, in the event of action being brought to recover for damages arising from sickness traceable to the use of water from such supply, constitute presumptive evidence of negligence on the part of such municipality, water district, or private corporation, company, or individual."

In view of fairly recent court decisions, there is no doubt but that, when sickness arises or deaths occur as a result of the use of polluted water from a public supply, the municipality or water company and its officials are legally liable if it can be proven that they have been officially warned of the danger to public health and have failed to carry out reasonable recommendations for the abatement of the menace. It is at times difficult, however, to establish the fact that such a warning has been issued and received.

The department has been held to have no power to compel a municipality or water company to act, even in the face of a threatened epidemic. It can only warn and recommend, urging that its recommendations be carried out. Several serious epidemics have occured after such warnings have been issued, the responsible local officials failing to act upon the department's recommendations.

This bill would give the department no new authority, but would make provision for an official certification which would be acceptable as evidence and

would definitely fix responsibility. It would still be necessary in any instance to establish the relationship between the use of the water and the sickness or death attributed to it.

PUBLIC HEALTH ENGINEERING ABSTRACTS

Progress Report on Recent Developments in the Field of Industrial Wastes in Relation to Water Supply. Anon. *Journal American Water Works Association*, vol. 16, No. 3, September, 1926, pp. 302–329. (Abstract by Frank Raab.)

The sources of greatest danger with regard to the pollution of streams which are the sources of public water supplies are mine waters which contain sulphuric acid and trade wastes containing phenols, creosotes, tarry acids, and similar compounds. Pulp-mill wastes, tannery wastes, and canning wastes are also discussed. According to a report of the United States Geological Survey for 1920, there are 2,397 coal mines in operation in Pennsylvania alone. These mines produce 116,000,000 tons of coal annually. It is estimated that these mines dump 9,000,000 tons of sulphuric acid into the streams of that State annually. About 27 per cent of the annual rainfall percolates through the soil and into the mines and is thus pumped out as acid water. Out of 300 mines in Pennsylvania, only four showed a nonacid water. In some mines the water is neutralized with limestone, lime, or marl. The cost of treating all this water before it is turned into the rivers represents an economic problem of serious proportions.

Phenolic wastes.—The Ohio River and its tributaries, owing to the proximity of highly industrialized regions producing coal, steel, coke, and similar products, offers one of the most serious problems of phenolic waste disposal. The discarding of the so-called "bee hive" ovens for modern by-products plants, which make possible the recovery of valuable substances, have greatly intensified the disagreeable taste and odor problem in water supplies taken from the Ohio River. Several methods to eliminate these wastes are discussed. An excess amount of biological material, especially sewage, seems to support a rapid natural oxidizing process. As far as can be determined, no serious and widespread digestive disorders have followed the use of water containing these phenolic compounds. Observations in several cities have demonstrated that rain will bring down from the air whither they have been carried by smoke, sufficient of these compounds into the rivers to produce the characteristic taste and odor when these waters are treated with chlorine. Observations have shown that these tastes always follow heavy rainfall, especially when the rains have been preceded by weeks of bright skies. Reactions producing these tastes and odors do not take place when free ammonia is present in the water, when the water

has not been exposed to the air, or when an unusually large amount of organic matter is present. Chlorinated water should not be exposed to the air if gas works are in the vicinity; neither should it be mixed with water which has thus been exposed. Phenols present in quantities as little as 1 part per billion will produce tastes and odors in water treated with 0.5 p. p. m. of chlorine. Superchlorination and subsequent dechlorination will yield satisfactory results. Potassium permanganate, if added before or after chlorination, is effective. Ammonia, ammonium chloride, and ammonium sulphate proved effective. No economically practical method for treating sulphite mill waste is known at present, but experiments in progress promise results.

Objectives and Standards of Ventilation. C. E.-A. Winslow, Professor of Public Health, Yale School of Medicine, and Chairman, New York State Commission on Ventilation. *Journal American Society of Heating and Ventilating Engineers*, vol. 32, No. 3, March, 1926, pp. 113–152. (Abstract by Dana E. Kepner.)

"The science of ventilation, as it has been understood by the engineering profession from the time of Billings and Woodbridge almost to the present day, has been based on the conceptions of the German hygienist, von Pettenkofer, who, in 1862, first clearly enunciated the view that the evil effects of the air of a badly ventilated room were due to alleged organic poisons excreted into the atmosphere from the human body, and that the object of ventilation was the removal of these poisons by dilution with fresh air." To Pettenkofer, carbonic acid was of significance as an indirect measure of the presence of morbific matter; and from his assumption that air containing more than a certain amount of carbon dioxide was bad, the common standard of 30 cubic feet of air supplied per person per minute was derived. This is the amount of fresh air containing 3 parts of CO_2 per 10,000 necessary to keep the CO_2 in an occupied space from rising above 6 parts per 10,000. This standard has been embodied in many State laws and city ordinances.

The findings of the New York State Commission on Ventilation, after considerable research, confirmed by other investigators, have shown the requisites for maximum comfort and efficiency of occupants to be "* * * air which has a temperature of 66–68° F., with a moderate relative humidity and a moderate, but not excessive, degree of air movement." These requisites, it is stated, can be secured as well, if not better, by window ventilation with gravity exhaust duct near the ceiling than by positive plenum systems. Because of the smaller cost, the former is advocated.

A resolution unanimously adopted by the American Public Health Association at the 1925 annual meeting in St. Louis, is as follows:

Whereas hundreds of thousands of dollars are wasted every year on this continent in the installation and operation of systems of school ventilation which are

not only not beneficial but are positively harmful to the health of school children; and

Whereas, in the light of current knowledge, the supply of as large an air volume in schoolrooms as 30 cubic feet per minute per capita is necessarily accompanied with dangerous overheating of the schoolroom in order to avoid resulting drafts; and

Whereas the use of ozone and other chemicals for treating schoolroom air has little or no scientific justification and little or no practical value: Therefore be it

Resolved, That the system of ventilating schoolrooms by fresh, untreated, outdoor air, admitted at the windows with gravity exhaust ducts for removing vitiated air from near the ceiling, is the most generally satisfactory method of school ventilation; and be it

Resolved, That we recommend that State laws and city regulations interfering with such scientific and economical methods of school ventilation should be repealed in the interest of the public health.

(Abstractor's note: Following the presentation of this paper 11 persons, presumably all members of the American Society of Heating and Ventilating Engineers, discussed the subject, definitely and positively objecting to the advantage of the window ventilation method, none of whom, however, based his objections on scientific facts. Doctor Fronczak, health commissioner of Buffalo, supported the window ventilation method. After Doctor Winslow had closed the discussion, several resolutions were presented and presumably adopted soliciting the cooperation of the American Public Health Association in the study of this matter, but definitely disagreeing with any suggestion that any consistent ventilation can be obtained by air admission through windows with gravity vent flues.)

School Sanitation from the Standpoint of the School Administrator. John R. McLure, professor of educational administration, University of Alabama. *American Journal of Public Health*, Vol. XVI, No. 9, September, 1926, pp. 887–892. (Abstract by H. N. Old.)

The author opens his discussion by stating the needs of the subject as follows: First, a program that has been developed and tested on a strictly scientific basis; second, a type of school organization and control that makes possible successful and efficient results with the total school population in the entire area concerned; and, third, an adequate system of school revenues that makes possible the financing of a complete and equal program for all school children.

While the title of this paper and the detailing of the needs as above would indicate the treatment of general school sanitation, it is found that it is mainly a discussion of school ventilation. The author treats most convincingly of the fallacy of the "30 cubic feet per minute per pupil" theory, which is the basis of nearly all State regulations concerning school ventilation.

The mechanical system of ventilation is contrasted with that of the gravity system and it is stated that "compliance with ventilation laws and regulations now discredited by scientific research is costing taxpayers, chiefly in our cities and towns, millions of dollars annually.

Millions of dollars from bond issues and tax levies have been translated into idle, semi-idle, and useless mechanical ventilation devices and paraphernalia. The conclusion is inevitable. Mechanical ventilation has not worked."

The desirable type of organization and control of the school system is discussed, and especially the importance of abandoning the small one-teacher schools or school districts where it is economically impossible to provide proper sanitation in favor of the larger consolidated or county-unit districts.

The paper concludes by a brief reference to the necessity for an adequate system of school revenues, in which it is stated that "more and more the revenues must come from State rather than local taxes," in order that poorer counties or districts may have educational facilities comparable to those furnished the more fortunate districts.

Light and Health. Ernest W. J. Hague, chief health inspector, Winnipeg, Manitoba. *Public Health Journal* (Canada), vol. 17, No. 10, October, 1926, pp. 503–508. (Abstract by Dana E. Kepner.)

In the earliest period of medical science the old Greek physicians advocated the use of sunlight as a curative agent, but this necessity of light to man has been lost sight of somewhat through the following centuries. Recent experiments by many investigators have demonstrated the great value of sunlight, particularly the ultra-violet rays. Excessive smoke in our cities and lack of adequate sunlight in homes and workshops are robbing many persons of this natural benefit. Sanitary inspectors should spread the gospel of the necessity of sunshine to the human race by advocating: (1) Clear atmosphere for our cities and towns; (2) the abolition of dark rooms in dwellings and workshops; (3) the use of a window glass which will permit the passage of ultra-violet rays; (4) the inculcating in the minds of the people the necessity for adequate sunlight and the promotion of such habits of life as will insure that every person shall receive his daily quota of the life-giving beams.

The Bacteriological Examination of Milk from Breconshire and Radnorshire. D. M. Evans and R. O. Davies (*Welsh Jour. Agr.*, 2 (1926), pp. 168–180). From *Experiment Station Record*, U. S. Dept. of Agriculture, vol. 55, No. 6, October, 1926, p. 572.

"The amount of dirt, bacterial content, contamination with *Bacillus coli*, keeping quality, methylene blue reduction test, and the relation of various conditions to the bacterial content were determined at 14-day intervals in the milk from 11 different dairies in a clean-milk competition.

"The studies of the keeping quality show that the morning's milk possessed better keeping qualities, although it also contained more bacteria per cubic centimeter, due to the differences in the tempera-

tures and the time over which the morning and evening milk was held.

"Much difference was found in the bacterial counts of the samples from the dairies and the samples of ordinary retail milk, the latter containing an average of over 100 times the count of the former samples. All of the retail samples contained *B. coli*, and in 80 per cent they were present in 0.001 c. c. *B. coli* were absent from many or present in only a very small proportion of the farm samples.

"Where the milking utensils were steamed there was greater freedom from *B. coli* and longer keeping quality, although the bacterial content was not as low as where the utensils were boiled or scalded. The methods of feeding and the use of small-top pails for milking as compared with large-top pails were found to affect the bacterial content materially."

Farm Water Supply and Sewage Disposal in West Virginia. F. D. Cornell, jr., Agricultural Experiment Station, College of Agriculture, West Virginia University, Bulletin 206, May, 1926, pp. 1–27. (Abstract by Fred Almquist.)

The need for educating farmers to the importance of sanitation is very great. Many practices now in use on farms are insanitary and dangerous, such as allowing chickens to clean closets, leaving closets open and the filth exposed, together with many other such practices. It is estimated that three out of every four wells are polluted. It is also important from an economic standpoint in that it costs a farmer from $300 to $500 for a case of typhoid.

With a view of ascertaining the importance of farm sanitation, three typical farm counties of West Virginia were surveyed with regard to water supply and sanitation. Of 287 farms, only 13 had running water in the house, 4 had pumps in the kitchen, and the others carried water from the outside.

One hundred and twenty-four of the 287 farms visited had open privies, 90 had surface privies closed in the back, and 21 had no privies at all.

A complete description of the survey, with detailed tables and graphs, is given. The survey shows the need of farm sanitation and the negligence of the farmers of West Virginia, many of whom, with a minimum of work and expense, could have running water and sanitary conveniences.

INFANT MORTALITY IN NEW HAVEN, CONN.—A CORRECTION

The infant mortality figures for New Haven, Conn., which appeared in the table printed on page 252 of PUBLIC HEALTH REPORTS for January 28, 1927, were incorrect. Dr. Dwight M. Lewis states that the number of deaths under 1 year of age for New Haven during 1926 was 197 instead of 297. This makes the infant mortality rate 52 instead of 79.

