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NOTE ON EXPERIMENTAL INFECTION OF ANOPHELES PUNCTIPENNIS WITH QUARTAN MALARIA

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During the course of experiments to perfect a method of providing malarial infection for the inoculation of paretics, we were continually faced with the problem of infecting Negroes. They proved almost completely refractory to benign tertian, but developed severe attacks of malaria after direct blood inoculation with quartan malaria. For this reason the ease or difficulty of infecting *Anopheles* with *Plasmodium malariae* becomes a matter of importance.

In May of this year (1932), a good quartan carrier was found at the United States marine hospital, New Orleans, La., and an attempt was made to infect mosquitoes. The carrier, a chronic case suffering from an acute relapse, had many gametocytes of both sexes at the rate of 6 per 100 leucocytes. All mosquitoes were laboratory bred and had been kept for two weeks at 66° F. and 90 per cent relative humidity. Ten to fifteen mosquitoes were kept in each cage; the cages rested on moist pads. All mosquitoes were fed on raisins at all feedings except the infective feeding on the patient. The mosquitoes were transported in a portable ice box 747 miles (24-hour trip), fed on the carrier, and retransported the same distance back to the laboratory. There they were kept at 72° F. and 84 per cent relative humidity.

In all, 78 mosquitoes were fed on the quartan carrier, 72 being *Anopheles punctipennis* and 6 *Anopheles crucians*.

The mosquitoes dying were dissected; the first death occurred 7 days after feeding. Dissections of 1 or more mosquitoes a day were continued at intervals of a few days each, until 40 days after the infective feeding, when the last 6 mosquitoes were sacrificed for dissection.

RESULTS

On the fifteenth day the first positive quartan infection was found, the infected mosquito showing a heavy pigmented form on the gut wall, about 7 microns in diameter, pigment rough and granular. The mosquito's salivary glands were negative. On the twenty-first day another positive was found. This mosquito had one matured oocyst measuring 59.4 microns with comparatively heavy walls, and another, 44 by 50.6 microns, both filled with sporozoites. Absence of pigment

was noted. The salivary glands were negative. The third and last positive was picked up on the twenty-fifth day after feeding. The gut was negative, but scanty sporozoites were found in the salivary glands and about 200 were counted. They measured uniformly 13.2 microns. These sporozoites were counted in the glands and dissecting fluid. All of these infections were in *Anopheles punctipennis*.

After the first lot of mosquitoes had been fed on the carrier he was given quinine, commencing on the afternoon of May 14. Between 8 and 11.30 o'clock the next morning (May 15) 29 mosquitoes, (25 *punctipennis* and 4 *crucians*,) were fed on the carrier. Out of this lot one positive was found in a mosquito dying four days after feeding. In this was seen a scanty number of pigmented forms, about one-half the size of a red blood cell.

During the course of this study nine paretics were bitten by mosquitoes which had previously fed upon a quartan carrier. Of these 9, 1 was bitten by 30 mosquitoes, 3 were bitten by 18 to 20 mosquitoes, and 5 were bitten by 5 or 6 mosquitoes each, 80 mosquitoes in all being used. Subsequent to being fed on the paretics these mosquitoes were all dissected and searched for signs of infection with quartan malaria, but, unfortunately, none of them was among the infected group.

Two other mosquito infection tests have been made. In the first test the patient was inoculated with blood from a quartan carrier, and 39 days later showed a few plasmodia in the circulating blood. Twelve days later there were, on the average, 22 gametocytes per 100 leucocytes. At this time 39 laboratory-bred mosquitoes (23 *quadrimaculatus* and 16 *punctipennis*) were fed upon the carrier. Subsequent dissections revealed no signs of infection.

In the second test a patient was inoculated intravenously with 5 c c of defibrinated blood from an active quartan case. Twenty-six days later the patient had the first chill, 2 days after which a few plasmodia were found in the peripheral circulation, and 6 days later gametocytes averaged 35 per 100 leucocytes. A blood slide kept in a moist chamber before staining showed free gametes and many gametocytes. On this day mosquito feedings were begun and from 2 to 35 mosquitoes were fed daily for two weeks, using a total of 86 mosquitoes (*punctipennis*, 69; *quadrimaculatus*, 16; *crucians*, 1).

