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LOSS OF LIGHT DUE TO SMOKE IN BALTIMORE, MD., FROM OCTOBER, 1929, TO SEPTEMBER, 1930

By JAMES E. IVES, *Senior Physicist, Office of Industrial Hygiene and Sanitation,
United States Public Health Service*

OBJECT AND METHOD OF THE STUDY

At the request of the committee on air pollution of the Baltimore Association of Commerce, and with the cooperation of the commissioner of health of Baltimore, Dr. C. Hampson Jones, the United States Public Health Service undertook to make a study of the loss of light due to smoke in the city of Baltimore during the years 1929 and 1930. The method pursued was that described in Public Health Bulletin No. 197, a report of a similar study made in the city of New York during the year 1927. The method was to record the daylight, by means of a photoelectric cell and a recording potentiometer, on the roof of a building in the smoky part of the city and, by a similar cell and recording potentiometer, at a point outside the city where the air was comparatively free from smoke. The difference between the records obtained with the two recorders, after making certain corrections, was taken as the loss of light due to the smoke in the atmosphere. Records were taken in Baltimore from March, 1929, to November, 1930; but in this report the records for only 12 months are used, viz, those from October 1, 1929, to September 30, 1930.

One photoelectric cell was placed on the roof of the Central Police Building, at the corner of Fayette Street and Fallsway, in Baltimore. This building is centrally located, and it may be assumed that the atmosphere in this region has at least the average condition of smokiness in the city. The other cell was placed on the roof of one of the buildings of the State sanitarium at Mount Wilson, about 10.5 miles northwest of the police building. Mount Wilson is about 573 feet above sea level, and the air there is unusually clear and free from smoke. The buildings of the sanitarium are on the summit of a hill, surrounded by fields and woods, with very few other buildings in their neighborhood. The roof of the building on which the cell

was placed is about 30 feet above the ground. The latitude and longitude of the Central Police Building are $39^{\circ} 17.5' N.$, $76^{\circ} 36.4' W.$, and of Mount Wilson, $39^{\circ} 22.9' N.$, $76^{\circ} 46' W.$

RESULTS OF THE STUDY

Figures 1 to 9 present graphically the results of the study for the 12 months from October, 1929, to September, 1930, inclusive.

In Table 1 are shown the number of days used in each month. Records were used only where they were complete at both stations, and where the conditions of cloudiness were the same at both stations. Records taken in rainy weather were not used. These restrictions greatly reduced the number of days that could be used for comparison. Sundays and holidays were included in the study, in order to use as many days as possible.

TABLE 1.—*Number of clear, cloudy, and mixed days used in the calculation of the average horizontal illumination at the police building in Baltimore and at the State sanitarium at Mount Wilson*

Type of day	1929			1930									Total
	October	November	December	January	February	March	April	May	June	July	August	September	
Clear.....	6	7	5	6	5	7	4	6	3	2	2	1	54
Cloudy.....	6	11	7	9	5	2	4	2	1	0	1	1	49
Mixed.....	8	6	7	2	9	11	12	10	1	7	5	12	90
Total.....	20	24	19	17	19	20	20	18	5	9	8	14	193

For the purposes of analysis, the days used in the study were divided into three groups—clear, cloudy, and mixed. When all the days were used, the averages are given as for “all days.” By clear days are meant days on which all the hours were clear; by cloudy days, days on which all the hours were cloudy; by mixed, days on which some hours were clear and some cloudy. An hour was called clear if more than half of it was clear, and cloudy if more than half was cloudy.

In Figures 1 to 3 are plotted the average values of the horizontal illumination, in terms of divisions on the recorder, at Mount Wilson and at Baltimore, for each month in the year for every hour of the day, and the average values for each hour for the whole year. The daily average for every month of the year is also shown. The hours of the day are given in local apparent time. As stated in the report of the New York study,¹ the readings on the recorders were not exactly proportional to the illumination, but probably did not depart from proportionality by more than plus or minus 10 per cent. The recorder readings can be

¹ Public Health Bulletin No. 197, p. 7.

converted into approximate foot-candles by multiplying them by 177, the average number of foot-candles represented by one division on the recorder paper. In Figure 1 are plotted, for clear, cloudy, and all days, the monthly averages of the illumination at the Mount Wilson Sanitarium in terms of recorder readings, for the first six

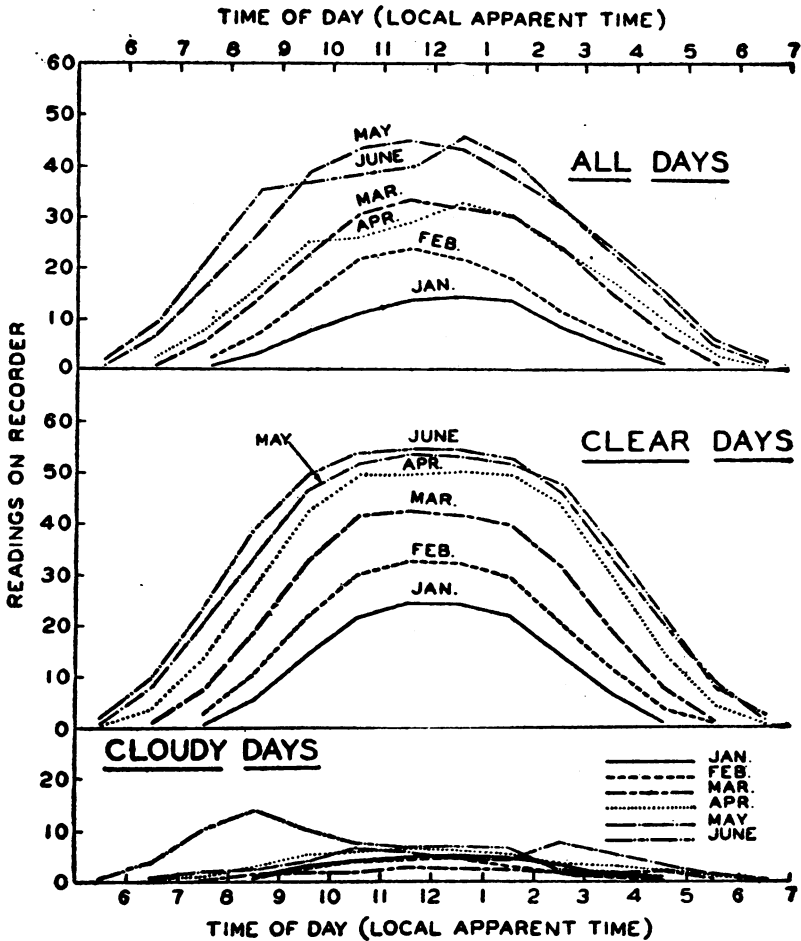


FIGURE 1.—Average hourly horizontal illumination by months at Mt. Wilson Sanitarium, January to June, 1930

months of the year for every hour of the day, and in Figure 2 are plotted the same quantities for the last six months. In Figure 3 are plotted the average hourly illuminations for the whole year for the three classes of days, both for Mount Wilson and for Baltimore.

In Figure 4 are plotted, as clear and cross-lined bars, respectively, the average total daily horizontal illumination at Mount Wilson and at the Central Police Building for every month of the year, the illumination being represented in terms of an index number of 100 for June at Mount Wilson. It will be seen that the average total daily hori-

zontal illumination was greatest in July at both places, and least in December.

In this figure are also plotted, as solid black bars, the differences between the average daily horizontal illuminations at Mount Wilson and the Central Police Building. These differences represent the total loss of light at the Central Police Building, due to smoke, for