DEATHS DURING WEEK ENDED FEBRUARY 12, 1927

Summary of information received by telegraph from industrial insurance companies for week ended February 12, 1927, and corresponding week of 1926. (From the Weekly Health Index, February 17, 1927, issued by the Bureau of the Census, Department of Commerce)

	Week ended Feb. 12, 1927	Corresponding week, 1926
Policies in force	66, 705, 342	63, 364, 512
Number of death claims	12, 300	10, 851
Death claims per 1,000 policies in force, annual rate	9. 6	8. 9

Deaths from all causes in certain large cities of the United States during the week ended February 12, 1927, infant mortality, annual death rate, and comparison with corresponding week of 1926. (From the Weekly Health Index, February 17, 1927, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Feb. 12, 1927		Annual death rate per 1,000, corresponding week 1926	Deaths under 1 year		Infant mortality rate, week ended Feb. 12, 1927 [2]
	Total deaths	Death rate [1]		Week ended Feb. 12, 1927	Corresponding week, 1926	
Total (67 cities)	7,551	13.3	14.5	838	896	[3] 73
Akron	50			12	6	129
Albany [4]	47	20.4	22.8	2	3	42
Atlanta	67			2	14	
White	36			1	4	
Colored	31	([5])		1	10	
Baltimore [4]	235	15.0	24.3	27	41	83
White	171		21.0	17	29	66
Colored	64	([5])	43.8	10	12	156
Birmingham	50	12.1	17.1	8	5	
White	26		13.0	2	3	
Colored	24	([5])	23.2	6	2	
Boston	244	16.0	14.2	42	26	117
Bridgeport	29			5	8	93
Buffalo	169	16.0	14.6	16	14	67
Cambridge	36	15.1	15.0	5	4	89
Camden	33	12.9	12.7	5	6	86
Canton	31	14.3	15.2	2	4	47
Chicago [4]	739	12.4	11.5	95	83	83
Cincinnati	133	16.8	19.2	14	16	87
Cleveland	212	11.2	11.8	27	32	71
Columbus	71	12.7	14.3	9	7	84
Dallas	40	10.0	15.4	6	5	
White	32		13.6	5	1	
Colored	8	([5])	27.0	1	4	
Dayton	49	14.2	8.8	7	5	115
Denver	74	13.3	19.2	3	10	
Des Moines	29	10.1	11.4	2	1	33
Detroit	288	11.3	13.2	52	55	82
Duluth	16	7.3	11.1	1	4	22
El Paso	20	9.1	23.4	2	8	
Erie	30			5	3	98
Fall River [4]	28	11.0	15.1	2	2	35
Flint	34	12.4	7.3	10	3	163
Fort Worth	26	8.3	13.8	3	3	
White	24		11.5	2	2	
Colored	2	([5])	30.2	1	1	
Grand Rapids	35	11.5	11.7	6	5	88
Houston	61			4	9	
White	32			3	5	
Colored	29	([5])		1	4	
Indianapolis	117	16.3	15.2	9	10	71
White	106		14.7	8	10	72
Colored	11	([5])	19.0	1	0	61

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.
[3] Data for 63 cities.
[4] Deaths for week ended Friday, Feb. 11, 1927.
[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Louisville, 17; Memphis, 38; New Orleans, 26; Norfolk, 38; Richmond, 32; and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended February 12, 1927, infant mortality, annual death rate, and comparison with corresponding week of 1926—Continued

City	Week ended Feb. 12, 1927		Annual death rate per 1,000, corresponding week 1926	Deaths under 1 year		Infant mortality rate, week ended Feb. 12, 1927
	Total deaths	Death rate		Week ended Feb. 12, 1927	Corresponding week, 1926	
Jersey City	77	12.5	17.1	6	10	45
Kansas City, Mo	86	11.7	13.9	4	15	
Los Angeles	249			21	70	60
Louisville	89	14.5	12.7	5	0	43
White	65		11.1	3	8	29
Colored	24	(5)	22.2	2	1	140
Lowell	28	13.2	11.8	1	3	19
Lynn	24	11.9	14.5	4	2	106
Memphis	57	16.6	20.9	6	6	
White	33		19.2	3	3	
Colored	24	(5)	24.0	3	3	
Milwaukee	127	12.6	11.9	20	11	93
Minneapolis	92	10.9	10.2	7	12	39
Nashville [4]	43	16.2	14.1	2	6	
New Bedford	41	17.9	10.9	3	5	52
New Haven	53	14.9	14.9	7	7	98
New Orleans	156	19.2	36.1	13	35	
White	95		32.1	5	19	
Colored	61	(5)	47.4	8	16	
New York	1,485	13.0	14.1	147	171	61
Bronx Borough	164	9.2	10.5	10	18	32
Brooklyn Borough	509	11.7	12.6	63	63	65
Manhattan Borough	622	17.9	18.9	58	66	68
Queens Borough	153	9.9	9.4	14	19	60
Richmond Borough	37	13.1	22.2	2	5	37
Newark, N. J	100	11.2	13.5	25	12	124
Norfolk	45	13.1	9.3	3	1	61
White	20		8.5	0	1	0
Colored	25	(5)	10.8	3	0	159
Oakland	64	12.5	12.6	13	9	152
Oklahoma City	26			0	3	
Omaha	49	11.7	11.6	5	6	56
Paterson	35	12.7	12.4	4	5	71
Philadelphia	593	15.2	14.6	58	57	77
Pittsburgh	172	13.9	13.4	24	24	84
Portland, Oreg	75			5	3	53
Providence	60	11.1	13.8	12	12	102
Richmond	54	14.7	24.6	4	5	53
White	38		20.6	4	3	81
Colored	16	(5)	34.1	0	2	0
Rochester	86	13.8	11.2	7	6	59
St. Louis	206	12.8	14.2	13	20	
St. Paul	56	11.7	11.6	4	3	36
Salt Lake City [4]	38	14.6	25.5	8	7	122
San Antonio	58	14.3	21.6	11	15	
San Diego	41	18.6	17.1	1	2	21
San Francisco	157	14.2	14.9	5	3	31
Schenectady	21	11.8	13.5	5	2	149
Seattle	82			2	2	21
Somerville	22	11.2	10.4	4	3	144
Spokane	39	18.7	15.8	1	3	25
Springfield, Mass	35	12.4	12.9	4	2	62
Syracuse	50	13.2	13.0	15	7	193
Tacoma	20	9.7	11.8	1	3	24
Toledo	81	13.9	14.5	6	9	58
Trenton	38	14.5	17.9	5	9	87
Utica	32	16.2	14.7	2	1	46
Washington, D. C	149	14.4	16.4	7	8	40
White	98		14.0	5	2	42
Colored	51	(5)	23.4	2	6	37
Waterbury	17			4	5	94
Wilmington, Del	23	9.5	11.4	3	3	74
Worcester	54	14.4	12.7	6	3	72
Yonkers	24	10.5	12.6	2	4	45
Youngstown	35	10.8	10.1	0	8	0

[4] Deaths for week ended Friday, Feb. 11, 1927.

[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Louisville, 17; Memphis, 38; New Orleans, 26; Norfolk, 38; Richmond, 32; and Washington, D. C., 25.

PREVALENCE OF DISEASE

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

UNITED STATES

CURRENT WEEKLY STATE REPORTS

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

Reports for Week Ended February 19, 1927

ALABAMA

	Cases
Chicken pox	46
Diphtheria	60
Influenza	61
Malaria	27
Measles	181
Mumps	15
Ophthalmia neonatorum	2
Pellagra	5
Pneumonia	50
Scarlet fever	15
Smallpox	46
Tuberculosis	156
Typhoid fever	41
Whooping cough	53

ARIZONA

Cerebrospinal meningitis	1
Chicken pox	13
Diphtheria	1
Measles	5
Scarlet fever	4
Smallpox	1
Tuberculosis	9
Typhoid fever	3
Whooping cough	1

ARKANSAS

Chicken pox	25
Diphtheria	7
Influenza	74
Malaria	5
Measles	23
Mumps	36
Pellagra	1
Scarlet fever	11
Smallpox	2
Trachoma	1
Tuberculosis	5
Typhoid fever	2
Whooping cough	36

CALIFORNIA

	Cases
Cerebrospinal meningitis:	
Alturas	1
Glendale	1
Los Angeles	3
Los Angeles County	2
Sacramento	1
Diphtheria	133
Influenza	55
Lethargic encephalitis	1
Measles	2,587
Mumps	227
Poliomyelitis—San Francisco	1
Scarlet fever	268
Smallpox	31
Tuberculosis	178
Typhoid fever	3
Whooping cough	88

COLORADO [1]

Cerebrospinal meningitis	2
Chicken pox	50
Diphtheria	20
German measles	15
Impetigo contagiosa	5
Influenza	2
Measles	306
Mumps	15
Pneumonia	5
Poliomyelitis	1
Scarlet fever	343
Septic sore throat	1
Smallpox	20
Tuberculosis	52
Typhoid fever	1
Whooping cough	1

CONNECTICUT

Cerebrospinal meningitis	2
Chicken pox	88

[1] Report for 2 weeks.

CONNECTICUT—continued

	Cases
Diphtheria	41
German measles	58
Influenza	14
Malaria	1
Measles	89
Mumps	31
Pneumonia (broncho)	41
Pneumonia (lobar)	41
Scarlet fever	118
Septic sore throat	6
Tuberculosis (all forms)	49
Typhoid fever	3
Whooping cough	49

DELAWARE

Measles	7
Mumps	1
Pneumonia	2
Scarlet fever	58
Tuberculosis	5
Whooping cough	8

FLORIDA

Chicken pox	70
Diphtheria	17
Influenza	7
Malaria	1
Measles	93
Mumps	9
Scarlet fever	14
Smallpox	45
Tuberculosis	11
Typhoid fever	9
Whooping cough	10

GEORGIA

Anthrax	1
Cerebrospinal meningitis	1
Chicken pox	60
Conjunctivitis (infectious)	4
Diphtheria	15
Dysentery	1
Hookworm disease	2
Influenza	99
Malaria	18
Measles	64
Mumps	27
Pneumonia	27
Scarlet fever	16
Septic sore throat	27
Smallpox	100
Tuberculosis	6
Typhoid fever	4
Whooping cough	17

IDAHO

Cerebrospinal meningitis:	
Pocatello	1
St. Maries	1
Chicken pox	5
Diphtheria	2
Measles	101
Mumps	14
Pneumonia	1
Scarlet fever	34

IDAHO—continued

	Cases
Smallpox	4
Typhoid fever	3
Whooping cough	6

ILLINOIS

Cerebrospinal meningitis:	
Alexander County	1
Morgan County	1
Sangamon County	1
Chicken pox	412
Diphtheria	141
Influenza	59
Lethargic encephalitis	3
Measles	2,340
Mumps	513
Pneumonia	450
Poliomyelitis:	
Henry County	1
McHenry County	1
Scarlet fever	432
Smallpox	21
Tuberculosis	454
Typhoid fever	19
Whooping cough	228

INDIANA

Cerebrospinal meningitis	1
Chicken pox	258
Diphtheria	56
Influenza	78
Measles	236
Mumps	2
Pneumonia	9
Scarlet fever	317
Smallpox	150
Tuberculosis	33
Typhoid fever	2
Whooping cough	63

IOWA

Chicken pox	43
Diphtheria	24
Measles	729
Mumps	10
Scarlet fever	90
Smallpox	1
Tuberculosis	7
Whooping cough	11

KANSAS

Cerebrospinal meningitis:	
Beloit	1
Coffeyville	1
Horton	1
Ottawa	1
Tampa	1
Chicken pox	145
Diphtheria	11
German measles	5
Influenza	36
Measles	795
Mumps	52
Pneumonia	68
Scarlet fever	210
Smallpox:	
Topeka	18
Scattering	52

KANSAS—continued

	Cases
Tetanus	2
Tuberculosis	39
Typhoid fever	3
Whooping cough	44

LOUISIANA

Cerebrospinal meningitis	1
Diphtheria	26
Influenza	7
Measles	141
Paratyphoid fever	1
Pneumonia	24
Poliomyelitis	1
Scarlet fever	9
Smallpox	6
Tuberculosis	42
Typhoid fever	5

MAINE

Chicken pox	42
Diphtheria	2
German measles	44
Influenza	6
Measles	192
Mumps	11
Pneumonia	25
Poliomyelitis	1
Scarlet fever	37
Tuberculosis	10
Vincent's angina	1
Whooping cough	53

MARYLAND [1]

Cerebrospinal meningitis	2
Chicken pox	146
Diphtheria	56
Dysentery	2
German measles	3
Influenza	162
Measles	30
Mumps	35
Paratyphoid fever	1
Pneumonia (broncho)	61
Pneumonia (lobar)	54
Poliomyelitis	1
Scabies	5
Scarlet fever	94
Septic sore throat	7
Smallpox	1
Tuberculosis	58
Typhoid fever	14
Vincent's angina	3
Whooping cough	96

MASSACHUSETTS

Cerebrospinal meningitis	1
Chicken pox	256
Conjunctivitis (suppurative)	10
Diphtheria	91
German measles	13
Influenza	14
Measles	154
Mumps	385
Ophthalmia neonatorum	30
Pneumonia (lobar)	114

MASSACHUSETTS—continued

	Cases
Scarlet fever	516
Septic sore throat	6
Trachoma	1
Tuberculosis (pulmonary)	135
Tuberculosis (other forms)	26
Typhoid fever	4
Whooping cough	146

MICHIGAN

Diphtheria	130
Measles	277
Pneumonia	211
Scarlet fever	364
Smallpox	56
Tuberculosis	153
Typhoid fever	12
Whooping cough	181

MINNESOTA

Actinomycosis	1
Cerebrospinal meningitis	1
Chicken pox	133
Diphtheria	31
Influenza	3
Lethargic encephalitis	1
Measles	301
Pneumonia	3
Poliomyelitis	1
Scarlet fever	225
Smallpox	12
Tuberculosis	55
Typhoid fever	4
Whooping cough	22

MISSISSIPPI

Diphtheria	11
Scarlet fever	24
Smallpox	4
Typhoid fever	2

MISSOURI

(Exclusive of Kansas City)

Chicken pox	56
Diphtheria	60
Epidemic sore throat	2
Influenza	8
Measles	212
Mumps	78
Pneumonia	2
Scarlet fever	102
Smallpox	5
Tuberculosis	48
Typhoid fever	2
Whooping cough	41

MONTANA

Cerebrospinal meningitis	2
Chicken pox	26
Diphtheria	5
Measles	77
Mumps	11
Poliomyelitis	1
Scarlet fever	76
Smallpox	3
Tuberculosis	3
Typhoid fever	1

[1] Week ended Friday.