Subsequently, the mosquito dissections were made at intervals of a few days, and only two positives were found, these being found on the fifth and sixth days, respectively, after feeding. Both were *Anopheles punctipennis*, laboratory bred. Both mosquitoes showed pigmented oocysts; in one mosquito, 1 oocyst 15.4 microns in diameter, and in the other, 2 oocysts of the same size, and one only 11 microns in diameter.

Although infection is proved only for one species, *punctipennis*, the number was too small to prove the other species negative. It is cer-

tain that, under the conditions of these tests, infection is not easy in any of our three major species of *Anopheles*, only 3 per cent of over 200 being infected with *Plasmodium malariae*.

TABULAR SUMMARY
Infection experiments

Gametocytes	Number of mosquitoes fed	Number of mosquitoes infected
6 per 100 leucocytes.....	49	3
6 per 100 leucocytes.....	29	1
35 per 100 leucocytes.....	86	2
22 per 100 leucocytes.....	39	0
Total.....	203	6

¹ Nearly 3 per cent.

Mosquito species

<i>A. punctipennis</i>		<i>A. quadrimaculatus</i>		<i>A. crucians</i>	
Number fed	Number infected with <i>P. malariae</i>	Number fed	Number infected with <i>P. malariae</i>	Number fed	Number infected with <i>P. malariae</i>
157	6	39	0	7	0

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DEATH RATES IN A LARGE GROUP OF INSURED PERSONS

Rates for Principal Causes of Death for June and First Half of 1932

The accompanying tables are taken from the Statistical Bulletin for July, 1932, issued by the Metropolitan Life Insurance Co. They present the mortality record of many millions of insured persons of the industrial insurance department of the company for June, 1932, as compared with that for the preceding month and for June, 1931, and they also give the cumulative death rates for the first six months, the total rates in the first table for the years 1931 and 1932, and the rates by white and colored policyholders in the second, for the three years 1930, 1931, and 1932.

The annual general death rate for this group during the past few years has averaged about 72 per cent of the death rate for the registration area of the United States.

The Bulletin states:

The health record for June among the industrial policyholders was less favorable than for the corresponding month of last year and two years ago. The death rate was 8.8 per thousand, as compared with 8.5 for May, 1932, and 8.4 for June, 1931. It must not be inferred, however, that deaths occurred in June at an above-average rate over a period of years. The fact is that the June, 1932, rate was merely the highest among those for a short series of remarkably low June figures, beginning with 1929. Prior to 1929 the mortality rate for these policyholders was higher every June than in 1932.

Death rates (annual basis) per 100,000 for principal causes of death

[Industrial department, Metropolitan Life Insurance Co.]

Cause of death	Annual rate per 100,000 lives exposed ¹				
	June, 1932	May, 1932	June, 1931	Cumulative, January to June	
				1932	1931
Total, all causes	884.2	848.0	836.9	919.9	954.4
Typhoid fever	1.9	1.0	1.9	1.2	1.3
Measles	2.2	3.2	5.5	2.8	4.0
Scarlet fever	2.9	4.3	3.7	3.9	4.0
Whooping cough	3.2	3.0	3.3	3.7	3.7
Diphtheria	2.4	3.0	3.3	4.5	4.7
Induenza	9.8	18.7	8.9	28.0	34.9
Tuberculosis (all forms)	79.1	71.4	78.0	75.3	81.0
Tuberculosis of respiratory system	68.6	63.4	68.1	69.4	72.4
Cancer	96.3	86.5	81.4	91.2	83.3
Diabetes mellitus	22.4	25.6	19.5	24.4	22.7
Cerebral hemorrhage	55.6	62.3	59.2	67.0	65.6
Organic diseases of heart	160.2	157.4	139.6	166.7	163.0
Pneumonia (all forms)	55.0	69.6	53.3	55.1	104.8
Other respiratory diseases	9.7	9.3	8.9	10.7	12.3
Diarrhea and enteritis	9.6	7.4	10.8	8.3	10.3
Bright's disease (chronic nephritis)	69.6	65.5	66.0	72.6	71.9
Puerperal state	9.9	9.3	11.4	11.0	12.0
Suicides	12.9	11.4	10.8	11.2	9.9
Homicides	6.6	5.3	6.2	6.3	6.7
Other external causes (excluding suicides and homicides)	63.0	47.7	65.4	51.9	55.1
Traumatism by automobiles	20.2	16.2	23.0	18.0	19.3
All other causes	200.9	188.6	199.7	196.1	202.4

¹ All figures in this table include insured infants under 1 year of age. The rates for 1932 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

FIRST HALF OF 1932

The cumulative death rate for these industrial policyholders for the first half of 1932 is 9.2 per 1,000, as compared with the previous low figure of 9.4 for the first six months of 1930, and with 9.5 for the corresponding period of 1931.