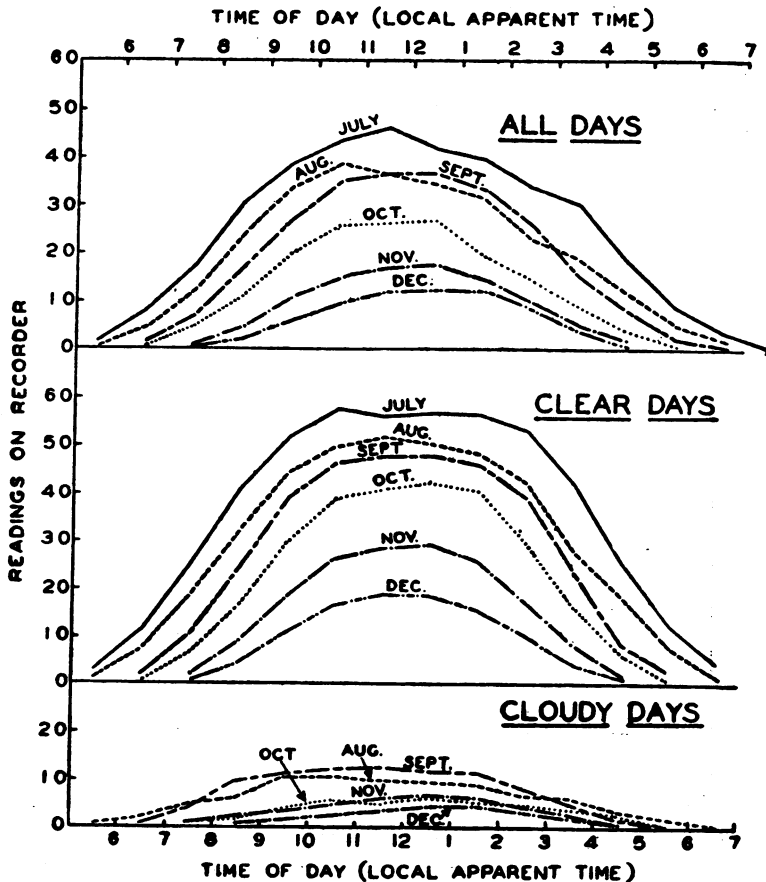


FIGURE 2.—Average hourly horizontal illumination by months at Mt. Wilson Sanitarium, July to September, 1930, and October to December, 1929

each month of the year. It will be noticed that the total loss of light is greatest in July and least in December. In the New York study referred to above, the greatest total loss of light was also found in July and the least in December.

The average values for the percentage loss ¹ of light at the Central Police Building for each hour for clear, cloudy, and all days was

¹ By percentage loss is meant the fraction, expressed as a percentage, of the light falling on Baltimore which is absorbed by smoke in the atmosphere at the Central Police Building. The percentage loss should not be confused with the absolute, or total loss, the absolute loss being the total amount of light lost at the Central Police Building due to smoke.

computed. For all classes of days the percentage loss is 14.1 per cent; for clear days, 13.2 per cent; and for cloudy days, 15.9 per cent. For clear days the average hourly percentage loss for the whole year varies with the time of day, being greater in the morning and in the late afternoon than at 2.30 p. m. For cloudy days, on the other hand, the average hourly percentage loss for the whole year is less in the morning and in the late afternoon than at 1.30 p. m. For all days of the year the average hourly percentage loss for the whole year showed a tendency to decrease during the course of the day.

An analysis of the percentage loss of light for clear days when the records for Sundays and holidays were omitted did not show any

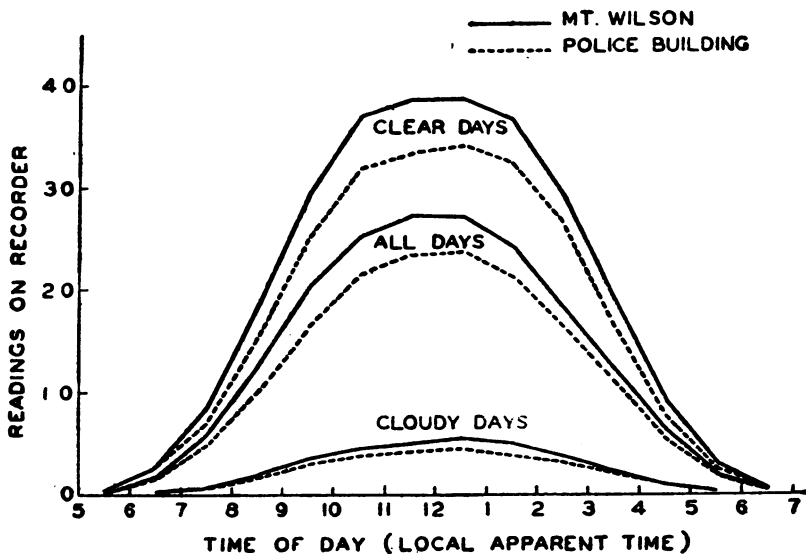


FIGURE 3.—Average hourly horizontal illumination at Mt. Wilson Sanitarium and at the Central Police Building for the year October 1, 1929, to September 30, 1930

great differences from those obtained when they were included. For the hours from 8 a. m. to 5 p. m. the average hourly percentage losses on clear days, when Sundays and holidays were omitted, for the whole year were 15.9, 16.4, 15.0, 14.4, 15.0, 12.4, 12.6, 12.2, 15.4, and 16.5, respectively. As would be expected, the percentage losses are in general slightly greater when Sundays and holidays are omitted.³

Figure 5 shows how the average percentage loss of light varies with the time of day, for clear, cloudy, and all days. Figure 6 shows how it varies with the time of year for clear, cloudy, and all days. In Figure 6 are also plotted the average relative humidities for each

³ The percentage losses for clear days for Sundays and holidays only, for 12 days distributed throughout the year, for the hours from 8 a. m. to 5 p. m. were found to be 13.6, 15.3, 14.4, 11.4, 11, 11.7, 7, 5.7, 8.1, and 8.7, respectively. It will be observed that these values are considerably lower than those for working days, especially in the afternoon.

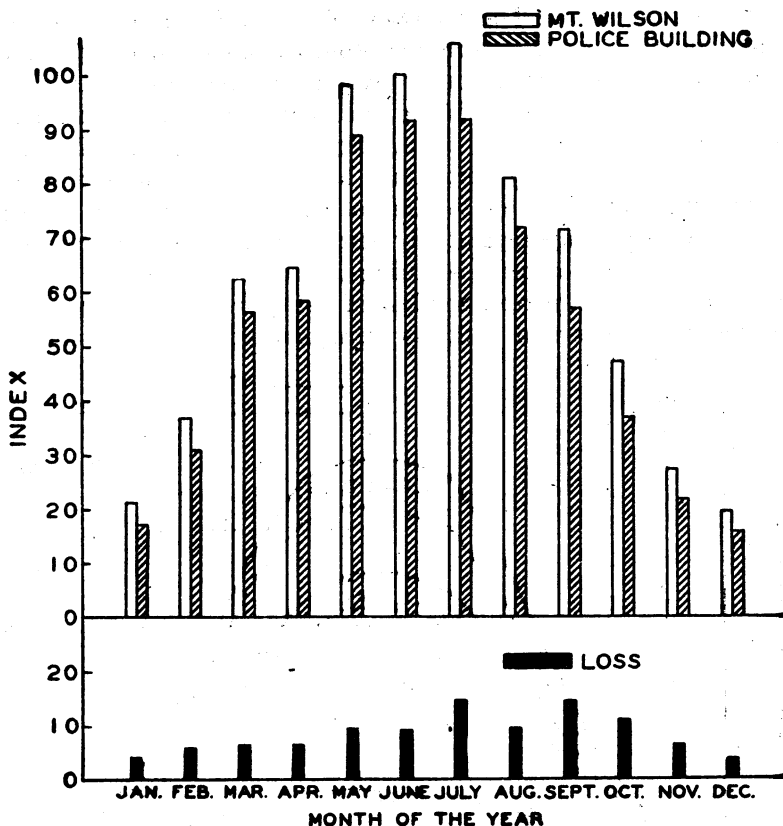


FIGURE 4.—Average total daily horizontal illumination, referred to an index number of 100 for June, at Mt. Wilson for every month of the year October 1, 1929, to September 30, 1930, and at the Central Police Building, and the difference between the two, which represents the total loss of light at the Central Police Building due to smoke

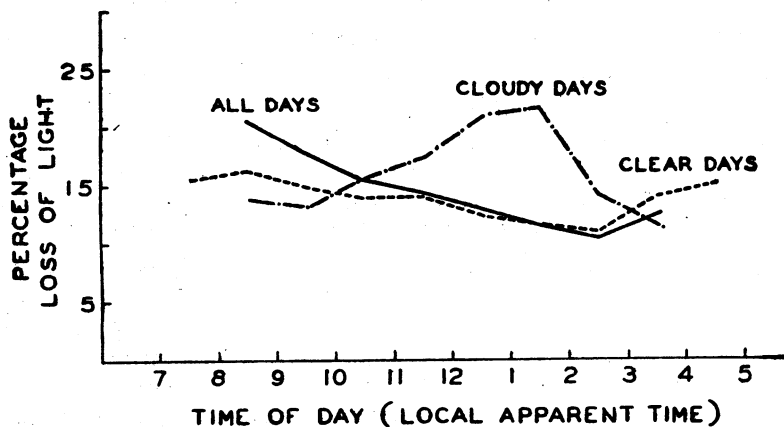


FIGURE 5.—Average hourly percentage loss of light at the Central Police Building, for the year October 1, 1929, to September 30, 1930, for clear, cloudy, and all days

month of the year. The average relative humidities were determined from the values given in the Monthly Meteorological Summary of the United States Weather Bureau in Baltimore for 8 a. m., noon, and 8 p. m. Only the values for the days for which the percentage loss of light was determined were used. It will be noted that for clear days and all days the percentage loss was in general low when the relative humidity was low. This relation is not clearly marked for cloudy days. The negative value of the average percentage loss for March for cloudy days is probably due to the very small values of the illumination at Mount Wilson and at the police building on the two cloudy days that could be used in this month. The occurrence of negative percentage losses and possible explanations are discussed in the section that follows.