NEBRASKA

	Cases
Chicken pox	55
Diphtheria	5
German measles	52
Influenza	1
Measles	105
Mumps	30
Pneumonia	1
Scarlet fever	65
Smallpox	8
Typhoid fever	1
Whooping cough	28

NEW JERSEY

Cerebrospinal meningitis	3
Chicken pox	266
Diphtheria	135
Influenza	41
Measles	64
Pneumonia	173
Poliomyelitis	1
Scarlet fever	423
Typhoid fever	6
Whooping cough	304

NEW MEXICO

Chicken pox	52
Conjunctivitis	5
Diphtheria	1
German measles	70
Influenza	2
Measles	72
Mumps	53
Pneumonia	16
Scarlet fever	28
Smallpox	4
Tetanus	1
Tuberculosis	38
Typhoid fever	1
Whooping cough	7

NEW YORK

(Exclusive of New York City)

Cerebrospinal meningitis	1
Chicken pox	465
Diphtheria	107
German measles	222
Measles	968
Mumps	465
Ophthalmia neonatorum	2
Pneumonia	373
Poliomyelitis	1
Scarlet fever	391
Septic sore throat	4
Smallpox	6
Tetanus	1
Typhoid fever	12
Vincent's angina	11
Whooping cough	334

NORTH CAROLINA

Chicken pox	231
Diphtheria	29
German measles	22
Measles	476

NORTH CAROLINA—continued

	Cases
Poliomyelitis	3
Scarlet fever	45
Septic sore throat	4
Smallpox	71
Typhoid fever	9
Whooping cough	611

OKLAHOMA

(Exclusive of Oklahoma City and Tulsa)

Cerebrospinal meningitis—Garfield County	1
Chicken pox	126
Diphtheria	18
Influenza	274
Measles	252
Mumps	39
Pneumonia	76
Poliomyelitis—Hughes County	1
Scarlet fever	51
Smallpox	34
Typhoid fever	17
Whooping cough	20

OREGON

Chicken pox	40
Diphtheria	10
Influenza	460
Measles	87
Mumps	23
Pneumonia	[1]14
Puerperal septicemia	1
Scarlet fever	57
Septic sore throat	1
Smallpox:	
Douglas County	11
Klamath County	18
Scattering	18
Tuberculosis	15
Typhoid fever	9
Whooping cough	6

PENNSYLVANIA

Cerebrospinal meningitis—Fayette County	1
Chicken pox	881
Diphtheria	211
German measles	53
Impetigo contagiosa	15
Measles	907
Mumps	356
Ophthalmia neonatorum	4
Pneumonia	212
Scabies	5
Scarlet fever	651
Tuberculosis	138
Typhoid fever	14
Whooping cough	392

SOUTH CAROLINA

Chicken pox	80
Dengue	2
Diphtheria	16
Hookworm disease	30
Influenza	636
Malaria	87
Measles	34

[1] Deaths.

SOUTH CAROLINA—continued

	Cases
Paratyphoid fever	2
Pellagra	34
Scarlet fever	8
Smallpox	13
Tuberculosis	40
Typhoid fever	2
Whooping cough	75

SOUTH DAKOTA

Chicken pox	18
Influenza	1
Measles	148
Mumps	3
Pneumonia	2
Scarlet fever	65
Smallpox	5
Tuberculosis	1
Whooping cough	3

TENNESSEE

Cerebrospinal meningitis—Nashville	2
Chicken pox	57
Diphtheria	9
Influenza	58
Lethargic encephalitis—Nashville	1
Malaria	3
Measles	80
Mumps	6
Ophthalmia neonatorum	1
Pellagra	1
Pneumonia	44
Scarlet fever	12
Smallpox	7
Tetanus	1
Tuberculosis	28
Typhoid fever	8
Whooping cough	74

TEXAS

Cerebrospinal meningitis	1
Chicken pox	105
Diphtheria	56
Influenza	17
Measles	129
Mumps	36
Pneumonia	20
Scarlet fever	71
Smallpox	53
Tuberculosis	33
Typhoid fever	8
Whooping cough	20

UTAH

Cerebrospinal meningitis—Salt Lake City	1
Chicken pox	27
Diphtheria	11
German measles	31
Influenza	5
Measles	547
Mumps	18
Pneumonia	3
Scarlet fever	25
Smallpox	1
Whooping cough	9

VERMONT

Chicken pox	20
Measles	85
Mumps	27
Scarlet fever	7
Typhoid fever	3
Whooping cough	15

VIRGINIA

	Cases
Cerebrospinal meningitis—Henry County	1

WASHINGTON

Cerebrospinal meningitis:	
Asotin County	1
Chelan County	2
Spokane	3
Tacoma	1
Chicken pox	84
Diphtheria	24
German measles	162
Influenza	2
Measles	173
Mumps	104
Pneumonia	1
Poliomyelitis	1
Scarlet fever	105
Septic sore throat	2
Smallpox	47
Trachoma	1
Tuberculosis	4
Typhoid fever	1
Whooping cough	18

WEST VIRGINIA

Diphtheria	35
Influenza	50
Measles	118
Scarlet fever	63
Smallpox	23
Tuberculosis	8
Typhoid fever	13
Whooping cough	142

WISCONSIN

Milwaukee:	
Cerebrospinal meningitis	2
Chicken pox	98
Diphtheria	34
German measles	2
Influenza	3
Measles	56
Mumps	65
Pneumonia	16
Scarlet fever	37
Tuberculosis	20
Whooping cough	48
Scattering:	
Chicken pox	194
Diphtheria	15
German measles	47
Influenza	95
Measles	709
Mumps	122
Pneumonia	14
Scarlet fever	198
Smallpox	23
Tuberculosis	24
Typhoid fever	4
Whooping cough	118

WYOMING

Chicken pox	1
Diphtheria	1
German measles	38
Measles	239
Mumps	25
Scarlet fever	19

Reports for Week Ended February 12, 1927

DISTRICT OF COLUMBIA

	Cases
Chicken pox	94
Diphtheria	25
Influenza	12
Lethargic encephalitis	3
Measles	3
Pellagra	1
Pneumonia	32
Scarlet fever	18
Tuberculosis	26
Typhoid fever	1
Whooping cough	16

NORTH DAKOTA

	Cases
Cerebrospinal meningitis	2
Chicken pox	4
Diphtheria	3
Influenza	4
Measles	131
Mumps	2
Pneumonia	6
Scarlet fever	58
Smallpox	11
Typhoid fever	2
Whooping cough	6

SUMMARY OF MONTHLY REPORTS FROM STATES

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

State	Cerebrospinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
January, 1927										
Florida	2	179	51	37	78	3	5	97	169	52
Georgia	3	175	626	55	303	12	1	94	385	38
Iowa	1	139	------	------	1,179	------	2	310	45	1
Michigan	0	496	29	------	526	------	8	1,435	175	26
North Dakota	3	24	11	------	513	------	1	295	33	1

January, 1927

	Cases
Anthrax:	
Georgia	1
Chicken pox:	
Florida	143
Georgia	162
Iowa	252
Michigan	1,234
North Dakota	91
Conjunctivitis (infectious):	
Georgia	1
Dengue:	
Florida	1
Georgia	1
Dysentery:	
Florida	11
Georgia	5
German measles:	
Iowa	5
North Dakota	1
Hookworm disease:	
Florida	75
Georgia	5
Lethargic encephalitis:	
Florida	1
Georgia	1
Michigan	4
North Dakota	2

January, 1927—Continued

	Cases
Mumps:	
Florida	31
Georgia	75
Iowa	57
Michigan	325
North Dakota	14
Paratyphoid fever:	
Florida	1
Septic sore throat:	
Georgia	54
Michigan	21
Tetanus:	
Florida	18
Georgia	3
Trachoma:	
North Dakota	4
Tularaemia:	
Iowa	1
Typhus fever:	
Georgia	2
Vincent's angina:	
Iowa	1
Whooping cough:	
Florida	32
Georgia	160
Iowa	48
Michigan	564
North Dakota	16

INFLUENZA IN THE UNITED STATES

The following table gives a comparison of the numbers of cases of influenza reported by State health officers during the fifth and sixth weeks of the years 1925, 1926, and 1927. This table is a continuation of the table for the first four weeks of these years which was printed in the PUBLIC HEALTH REPORTS of February 18, 1927, page 503.

Influenza cases reported by State health officers for the fifth and sixth weeks of 1925, 1926, and 1927

State	Week ended—					
	Feb. 7, 1925	Feb. 6, 1926	Feb. 5, 1927	Feb. 14, 1925	Feb. 13, 1926	Feb. 12, 1927
Alabama	643	311	74	758	688	131
Arkansas	337	248	106	245	231	99
California	65	525	40	77	479	101
Connecticut	6	13	11	21	9	5
Delaware	0	4	6	8	2	1
District of Columbia	3	10	2	3	12	12
Florida	15	38	11	55	26	18
Georgia	183	850	171	956	1,045	174
Illinois	33	72	66	33	41	37
Indiana	121	44	51	101	77	44
Kansas	8	16	7	21	53	2
Louisiana	50	261	13	56	357	41
Maine	10	6	25	11	33	12
Maryland	113	1,094	69	130	776	63
Massachusetts	62	13	21	89	12	17
Minnesota	3	1	0	0	3	5
Missouri	41	2	8	22	9	11
Montana	0	0	0	0	2	0
Nebraska	30	0	20	0	14	25
New Jersey	20	38	37	20	41	31
New Mexico[1]	18	205	0	45	368	5
Oklahoma[1]	433	569	299	456	664	238
Oregon	5	87	180	0	191	331
South Carolina	[2]	1,931	684	[2]	[2]	1,363
Tennessee	[2]	158	93	[2]	185	70
Texas	4,608	106	174	4,961	634	70
Utah	[2]	224	2	[2]	79	3
Wisconsin	59	35	54	83	47	131
Wyoming	1	5	1	0	0	1

[1] Exclusive of Oklahoma City and Tulsa. [2] No report.

DEATHS FROM INFLUENZA AND PNEUMONIA IN LARGE CITIES

The Bureau of the Census, Department of Commerce, has issued the following table, which gives the deaths from influenza and pneumonia in 78 large cities of the United States from January 2 to February 12, 1927.

The table shows that in these cities the number of deaths from influenza was increasing during the six-week period, but the number of deaths from pneumonia decreased.

Deaths reported from influenza and pneumonia

City	Influenza						Pneumonia					
	For week ended January—				For week ended February—		For week ended January—				For week ended February—	
	8	15	22	29	5	12	8	15	22	29	5	12
Total	106	106	107	118	113	158	1,226	1,150	1,122	1,008	1,075	922
Akron		2					7	3	5	6	6	12
Albany	2	0	0	1	0	0	10	8	7	10	10	2
Atlanta					2	3	16	10	16	6	12	2
Baltimore	2	5	4	6	5	2	33	38	58	38	54	34
Birmingham	15	1	7	12	5	3	6	8	9	8	10	4
Boston	1	0	0	1	1	1	34	42	38	21	28	28
Bridgeport	4	3	0	1	0	0	4	5	5	5	5	6
Buffalo							26	14	22	20	17	18
Cambridge					0		4	4	2	8	4	5
Camden					1	1	3	4	2	2	1	5
Canton					1	2	1	3	5	6	2	3
Chicago	10	10	14	18	7	11	91	95	83	68	69	74
Cincinnati					2	6	27	13	12	19	12	11
Cleveland	2	2	5	1	1	3	29	25	15	16	18	6
Columbus	2	1	4	0	1	1	5	12	8	8	4	5
Dallas	1	3	2	3	2	4	5	5	4	5	4	3
Dayton					0	0	6	3	10	8	5	8
Denver						6	23	10	11	13	7	4
Des Moines					0		4	6	1	4	1	
Detroit	4	5	7	5	1	7	36	40	28	42	28	31
Duluth	0	0	0	0	0	0	2	3	4	3	5	0
El Paso	2	3	4	2	1	0	3	4	7	1	1	3
Erie		3	3	3			4	4	2	2	6	3
Fall River					0		6	4	3	4	5	0
Flint					0	1	5	1	5	4	4	5
Fort Worth					1	0	2	4	2	7	6	5
Grand Rapids	0	2	1	0	0	1	5	2	6	2	2	4
Houston					0	1	10	9	6	6	7	6
Indianapolis						1	15	13		11	14	14
Jersey City	0	1	1	1	1	1	12	16	10	10	9	11
Kansas City, Kans	0	2	0				8	3	4	6	4	
Kansas City, Mo	4	1	1	0	4	1	15	16	12	14	16	11
Los Angeles						4	37	38	25	22	17	18
Louisville					0	0	18	9	25	12	13	8
Lowell					0	0	4	4	3	0	4	3
Lynn					0	0	5	4	1	3	4	3
Memphis	1	2		1	4		7	9	6	6	7	
Milwaukee					1	1	16	19	22	14	17	13
Minneapolis					2	0	15	12	9	12	12	10
Nashville					1	3	7	9	5	10	8	3
New Bedford					1		4	5	7	4	6	4
New Haven					0	0	8	13	6	10	12	5
New Orleans	6	6	6	10	9	3	17	15	22	22	19	19
New York	22	26	25	23	20	22	231	249	221	189	225	230
Newark, N. J					2	0	18	14	18	14	14	8
Norfolk							6	8	9	2	3	10
Oakland						1	11	10	3	5	5	9
Oklahoma City						1	6	5	3	11	5	5
Omaha							6	9	5	3	7	2
Paterson						2	5	9	4	7	8	3
Philadelphia	4	8	7	14	10	18	72	79	81	59	80	61
Pittsburgh	7	4	3	3	3	10	39	39	35	44	41	20
Portland, Oreg	0	0	0	1	1	5	8	9	12	10	13	13
Providence					1	0	4	6	9	4	9	8
Richmond	1	0	2	3	2	4	7	5	7	3	6	4
Rochester					0	2	6	4	8	8	7	8
St. Louis					1	2	22	18	25	33	12	16
St. Paul		2	0	0	0	3	4	9	7	9	10	5
Salt Lake City						1	9	6	5	3	7	7
San Antonio							12	6	7	12	6	
San Diego	1	0	0	0	3	1	3	7	4	5	3	1
San Francisco	1	1	2	0	3	2	20	13	18	8	17	17
Schenectady							5	2	0	1	1	0
Seattle	5	1	1	1	2	5	8	4	3	3	4	7
Somerville					0		3	4	6	2	2	1
Spokane	0	2	0	2	3	4	9	1	2	3	5	
Springfield, Mass	0	0	1	0	0	0	2	4	4	2	5	5
Syracuse					1	0	16	7	6	8	5	2
Tacoma	0	0	0				7	1	3	0	5	
Toledo	1	3	1	2	1	0	10	8	13	9	10	9
Trenton	1	0	1	0	3	1	9	5	9	4	7	2
Utica					1	0	3	5	2	5	8	5
Washington, D. C	4	4	4	3	2	7	29	20	27	23	20	12

Deaths reported from influenza and pneumonia—Continued

City	Influenza						Pneumonia					
	For week ended January—				For week ended February—		For week ended January—				For week ended February—	
	8	15	22	29	5	12	8	15	22	29	5	12
Waterbury	2	3	1	0	0	0	1	1	4	1	2	2
Wilmington, Del	1	0	0	0	0	0	8	6	5	5	7	5
Worcester						0	14	6	10	6	7	10
Yonkers	0	0	0	1	0	0	6	3	5	6	1	2
Youngstown					0	0	12	4	9	3	13	4

Blank spaces indicate that no report has been received.