The death rates for diphtheria, tuberculosis, pneumonia, diarrheal diseases, and puerperal conditions are the lowest recorded for this group of persons for any previous corresponding period. Judging from past experience, the prediction is made by the statisticians of the company that the tuberculosis death rate for these insured persons for the year 1932 will probably reach approximately 70 per 100,000, which would be a reduction of almost one-half in the rate since 1920, when it was 137.9 per 100,000.

It is stated that the greatest single factor in bringing the gross death rate for the first half-year period to a new minimum was an 18.8 per

cent drop in mortality from pneumonia as compared with 1931, a decrease associated with a lower death rate for influenza.

For the 6-month period there were slight rises in the death rates for heart diseases, cerebral hemorrhage, and chronic nephritis, as compared with the first half of last year, due almost entirely, it is said, to increases in the last month of the period.

The cancer death rate shows a material increase this year, following the rise during 1931. This increase has occurred during a period when health conditions generally have been extremely favorable.

The diabetes death rate also increased during the first half of 1932, following a sharp rise in 1931. The death rate for this cause has shown a continuous increase in this group since 1924.

The suicide rate increased from 9.9 per 100,000 in 1931 to 11.2 in 1932, while automobile fatalities, for the first time in the records of the company, showed a decrease from the rate for the corresponding 6-month period of the preceding year.

Death rates (annual basis) per 100,000 for principal causes of death, by white and colored policyholders, first six months of the years 1930, 1931, and 1932

[Industrial department, Metropolitan Life Insurance Co.]

Cause of death	Death rates per 100,000 persons exposed ¹					
	White			Colored		
	January-June, 1932	January-June, 1931	January-June, 1930	January-June, 1932	January-June, 1931	January-June, 1930
All causes of death.....	845.6	861.3	843.1	1,497.5	1,677.6	1,618.1
Typhoid fever.....	1.1	1.1	1.1	2.3	2.6	2.7
Measles.....	3.0	5.2	5.0	1.3	2.8	2.8
Scarlet fever.....	4.2	4.3	3.7	1.5	1.8	1.1
Whooping cough.....	3.6	3.7	4.6	4.3	3.8	4.8
Diphtheria.....	4.8	5.0	7.7	2.3	2.4	3.5
Influenza.....	22.6	28.1	17.1	52.6	81.3	53.1
Meningococcus meningitis.....	1.4	2.5	3.7	1.9	9.1	12.5
Tuberculosis (all forms).....	59.3	62.3	67.5	199.6	234.1	227.1
Tuberculosis of respiratory system.....	52.1	55.0	58.3	177.3	207.7	198.2
Tuberculosis of the meninges, etc.....	3.0	3.1	4.1	5.0	5.9	7.0
Other forms of tuberculosis.....	4.2	4.2	5.1	17.3	20.6	21.9
Cancer.....	90.3	82.6	76.9	98.2	88.8	77.8
Diabetes.....	24.0	22.2	19.4	27.1	26.5	22.6
Alcoholism.....	2.7	3.0	2.9	3.7	3.8	5.2
Cerebral hemorrhage—apoplexy.....	58.8	56.5	54.2	130.4	135.8	128.6
Organic diseases of the heart.....	155.6	148.8	142.7	253.3	273.9	274.1
Total respiratory diseases.....	87.5	105.5	104.5	160.4	207.1	196.8
Bronchitis.....	2.8	3.6	3.9	4.5	4.8	5.2
Broncho-pneumonia.....	30.9	29.6	38.4	40.1	56.0	55.2
Pneumonia (lobar and undefined).....	46.6	54.4	53.9	104.2	133.1	124.7
Other diseases of respiratory system.....	7.2	8.0	8.2	11.6	13.1	11.7
Diarrhea and enteritis.....	8.5	10.0	12.5	7.4	12.1	13.7
Under 2 years.....	6.5	7.8	9.7	3.0	5.0	7.4
2 years and over.....	2.0	2.1	2.7	4.4	7.1	6.2
Acute nephritis.....	3.2	3.8	3.4	9.9	13.1	15.3
Chronic nephritis.....	64.1	62.7	62.7	138.1	143.3	140.7
Total puerperal state.....	10.3	11.1	12.3	16.2	18.3	19.2
Total external causes.....	66.4	67.6	69.3	92.8	102.6	109.1
Suicides.....	11.6	10.4	10.1	7.9	6.1	7.2
Homicides.....	3.2	3.7	3.2	30.3	29.8	28.8
Accidental and unspecified violence.....	51.6	53.6	56.0	54.6	66.7	73.1
Automobile accidents.....	17.9	18.9	18.4	18.4	22.2	18.2
All other and ill-defined causes of death.....	174.1	175.4	171.8	294.2	314.4	307.5