The percentage losses of light at the Central Police Building in Baltimore from October 1, 1929, to September 30, 1930, both hourly and monthly, were considerably less than those found in the New York study at the lower end of Manhattan Island during the year 1927,⁴ the former being, on an average, only about two-thirds of the latter.

Relation of the percentage loss of light to the character of the sky, clear or cloudy, to the relative humidity, and to the direction and velocity of the wind.—As in the New York study,⁵ an attempt was made to determine the relation of the average daily loss of light to the average daily relative humidity and to the average velocity and direction of the wind. The average daily values of these quantities are plotted in Figures 7, 8, and 9. The values for the average velocity and direction of the wind were obtained from the hourly values of these quantities recorded by the United States Weather Bureau at its station in Baltimore.

In Figure 7 are plotted the average daily values of the percentage loss of light as a function of the relative humidity. Dots represent the values for clear days and crosses give the values for cloudy days. Points representing the mean values of the percentage loss for the humidity intervals 20.1 to 40, 40.1 to 60, etc., are connected by a solid straight line for the clear-day values and by a broken line for the cloudy-day values.

The negative percentage losses shown by points lying below the axis of abscissae, represent values for which the average illumination for the day was, for some unknown reason, greater at the Central Police Building than at Mount Wilson. It is hard to say why this occurred in a number of cases. It might be due to the fact that the condition of clouds or haze was not exactly the same in the two places. Another possible explanation is that a slight amount of

⁴ Public Health Bulletin No. 197, p. 14.

⁵ Public Health Bulletin No. 197, pp. 20-32.

smoke in the atmosphere may actually increase the illumination on a horizontal plane rather than decrease it. It is well known that the illumination on a horizontal plane due to the sky alone is greater when the atmosphere is slightly hazy than when it is perfectly clear. The same effect may possibly occur when there is a small amount of smoke in the air.

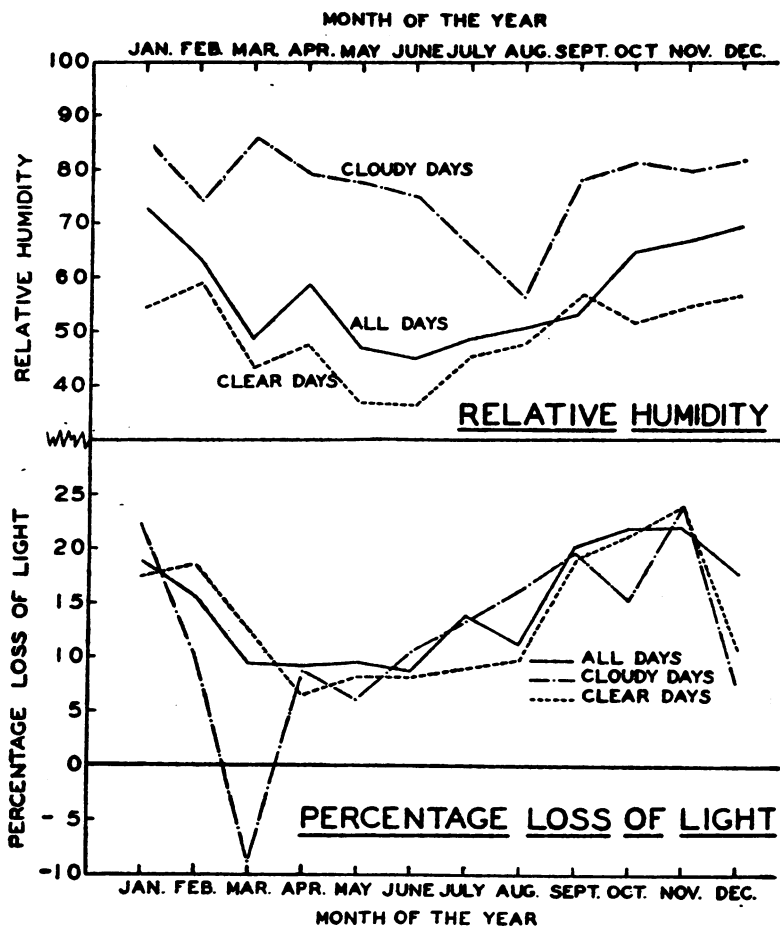


FIGURE 6.—Average monthly percentage loss of light and average monthly relative humidity at Central Police Building for the year October 1, 1929, to September 30, 1930, for clear, cloudy, and all days

It will be noted from Figure 7 that there is a considerable increase of the percentage loss with increase of relative humidity both for clear and cloudy days. It will also be noted that for the same degree of relative humidity the percentage loss of light was less for cloudy days than for clear days. This latter result is the reverse of that found in the New York study.

Since both the percentage loss and the relative humidity vary greatly during the course of the same day, and since the average rela-

tive humidity for the day is not known accurately (only the values for 8 a. m., noon, and 8 p. m. being known), it was thought advisable to calculate the average percentage loss of light for the hour on either side of noon, that is, for the two hours from 11 a. m. to 1 p. m. These values are plotted in Figure 8. The curves plotted by taking the averages of the percentage losses for the humidity intervals from 20.1 to 40, 40.1 to 60, etc., show that for the noon hours the percentage loss increases with the relative humidity, both for clear and cloudy hours. Also, that the percentage losses of light for cloudy hours are less than those for clear hours. This latter result is again the reverse of that found in the New York study.⁶ It is explained by the large number of negative percentage losses for cloudy days which occur in the Baltimore study and which, as previously suggested, may possibly be due to the fact that a small amount of smoke in the air may actually increase the horizontal illumination.

The effect of the velocity of the wind on the percentage loss of light by smoke is shown in Figure 9. Here the values of the percentage loss for clear days have been separated according to the average daily velocity of the wind into two groups—those in which the average daily velocity of the wind was less than 10 miles an hour and those in which it was 10 or more miles an hour. The points representing the mean values for the percentage losses, for each group, for the humidity intervals 0 to 40, 40.1 to 60, and 60.1 to 80, are connected by solid straight lines. It will be seen from the curves that for clear days the percentage losses are greater for the low-velocity winds than for the high, and also that there is again an increase of the percentage loss of light with an increase of relative humidity. For cloudy days no definite relation could be found between the percentage loss of light and the average velocity of the wind.

The effect of the direction of the wind upon the percentage loss of light was investigated by calculating the average percentage loss when the prevailing wind came from the north, northwest, west, southwest, south, southeast, east, or the northeast, both for clear and cloudy days. The results show that for clear days the greatest percentage loss was for south winds, viz, 16.2 per cent, and the least for northwest winds, 8.3 per cent. For cloudy days, the greatest percentage loss was for southwest winds, viz, 23 per cent, and the least for northwest winds, 8 per cent. The loss for south winds on cloudy days was nearly as great as that for southwest winds, being 21.7 per cent.

SUMMARY

1. Records of the total horizontal illumination were obtained from October 1, 1929, to September 30, 1930, at the Central Police Building, Baltimore, Md., where the air was smoky, and at the State sanitarium

⁶ Public Health Bulletin No. 197, pp. 22 and 27.

at Mount Wilson, about 10.5 miles to the northwest of Baltimore, where the air was comparatively free from smoke.

2. From these records the average hourly illumination on a horizontal plane for each month of the year, the average hourly illumination for the whole year, and the daily average for each month have been calculated for each place.