PLAGUE PREVENTION WORK IN THE UNITED STATES

Los Angeles—California.—The rodent division of the Los Angeles Department of Health reports that during the 21 weeks from September 13, 1926, to February 5, 1927, 8,790 rodents (rats, mice, and ground squirrels) were examined for plague infection. Two rats were found to be plague-infected, one caught December 11, 1926, and one caught January 24, 1927.

Seattle—Washington.—Reports of the work conducted by the United States Public Health Service and the city health department of Seattle for the five weeks ended January 29, 1927, show that 900 rats and mice were examined and none found to be plague-infected.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 100 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 30,900,000. The estimated population of the 95 cities reporting deaths is more than 30,280,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended February 5, 1927, February 6, 1926

	1926	1927	Estimated expectancy
Cases reported			
Diphtheria:			
43 States	1,498	2,155	
100 cities	779	1,156	1,011
Measles:			
40 States	15,879	12,122	
100 cities	8,648	3,321	
Poliomyelitis:			
43 States	28	13	
Scarlet fever:			
43 States	4,766	6,469	
100 cities	1,739	2,387	1,363
Smallpox:			
43 States	1,114	1,374	
100 cities	275	148	129
Typhoid fever:			
43 States	221	208	
100 cities	43	43	42
Deaths reported			
Influenza and pneumonia:			
95 cities	1,372	1,088	

City reports for week ended February 5, 1927

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

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1918 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	75,333	11	1	0	0	0	2	1	5
New Hampshire:									
Concord	22,546	0	0	0	0	0	87	0	0
Manchester	83,097	0	2	0	0	0	3	0	2
Vermont:									
Barre	10,008	1	0	0	0	0	20	0	0
Massachusetts:									
Boston	779,620	90	65	39	9	1	43	90	28
Fall River	128,993	9	6	3	1	0	0	5	0
Springfield	142,065	3	3	1	3	0	0	0	4
Worcester	190,757	19	5	4	0	0	1	5	7
Rhode Island:									
Pawtucket	69,760	6	1	0	0	0	0	0	0
Providence	267,918	0	10	9	0	1	1	0	9
Connecticut:									
Bridgeport	[1]	4	8	6	1	0	7	1	6
Hartford	160,197	5	8	0	0	0	1	0	10
New Haven	178,927	17	3	1	0	0	1	1	12
MIDDLE ATLANTIC									
New York:									
Buffalo	538,016	0	14	11	----	0	0	14	17
New York	5,873,356	273	201	299	154	20	19	395	225
Rochester	316,786	11	12	28	----	0	7	1	6
Syracuse	182,003	20	6	1	----	1	11	1	5
New Jersey:									
Camden	128,642	2	5	12	2	1	1	1	1
Newark	452,513	33	23	18	17	0	3	38	15
Trenton	132,020	7	6	2	3	3	1	1	7
Pennsylvania:									
Philadelphia	1,979,364	133	80	75	----	10	5	90	80
Pittsburgh	631,563	65	21	18	----	3	35	3	41
Reading	112,707	17	4	1	----	4	1	27	3
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	409,333	24	9	15	0	2	0	25	12
Cleveland	936,485	91	34	48	3	1	3	7	18
Columbus	279,836	42	4	14	7	1	5	0	4
Indiana:									
Fort Wayne	97,846	6	3	1	0	0	45	0	1
Indianapolis	358,819	48	12	11	0	0	7	1	16
South Bend	80,091	4	1	2	0	0	16	0	3
Terre Haute	71,071	5	1	1	0	0	4	0	2
Illinois:									
Chicago	2,995,239	133	101	91	32	7	687	55	69
Peoria	81,564	8	1	0	0	1	50	7	1
Springfield	63,923	6	1	3	1	1	123	0	6
Michigan:									
Detroit	1,245,824	78	63	84	3	1	10	70	28
Flint	130,316	17	7	5	0	0	0	1	4
Grand Rapids	153,698	10	4	1	0	0	0	0	2

[1] No estimate made.

City reports for week ended February 5, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST NORTH CENTRAL—continued									
Wisconsin:									
Kenosha	50,891	12	2	0	0	0	74	22	0
Madison	46,385	9	1	0	0	0	0	2	0
Milwaukee	509,192	94	20	25	1	1	59	49	17
Racine	67,707	15	2	1	0	0	6	15	0
Superior	39,671	0	0	0	0	0	3	0	0
WEST NORTH CENTRAL									
Minnesota:									
Duluth	110,502	11	2	1	0	0	46	0	5
Minneapolis	425,435	115	21	8	0	2	4	4	12
St. Paul	246,001	28	14	3	0	0	2	2	18
Iowa:									
Des Moines	141,441	0	3	3	0	----	6	0	----
Sioux City	76,411	7	2	1	0	----	21	0	----
Waterloo	36,771	5	1	0	0	----	39	0	----
Missouri:									
Kansas City	367,481	63	9	6	0	4	32	2	16
St. Joseph	78,342	3	3	0	0	0	0	0	2
St. Louis	821,543	26	52	40	0	0	24	28	----
North Dakota:									
Fargo	26,403	2	0	0	0	0	1	1	2
Grand Forks	14,811	0	0	0	0	----	2	0	----
South Dakota:									
Aberdeen	15,036	13	0	0	0	----	4	3	----
Sioux Falls	30,127	0	1	0	0	----	0	0	----
Nebraska:									
Lincoln	60,941	10	2	0	0	2	13	3	0
Omaha	211,768	14	5	1	0	0	55	20	7
Kansas:									
Topeka	55,411	9	2	1	0	0	5	0	2
Wichita	88,367	24	4	1	0	0	0	0	1
SOUTH ATLANTIC									
Delaware:									
Wilmington	122,049	2	3	1	0	0	0	0	7
Maryland:									
Baltimore	796,296	73	32	39	19	5	3	8	54
Cumberland	33,741	1	0	1	0	0	0	0	3
Frederick	12,035	0	1	0	0	0	0	0	0
District of Columbia:									
Washington	497,906	71	19	12	2	2	5	0	20
Virginia:									
Lynchburg	30,395	9	1	1	0	1	11	1	3
Norfolk	(1)	21	2	0	0	0	7	0	3
Richmond	186,403	11	4	6	0	3	182	0	2
Roanoke	58,208	1	2	3	0	1	2	0	4
West Virginia:									
Charleston	49,019	15	2	0	1	0	0	1	1
Wheeling	56,208	8	1	2	0	0	1	0	4
North Carolina:									
Raleigh	30,371	6	0	0	0	0	2	0	0
Wilmington	37,061	13	1	1	0	0	0	5	2
Winston-Salem	69,031	10	0	0	0	0	0	17	3
South Carolina:									
Charleston	73,125	1	1	0	44	0	0	0	1
Columbia	41,225	0	0	0	0	----	2	2	----
Greenville	27,311	0	0	0	0	0	0	0	0
Georgia:									
Atlanta	(1)	7	3	7	62	2	42	9	8
Brunswick	16,809	2	0	0	0	0	0	0	0
Savannah	93,134	4	1	2	17	1	0	0	6
Florida:									
Miami	69,754	13	2	5	3	0	0	9	1
St. Petersburg	26,847	----	0	----	----	0	----	----	0
Tampa	94,743	3	0	4	0	0	40	0	2

[1] No estimate made.

City reports for week ended February 5, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST SOUTH CENTRAL									
Kentucky:									
Covington	58,309	1	1	2	0	1	0	0	1
Louisville	305,935	15	7	4	1	0	0	1	13
Tennessee:									
Memphis	174,533	9	4	2	0	4	9	0	7
Nashville	136,220	5	1	1	0	1	0	0	8
Alabama:									
Birmingham	205,670	20	3	13	16	5	7	2	10
Mobile	65,955	4	0	0	1	0	33	2	0
Montgomery	46,481	3	1	3	3	0	4	1	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	31,643		0						
Little Rock	74,216	0	1	1	0	1	1	0	3
Louisiana:									
New Orleans	414,493	4	12	14	11	9	128	0	19
Shreveport	57,857	17	1	2	0	0	0	12	1
Oklahoma:									
Oklahoma City	(1)	0	1	1	12	0	0	0	5
Texas:									
Dallas	194,450	7	6	9	1	2	1	5	4
Galveston	48,375	2	1	0	0	0	0	0	2
Houston	164,954	51	5	23	0	1	3	33	0
San Antonio	198,069	1	2	7	0	2	1	1	6
MOUNTAIN									
Montana:									
Billings	17,971	0	0	0	0	0	11	0	0
Great Falls	29,883	3	2	0	0	0	14	0	0
Helena	12,037	0	0	0	0	0	0	0	0
Missoula	12,668	0	1	0	0	0	1	12	2
Idaho:									
Boise	23,042	6	1	0	0	0	25	2	0
Colorado:									
Denver	280,911	19	12	9		5	549	2	7
Pueblo	43,787	1	2	5	0	0	2	1	0
New Mexico:									
Albuquerque	21,000	1	0	0	0	0	39	21	5
Arizona:									
Phoenix	38,669	0	0	1	0	0	1	0	6
Utah:									
Salt Lake City	130,948	12	3	7	0	0	200	1	7
Nevada:									
Reno	12,665	0	0	0	0	0	3	0	0
PACIFIC									
Washington:									
Seattle	(1)	30	8	3	0		16	44	
Spokane	108,897	10	4	0	0		95	0	
Tacoma	104,455	18	3	0	0	0	6	1	5
Oregon:									
Portland	282,383	10	10	3	42	1	11	0	13
California:									
Los Angeles	(1)	82	43	65	8	0	284	10	17
Sacramento	72,260	4	3	2	0	0	113	19	4
San Francisco	557,530	19	23	13	4	2	75	52	9

[1] No estimate made.

City reports for week ended February 5, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	3	1	0	0	0	2	1	0	0	12	25
New Hampshire:											
Concord	1	1	0	0	0	0	0	0	0	2	7
Manchester	3	1	0	0	0	2	0	0	0	0	21
Vermont:											
Barre	0	0	0	0	0	1	0	0	0	1	6
Burlington	1		0				0				
Massachusetts:											
Boston	69	141	0	0	0	18	1	1	0	13	236
Fall River	2	4	0	0	0	1	1	0	0	11	31
Springfield	9	7	0	0	0	0	0	0	0	7	35
Worcester	10	21	0	0	0	5	0	1	1	0	57
Rhode Island:											
Pawtucket	1	1	0	0	0	0	0	0	0	0	21
Providence	7	8	0	0	0	4	0	2	0	2	68
Connecticut:											
Bridgeport	9	23	0	0	0	3	0	0	0	0	39
Hartford	7	2	0	0	0	0	0	0	0	2	42
New Haven	10	10	0	0	0	2	0	0	0	0	44
MIDDLE ATLANTIC											
New York:											
Buffalo	26	23	0	0	0	14	1	0	1	14	152
New York	244	608	0	0	0	[1] 126	8	14	2	73	1,573
Rochester	14	14	0	0	0	2	1	1	1	8	79
Syracuse	18	11	0	0	0	2	0	0	0	10	61
New Jersey:											
Camden	5	7	0	0	0	4	0	0	0	1	35
Newark	26	55	1	0	0	7	1	1	0	34	116
Trenton	5	6	0	0	0	0	0	0	0	9	40
Pennsylvania:											
Philadelphia	89	121	0	0	0	40	3	2	1	19	575
Pittsburgh	44	32	0	0	0	8	0	0	0	7	226
Reading	1	2	0	0	0	0	0	0	0	9	33
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	16	30	1	0	0	4	0	1	0	4	142
Cleveland	43	37	1	0	0	9	1	1	0	31	191
Columbus	13	15	1	0	0	2	0	0	0	22	81
Indiana:											
Fort Wayne	6	1	0	7	0	1	0	0	0	1	
Indianapolis	9	26	11	22	0	3	0	0	0	14	102
South Bend	2	1	1	0	0	0	0	0	0	2	18
Terre Haute	3	6	1	0	0	2	0	0	0	3	28
Illinois:											
Chicago	143	126	4	0	0	58	3	5	0	52	775
Peoria	6	1	0	0	0	0	0	0	0	0	24
Springfield	1	3	1	0	0	0	0	0	0	0	31
Michigan:											
Detroit	96	114	3	2	0	27	1	1	0	47	290
Flint	8	36	1	2	0	2	0	0	0	0	34
Grand Rapids	10	15	0	0	0	1	1	0	0	1	33
Wisconsin:											
Kenosha	1	21	1	0	0	0	0	0	0	5	13
Madison	3	12	1	0	0	0	0	0	0	4	9
Milwaukee	30	44	2	0	0	4	1	0	0	25	111
Racine	6	7	1	0	0	0	0	0	0	8	7
Superior	3	4	4	0	0	0	0	0	0	0	8
WEST NORTH CENTRAL											
Minnesota:											
Duluth	9	15	1	0	0	1	0	0	0	1	23
Minneapolis	54	49	13	1	0	2	1	1	0	2	100
St. Paul	34	29	7	1	0	5	0	0	0	10	65

[1] Pulmonary tuberculosis only.