¹ All figures in this table include insured infants under 1 year of age. The rates for 1932 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

COMPARATIVE CURRENT STATE MORTALITY STATISTICS ¹

The present report on mortality from certain causes covers, for a majority of the States included, the months January to March, 1932. For some of the States the data for all of these months are not available. The present plan is to publish about three current reports during the year, covering periods of approximately 3 months, 6 months, and 9 months, respectively, with a more complete annual summary of death rates for the calendar year at as early a date as possible in the following year. It is impossible to present data for all of the States on this basis of 3, 6, and 9 months, but each State is included in each report for as many months as possible with rates in each case for the "year to date" and comparative rates for the same period in preceding years. This arrangement makes it possible to compare the mortality of the current calendar year with the mortality of preceding years in the same State.

The rates are computed from current and generally preliminary reports furnished by State departments of health. Because of (a) some lack of uniformity in the method of classifying deaths according to cause, (b) some delayed death certificates, and (c) various other reasons, these preliminary rates can not be expected to agree in all instances with final rates published by the Bureau of the Census, which are based on a complete review and retabulation of the individual death certificates from each State. The preliminary rates given in the accompanying table are intended to serve only as a current index of mortality until final figures are issued by the Bureau of the Census.

Populations used in computing rates are estimates as of July 1 of each year, based on the 1920 and 1930 censuses.

¹ From the Office of Statistical Investigations, United States Public Health Service.

Death rates from certain causes in stated periods of 1932, with comparative data for corresponding periods in preceding years—Continued