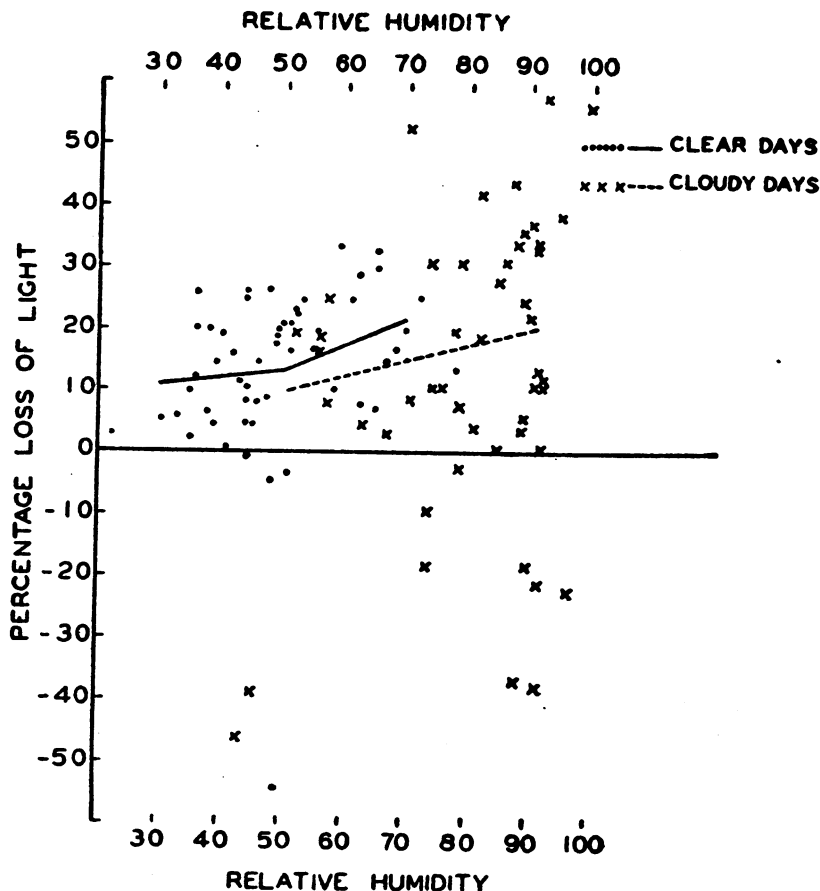


FIGURE 7.—Relation of the daily percentage loss of light to the relative humidity for clear and cloudy days

3. The absolute and relative losses of light from smoke at the Central Police Building have been determined from the records.

4. The highest average daily horizontal illumination at Mount Wilson occurred in July and the lowest in December. The greatest total loss of light at the Central Police Building was also in July and the least in December.

5. The records showed a large relative loss of light due to smoke. In some cases the average hourly or daily loss was greater than 50 per cent. The average loss for the whole year was 13.2 per cent for clear days, 15.9 for cloudy days, and 14.1 for all days. The average

percentage loss of light for the whole year was therefore greater on cloudy days than on clear days.

6. The percentage loss of light for clear days at the Central Police Building in Baltimore varied with the time of the day, being greater in the morning and in the late afternoon than at 2.30 p. m.; the aver-

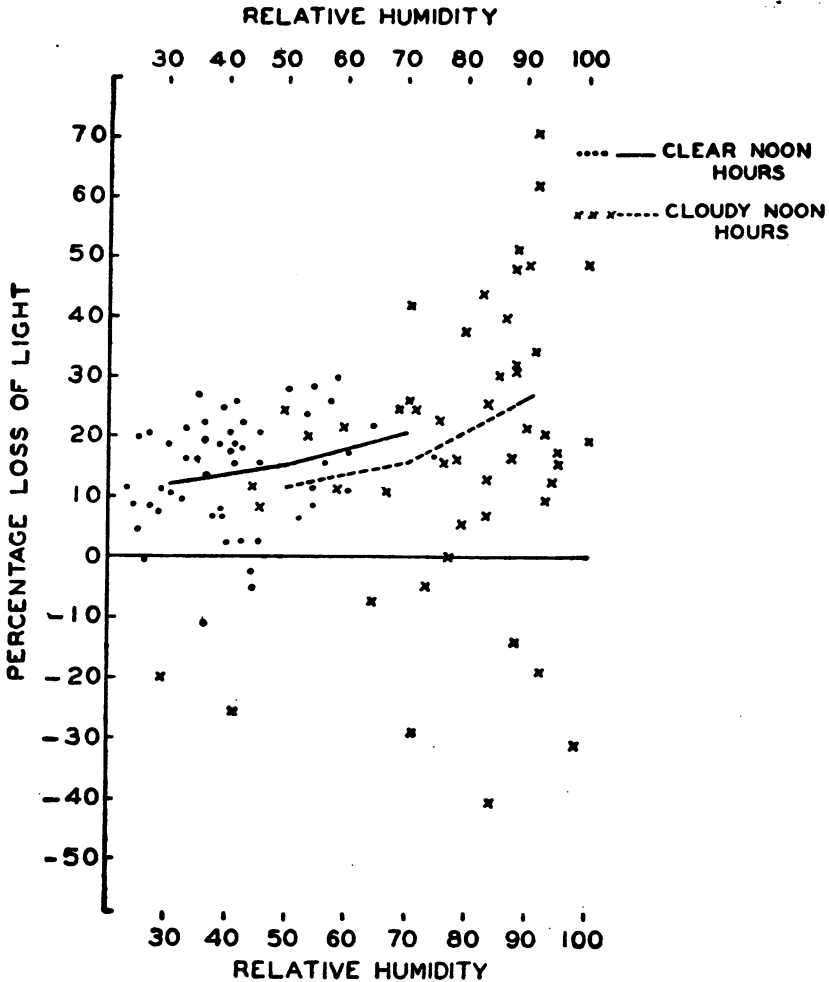


FIGURE 8.—Relation of the percentage loss of light to relative humidity during the noon hours (11 a. m. to 1 p. m.) for clear and cloudy days

age loss of light for the whole year for the hours ending at 8 a. m., 3 p. m., and 5 p. m., was 15.5, 10.8, and 14.8 per cent, respectively. For cloudy days, the percentage loss of light was found to be less in the morning and in the late afternoon than at 1.30 p. m.; for the hours ending at 9 a. m., 2 p. m., and 4 p. m. it was 13.6, 21.5, and 11.5 per cent, respectively.

7. The analysis of the results showed that the percentage loss of light depended, among other things, upon the nature of the sky,

whether clear or cloudy, upon the relative humidity of the air, and upon the velocity and direction of the wind.

8. For the same relative humidity the average percentage loss of light, both for the whole day and for the noon hours only, was found to be less for a cloudy than for a clear sky. In the New York study, the reverse was found to be true.

9. For the same kind of sky, clear or cloudy, and for the whole day, or for the noon hours only, the average percentage loss of light increased with increase of relative humidity, the percentage loss of light being about twice as great for 70 per cent relative humidity as for 30 per cent for clear days and clear noon hours, and about twice as

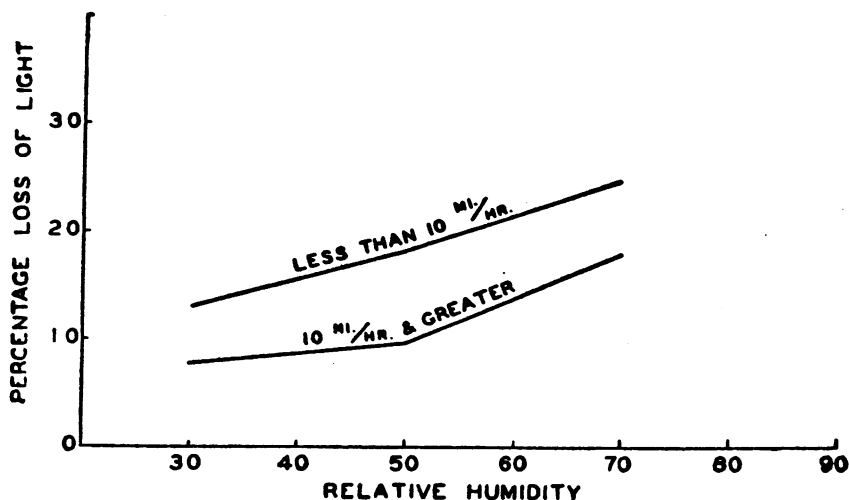


FIGURE 9.—Relation of the percentage loss of light to the relative humidity and to the velocity of the wind for clear days

great for 90 per cent relative humidity as for 50 per cent for cloudy days and cloudy noon hours.

10. Other conditions being the same, the percentage loss of light for clear days was found to decrease as the velocity of the wind increased, being roughly inversely proportional to the velocity of the wind. No definite relation between the percentage loss of light and the average velocity of the wind was found for cloudy days.

11. For clear days the percentage loss of light was found to be greatest for southerly winds, and least for northwesterly. For cloudy days the percentage loss was greatest for southwesterly and southerly winds, and least for northwesterly.

ACKNOWLEDGMENTS

Acknowledgment is made of the assistance rendered during the investigation by the health department of the city of Baltimore, Dr. C. Hampson Jones, commissioner; by the committee on air pollution

of the Baltimore Association of Commerce, Mr. Willoughby M. McCormick, chairman; and by the State sanitarium at Mount Wilson, Dr. J. A. Smith, superintendent. Acknowledgment is also made of the assistance rendered by Assistant Scientific Aide J. Harold Link, in the analysis of the results.