City reports for week ended February 5, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST NORTH CENTRAL—contd.											
Iowa:											
Des Moines	7	6	2	0	-------	-------	0	0	-------	0	-------
Sioux City	2	10	2	3	-------	-------	0	0	-------	3	-------
Waterloo	2	0	0	0	-------	-------	0	0	-------	6	-------
Missouri:											
Kansas City	13	54	2	14	0	9	0	0	0	11	99
St. Joseph	3	3	0	0	0	0	0	0	0	3	32
St. Louis	36	56	4	0	0	9	1	1	0	15	229
North Dakota:											
Fargo	2	8	0	0	0	0	0	0	0	0	19
Grand Forks	1	2	1	0	-------	-------	0	0	-------	0	-------
South Dakota:											
Aberdeen	1	8	0	0	-------	-------	0	0	-------	0	-------
Sioux Falls	2	8	1	0	-------	-------	0	0	-------	0	-------
Nebraska:											
Lincoln	3	8	1	0	0	0	0	0	0	3	15
Omaha	5	29	9	5	0	5	1	0	0	0	73
Kansas:											
Topeka	2	0	0	3	0	0	0	0	0	17	9
Wichita	4	10	0	0	0	4	0	0	0	8	33
SOUTH ATLANTIC											
Delaware:											
Wilmington	3	28	0	0	0	1	0	0	0	1	22
Maryland:											
Baltimore	43	34	0	0	0	12	2	1	0	76	247
Cumberland	1	4	0	0	0	1	0	0	0	4	13
Frederick	1	3	0	0	0	0	0	0	0	0	2
District of Columbia:											
Washington	26	25	2	2	0	16	1	0	0	16	165
Virginia:											
Lynchburg	1	0	0	0	0	1	0	0	0	0	19
Norfolk	2	3	1	0	0	1	0	0	0	29	-------
Richmond	4	4	0	0	0	5	0	0	0	12	57
Roanoke	1	3	0	1	0	1	0	0	0	0	15
West Virginia:											
Charleston	1	2	0	0	0	0	0	0	0	0	12
Wheeling	1	7	0	0	0	1	1	0	0	1	19
North Carolina:											
Raleigh	0	8	0	0	0	0	0	0	0	17	18
Wilmington	0	2	1	0	0	1	0	0	0	2	18
Winston-Salem	1	1	4	0	0	2	0	0	0	39	14
South Carolina:											
Charleston	0	1	0	0	0	1	1	0	0	0	16
Columbia	0	0	0	0	-------	-------	0	0	-------	9	-------
Greenville	0	0	0	2	0	3	0	0	0	0	11
Georgia:											
Atlanta	3	6	2	14	0	6	0	1	0	5	80
Brunswick	0	3	0	1	0	0	0	0	0	0	4
Savannah	1	2	0	3	0	2	0	0	0	0	31
Florida:											
Miami	1	3	-------	1	0	0	1	0	0	14	42
St. Petersburg	0	-------	0	-------	0	2	0	-------	0	-------	21
Tampa	1	0	0	1	0	4	1	1	0	0	29
EAST SOUTH CENTRAL											
Kentucky:											
Covington	1	4	1	0	0	0	0	0	0	0	21
Louisville	5	14	0	1	0	7	0	0	0	93	94
Tennessee:											
Memphis	5	20	2	4	0	3	0	0	0	15	57
Nashville	3	3	1	0	0	2	0	1	0	10	52
Alabama:											
Birmingham	3	2	4	7	0	4	1	0	0	4	70
Mobile	0	5	1	0	0	1	0	0	0	1	13
Montgomery	0	0	0	1	0	0	0	0	0	4	25

City reports for week ended February 5, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	0		1				0				
Little Rock	1	1	0	0	0	2	1	0	0	2	
Louisiana:											
New Orleans	6	7	1	0	0	9	2	4	0	6	140
Shreveport	1	0	2	0	0	1	0	0	0	0	28
Oklahoma:											
Oklahoma City	2	0	3	2	0	1	0	0	0	0	33
Texas:											
Dallas	3	15	2	9	0	5	0	0	0	0	54
Galveston	0	1	1	0	0	1	1	0	0	0	15
Houston	2	4	2	10	0	6	0	0	0	1	51
San Antonio	1	1	0	0	0	12	0	0	0	0	60
MOUNTAIN											
Montana:											
Billings	0	0	0	0	0	1	0	0	0	0	8
Great Falls	2	5	2	0	0	0	0	0	0	0	6
Helena	0	1	0	0	0	0	0	0	0	0	3
Missoula	1	17	1	0	0	0	0	0	0	0	10
Idaho:											
Boise	1	1	1	0	0	0	0	0	0	0	5
Colorado:											
Denver	13	125	2	0	0	7	0	0	0	0	84
Pueblo	2	4	0	0	0	1	0	0	1	0	13
New Mexico:											
Albuquerque	1	1	0	0	0	6	0	0	0	0	18
Arizona:											
Phoenix	1	2	0	0	0	3	0	0	0	0	18
Utah:											
Salt Lake City	3	16	3	1	0	1	1	0	1	1	42
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	2
PACIFIC											
Washington:											
Seattle	11	20	4	0			0	2		3	
Spokane	4	52	5	7			0	0		4	
Tacoma	3	5	3	14	0	0	0	0	0	5	23
Oregon:											
Portland	6	11	8	1	0	8	0	0	0	3	94
California:											
Los Angeles	27	59	5	1	0	26	2	0	0	3	285
Sacramento	2	1	0	1	0	0	0	0	0	1	20
San Francisco	15	30	4	1	0	15	1	1	0	18	192

City reports for week ended February 5, 1927—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
New Hampshire:									
Manchester	0	0	0	0	0	0	0	1	1
Massachusetts:									
Boston	0	1	0	0	0	0	1	0	0
Fall River	0	0	1	1	0	0	0	0	0
Connecticut:									
Bridgeport	1	1	0	0	0	0	0	0	0
MIDDLE ATLANTIC									
New York:									
New York	5	1	4	4	0	0	1	0	0
Pennsylvania:									
Philadelphia	1	0	0	0	0	0	0	0	0
Pittsburgh	1	1	0	1	0	0	0	0	0
EAST NORTH CENTRAL									
Ohio:									
Columbus	1	1	0	0	0	0	0	0	0
Illinois:									
Chicago	2	2	0	0	1	0	1	0	0
Michigan:									
Detroit	3	0	1	0	0	0	0	0	0
Wisconsin:									
Milwaukee	2	2	1	0	0	0	0	0	0
WEST NORTH CENTRAL									
Missouri:									
Kansas City	0	0	0	0	0	0	0	1	0
St. Louis	1	0	0	0	0	0	0	0	0
SOUTH ATLANTIC [1]									
Marylond:									
Baltimore	1	0	2	1	0	0	1	0	1
District of Columbia:									
Washington	0	0	1	0	0	0	0	0	0
North Carolina:									
Wilmington	0	0	0	0	0	1	0	0	0
South Carolina:									
Charleston [2]	0	0	0	0	1	0	0	0	0
Georgia:									
Atlanta	0	0	0	0	1	1	0	0	0
EAST SOUTH CENTRAL									
Tennessee:									
Nashville	0	0	0	0	1	0	0	0	0
Alabama:									
Montgomery	0	0	0	0	1	0	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock	0	0	0	0	0	1	0	0	0
Texas:									
San Antonio	0	0	0	0	0	1	0	0	0
MOUNTAIN									
Montana:									
Helena	0	1	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Spokane	2	----	0	----	0	----	0	0	----
Oregon:									
Portland	0	0	2	0	0	0	0	0	0
California:									
Los Angeles	1	0	0	0	0	0	0	0	0
San Francisco	0	0	0	0	0	0	0	1	0

[1] Typhus fever: 1 case at Tampa, Fla.

[2] Dengue: 1 case at Charleston, S. C.

The following table gives the rates per 100,000 population for 101 cities for the five-week period ended February 5, 1927, compared with those for a like period ended February 6, 1926. The population figures used in computing the rates are approximate estimates as of July 1, 1926 and 1927, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 30,440,000 in 1926 and 30,960,000 in 1927. The 95 cities reporting deaths had nearly 29,780,000 estimated population in 1926 and nearly 30,290,000 in 1927. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, January 2 to February 5, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1926 [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Jan. 9, 1926	Jan. 8, 1927	Jan. 16, 1926	Jan. 15, 1927	Jan. 23, 1926	Jan. 22, 1927	Jan. 30, 1926	Jan. 29, 1927	Feb. 6, 1926	Feb. 5, 1927
101 cities	170	199	146	187	142	176	142	178	134	[2] 195
New England	139	158	144	174	132	151	118	163	97	146
Middle Atlantic	182	183	151	177	138	192	130	194	129	229
East North Central	151	223	135	189	131	170	138	175	119	202
West North Central	288	189	258	159	210	147	250	127	222	123
South Atlantic	177	223	140	216	151	161	115	199	132	143
East South Central	52	138	67	250	72	153	41	102	41	127
West South Central	189	256	120	247	155	172	142	206	137	[2] 241
Mountain	182	126	128	117	155	117	264	198	128	189
Pacific	96	230	80	194	139	233	166	168	188	217

MEASLES CASE RATES

101 cities	1,147	382	974	334	1,336	445	1,385	417	1,481	[2] 560
New England	3,087	253	2,861	195	2,566	548	2,745	323	2,403	378
Middle Atlantic	997	31	846	38	1,090	49	1,187	46	1,350	41
East North Central	1,763	416	1,303	380	2,071	516	2,091	500	2,155	647
West North Central	151	260	129	193	153	278	280	298	395	455
South Atlantic	1,278	205	1,345	203	2,457	303	2,261	257	2,557	538
East South Central	52	107	238	97	234	204	393	188	708	270
West South Central	0	189	17	306	13	453	26	382	34	[2] 577
Mountain	55	5,241	91	3,443	118	5,088	100	4,459	91	7,237
Pacific	64	1,521	51	1,482	64	1,346	72	1,508	104	1,542

SCARLET FEVER CASE RATES

101 cities	269	318	286	366	292	383	287	386	298	[2] 402
New England	295	490	380	478	300	536	377	539	401	508
Middle Atlantic	210	286	238	339	237	369	235	379	209	434
East North Central	334	283	322	344	325	330	300	342	338	319
West North Central	583	451	557	558	678	518	666	488	754	522
South Atlantic	156	232	184	259	184	281	153	254	162	246
East South Central	119	234	140	214	202	336	109	321	119	245
West South Central	112	155	90	143	69	197	69	113	137	[2] 125
Mountain	237	953	319	1,115	374	1,349	255	1,609	155	1,519
Pacific	241	340	268	377	254	319	332	327	324	437

SMALLPOX CASE RATES

101 cities	33	22	47	22	35	20	40	26	47	[2] 25
New England	0	0	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	2	1	0	1	1	0	0	0
East North Central	48	32	37	21	33	17	43	17	16	22
West North Central	63	58	52	69	34	60	54	79	52	54
South Atlantic	43	27	67	51	56	34	58	60	101	43
East South Central	47	41	57	87	47	25	21	87	41	102
West South Central	52	42	146	25	99	63	125	42	155	[2] 82
Mountain	36	0	18	0	27	0	18	9	73	9
Pacific	110	60	284	37	193	63	204	71	321	63

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1926 and 1927, respectively.

[2] Fort Smith, Ark., not included.

Summary of weekly reports from cities, January 2 to February 5, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1926—Continued

TYPHOID FEVER CASE RATES

	Week ended—									
	Jan. 9, 1926	Jan. 8, 1927	Jan. 16, 1926	Jan. 15, 1927	Jan. 23, 1926	Jan. 22, 1927	Jan. 30, 1926	Jan. 29, 1927	Feb. 6, 1926	Feb. 5, 1927
101 cities	13	8	11	9	9	7	8	7	7	[2]7
New England	31	9	2	21	9	2	9	5	14	9
Middle Atlantic	14	6	16	8	10	5	9	4	3	9
East North Central	11	5	8	1	3	6	4	2	3	5
West North Central	2	8	4	6	4	4	2	8	6	4
South Atlantic	9	7	7	16	7	7	9	18	13	5
East South Central	16	25	16	15	5	10	10	36	21	5
West South Central	21	25	13	17	47	4	17	0	4	[2]17
Mountain	9	9	9	9	0	27	18	18	36	0
Pacific	11	8	13	21	16	21	11	21	16	8

INFLUENZA DEATH RATES

95 cities	21	20	23	[1]21	20	21	29	25	34	19
New England	9	16	14	14	7	5	17	9	12	5
Middle Atlantic	18	18	16	20	14	20	18	22	20	21
East North Central	12	17	11	16	8	25	12	21	12	9
West North Central	8	15	19	10	11	4	13	4	19	12
South Atlantic	15	17	23	24	40	20	36	50	68	28
East South Central	83	46	88	36	57	15	72	31	103	56
West South Central	44	43	75	43	88	43	141	73	168	85
Mountain	46	63	64	99	18	54	73	72	109	45
Pacific	57	10	46	[3]15	39	31	78	14	67	7

PNEUMONIA DEATH RATES

95 cities	220	196	211	[1]180	199	183	201	159	206	168
New England	245	181	208	190	210	207	144	158	200	188
Middle Atlantic	229	209	236	205	228	197	218	174	213	197
East North Central	177	170	153	152	139	138	166	132	145	122
West North Central	141	116	127	125	82	116	110	127	125	135
South Atlantic	291	234	278	193	289	283	286	193	346	226
East South Central	331	204	284	199	228	245	207	204	248	199
West South Central	313	241	331	181	291	202	415	202	362	151
Mountain	128	369	328	198	273	216	164	171	228	144
Pacific	219	210	166	[3]178	184	134	173	107	184	121

[1] Fort Smith, Ark., not included.