State	Period	Year	Rates per 100,000 population (annual basis)																							
			Rate per 1,000 live births	Infant mortality													Diseases of the nervous system (70-86)									
				All except malformations and early infancy	Maternal mortality (143-150)	Typhoid fever (1)	Measles (7)	Scarlet fever (8)	Whooping cough (9)	Diphtheria (10)	Influenza (11)	Poliomyelitis (22)	Lethargic encephalitis (23)	Meningococcus meningitis (24)	Tuberculosis, all forms (31-37)	Cancer, all forms (43-49)	Diabetes (57)	Diseases of the nervous system (70-86)	Cerebral hemorrhage, apoplexy (74)	Diseases of the circulatory system (87-96)	Diseases of the heart (87-90)	Diseases of the respiratory system (97-107)	Pneumonia, all forms (100-101)	Diseases of the digestive system (108-127)	Diarrhea and enteritis under 2 years (113)	Nephritis (128, 129)
Georgia	Jan. to Mar.	1932	10.5	78	9.1	7.9	1.0	3.0	4.7	45.7	8	3	1.7	62	48.4	12.2	116.5	81.2	135.1	124.2	123.7	115.1	55.5	8.0	110.3	
		1931	11.4	83	9.1	7.9	1.0	3.0	4.7	45.7	8	3	3.2	72	47.1	10.0	118.2	148.4	136.7	144.1	135.2	140.3	4.2	108.4		
		1930	11.7	86	10.0	8.2	1.0	7.5	4.8	65.9	1.5	3	4.9	76	45.8	11.7	128.3	151.9	138.7	147.3	133.6	145.5	5.0	139.9		
		1929	13.1	91	9.2	8.2	2.0	4.9	4.8	27.0	0	0	0	70.7	43.6	11.7	128.3	81.2	135.1	124.2	123.7	115.1	55.5	6.0	137.4	
Hawaii	do	1932	10.5	92	9.1	7.9	1.1	3.0	4.3	6.5	0	0	4.3	104.9	72.5	13.0	0	48.7	85.3	209.2	175.1	124.8	112.2	45.8	67.1	67.1
		1931	11.5	43	9.1	7.9	1.1	3.0	4.3	6.5	0	0	10.2	104.2	52.1	12.5	0	59.3	131.3	131.3	131.3	131.3	131.3	131.3	60.8	76.2
		1930	12.1	100	9.1	7.9	1.1	3.0	4.3	6.5	0	0	33.7	96.5	68.1	9.3	0	48.7	85.3	209.2	175.1	124.8	112.2	45.8	67.1	67.1
		1929	14.2	116	9.1	7.9	1.1	3.0	4.3	6.5	0	0	0	96.5	68.1	9.3	0	59.3	131.3	131.3	131.3	131.3	131.3	131.3	60.8	76.2
Idaho	do	1932	9.7	75	48	8.6	2.7	0	0	2.6	28.7	0	0	1.8	27	36.8	13.5	114.0	85.3	209.2	175.1	124.8	112.2	45.8	3.6	51.2
		1931	10.6	76	42	4.6	2.7	0	0	2.6	28.7	0	0	1.8	27	36.8	13.5	114.0	85.3	209.2	175.1	124.8	112.2	45.8	3.6	51.2
		1930	9.8	59	30	5.5	1.8	3.6	10.9	2.6	9.1	0	0	12.7	34.5	68.2	4.5	132.5	104.3	198.7	180.0	138.8	127.9	66.2	2.7	46.3
		1929	11.6	59	27	5.8	1.1	5.0	5.1	4.1	40.3	7	7	2.9	58.1	115.0	31.1	106.0	79.1	270.5	250.5	120.1	100.3	69.4	4.2	119.8
Illinois	do	1932	11.6	59	27	5.8	1.1	5.0	5.1	4.1	40.3	7	7	2.9	58.1	115.0	31.1	106.0	79.1	270.5	250.5	120.1	100.3	69.4	4.2	119.8
		1931	10.5	59	27	5.8	1.1	5.0	5.1	4.1	40.3	7	7	2.9	58.1	115.0	31.1	106.0	79.1	270.5	250.5	120.1	100.3	69.4	4.2	119.8
		1930	10.5	59	27	5.8	1.1	5.0	5.1	4.1	40.3	7	7	2.9	58.1	115.0	31.1	106.0	79.1	270.5	250.5	120.1	100.3	69.4	4.2	119.8
		1929	12.9	63	27	5.8	1.1	5.0	5.1	4.1	40.3	7	7	2.9	58.1	115.0	31.1	106.0	79.1	270.5	250.5	120.1	100.3	69.4	4.2	119.8
Indiana	do	1932	12.6	58	29	5.7	1.0	6.2	9.2	6.4	67.6	0	0	8.0	82.1	106.9	18.6	135.0	125.8	193.7	193.7	135.1	135.1	69.4	4.4	72.4
		1931	13.2	72	41	7.0	1.4	7.8	9.2	4.8	80.3	2	7	8.2	99.0	103.9	17.1	135.0	125.8	193.7	193.7	135.1	135.1	69.4	4.4	72.4
		1930	12.7	59	28	6.5	1.3	1.8	3.3	4.7	63.3	3	8	17.3	72.6	104.1	19.1	135.0	125.8	193.7	193.7	135.1	135.1	69.4	4.4	72.4
		1929	15.0	83	63	7.9	1.8	6.1	6.5	5.1	179.6	4	8	17.3	72.6	104.1	19.1	135.0	125.8	193.7	193.7	135.1	135.1	69.4	4.4	72.4
Iowa	do	1932	11.3	55	29	3.6	0.8	3.2	2.3	2.3	61.3	1.9	1.6	1.3	27.3	112.1	18.1	155.3	120.5	267.6	216.3	146.1	117.8	69.9	1.9	49.8
		1931	11.3	69	36	6.1	1.7	2.2	2.6	2.6	59.4	2.2	2.3	4.7	31.9	115.6	26.8	130.3	110.1	266.9	232.5	130.8	119.5	64.6	3.8	39.7
		1930	11.4	68	30	7.5	1.1	11.5	4.9	5.4	48.4	2	2.3	4.7	38.3	107.9	26.5	146.3	98.0	272.1	194.0	137.5	125.0	68.3	3.3	44.0
		1929	12.4	68	29	7.7	1.0	1.2	3.1	4.9	156.7	1.2	2.1	3.0	35.7	107.3	20.9	148.8	104.9	285.6	252.6	124.6	108.5	60.7	3.3	56.1
Kansas	do	1932	10.7	51	20	7.5	1.1	1.3	2.3	1.5	69.3	2	1.1	2.1	32.5	105.9	24.9	129.1	108.4	214.3	191.7	158.0	75.9	61.4	3.6	106.5
		1931	10.8	71	40	11.7	1.6	4.4	1.7	2.1	67.6	1.1	1.6	4.1	37.9	86.7	26.5	132.5	102.3	209.7	132.5	117.1	106.4	64.0	3.6	106.5
		1930	11.3	60	30	9.2	1.1	3.2	3.4	4.5	52.2	0.4	0.4	4.3	40.9	90.7	24.3	138.5	105.1	225.8	198.8	106.0	93.3	63.8	5.4	103.6
		1929	12.4	81	49	7.1	1.5	5.6	6.3	3.2	140.4	0.4	0.4	4.1	53.7	92.3	24.5	159.0	128.3	211.5	185.2	124.4	108.3	69.9	8.4	101.0