COURT DECISION RELATING TO PUBLIC HEALTH

Effect on municipal health ordinances of adoption by city of commission government.—(New Jersey Supreme Court; Quacci v. City of Union City et al., 162 A. 719; decided Oct. 17, 1932.) An act of the New Jersey Legislature, passed in 1911 and amended in 1912, relating to commission government, vested cities adopting the act with authority to enact and enforce all ordinances necessary for the protection of life, health, and property, and provided that all ordinances or resolutions already passed, not inconsistent with the rights and powers granted, should remain in force until altered or repealed by the commissioners. A 1913 supplemental law abolished in commission-government cities all boards and bodies, whether State or local municipal agencies (except the board of education and the district court or courts), and imposed their powers and duties upon the board of commissioners. In 1928 the Board of Health of Union City adopted an ordinance regulating the slaughter of poultry. Some years later the city adopted a commission government. In a case involving a conviction for violation of the poultry ordinance, the supreme court held that the ordinance was continued by the terms of the commission government act, saying:

We think that the ordinances of the board of health were continued by the express provisions of the Pamphlet Laws of 1912 quoted, and that the power to enforce them was, by the enactment of 1913, vested in the board of commissioners chosen after commission government was adopted.

The ordinance of the old board of health was an ordinance passed in Union City, and as such it was continued by the Walsh Act. The enforcement of the ordinance was vested in the board of commissioners when the board of health was abolished by the adoption of commission government. To construe the legislative language otherwise would leave a city adopting commission government without health ordinances until new ones were adopted. Such view seems contrary to the expressed legislative intention, which appears to have been to hold old ordinances until new ones were adopted and to vest the enforcement thereof in the city commission.

PROVISIONAL SUMMARY OF MORTALITY STATISTICS, 1931

The Bureau of the Census announces that, in the United States death registration area, in the calendar year 1931, there were 1,322,587 deaths, or a death rate of 1,107.5 per 100,000 population, as compared with 1,343,356 deaths, or a rate of 1,133.1 in 1930.

The five leading causes of death were the same in 1931 as in 1930; namely, diseases of the heart, cancer, nephritis, cerebral hemorrhage, and the pneumonias; and in each of the years these five causes were responsible for slightly over 50 per cent of the total number of deaths which were reported in the registration area. The principal causes of death, the total number of deaths, and the death rates for the years 1930 and 1931 are shown in the accompanying table:

Cause of death	Deaths and death rates in the United States registration area, 1931 and 1930			
	Number		Rate per 100,000 estimated population	
	1931	1930	1931	1930
Total deaths (all causes) ¹	1, 322, 587	1, 343, 356	1, 107.5	1, 133.1
Typhoid and paratyphoid fever.....	5, 382	5, 698	4.5	4.8
Smallpox.....	96	165	.1	.1
Measles.....	3, 576	3, 820	3.0	3.2
Scarlet fever.....	2, 650	2, 279	2.2	1.9
Whooping cough.....	4, 619	5, 707	3.9	4.8
Diphtheria.....	5, 738	5, 822	4.8	4.9
Influenza.....	31, 701	23, 066	26.5	19.5
Dysentery.....	2, 441	3, 356	2.0	2.8
Erysipelas.....	2, 276	2, 508	1.9	2.1
Acute poliomyelitis and acute polioencephalitis.....	2, 098	1, 370	1.8	1.2
Lethargic or epidemic encephalitis.....	972	1, 082	.8	.9
Epidemic cerebrospinal meningitis.....	2, 832	4, 211	2.4	3.6
Tuberculosis (all forms).....	81, 396	84, 741	68.2	71.5
Of the respiratory system.....	72, 515	75, 120	60.7	63.4
Of the meninges, central nervous system.....	2, 709	2, 906	2.3	2.6
Other forms.....	6, 171	6, 626	5.2	5.6
Syphilis ²	16, 454	16, 676	13.8	14.1
Malaria.....	2, 836	3, 403	2.1	2.9
Cancer and other malignant tumors.....	118, 141	115, 265	98.9	97.2
Of the buccal cavity.....	3, 563	3, 543	3.0	3.0
Of the pharynx.....	1, 004	1, 011	.8	.9
Of the esophagus.....	2, 038	1, 896	1.7	1.6
Of the stomach and duodenum.....	25, 397	25, 408	21.3	21.4
Of the liver and biliary passages.....	10, 290	10, 388	8.6	8.8
Of the pancreas.....	4, 139	2, 969	2.6	2.5
Of other digestive tract and peritoneum.....	17, 919	17, 151	15.0	14.5
Of the respiratory system.....	4, 039	3, 848	3.4	3.2
Of the uterus.....	14, 464	14, 132	12.1	11.9
Of other female genital organs.....	2, 565	2, 290	2.1	1.9
Of the breast.....	11, 444	10, 912	9.6	9.2
Of the male genito-urinary organs.....	9, 184	8, 661	7.7	7.3
Of the skin.....	2, 986	3, 019	2.5	2.5
Of other or unspecified organs.....	10, 109	10, 037	8.5	8.5
Rheumatism and gout.....	4, 133	4, 493	3.5	3.8
Diabetes mellitus.....	24, 331	22, 528	20.4	19.0
Pellagra.....	5, 090	6, 333	4.3	5.3
Pernicious anæmia.....	3, 734	3, 906	3.1	3.3
Alcoholism (acute or chronic).....	3, 933	4, 158	3.3	3.5
Meningitis (nonepidemic).....	2, 782	3, 048	2.3	2.6
Cerebral hemorrhage, embolism, thrombosis, and softening.....	99, 376	100, 646	83.2	84.9
Hemiplegia, other paralysis, cause not specified.....	4, 036	4, 671	3.4	3.9
Diseases of the heart.....	253, 985	253, 064	212.7	213.5
Diseases of the arteries, atheroma, aneurysm, etc.....	24, 498	25, 446	20.5	21.5
Bronchitis.....	4, 586	4, 992	3.8	4.2
Pneumonia (all forms).....	96, 973	98, 657	81.2	83.2
Respiratory diseases other than bronchitis and pneumonia (all forms).....	9, 415	9, 588	7.9	8.1
Ulcer of the stomach and duodenum.....	7, 259	7, 360	6.1	6.2
Diarrhea and enteritis.....	20, 813	31, 192	17.4	26.3
Diarrhea and enteritis (under 2 years).....	14, 794	23, 294	12.4	19.6
Diarrhea and enteritis (2 years and over).....	6, 019	7, 898	5.0	6.7
Appendicitis.....	18, 113	18, 100	15.2	15.3
Hernia, intestinal obstruction.....	12, 639	12, 176	10.5	10.3
Cirrhosis of the liver.....	8, 851	8, 583	7.4	7.2
Nephritis.....	104, 119	107, 619	87.2	90.8
Puerperal septicæmia.....	5, 445	5, 439	4.6	4.6

¹ Exclusive of stillbirths.

² Includes tabes dorsalis (locomotor ataxia) and general paralysis of the insane.

Cause of death	Deaths and death rates in the United States registration area, 1931 and 1930			
	Number		Rate per 100,000 estimated population	
	1931	1930	1931	1930
Puerperal causes other than puerperal septicemia.....	8,794	9,726	7.4	8.2
Congenital malformations and diseases of early infancy.....	67,436	72,246	56.5	60.9
Suicide.....	20,068	18,561	16.8	15.6
Homicide.....	11,160	10,617	9.3	9.0
Accidental and unspecified external causes.....	100,133	95,527	83.8	80.6
Burns (conflagration excepted) ¹	5,893	6,523	4.9	5.5
Accidental drowning ¹	7,545	7,450	6.3	6.3
Accidental shooting.....	3,041	3,120	2.5	2.6
Accidental falls ¹	20,356	20,030	17.0	16.9
Excessive heat (burns excepted).....	2,768	1,487	2.3	1.3
Other external causes.....	60,530	56,917	50.7	48.0
All other defined causes.....	95,546	100,655	80.0	84.9
Unknown or ill-defined causes.....	22,517	24,864	18.9	21.0
SUPPLEMENTAL				
Mine and quarry accidents.....	1,849	2,560	1.5	2.2
Machinery accidents.....	1,630	2,065	1.4	1.7
Railroad accidents.....	5,243	5,773	4.4	4.9
Collision with automobile.....	1,651	1,760	1.4	1.5
Other railroad accidents.....	3,592	4,012	3.0	3.4
Street car accidents.....	1,094	1,174	.9	1.0
Collision with automobile.....	419	463	.4	.4
Other street car accidents.....	675	711	.6	.6
Automobile accidents (excluding collision with railroad trains and street cars).....	30,042	29,080	25.2	24.5
Other transportation accidents ¹	2,804	2,764	2.3	2.3

¹ Includes deaths from this cause where the accident occurred in a mine or quarry, by machinery, or in connection with transportation.

¹ Includes air, motor cycle, and water transportation accidents.