[2] Tacoma, Wash., not included.

Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1926 and 1927, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1926	1927	1926	1927
Total	101	95	30,438,500	30,960,600	29,778,400	30,289,800
New England	12	12	2,211,000	2,245,900	2,211,000	2,245,900
Middle Atlantic	10	10	10,457,000	10,567,000	10,457,000	10,567,000
East North Central	16	16	7,644,900	7,804,500	7,644,900	7,804,500
West North Central	12	10	2,585,500	2,626,600	2,470,600	2,510,000
South Atlantic	21	20	2,799,500	2,878,100	2,757,700	2,835,700
East South Central	7	7	1,008,300	1,023,500	1,008,300	1,023,500
West South Central	8	7	1,213,800	1,243,300	1,181,500	1,210,400
Mountain	9	9	572,100	580,000	572,100	580,000
Pacific	6	4	1,946,400	1,991,700	1,475,300	1,512,800

FOREIGN AND INSULAR

THE FAR EAST

Report for week ended January 29, 1927.—The following report for the week ended January 29, 1927, was transmitted by the eastern bureau of the secretariat of the health section of the League of Nations, located at Singapore, to the headquarters at Geneva:

Maritime towns	Plague		Cholera		Smallpox		Maritime towns	Plague		Cholera		Smallpox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths		Cases	Deaths	Cases	Deaths	Cases	Deaths
Ceylon: Colombo	0	1	0	0	0	0	Dutch East Indies: Surabaya	1	1	0	0	0	0
British India:							Siam: Bangkok	0	0	1	1	5	2
Karachi	----	0	----	0	1	0	Hongkong	0	0	0	0	3	3
Bombay	----	0	----	0	19	10	Union of Socialistic Soviet Republics:						
Tuticorin	----	0	----	0	4	0	Vladivostok	0	0	0	0	17	----
Madras	----	0	----	0	17	1	Manchuria: Changchun	0	0	0	0	1	1
Calcutta	----	0	----	38	135	98	Mauritius: Port Louis	0	1	0	0	0	0
Rangoon	----	5	----	1	4	1							
Negapatam	----	0	----	1	0	0							
Vizagapatam	----	0	----	0	8	1							

Telegraphic reports from the following maritime towns indicated that no case of plague, cholera, or smallpox was reported during the week:

ASIA

Arabia.—Aden, Jeddah, Kamaran, Perim.
Iraq.—Basrah.
Persia.—Mohammerah, Bender-Abbas, Bushire.
British India.—Chittagong, Cochin.
Portuguese India.—Nova Goa.
Federated Malay States.—Port Swettenham.
Straits Settlements.—Penang, Singapore.
Dutch East Indies.—Batavia, Sabang, Samarinda, Macassar, Belawan-Deli, Pontianak, Semarang, Menado, Banjermasin, Cheribon.
Sarawak.—Kuching.
British North Borneo.—Sandakan, Jesselton, Kudat, Tawao.
Portuguese Timor.—Dilly.
French Indo-China.—Saigon and Cholon, Haiphong, Turane.
Philippine Islands.—Manila, Iloilo, Jolo, Cebu, Zamboanga.
China.—Amoy, Shanghai (International Settlement).
Macao.
Formosa.—Keelung.
Chosen.—Chemulpo, Fusan.
Manchuria.—Harbin, Antung, Yingkow, Changchun, Mukden.
Kwantung.—Port Arthur, Dairen.
Japan.—Yokohama, Nagasaki, Niigata, Hakodate, Shimonoseki, Moji, Kobe, Tsuruga, Osaka.

AUSTRALASIA AND OCEANIA

Australia.—Adelaide, Melbourne, Sydney, Brisbane, Rockhampton, Townsville, Port Darwin, Broome, Fremantle, Carnarvon, Thursday Island.
New Guinea.—Port Moresby.
New Britain Mandated Territory.—Rabaul and Kokopo.
New Zealand.—Auckland, Wellington, Christchurch, Invercargill, Dunedin.
New Caledonia.—Noumea.
Fiji.—Suva.
Hawaii.—Honolulu.
Society Islands.—Papeete.

AFRICA

Egypt.—Port Said, Suez, Alexandria.
Anglo-Egyptian Sudan.—Port Sudan, Suakin
Eritrea.—Massaua.
French Somaliland.—Jibuti.
British Somaliland.—Berbera.
Italian Somaliland.—Mogadiscio.
Kenya.—Mombasa.
Zanzibar.—Zanzibar.
Tanganyika.—Dar-es-Salaam.
Seychelles.—Victoria.
Portuguese East Africa.—Mozambique, Beira, Lourenco Marques.
Union of South Africa.—East London, Port Elizabeth, Cape Town, Durban
Reunion.—St. Denis.

Reports had not been received in time for distribution from:

Madagascar.—Tamatave, Majunga.
Dutch East Indies.—Padang, Palembang, Balikpapan, Tarakan.

Belated information

Week ended January 15—

French India.—Pondicherry, smallpox, 5 cases, 2 deaths.

Other epidemiological information received by the Singapore bureau:

Singapore.—Steamship *Solviken* arrived on January 27 from Hongkong infected with smallpox.

Correction to returns for week ended January 22:

Colombo.—Seven plague deaths instead of three.
Madras.—Five smallpox cases instead of 77.

INFLUENZA IN FOREIGN COUNTRIES

The health section of the secretariat of the League of Nations has published the following information relative to the prevalence of influenza in foreign countries. The data were obtained from the health administrations of the several countries. Earlier reports will be found in the Public Health Reports of February 4, 1927, page 283, February 11, 1927, page 367, and February 18, 1927, page 516.

Albania—(*January 26*).—During December influenza invaded nearly the whole country and is still prevalent. The prevailing type is benign.

Algeria—(*January 28*).—Influenza hitherto has appeared only in mild form and the number of cases is not greater than is usual for the time of the year.

Austria—(*January 27*).—There has been a considerable number of mild influenza cases in Vorarlberg, but the incidence is now decreasing. The cases were generally so mild that the greater part of the sick, who did not belong to a sickness insurance fund, did not seek medical assistance. It is the opinion of the administration that there has, so far, been no influenza epidemic in Austria, the cases occurring being not more numerous than is usual at the time of the year.

Belgium—(*January 28*).—Influenza remains benign and the cases are less numerous.

Bulgaria—(*February 3*).—The following numbers of influenza cases and deaths were reported in the towns of the various departments from January 1 to 28: Pleven, 2,749 cases, 13 deaths; Varna, 1,309 cases, 4 deaths; Haskovo, 1,179 cases, 14 deaths; Bourgas (6 towns), 2,890 cases, 23 deaths; Mastanly, 311 cases, 1 death; Roustjuk, 1,571 cases, 4 deaths; Stara-Zagora (4 towns), 522 cases, 7 deaths; Choumen, 1,945 cases; at Tirnovo 30 per cent of the population is suffering from influenza, there have been 7 deaths; Kustendil, 40 per cent of the population sick, 1 death; Vidin, 1 death. There is a tendency for the epidemic to decrease at Bourgas, Stara-Zagora, and Sofia.

Czechoslovakia.—During the week ended January 22 there was a considerable increase in the incidence of influenza in Czechoslovakia. In Bohemia 21,468 cases and 22 deaths were reported; in Moravia 4,032 cases and 4 deaths, in Silesia 1,181 cases and 2 deaths, in Slovakia 4,148 cases and 11 deaths. In Uzhorod and Mukacevo the number of cases is estimated at 5 per cent of the population. At Berehovo it is estimated at 7 per cent among adults and 33 per cent among children of school age.

Egypt—(*January 29*).—Influenza is not very prevalent and the cases are mostly of mild type.

England and Wales—(*February 1*).—The week ended January 29 brought no material changes in the influenza position. The epidemic is apparently abating in the southern districts, but increased death returns are reported from London. An epidemic of mild type is widespread in the Midlands, especially in the counties of Northampton, Nottingham, and Leicester. The northern districts are still comparatively free. The provisional returns for the said week are as follows: Deaths from influenza in London 252, in 105 large towns, including London, 725. Pneumonia notifications numbered 433 in London and 2,559 in the whole country.

Mortality statistics for London show that the age distribution of the deaths attributed to influenza was, during the last three weeks, about the same as during the epidemic of 1924, except that deaths among children have been less frequent.

Finland—(*January 29*).—Reports for the first two weeks of January show that influenza was not epidemic. The cases were, however, more numerous in a few towns. The most recent information would indicate that an epidemic is beginning. The cases are mild.

Germany.—Statistics of causes of death show a moderate increase of the general mortality and of deaths from respiratory diseases in north and west German towns during the week ended January 8. The number of deaths from influenza increased from 23 during the preceding week to 56 at Berlin and from 22 to 40 at Breslau. The general mortality was 15.6 per cent per 1,000 inhabitants at Berlin and 20.2 at Breslau. The other towns were less affected and those of Saxony not at all.

Statistics of influenza cases reported among the members of the General Sickness Insurance Fund of Berlin show that the incidence has decreased since about January 20.

Influenza is not a notifiable disease in Germany, and statistics of the number of cases are available only for the city of Nuremberg, where the members of the medical society have decided to notify cases occurring in their practice. The cases notified in this town numbered 71 during the week ended January 1; 192 during the week ended January 8; and 745 during the week ended January 15. It may be added that there was only one death attributed to influenza in Nuremberg during the first two weeks of the year.

Greece—(*February 5*).—The influenza epidemic continues in mild form. A considerable decrease of the incidence is observed everywhere, except in Macedonia.

Hungary—(*February 1*).—One thousand and twenty-one influenza cases and 19 deaths were reported at Budapest during the week ended January 29, as compared with 732 cases and 14 deaths during the previous week. A considerable prevalence of common colds is reported. There were 69 deaths from pneumonia during the third week of January, as compared with 58 during the previous week, figures which are nearly normal for the season. The number of cases is now decreasing at Budapest and complications are becoming more rare. It is stated that the Pfeiffer bacillus has been recovered in 10 per cent of the influenza cases bacteriologically examined. The Army Medical Service reports 1,192 influenza cases, of which 20 were severe cases with one death during the week ended January 29, as compared with 2,708 cases during the previous week. The number of cases is reported to be decreasing also elsewhere in the country.

India.—Returns from a number of Provinces and cities in India show very little influenza.

Ireland.—The influenza epidemic has not so far appeared in Ireland; only two deaths were attributed to this disease at Dublin and five at Belfast during the week ended January 22.

Korea.—Fifty-one influenza cases were reported at Chemulpo; 240 cases and 4 deaths at Fusan during the week ended January 29.

Luxemburg—(*February 3*).—Influenza exists everywhere in the Grand Duchy. Its character is, however, very mild and complications are rare; there have been only a few cases of bronco-pneumonia. Deaths due to influenza are very rare. The epidemic reached its maximum at the beginning of January, since when it has decreased.

Netherlands.—Twenty-five deaths from influenza were reported at Amsterdam during the week ended January 22, as compared with 32 deaths during the previous week and 23 during the first week of January.

Poland—(*January 27*).—The incidence of influenza is diminishing and its character remains mild.

The disease has been more prevalent than during the previous year but the mortality was low.

Portugal—(*January 28*).—Influenza cases are numerous but the incidence is hardly higher than normal for the time of the year. Pneumonia cases are rare. The frontier zone has been the least affected part of the country.

Scotland.—The registrar general of Scotland states (January 31) that the death returns remain normal.

Spain—(*January 27*).—The influenza incidence continues to diminish in all Provinces and the disease remains benign in character.

Sweden—(*January 31*).—Influenza is now rather prevalent throughout Sweden but its character remains mild.

Six thousand one hundred and sixty-six influenza cases were reported from January 1 to 15, of which 2,531 occurred in the Province of Norrbotten, in the northernmost part of Sweden, and 833 in the town and Province of Malmoe, across the sound from Copenhagen.

Switzerland.—Influenza cases reported numbered 19,122 during the week ended January 22, as compared with 22,726 during the previous week. The epidemic diminished very markedly at Geneva, Basle, Bern, Lucerne, and Soleure, and is now practically terminated in these cantons. The number of cases reported at Zurich increased only slightly. A marked increase was shown only by the returns from St. Gall and Ticino.

BRITISH EAST AFRICA

Leprosy—(November and December, 1926).—Leprosy has been reported in British East Africa as follows: December 2–31, 1926, two cases at Mombasa, and in Zanzibar, during the month of November, 1926, one case.