Louisiana	1932	10.1	66	39	8.7	10.0	6.5	38.5	2.6	7.1	78.0	48.1	11.9	76.3	56.7	196.7	182.2	101.5	91.1	53.7	10.6	98.7
	1931	12.1	73	47	9.9	6.8	5.1	105.4	1.8	4.6	60.8	60.9	16.1	88.9	63.1	228.6	212.1	145.7	133.8	65.0	12.5	114.5
	1930	12.7	90	64	11.4	5.4	5.6	78.3	1.0	1.0	64.5	65.9	16.6	93.9	63.0	240.2	224.8	169.6	144.3	70.0	13.1	119.6
	1929	13.9	82	57	10.1	4.3	4.7	74.7	1.6	4.4	98.2	69.0	16.3	97.3	61.8	240.0	221.8	154.2	140.7	71.8	18.6	112.3
Maryland	1932	14.0	67	36	3.7	1.9	5.2	33.2	2.7	1.4	92.6	119.0	30.5	151.7	132.0	318.3	290.4	177.9	157.5	72.1	12.5	152.1
	1931	15.8	86	49	6.4	1.0	5.2	60.5	1.5	2.0	102.9	119.6	27.2	163.7	120.8	348.0	319.3	260.2	241.9	72.0	12.5	152.4
	1930	14.1	69	38	4.1	2.0	4.2	18.0	(1)	1.0	110.4	106.5	24.7	157.3	119.5	307.9	273.6	200.4	178.9	68.5	9.8	108.2
Michigan	1932	10.8	60	23	6.5	6.6	2.2	43.3	5.5	2.0	50.7	92.7	25.3	121.6	92.2	266.2	240.8	107.2	92.0	66.0	4.6	64.7
	1931	11.0	69	32	6.9	7.7	4.3	37.1	3.8	3.8	58.6	90.2	21.0	125.7	94.5	255.7	228.6	119.6	103.1	69.4	6.8	65.9
	1930	11.6	76	36	7.2	6.6	4.3	20.3	8.7	13.9	61.3	88.4	19.4	131.4	100.6	251.4	221.9	134.7	114.8	73.8	8.2	67.0
	1929	13.9	85	47	7.1	5.9	6.2	116.3	3.8	1.2	72.3	94.4	31.5	151.2	107.6	289.5	264.3	180.0	167.3	83.3	12.7	74.9
Minnesota	1932	10.2	47	16	3.9	2.2	1.7	51.1	2.2	6.1	40.0	117.6	22.1	107.6	84.8	238.2	215.4	100.2	90.9	59.4	1.7	61.4
	1931	10.7	61	26	5.0	3.3	2.2	49.1	1.5	1.1	40.1	121.7	24.5	108.5	83.2	222.6	197.4	129.3	119.9	70.2	4.1	56.8
	1930	10.4	47	20	5.2	7.9	2.8	27.9	2.2	1.7	50.5	116.6	19.7	109.3	87.4	202.7	187.7	103.8	102.7	65.9	6.0	56.1
	1929	11.9	65	31	5.5	2.4	7.1	119.8	2.3	2.9	58.0	112.9	24.9	116.6	86.4	231.8	186.2	118.2	110.1	65.4	4.1	67.8
Mississippi	1932	9.4	(1)	(1)	(1)	(1)	2.9	42.4	3.8	(1)	74.2	45.9	6.8	(1)	72.6	(1)	87.3	(1)	76.9	(1)	4.9	76.5
	1931	11.4	(1)	(1)	3.0	2.2	2.2	66.3	2.2	3.0	79.6	47.6	9.4	(1)	74.8	(1)	111.6	(1)	116.2	(1)	5.0	92.7
	1930	11.9	(1)	(1)	3.8	2.2	7.3	65.1	1.8	16.7	80.8	43.3	11.3	(1)	78.0	(1)	108.5	(1)	113.4	(1)	5.8	93.9
	1929	15.1	(1)	(1)	4.9	10.8	9.8	362.8	1.6	4.4	75.9	41.5	8.6	(1)	68.6	(1)	95.1	(1)	123.4	(1)	4.3	97.3