DEATHS DURING WEEK ENDED JANUARY 14, 1933

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

	Week ended Jan. 14, 1933	Correspond- ing week, 1932
Data from 85 large cities of the United States:		
Total deaths.....	9,640	8,468
Deaths per 1,000 population, annual basis.....	13.5	12.1
Deaths under 1 year of age.....	706	636
Deaths under 1 year of age per 1,000 estimated live births ¹	61	53
Deaths per 1,000 population, annual basis, first 2 weeks of year.....	13.6	12.5
Data from industrial insurance companies:		
Policies in force.....	69,167,602	74,179,429
Number of death claims.....	17,306	15,062
Death claims per 1,000 policies in force, annual rate.....	10.0	10.6
Death claims per 1,000 policies, first 2 weeks of year, annual rate.....	10.8	9.9

¹ 1932, 81 cities; 1931, 78 cities.

PREVALENCE OF DISEASE

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

UNITED STATES

CURRENT WEEKLY STATE REPORTS

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

Reports for Weeks Ended January 21, 1933, and January 23, 1932

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended January 21, 1933, and January 23, 1932

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932
New England States:								
Maine.....		2	994	181	1	633	0	0
New Hampshire.....	1	2			1	44	0	0
Vermont.....	2				3	334	0	0
Massachusetts.....	38	55	293	29	125	349	2	1
Rhode Island.....	5	4	53		1	1,056	0	0
Connecticut.....	1	9	249	7	109	121	0	1
Middle Atlantic States:								
New York.....	67	168	312	29	1,106	884	8	6
New Jersey.....	24	30	474	11	257	104	2	6
Pennsylvania.....	134	112			423	1,030	11	9
East North Central States:								
Ohio.....	49	86	195	15	544	141	2	1
Indiana.....	51	69	220	29	16	213	5	6
Illinois.....	65	170	159	33	169	68	16	8
Michigan.....	22	46	78	1	372	217	1	6
Wisconsin.....	4	19	2,887	28	227	89	1	3
West North Central States:								
Minnesota.....	3	17	102	1	424	68	3	1
Iowa.....	13	26	69			3	5	0
Missouri.....	32	57	87	7	86	28	5	0
North Dakota.....	7		2,517		109	86	0	0
South Dakota.....	1	6	57		4	56	0	0
Nebraska.....	15	11	11		20	14	1	0
Kansas.....	6	44	812	4	55	79	1	0
South Atlantic States:								
Delaware.....	2	3	49	1	2	2	0	0
Maryland.....	16	35	928	41	5	11	1	3
District of Columbia.....	13	19	8	1	2	3	0	0
Virginia.....	11				178		5	3
West Virginia.....	20	42	664	64	225	336	0	0
North Carolina.....	17	38	1,301	23	291	137	4	3
South Carolina.....	7	12	3,681	389	38	20	0	0
Georgia.....	17	24	877	128	4	9	0	1
Florida.....	10	10	76	7		11	0	0

See footnotes at end of table.

*Cases of certain communicable diseases reported by telegraph by State health officers
for weeks ended January 21, 1933, and January 23, 1932—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932
East South Central States:								
Kentucky.....	14	76	1,042			94	1	0
Tennessee.....	25	31	726	43	2	16	4	4
Alabama ¹	18	65	751	95	2	17	1	4
Mississippi.....	7	22					2	1
West South Central States:								
Arkansas.....	17	24	347	18	18	2	2	0
Louisiana ¹	20	35	260	4	7	4	1	1
Oklahoma ¹	16	55	1,077	78	1	84	7	0
Texas ¹	94	80	706	63	230	10	5	1
Mountain States:								
Montana.....	7	6	1,754	11	214	103	0	0
Idaho.....	6		6		14	2	0	1
Wyoming.....						1	0	0
Colorado.....	5	9	108		3	6	0	0
New Mexico.....	11	17	8	250	2	8	1	0
Arizona.....	3	2	18	42			0	0
Utah ¹	2	1	1		5	2	0	0
Pacific States:								
Washington.....	10	9	12		3	443	2	0
Oregon.....	2	5	279	70	20	40	1	0
California ¹	57	79	515	235	182	252	1	5
Total.....	967	1,632	24,763	1,936	5,499	7,230	101	74
Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932
New England States:								
Maine.....	0	0	37	25	0	0	0	1
New Hampshire.....	0	1	29	14	0	1	0	0
Vermont.....	0	0	29	7	0	26	0	1
Massachusetts.....	0	2	334	549	0	18	0	3
Rhode Island.....	0	0	40	36	0	0	0	0
Connecticut.....	0	1	198	87	0	4	1	1
Middle Atlantic States:								
New York.....	0	1	758	909	0	4	9	15
New Jersey.....	0	1	273	209	0	0	2	3
Pennsylvania.....	0	3	958	589	0	0	5	26
East North Central States:								
Ohio.....	0	0	413	323	8	34	2	10
Indiana.....	0	0	110	100	2	31	2	0
Illinois.....	2	5	471	398	9	29	6	14
Michigan.....	0	1	421	319	0	16	5	2
Wisconsin.....	0	3	156	111	4	5	1	2
West North Central States:								
Minnesota.....	0	1	73	87	0	0	0	0
Iowa.....	0	1	43	64	23	67	2	0
Missouri.....	0	0	109	89	0	23	1	1
North Dakota.....	0	3	26	15	0	1	0	2
South Dakota.....	0	1	17	7	0	17	35	4
Nebraska.....	1	1	35	15	3	5	0	0
Kansas.....	0	0	85	74	1	1	2	4
South Atlantic States:								
Delaware.....	0	0	11	8	0	0	0	0
Maryland ¹	0	1	113	92	0	0	0	12
District of Columbia.....	0	0	22	21	0	0	0	3
Virginia.....	0	1	57		0		5	
West Virginia.....	0	0	27	46	0	4	5	
North Carolina.....	1	2	61	57	0	1	6	5
South Carolina.....	0	0	9	11	0	2	0	11
Georgia.....	0	1	14	32	1	0	5	5
Florida ¹	0	1	17	1	0	0	1	11

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended January 21, 1933, and January 23, 1933—Continued

Division and State	Polio-myelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932	Week ended Jan. 21, 1933	Week ended Jan. 23, 1932
East South Central States:								
Kentucky.....	1	1	45	124	1	8	5	19
Tennessee.....	0	0	31	62	0	16	8	21
Alabama.....	2	2	12	30	0	16	3	24
Mississippi.....	1	1	14	23	2	58	2	6
West South Central States:								
Arkansas.....	0	0	13	14	13	20	2	6
Louisiana.....	0	1	10	15	1	4	5	9
Oklahoma.....	0	0	29	32	1	36	0	2
Texas.....	0	1	82	98	14	72	11	8
Mountain States:								
Montana.....	0	0	16	45	1	2	0	3
Idaho.....	0	0	5	12	0	2	0	0
Wyoming.....	0	0	2	18	0	0	0	0
Colorado.....	0	0	27	46	0	4	3	2
New Mexico.....	1	0	20	9	0	1	7	1
Arizona.....	2	0	14	5	0	0	0	0
Utah.....	0	0	14	18	0	0	0	0
Pacific States:								
Washington.....	0	0	37	39	6	32	0	3
Oregon.....	1	1	16	27	12	20	2	3
California.....	2	2	203	149	48	21	1	5
	14	40	5,496	5,061	150	601	141	255

† New York City only.

‡ Week ended Friday.

§ Typhus fever, week ended Jan. 21, 1933, 11 cases: 1 case in Maryland, 1 case in Florida, 2 cases in Alabama, 1 case in Louisiana, 5 cases in Texas, and 1 case in California.

¶ Figures for 1933 are exclusive of Oklahoma City and Tulsa.