CANADA

Communicable diseases—Week ended February 5, 1927.—The Canadian Ministry of Health reports cases of certain communicable diseases for seven Provinces of Canada for the week ended February 5, 1927, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	Total
Cerebrospinal fever			1	1				2
Influenza	13				1			14
Lethargic encephalitis				1				1
Smallpox				19	5	2	14	40
Typhoid fever		1	11	5	1		2	20

Communicable diseases—Ontario—January, 1927—Comparative.—During the month of January, 1927, communicable diseases were reported in the Province of Ontario, Canada, as follows:

Disease	January, 1927		January, 1926	
	Cases	Deaths	Cases	Deaths
Cerebrospinal meningitis	8	7	6	2
Chancroid	9			
Chicken pox	1,273		1,010	
Diphtheria	419	34	288	16
German measles	149	4	63	
Gonorrhea	172		135	
Influenza		50		46
Lethargic encephalitis	2		2	
Measles	2,405	1	1,305	3
Mumps	255		566	
Pneumonia		239		261
Poliomyelitis			2	1
Scarlet fever	885	4	811	7
Septic sore throat			8	
Smallpox	167	1	78	
Syphilis	125		114	
Tuberculosis	178	76	138	82
Typhoid fever	59	3	51	4
Whooping cough	553	4	240	3

Smallpox.—Smallpox was reported present during the period under report in 24 towns and townships and in one unorganized district. The localities showing the greatest number of cases were: Belleville, 17 cases; Loughboro, 19; Peterboro, 24; Toronto, 35. In seven localities one case each was reported.

CHINA

Further relative to pneumonic plague—Mongolia.—According to the quarterly report of the North Manchurian Plague Prevention Service for the quarter ended December 31, 1926, the plague outbreak in Mongolia [1] was confined to a limited area near Chechan Han, 200 English miles from Urga. The last reported case was stated to have been recorded on December 13, 1926.

CZECHOSLOVAKIA

Communicable diseases—September, October, and December, 1926.—During the months of September, October, and December, 1926, communicable diseases were reported in the Republic of Czechoslovakia as follows:

September and October, 1926

Disease	September		October	
	Cases	Deaths	Cases	Deaths
Anthrax	3		5	1
Cerebrospinal meningitis	5	2	3	2
Diphtheria	421	25	564	43
Dysentery	138	15	215	15
Malaria	57		29	
Paratyphoid fever	15	2	12	
Puerperal fever	34	17	35	16
Scarlet fever	988	9	1,591	25
Trachoma	179		212	
Typhoid fever	952	50	980	71
Typhus fever			1	

December, 1926

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax	2	1	Puerperal fever	57	15
Cerebrospinal meningitis	7	1	Rabies	2	2
Diphtheria	834	70	Scarlet fever	1,542	21
Dysentery	45	4	Trachoma	182	
Malaria	1		Typhoid fever	665	46
Paratyphoid fever	4	1	Typhus fever	9	

JAMAICA

Smallpox (alastrim)—December 26, 1926–January 29, 1927.—During the five weeks ended January 29, 1927, 42 cases of smallpox, reported as alastrim, were notified in the island of Jamaica, not including Kingston Parish and city.

[1] Public Health Reports, Dec. 31, 1926, p. 3096; Feb. 4, 1927, p. 359; Feb. 11, 1927, p. 447.

Other communicable diseases.—During the period under report certain communicable diseases were reported in the island of Jamaica as follows:

Disease	Cases		Disease	Cases	
	Kingston	Other localities		Kingston	Other localities
Chicken pox		3	Puerperal fever		2
Diphtheria		1	Tuberculosis	11	39
Dysentery	10	11	Typhoid fever	19	65
Leprosy		1			

Population: Island, estimated, 916,620; Kington, 62,707.

LATVIA

Communicable diseases—November, 1926.—During the month of November, 1926, communicable diseases were reported in the Republic of Latvia as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis	1	Mumps	9
Chicken pox	4	Paratyphoid fever	1
Diphtheria	66	Puerperal fever	2
Dysentery	2	Scarlet fever	596
Erysipelas	36	Tetanus	3
German measles	26	Trachoma	21
Leprosy	4	Typhoid fever	76
Malaria	1	Whooping cough	79
Measles	137		

Population, 1,860,000.

MADAGASCAR

Plague—November 16–30, 1926.—During the 15 days ended November 30, 1926, 161 cases of plague, with 134 deaths, were reported in the island of Madagascar. The occurrence was distributed by Provinces as follows: Itasy—cases, 6; deaths, 6. Moramanga—cases, 15; deaths, 10. Tamatave—cases, 11. Tananarive—cases, 129; deaths, 118. Distribution according to type was: Bubonic, 90 cases; pneumonic, 41; septicemic, 30. Urban occurrence was: Tamatave Town, 2 cases; Tananarive Town, 13 cases.

MALTA

Communicable diseases—December, 1926.—During the month of December, 1926, communicable diseases were reported in the island of Malta as follows:

Disease	Cases	Disease	Cases
Bronchopneumonia	12	Pneumonia	5
Chicken pox	2	Scarlet fever	4
Diphtheria	4	Trachoma	19
Erysipelas	4	Tuberculosis	20
Influenza	4	Typhoid fever	45
Malta fever	34	Whooping cough	40

Population, estimated, 225,242.

Mortality from certain diseases.—During the period under report 1 death from diphtheria, 12 deaths from tuberculosis, and 6 deaths from typhoid fever were reported in the island of Malta.

NETHERLANDS

Correction—Smallpox erroneously reported at Amsterdam.—The report of 9 deaths from smallpox at Amsterdam, Netherlands, during the week ended July 24, 1926, was erroneous. The director of the Medical Statistical Department of the Municipal Health Service of Amsterdam states that no case of smallpox has been reported in Amsterdam for a long time.

PERU

Plague—December, 1926.—During the month of December, 1926, 66 cases of plague, with 22 deaths, were reported in Peru. The occurrence was distributed in four Departments as follows: Ancash—6 cases in one province; Cajamarca—36 cases in two Provinces; Libertad—two cases in one Province and locality (Pacasmayo); Lima—22 cases in three Provinces, including five cases in Lima City and country districts.

SENEGAL

Yellow fever, vicinity of Diourbel—January 10–20, 1927.—During the period January 10–20, 1927, a fatal case of yellow fever, occurring in a Syrian, was reported at N'Bake, 40 kilometers north of Diourbel.

TUNISIA

Plague—January 12–26, 1927.—Under date of January 26, 1927, 34 cases of plague were reported in Tunisia, of which 31 occurred in new foci.

UNION OF SOUTH AFRICA

Plague—Cape Province—December 26, 1926–January 1, 1927.—During the week ended January 1, 1927, one fatal case of plague was reported in the Cape Province, occurring in Hanover District.

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

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

Reports Received During Week Ended February 25, 1927 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
India:				
Calcutta	Dec. 19–25	72	62	
Do	Dec. 26–Jan. 1	56	53	
Madras	Jan. 2–8	8	6	
Rangoon	Dec. 26–Jan. 1	3	4	
Siam	Apr. 1, 1926–Jan. 1, 1927.			Cases, 7,847; deaths 5,164.
Do	Dec. 19–Jan. 1	41	22	
Bangkok	do	6	2	
Straits Settlements:				
Singapore	Dec. 5–18	7	3	

PLAGUE

India:				
Madras	Dec. 19–25	88	54	
Madagascar				Nov. 16–30, 1926: Cases, 161; deaths, 134. Bubonic, 90; pneumonic, 41; septicemic, 30.
Province—				
Itasy	Nov. 16–30	6	6	
Moramanga	do	15	10	
Tamatave	do	11		Tamatave Town: Cases, 2; other localities, 9.
Tananarive	do	129	118	Tananarive Town: Cases, 13; other localities, 116.
Peru				December, 1926: Cases, 66; deaths, 22.
Department—				
Ancash	Dec. 1–31	6	6	At Huanchay.
Cajamarca	do	36	6	Cajamarca and Cutervo Provinces, in districts.
Libertad	do	2		At Pacasmayo.
Lima	do			Cases, 22; deaths, 10.
Chancay Province	do	11	1	
Lima Province	do	5	3	City and districts.
Canete	do	6	6	In districts.
Tunisia				Jan. 12–26, 1927: Cases, 34.
Bousse	Jan. 12–26	8		Southeast of locality, in 3 foci.
Djeneniana	do	8		In district.
Kairouan	do	3		Vicinity.
Mahares	do	15		
Union of South Africa:				
Cape Province—				
Hanover District	Dec. 26–Jan. 1	1	1	

SMALLPOX

Algeria:				
Algiers	Jan. 1–10	1		
Canada	Jan. 30–Feb. 5			Cases, 40.
Alberta	do	14		
Manitoba	do	5		
Winnipeg	Feb. 6–12	1		
Ontario	Jan. 30–Feb. 5	19		
Saskatchewan	do	2		
Chile:				
Concepcion	Dec. 26–Jan. 1		5	
China:				
Amoy	Jan. 9–15	1		
Chungking	Jan. 26–31			Present.
Nanking	Jan. 2–15			Do.
France:				
Paris	Jan. 11–20	6	1	
Great Britain:				
England and Wales	Jan. 9–22			Cases, 1,233.
Newcastle on Tyne	Jan. 16–22	3		
Sheffield	Jan. 8–22	223		
Greece	Dec. 1–31	5		

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

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

Reports Received During Week Ended February 25, 1927—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
India:				
Bombay	Dec. 26-Jan. 1	8	5	
Do	Jan. 2-7	8	5	
Calcutta	Dec. 19-25	93	72	
Do	Dec. 26-Jan. 1	117	79	
Madras	Jan. 2-15	20	2	
Rangoon	Dec. 26-Jan. 1		1	
Jamaica	do	3		
Do	Jan. 2-29	39		
Mexico:				
Chihuahua	Jan. 31-Feb. 6			Unofficially reported present.
Parral	do			25 cases unofficially reported.
San Luis Potosi	Jan. 16-29		4	
Tampico	Jan. 21-31	1		Varioloid.
Siam				Dec. 19-Jan. 1, 1927: Cases, 3; deaths, 2.
Bangkok	Dec. 19-Jan. 1	3	2	Apr. 1, 1926-Jan. 1, 1927: Cases, 711; deaths, 268.
Straits Settlements:				
Singapore	Dec. 5-18	3	2	

TYPHUS FEVER

Chile:				
Valparaiso	Jan. 16-22		1	
China:				
Chungking	Dec. 25-31			Present.
Czechoslovakia	Oct. 1-31	1		
Do	Dec. 1-31	9		
Greece:				
Athens	do	4		

YELLOW FEVER

Senegal:				
Diourbel	Jan. 1-20	1	1	At N'Bake.

Reports Received from January 1 to February 18, 1927 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Chungking	Nov. 14-20			Present.
Tsingtao	Nov. 14-Dec. 11			Do.
Chosen	Sept. 1-30	231	143	
French Settlements in India	Aug. 29-Oct. 30	128	94	
India	Oct. 10-Nov. 27			Cases, 10,739; deaths, 6,404.
Calcutta	Oct. 31-Dec. 18	257	198	
Madras	Dec. 26-Jan. 1	2	2	
Rangoon	Nov. 21-Dec. 25	8	5	
Indo-China	July 1-31			Cases, 2,204; deaths, 1,350. European, 1.
Saigon	Oct. 31-Nov. 13	2	2	
Province—				
Annam	July, 1926	215	178	July, 1925: Cases, none.
Cambodia	do	571	352	1 European, fatal. July, 1925: Cases, 3.
Cochin-China	do	390	317	July, 1925: Cases, 6; deaths, 2.
Kwang-Chow-Wan	do	220		July, 1925: Cases, 22; deaths, 15.
Laos	do	24	21	July, 1925: Case, 1.
Tonkin	do	784	482	July, 1925: Cases, 3; death, 1.
Japan:				
Hiogo	Nov. 14-20	3		

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

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

Reports Received from January 1 to February 18, 1927—Continued

CHOLERA—Continued

Place	Date	Cases	Deaths	Remarks
Philippine Islands:				
Manila	Oct. 31-Nov. 6	1		
Russia	Aug. 1-31	1		
Siam	Apr. 1-Dec. 18			Cases, 7,806; deaths, 5,142.
Bangkok	Oct. 31-Dec. 18	10	3	
Straits Settlements	July 25-Oct. 16		60	
Singapore	Nov. 21-Dec. 4	3	2	

PLAGUE

Algeria:				
Algiers	Reported Nov. 16	1		
Bona	Jan. 11-19	3	2	
Oran	Nov. 21-Dec. 10	32	22	
Tarafaraoui	Nov. 1-Dec. 9	10	9	Near Oran.
Brazil:				
Rio de Janeiro	Nov. 28-Dec. 4	2	2	
Do	Dec. 26-Jan. 1	1	1	On vessel in harbor.
British East Africa:				
Tanganyika Territory	Nov. 21-Dec. 18		12	
Uganda	Sept. 1-30	117	110	
Canary Islands:				
Atarfe	Dec. 20	1	1	Vicinity of Las Palmas.
Las Palmas	Jan. 8	1		
San Miguel	do	1		Vicinity of Santa Cruz de Teneriffe.
Ceylon:				
Colombo	Nov. 14-Dec. 11	3	1	2 plague rodents.
China:				
Mongolia	Reported Dec. 21	500		
Nanking	Oct. 31-Dec. 18			Prevalent.
Ecuador:				
Guayaquil	Nov. 1-Dec. 31	26	8	Rats taken, 50,616; found infected, 184.
Do	Jan. 1-15	5	3	Rats taken, 10,261; found infected, 53.
Egypt	Jan. 1-Dec. 9			Cases, 149.
Alexandria	Nov. 19-Dec. 2	2		
Charkia Province	Jan. 5	1	1	At Zagazig (Tel el Kebir).
Gharbia Province	Jan. 4	1	1	
Kafr el Sheikh	Dec. 3-9	2		
Marsa Matrah	Dec. 23-29	10		
Tanta district	Nov. 19-Dec. 20	3		
Greece	Nov. 1-30	10	1	Athens and Piræus.
Athens	Nov. 1-Dec. 31	9	4	
Patras	Nov. 28-Dec. 4		1	
Pravi	Nov. 27	1	1	Province of Drama-Kavalla.
India	Oct. 10-Nov. 27			Cases, 10,593; deaths, 6,237.
Bombay	Nov. 21-27	1	1	
Madras	Oct. 31-Dec. 4	415	212	
Rangoon	Nov. 14-Dec. 25	11	9	
Indo-China	July 1-31			Cases, 24; deaths, 10.
Province—				
Cambodia	July, 1926	6	6	July, 1925: Cases, 16; deaths, 13
Cochin-China	do	8	4	July, 1925: No case.
Kwang-Chow-Wan	do	10		July, 1925: Cases, 22; deaths, 15
Java:				
Batavia	Nov. 7-Jan. 1	91	90	Province.
Surabaya	Oct. 24-Dec. 18	14	14	
Madagascar:				
Province—				
Analalava	Oct. 16-31	1	1	Bubonic.
Itasy	Oct. 16-Nov. 15	8	8	
Maevatanana	Oct. 16-31	10	10	
Moramanga	Oct. 16-Nov. 15	38	26	
Tamatave	Oct. 16-31	3	1	
Tananarive	Oct. 16-Nov. 15			Cases, 180; deaths, 167.
Tananarive Town	do	26	25	
Mauritius:				
Plaines Wilhems	Oct. 1-31	2	2	
Port Louis	do	7	7	
Nigeria	Aug. 1-Sept. 30	492	441	