Nebraska	1932	10.1	39	14	4.9	3.1	(1)	4.8	2.2	1.3	64.2	4.9	1.3	26.2	96.9	28.8	122.7	101.7	219.6	106.1	4.8	85.2
	1931	10.8	61	33	6.4	4.4	(1)	4.5	1.3	9.9	4.9	106.1	25.4	139.5	114.5	212.2	183.2	119.4	109.2	65.5	5.3	75.3
	1930	10.3	48	21	4.8	1.3	9.9	35.8	1.4	9.9	5.4	110.7	26.4	120.1	96.8	212.9	190.1	115.7	104.5	72.1	5.4	51.1
	1929	12.4	80	48	7.6	2.3	9.7	171.2	(1)	1.4	35.6	83.4	22.5	130.7	100.9	222.6	200.5	138.3	120.8	78.9	7.2	64.0
New Jersey	1932	10.9	50	(1)	5.7	5.7	5.3	27.3	3.8	1.8	62.6	100.3	27.5	109.0	84.0	291.0	259.4	120.4	99.3	59.5	4.9	103.8
	1931	12.4	72	(1)	5.9	7.7	4.3	36.3	3.1	2.3	71.7	110.7	37.9	118.3	88.4	310.4	290.7	164.1	149.4	67.0	8.1	107.1
	1930	11.7	70	(1)	5.8	6.6	3.5	24.2	3.2	1.8	69.4	100.2	26.1	116.4	86.3	285.5	260.2	142.5	128.9	69.1	5.5	107.0
	1929	14.3	78	(1)	5.6	6.1	1.6	1.3	8.5	14.1	80.6	106.7	26.9	132.2	97.7	334.7	309.5	237.2	215.8	71.4	9.2	117.3
New York	1932	12.7	57	25	6.6	6.6	2.0	4.4	2.3	3.3	23.5	125.5	34.3	81.0	55.4	391.5	331.5	163.0	150.2	68.1	5.6	85.0
	1931	13.7	74	38	7.1	3.3	1.2	2.4	3.9	2.8	38.8	71.6	37.5	84.5	58.4	399.5	340.2	212.2	196.8	69.1	7.3	82.9
	1930	12.7	67	32	5.6	6.8	1.1	1.5	2.4	4.2	33.6	122.0	30.4	84.5	53.3	379.3	311.7	159.9	147.1	70.5	9.1	88.3
	1929	15.7	79	40	6.0	6.6	2.4	2.7	4.5	7.3	87.1	122.8	32.0	105.7	70.0	441.1	369.5	235.5	242.3	73.1	10.2	89.4
North Carolina	1932	9.5	74	(1)	8.1	3.8	7.1	24.7	1.0	9.9	66.0	44.1	10.8	(1)	(1)	(1)	(1)	(1)	123.1	(1)	8.2	(1)
	1931	11.5	83	(1)	8.3	1.5	2.1	2.7	4.1	7.2	86.0	41.1	73.5	(1)	(1)	(1)	(1)	(1)	158.1	(1)	2.5	(1)
	1930	12.0	83	(1)	7.0	8.1	1.4	9.2	6.7	50.3	4.6	9.9	84.5	(1)	(1)	(1)	(1)	(1)	156.5	(1)	6.2	(1)
	1929	13.9	(1)	(1)	2.1	1.3	1.7	10.0	24.4	3.8	85.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	184.0	(1)	7.7	(1)
Ohio	1932	12.4	60	25	5.8	1.1	2.8	4.5	7.2	5.5	58.2	112.8	28.8	143.4	120.8	303.7	283.0	124.8	114.7	55.2	3.5	85.0
	1931	12.0	74	27	7.1	1.1	2.5	4.6	2.1	2.4	68.7	106.9	32.3	146.7	120.5	243.4	237.7	157.4	143.7	63.3	5.9	85.9
	1930	12.4	62	27	7.0	1.8	4.9	3.3	3.5	4.3	33.1	107.0	24.8	131.8	116.1	260.2	238.7	130.5	117.9	57.8	6.6	86.2
	1929	15.7	(1)	(1)	1.2	4.7	3.1	11.2	4.5	194.7	105.5	105.5	(1)	(1)	130.4	(1)	271.8	(1)	174.9	(1)	7.1	101.0