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	Menin- gococ- cus menin- gitis	Diph- theria	Influ- enza	Malaria	Measles	Pel- lagra	Polio- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
<i>December, 1932</i>										
Arkansas.....	5	57	16,056	34	6	36	0	62	6	11
Colorado.....	29	29	1,744	—	32	—	0	151	2	3
Maryland.....	3	71	2,411	—	26	1	1	454	0	23
Minnesota.....	5	54	298	—	632	—	1	352	2	6
New York.....	17	259	—	5	2,805	—	13	2,569	19	43
North Carolina.....	5	164	1,405	—	321	21	2	342	2	35
Ohio.....	8	273	2,906	—	1,886	—	6	2,159	54	40
Pennsylvania.....	11	477	—	1	1,306	—	17	2,704	0	65
South Dakota.....	1	51	792	—	14	—	1	70	5	5
West Virginia.....	6	121	6,379	—	622	—	0	280	3	23

<i>December, 1932</i>		Cases	Diarrhea:	Cases	German measles—Con.	Cases
Anthrax:			Maryland.....	2	North Carolina.....	7
New York.....	2		Diarrhea and enteritis:		Ohio.....	28
Chicken pox:			Ohio.....	17	Pennsylvania.....	36
Arkansas.....	204		Dysentery:		Hookworm disease:	
Colorado.....	373		Maryland.....	1	Arkansas.....	1
Maryland.....	670		Minnesota.....	1	Impetigo contagiosa:	
Minnesota.....	815		New York.....	8	Colorado.....	31
New York.....	3,497		Ohio.....	1	Maryland.....	25
North Carolina.....	787		Food poisoning:		Lead poisoning:	
Ohio.....	2,977		Ohio.....	12	Ohio.....	11
Pennsylvania.....	4,624		German measles:		Lethargic encephalitis:	
South Dakota.....	108		Maryland.....	9	Minnesota.....	2
West Virginia.....	228		New York.....	129	New York.....	8

Lethargic encephalitis—	Cases	Septic sore throat:	Cases	Tularaemia—Con.	Cases
Continued.		Maryland.....	10	Pennsylvania.....	11
Ohio.....	3	New York.....	17	West Virginia.....	1
Pennsylvania.....	3	North Carolina.....	17		
Mumps:		Ohio.....	269	Typhus fever:	
Arkansas.....	55	South Dakota.....	2	Maryland.....	1
Colorado.....	78	West Virginia.....	1	New York.....	1
Maryland.....	258			North Carolina.....	3
Ohio.....	191	Tetanus:			
Pennsylvania.....	1,600	Minnesota.....	1	Undulant fever:	
South Dakota.....	40	New York.....	3	Maryland.....	3
West Virginia.....	3	Ohio.....	2	Minnesota.....	6
Ophthalmia neonatorum:		Pennsylvania.....	4	New York.....	30
Maryland.....	2			North Carolina.....	1
New York.....	3	Trachoma:		Ohio.....	3
North Carolina.....	1	Arkansas.....	1	Pennsylvania.....	10
Ohio.....	81	Ohio.....	18	Vincent's angina:	
Pennsylvania.....	16	South Dakota.....	2	Colorado.....	3
Paratyphoid fever:				Maryland.....	0
Colorado.....	1	Trichinosis:		New York.....	119
Minnesota.....	1	Maryland.....	2		
New York.....	4	New York.....	6	Whooping cough:	
Puerperal septicemia:		Pennsylvania.....	1	Arkansas.....	36
Ohio.....	4			Colorado.....	8
Pennsylvania.....	19	Tularaemia:		Maryland.....	106
Rabies in animals:		Arkansas.....	3	Minnesota.....	135
Maryland.....	4	Colorado.....	1	New York.....	1,763
West Virginia.....	1	Maryland.....	10	North Carolina.....	405
Scabies:		Minnesota.....	2	Ohio.....	307
Maryland.....	1	New York.....	4	Pennsylvania.....	831
		North Carolina.....	1	South Dakota.....	14
		Ohio.....	43	West Virginia.....	96

PLAGUE-INFECTED GROUND SQUIRREL IN CALIFORNIA

The Director of Public Health of California reported January 20, 1933, that plague infection had been proved by animal inoculation in a ground squirrel which was shot on a ranch 20 miles east of Hollister, San Benito County, California. The specimen was received at the State bacteriological laboratory January 12, 1933. The last plague-infected squirrel previously found at this location was shot August 5, 1932.

WEEKLY REPORTS FROM CITIES

City reports for week ended January 14, 1933

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland.....	0	9	0	0	5	6	0	1	0	23	31
New Hampshire:											
Concord.....	0		2	0	3	0	0	0	0	9	19
Nashua.....	0		0	0	0	0	0	0	0	0	
Vermont:											
Barre.....	0		0	0	0	0	0	1	0	0	3
Burlington.....	3		0	0	0	0	0	0	0	0	
Massachusetts:											
Boston.....	6	59	4	27	49	101	0	12	0	66	232
Fall River.....	0	6	4	0	4	16	0	2	1	4	42
Springfield.....	2	1	0	3	2	11	0	2	0	0	36
Worcester.....	0	3	0	2	12	21	0	1	0	14	39
Rhode Island:											
Pawtucket.....	0		0	0	0	0	0	0	0	0	20
Providence.....	2	8	4	0	7	26	0	2	0	10	77
Connecticut:											
Bridgeport.....	0	357	4	14	6	6	1	2	0	1	53
Hartford.....	0	6	2	3	9	2	0	1	0	1	50
New Haven.....	0	8	4	6	5	12	0	2	0	3	64
New York:											
Buffalo.....	5	6	8	6	28	47	0	5	1	61	145
New York.....	49	533	91	344	413	218	0	95	3	80	2,004
Rochester.....	1	111	1	1	13	37	0	1	0	7	108
Syracuse.....	0	50	5	3	12	28	0	2	0	2	60
New Jersey:											
Camden.....	0	5	3	0	8	7	0	1	0	0	41
Newark.....	0	172	3	117	15	4	0	13	0	19	103
Trenton.....	2	12	1	0	5	22	0	2	0	4	47

City reports for week ended January 14, 1933—Continued.

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Pennsylvania:											
Philadelphia.....	7	110	20	26	59	150	0	26	0	3	528
Pittsburgh.....	4	18	9	3	19	42	0	5	1	9	148
Reading.....	2		0	26	2	6	0	2	0	3	29
Scranton.....	1			0		11	0		0	0	
Ohio:											
Cincinnati.....	1	2	6	0	19	23	0	5	0	0	150
Cleveland.....	4	184	8	5	14	128	0	9	0	18	106
Columbus.....	8	7	7	196	7	10	0	4	0	1	80
Toledo.....	2		0	46	6	31	0	2	0	2	89
Indiana:											
Fort Wayne.....	4		0	0	1	1	0	0	0	0	26
Indianapolis.....	5		1	14	19	6	0	4	0	9	
South Bend.....	0		2	0	0	2	0	1	0	0	10
Terre Haute.....	0		0	0	2	3	0	0	0	0	24
Illinois:											
Chicago.....	15	23	18	64	72	247	0	22	0	18	704
Springfield.....	0		0	0	5	3	0	0	0	0	31
Michigan:											
Detroit.....	16	16	11	87	33	95	0	20	0	72	283
Flint.....	1	74	1	4	12	6	0	2	0	4	40
Grand Rapids.....	0		12	0	3	7	0	1	0	30	44
Wisconsin:											
Kenosha.....	0		1	0	0	2	1	0	0	8	6
Madison.....	0			5		1	0		0	4	
Milwaukee.....	1	41	17	2	22	27	0	4	0	21	136
Racine.....	0	3	3	0	1	17	0	0	0	7	23
Superior.....	0		1	0	1	1	0	0	0	3	6
Minnesota:											
Duluth.....	0		2	0	3	5	0	0	0	13	20
Minneapolis.....	1		2	154	8	23	0	5	0	7	100
St. Paul.....	1	8	3	10	3	17	0	1	0	44	50
Iowa:											
Des Moines.....	7			0		3	1		0	0	39
Sioux City.....	0			1		0			0	1	
Waterloo.....	0			0		1	0		0	0	
Missouri:											
Kansas City.....	2	1	5	69	22	49	0	13	0	7	127
St. Joseph.....	2		1	0	13	2	0	1	0	0	49
St. Louis.....	22	4	4	5	11	29	0	9	0	3	235
North Dakota:											
Fargo.....	0		1	1	1	0	0	0	0	0	6
Grand Forks.....	0		0	9	0	0	0	0	0	0	
South Dakota:											
Aberdeen.....	4			0		0	0		0	0	
Nebraska:											
Omaha.....	4		0	2	18	6	1	0	0	0	60
Kansas:											
Topeka.....	0		0	9	5	4	0	0	0	0	19
Wichita.....	0		1	0	5	2	0	0	0	0	32
Delaware:											
Wilmington.....	4		0	0	8	6	0	1	0	0	36
Maryland:											
Baltimore.....	5	170	18	4	52	65	0	10	0	11	300
Cumberland.....	0	5	1	0	1	5	0	1	0	0	20
Frederick.....	1	4	0	0	2	0	0	0	0	0	4
District of Colum- bia:											
Washington.....	9	11	8	7	21	21	0	9	0	3	191
Virginia:											
Lynchburg.....	1		4	0	2	0	0	0	0	0	18
Norfolk.....	2	8	0	0	7	1	0	0	0	2	34
Richmond.....	0		8	3	8	8	0	6	0	0	62
Roanoke.....	1		8	18	4	2	0	0	0	0	18
West Virginia:											
Charleston.....	1	7	3	0	5	0	0	0	1	0	12
Huntington.....	3			43		4	0		0	0	
Wheeling.....	1		0	113	5	0	0	0	0	6	24
North Carolina:											
Raleigh.....	0	4	0	1	2	3	0	0	0	0	10
Wilmington.....	1		1	1	1	0	0	0	0	0	9
Winston-Salem.....	1	24	0	2	1	3	0	2	0	0	16
South Carolina:											
Charleston.....	0	382	0	0	4	0	0	3	0	0	24
Columbia.....	1		0	2	0	0	0	0	0	0	9
Greenville.....	0		0	0	0	0	0	0	0	0	

1 Nonresident.

City reports for week ended January 14, 1933—Continued.