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

Reports Received from January 1 to February 18, 1927—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Peru	Nov. 1-30			Cases, 24; deaths, 4.
Departments—				
Cajamarca	do			Present.
Ica—				
Chincha	do	1		
Lambayeque	do			Present in Province.
Chiclayo	do	3		
Lima	do			Cases, 30; deaths, 4. Present in Cajatambo and Chancay Provinces.
Canete Province	do	10	3	
Chancay Province	do	3		
Lima Province	do	7	1	
Portuguese West Africa:				
Angola—				
Benguela	Oct. 16-31	8	4	
Portugal:				
Lisbon	Nov. 23-26	3	2	In suburb of Balem.
Russia	May 1-June 30	44		
Do	July 1-Aug. 31	19		
Senegal	July 1-31	178	162	
Diourbel	Nov. 20-30	12	1	
Tivaouane	Dec. 19-25	6	2	In interior.
Siam	Apr. 1-Dec. 18			Cases, 26; deaths, 21.
Syria:				
Beirut	Nov. 11-Dec. 20	4		
Tunisia:				
Sfax	Oct. 1-Dec. 31	304	128	
Turkey:				
Constantinople	Dec. 15-25	1		
Union of South Africa:				
Cape Province—				
De Aar District	Nov. 21-27	1		Native.
Hanover District	Nov. 14-25	2	1	Native. On farm.
Middleburg District	Dec. 5-11	1	1	Do.
Orange Free State	do			Cases, 12; deaths, 2.
Bothaville District	Dec. 5-18	2	1	
Hoopstad District	Nov. 7-13	1	1	Native.
Do	Dec. 5-25	2	1	Do.
Vrede Fort District	Dec. 19-25	10	5	First case occurred Dec. 1, 1926. Reported Dec. 17.

SMALLPOX

Algeria	Sept. 21-Nov. 20			Cases, 477.
Algiers	Dec. 11-31	4		
Arabia:				
Aden	Dec. 12-18	1		Imported.
Belgium	Oct. 1-10	1		
Brazil:				
Bahia	Oct. 30-Dec. 18	12	8	
Para	Oct. 31-Nov. 6		1	
Pernambuco	Oct. 17-Dec. 25	58	4	
Rio de Janeiro	Year 1926			Cases, 4,083; deaths, 2,180.
Sao Paulo	Aug. 23-Oct. 24	12	9	
British East Africa:				
Tanganyika Territory	Oct. 31-Nov. 20	2		
Zanzibar	Oct. 1-31	23	12	
British South Africa:				
Northern Rhodesia	Nov. 27-Dec. 3			Cases, 200. In natives.
Canada	Dec. 5-Jan. 1			Cases, 155.
Do	Jan. 2-29	181		
Alberta	Dec. 5-Jan. 1	132		
Do	Jan. 2-22	28		
Calgary	Nov. 28-Dec. 25	12		
Do	Jan. 2-29	12		
Edmonton	Dec. 1-31	4		
Manitoba	Dec. 5-Jan. 1	9		
Do	Jan. 2-29	8		
Winnipeg	Dec. 19-25	1		
Do	Jan. 2-Feb. 5	5		
Ontario	Dec. 5-Jan. 1	90		
Do	Jan. 2-29	124		
Kingston	Jan. 1-7	1		
Ottawa	Dec. 12-31	5		
Do	Jan. 9-29	4		
Toronto	Dec. 14-25	14		
Do	Jan. 1-29	35	1	

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

Reports Received from January 1 to February 18, 1927—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Canada—Continued.				
Saskatchewan	Dec. 5-Jan. 1	18		
Do	Jan. 2-29	21		
Regina	Jan. 16-22	1		
China:				
Chungking	Nov. 7-Dec. 25			Present.
Foochow	Nov. 7-Dec. 25			Do.
Hankow	Nov. 6-30			Do.
Manchuria—				
Harbin	Dec. 16-31	3		
Mukden	Dec. 5-11	1		
Shanghai	Dec. 12-18		1	
Swatow	Nov. 21-27			Do.
Nanking	Dec. 12-25			Do.
Chosen	Aug. 1-Sept. 30	42	14	
Seoul	Nov. 1-30	2		
Egypt:				
Cairo	June 11-Aug. 26	27	4	
Estonia	Oct. 1-30	2		
France	Sept. 1-Oct. 31	165		
Paris	Dec. 1-31	10	3	
Do	Jan. 1-10	1		
French Settlements in India	Aug. 29-Nov. 30	83	83	
Germany:				
Stuttgart	Nov. 28-Dec. 4	7		
Gold Coast	Aug. 1-31	41	5	
Great Britain:				
England and Wales	Nov. 14-Jan. 1			Cases, 2,262.
Do	Jan. 2-8			Cases, 412.
Bradford	Jan. 9-22	2		
Newcastle-on-Tyne	Dec. 5-11	2		
Do	Jan. 2-19	7		
Normanton	Dec. 30	1		9 miles from Leeds.
Sheffield	Nov. 28-Jan. 1	60		
Do	Jan. 2-8	20		
Greece	Nov. 1-30	20		
Athens	Dec. 1-31	14	2	
Guatemala:				
Guatemala City	Nov. 1-Dec. 31		15	
India	Oct. 10-Nov. 27			Cases, 7,882; deaths, 1,859.
Bombay	Nov. 7-Dec. 25	29	21	
Calcutta	Oct. 31-Dec. 18	239	160	
Karachi	Dec. 19-25	1	1	
Madras	Nov. 21-Jan. 1	32	2	
Rangoon	Nov. 28-Dec. 25	2	1	
Indo-China	July 1-31			Cases, 29; deaths, 10.
Province—				
Annam	July, 1926	6	3	July, 1925: Cases, 39; deaths, 7.
Cambodia	do	11	4	July, 1925: Cases, 62; deaths, 18.
Chochin-China	do	6	1	July, 1925: Cases, 12; deaths, 7.
Laos	do	3	1	July, 1925: Cases, none.
Tonkin	do	3	1	July, 1925: Cases, 31; deaths, 3.
Iraq:				
Baghdad	Oct. 31-Dec. 4	7	4	
Basra	Nov. 7-13	1	1	
Italy	Aug. 29-Oct. 23	12		
Genoa	Dec. 20-31	1		
Do	Jan. 1-10	2		
Jamaica	Nov. 26-Dec. 25	34		Reported as alastrim.
Japan:				
Kobe	Nov. 14-20	1		
Yokohama	Nov. 27-Dec. 3	2		
Java:				
Batavia	do	2		Province.
Surabaya	Oct. 24-Nov. 27	10	1	
Luxemburg	Nov. 1-30	1		
Mexico	July 1-Aug. 31		331	
Chihuahua	Dec. 31			Several cases; mild.
Ciudad Juarez	Dec. 14-27		2	
Mexico City	Nov. 23-Dec. 25	6		Including municipalities in Federal district.
Do	Dec. 26-Jan. 8	1		Do.
San Luis Potosi	Nov. 12-Dec. 18		3	
Do	Jan. 9-15		2	
Torreon	Nov. 28-Jan. 1		12	
Do	Jan. 2-22		5	
Nigeria	Aug. 1-Sept. 30	61	3	

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

Reports Received from January 1 to February 18, 1927—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Peru:				
Arequipa	Dec. 1-31			Present.
Laredo	Dec. 1			Severe outbreak; vicinity of Trujillo.
Poland	Oct. 11-30			Cases, 30.
Portugal:				
Lisbon	Nov. 22-Jan. 1	43	4	
Do	Jan. 2-15	5		
Portuguese West Africa:				
Angola	Oct. 1-15			Present in Congo district.
Rumania	Jan. 1-Sept. 30	7	1	
Russia	May 1-June 30	705		
Do	July 1-Aug. 31	629		
Senegal:				
Dakar	Jan. 9-15	1		
Siam	Apr. 1-Dec. 18			Cases, 708; deaths, 266.
Bangkok	Oct. 31-Dec. 18	25	8	
Sierra Leone:				
Manowa	Dec. 1-15	1		Pendembu district.
Straits Settlements:				
Singapore	Oct. 31-Nov. 27	3		
Tunisia	Oct. 1-Nov. 20	7		
Union of South Africa:				
Cape Province—				
Caledon district	Dec. 5-11			Outbreaks.
Steynsburg district	do			Do.
Stutterheim district	Nov. 21-27			Do.
Natal—				
Durban district	Nov. 7-27	9		Including Durban municipality. Total from date of outbreak; cases, 62; deaths, 16.
Orange Free State	Nov. 14-27			Outbreaks.
Bothaville district	Nov. 21-27			Do.
Transvaal	Nov. 7-20	2		Europeans.
Johannesburg	Nov. 14-20	1		
Yugoslavia	Nov. 1-30	1	1	

TYPHUS FEVER

Algeria	Sept. 21-Nov. 20	22		
Bulgaria	July 1-Oct. 31	23	3	
Chile:				
Valparaiso	Nov. 21-Dec. 25	6		
Do	Jan. 2-8	3		
China:				
Antung	Nov. 22-Dec. 5	4		
Chefoo	Oct. 24-Nov. 6			Present.
Chosen	Aug. 1-Sept. 30	15		
Seoul	Nov. 1-30	1		
Egypt:				
Alexandria	Dec. 3-9		1	
Cairo	Oct. 29-Nov. 4	1	1	
Gold Coast	Sept. 1-30	1	1	
Greece	Nov. 1-30			Cases, 12.
Athens	Nov. 1-Dec. 30	15	2	
Ireland:				
Clare County—				
Tulla district	Jan. 9-15	1		Suspect.
Italy	Aug. 29-Sept. 23	3		
Japan:				
Tokio Prefecture	Dec. 5-25	9		
Tokio city	do	5	1	
Lithuania	Sept. 1-Oct. 31	17	2	
Mexico	July 1-Aug. 31			Deaths, 46.
Aguascalientes	Jan. 9-15	1		
Durango	Jan. 1-31		1	
Mexico City	Dec. 5-11	3		Including municipalities in Federal district.
Do	Jan. 2-15	16		Do.
Nigeria	Sept. 1-30	1		

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

Reports Received from January 1 to February 18, 1927—Continued

TYPHUS FEVER—Continued

Place	Date	Cases	Deaths	Remarks
Palestine:				
Acre	Dec. 29-Jan. 3	1		
Beisan	Dec. 21-27	1		
Haifa	Nov. 23-Dec. 13	5		
Do	Dec. 28-Jan. 10	4		
Jaffa	Nov. 23-Dec. 20	6		
Jerusalem	Sept. 1-Oct. 30	19		
Majdal	Dec. 28-Jan. 3	1		
Nazareth	Nov. 16-Jan. 3	10		
Safad	Dec. 28-Jan. 3	1		
Peru:				
Arequipa	Dec. 1-31			Present.
Poland	Oct. 11-Nov. 13			Cases, 82; deaths, 8.
District—				
Bialystok	Oct. 31-Nov. 27	16	1	
Kielce	Nov. 28-Dec. 4	30	3	
Stanislawow	Oct. 31-Nov. 27	52	4	
Warsaw	do	45	5	
Rumania	Aug. 1-Oct. 31	114	6	
Russia	May 1-June 30	6,043		
Do	July 1-Aug. 31	2,364		
Tunisia	Oct. 1-20	3		
Turkey:				
Constantinople	Dec. 12-25	3		
Union of South Africa	Oct. 1-30			Cases, 71; deaths, 8.
Cape Province	do	47	7	
Do	Nov. 14-Dec. 18			Outbreaks.
East London	Nov. 21-27	1		Native. Imported.
Port St. Johns district	Dec. 5-11			Outbreaks. On farm.
Natal	Oct. 1-31	1		
Orange Free State	do	22	1	
Transvaal	do	1		
Yugoslavia	Nov. 1-Dec. 31	30	2	

YELLOW FEVER

French Sudan	Dec. 19-25	1	1	
Gold Coast	Aug. 1-Sept. 30	8	3	
Nigeria	Sept. 1-30	1		
Senegal	Dec. 19-25	3	3	
Diourbel	Dec. 6	1	1	
Guinguineo	Dec. 7	1	1	
Rufisque	Nov. 27	1	1	In European.
Do	Jan. 2-8	3	3	
Upper Volta:				
Gaoua district	Oct. 25	2		