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Georgia:											
Atlanta.....	4	56	4	0	4	4	0	4	0	9	4
Brunswick.....	0		0	0	0	0	0	0	0	0	0
Savannah.....	1	31	3	0	6	2	0	1	0	0	3
Florida:											
Miami.....	0	38	0	0	2	2	0	2	0	0	26
Tampa.....	3	4	4	0	1	0	0	2	0	1	34
Kentucky:											
Ashland.....	1	44	0	1	0	5	0	0	0	0	1
Lexington.....	0	11	0	1	2	0	0	2	0	0	18
Louisville.....	1	9	2	1	8	9	0	3	0	1	91
Tennessee:											
Memphis.....	7		5	0	5	8	0	7	2	1	101
Nashville.....	0		4	1	8	1	0	3	0	1	45
Alabama:											
Birmingham.....	3	31	1	3	4	3	0	3	1	6	60
Mobile.....	1	7	5	0	1	2	0	1	0	0	26
Montgomery.....	2	2		0		2	0		0	0	
Arkansas:											
Fort Smith.....	2			0		0	0		0	0	
Little Rock.....	0		3	0	6	0	0	3	0	0	14
Louisiana:											
New Orleans.....	13	13	13	0	14	3	0	10	1	3	140
Shreveport.....	0		0	0	15	1	0	2	0	0	37
Oklahoma:											
Tulsa.....	1			0		1	1		0	0	
Texas:											
Dallas.....	15	16	11	2	7	10	0	4	0	0	65
Fort Worth.....	3		3	2	5	8	1	3	0	0	47
Galveston.....	2		0	2	3	8	0	0	0	0	17
Houston.....	13		4	12	20	3	1	1	0	0	78
San Antonio.....	6	3	10	0	8	2	0	18	0	0	87
Montana:											
Billings.....	0	1	0	1	0	0	0	0	0	0	10
Great Falls.....	0		0	38	1	0	0	1	0	2	12
Helena.....	0	87	0	0	0	0	0	0	0	0	9
Missoula.....	0	155	0	0	4	0	0	0	0	0	13
Idaho:											
Boise.....	0		0	2	3	0	3	0	0	0	9
Colorado:											
Denver.....	6	99	6	6	13	12	0	3	0	2	90
Pueblo.....	0		2	0	5	1	0	1	0	1	21
New Mexico:											
Albuquerque.....	2	1	0	0	5	3	0	6	0	0	14
Arizona:											
Phoenix.....	0		1	0	2	2	0	1	0	0	
Utah:											
Salt Lake City.....	0		2	0	1	0	0	0	0	2	35
Nevada:											
Reno.....	0		0	0	1	0	0	0	0	0	5
Washington:											
Seattle.....	0			0		5	0		0	9	
Spokane.....	0			0		2	0		1	0	
Tacoma.....	0		5	0	8	9	0	0	0	2	33
Oregon:											
Portland.....	0	19	3	0	7	2	1	3	0	0	72
Salem.....	0	12		7		1	0		0	0	
California:											
Los Angeles.....	33	142	15	53	38	57	22	22	0	33	366
Sacramento.....	1	3	1	0	7	0	0	8	0	11	40
San Francisco.....	1	241	14	0	27	10	9	10	1	41	237

City reports for week ended January 14, 1933—Continued

State and city	Meningococcus meningitis		Polio-myelitis cases	State and city	Meningococcus meningitis		Polio-myelitis cases
	Cases	Deaths			Cases	Deaths	
Massachusetts:				Maryland:			
Boston.....	1	1	0	Baltimore.....	2	0	0
New York:				District of Columbia:			
Buffalo.....	2	0	0	Washington.....	1	1	0
New York.....	8	5	0	Kentucky:			
Rochester.....	0	1	0	Ashland.....	0	0	1
Pennsylvania:				Tennessee:			
Philadelphia.....	2	0	0	Nashville.....	2	2	0
Pittsburgh.....	1	1	0	Alabama:			
Indiana:				Birmingham.....	1	0	0
Indianapolis.....	4	0	0	Louisiana:			
Illinois:				New Orleans.....	2	0	0
Chicago.....	8	3	0	Idaho:			
Minnesota:				Boise.....	0	0	1
Duluth.....	1	0	0	California:			
Minneapolis.....	1	0	0	Los Angeles.....	0	0	1
Iowa:				San Francisco.....	2	1	0
Des Moines.....	3	0	0				
Sioux City.....	1	0	0				
Missouri:							
St. Joseph.....	1	0	0				
St. Louis.....	1	0	0				

Lethargic encephalitis.—Cases: Buffalo, 1; New York, 1; Newark, 1; Philadelphia, 1; Chicago, 1; Baltimore, 1; Nashville, 1.

Pellagra.—Cases: Washington, 1; Birmingham, 3; New Orleans, 1.

Typhus fever.—Cases: Montgomery, 1.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—Week ended January 7, 1933.—The Department of Pensions and National Health of Canada reports cases of certain communicable diseases for the week ended January 7, 1933, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Cerebrospinal meningitis	-----	-----	-----	2	-----	-----	-----	1	3
Chicken pox	21	-----	107	248	65	1	1	67	510
Diphtheria	-----	8	28	20	8	-----	3	1	68
Erysipelas	-----	-----	4	-----	2	-----	1	1	8
Influenza	15	-----	20	1,300	6	-----	-----	873	2,214
Measles	13	23	69	339	6	-----	-----	16	466
Mumps	-----	-----	-----	151	17	-----	-----	5	173
Pneumonia	6	-----	-----	16	-----	-----	-----	5	27
Polio myelitis	-----	-----	4	1	-----	-----	-----	-----	5
Scarlet fever	16	4	75	72	11	12	3	10	203
Smallpox	-----	-----	-----	3	-----	-----	-----	-----	3
Trachoma	-----	-----	-----	-----	-----	-----	-----	8	8
Tuberculosis	2	7	34	18	2	1	-----	9	73
Typhoid fever	-----	-----	6	7	1	-----	1	-----	15
Undulant fever	-----	-----	-----	5	-----	-----	-----	-----	5
Whooping cough	-----	-----	39	123	11	4	6	54	237

PUERTO RICO

Communicable diseases—Four weeks ended December 31, 1932.—During the four weeks ended December 31, 1932, cases of certain communicable diseases were reported in Puerto Rico as follows:

Disease	Cases	Disease	Cases
Bronchitis	10	Mumps	14
Chicken pox	7	Ophthalmia neonatorum	13
Colibacillosis	1	Pellagra	2
Diphtheria	42	Polio myelitis	6
Dysentery	1,623	Puerperal fever	4
Erysipelas	5	Syphilis	209
Filariasis	4	Tetanus	5
Impetigo contagiosa	1	Tetanus, infantile	4
Influenza	159	Trachoma	1
Leprosy	1	Tuberculosis	446
Malaria	6,664	Typhoid fever	9
Measles	190	Whooping cough	61

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

(NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the Public Health Reports for January 27, 1933, pp. 101-112. A similar cumulative table will appear in the Public Health Reports to be issued February 24, 1933, and thereafter, at least for the time being, in the issue published on the last Friday of each month.)

Cholera

Philippine Islands.—During the week ended January 21, 1933, cholera was reported in the Province of Samar, Philippine Islands, as follows: Catbalogan, 64 cases, 43 deaths; Gandara, 26 cases, 13 deaths; Santa Rita, 17 cases, 9 deaths; Tarangnan, 2 cases, 2 deaths; Villareal, 7 cases, 6 deaths; Wright, 2 cases, 2 deaths; Zumarraga, 3 cases.

Plague

Hawaii Territory.—A plague-infected rat was reported January 10, 1933, at Kukaiau, Hamakua District, Island of Hawaii. The place is about 3 miles from Paauilo, where plague-infected rats were found in December, 1932, and is about 175 miles southeast of Honolulu, Oahu Island.

Smallpox

China—Canton.—During the week ended January 14, 1933, 189 cases of smallpox with 4 deaths were reported in Canton, China.

Egypt.—During the week ended January 14, 1933, 237 cases of smallpox with 46 deaths were reported in Alexandria, Egypt.

During the two weeks ended January 7, 1933, 7 cases of smallpox with 1 death were reported in Cairo, Egypt.