1 No deaths.

2 Not available.

Death rates from certain causes in stated periods of 1932, with comparative data for corresponding periods in preceding years—Continued

State	Period	Year	Rates per 100,000 population (annual basis)																									
			Rate per 1,000 population, all causes (annual basis)	Rate per 1,000 live births												Rate per 100,000 population (annual basis)												
				Infant mortality	All except malformations and early infancy	Maternal mortality (143-150)	Typhoid fever (1)	Measles (7)	Scarlet fever (8)	Whooping cough (9)	Diphtheria (10)	Influenza (11)	Poliomyelitis (22)	Lethargic encephalitis (23)	Meningococcus meningitis (24)	Tuberculosis, all forms (31-37)	Cancer, all forms (43-49)	Diabetes (57)	Diseases of the nervous system (70-80)	Cerebral hemorrhage, apoplexy (74)	Diseases of the circulatory system (87-96)	Diseases of the heart (87-90)	Diseases of the respiratory system (97-107)	Pneumonia, all forms (100-101)	Diseases of the digestive system (108-127)	Diarrhea and enteritis under 2 years (113)	Nephritis (128, 129)	
Pennsylvania	Jan. to Feb.	1932	12.3	61	31	6.7	1.5	4.7	3.8	5.5	6.3	52.6	.4	.8	1.8	57.3	101.1	28.8	122.9	96.0	308.0	269.1	138.1	122.4	61.3	7.5	106.8	
		1931	13.3	87	47	6.2	.9	6.7	3.1	2.4	4.7	67.9	.2	1.3	2.7	61.3	94.4	27.8	123.2	94.9	308.0	274.2	188.5	168.3	66.7	12.2	103.4	
		1930	12.8	81	51	6.1	.9	3.3	3.1	2.5	7.1	34.5	.3	.8	2.7	66.3	96.4	24.0	126.3	94.2	296.3	265.1	167.8	149.9	70.5	12.8	113.3	
		1929	16.0	98	60	7.2	1.4	7.2	3.8	9.0	9.2	177.9	.9	1.4	2.6	74.5	104.6	27.7	144.8	104.7	326.7	296.8	230.4	204.6	79.3	15.3	128.4	
South Carolina	do	1932	(3)	(3)	(3)	(3)	6.7	1.8	2.7	7.4	3.7	61.6	1.1	1.8	1.8	57.9	34.7	9.2	(3)	(3)	240.0	(3)	(3)	133.2	(3)	(3)	(3)	115.1
		1931	(3)	(3)	(3)	(3)	2.6	3.9	.7	1.9	3.7	153.3	.7	2.3	2.1	68.5	40.2	9.1	(3)	(3)	270.4	(3)	(3)	163.1	(3)	(3)	(3)	117.8
		1930	(3)	(3)	(3)	(3)	3.4	3.6	.2	5.5	6.3	74.6	.9	3.3	3.3	77.7	34.6	8.0	(3)	(3)	313.7	(3)	(3)	152.5	(3)	(3)	(3)	106.4
		1929	(3)	(3)	(3)	(3)	9.4	(3)	.5	7.0	9.6	236.4	.7	2.8	2.9	74.6	37.3	9.6	(3)	(3)	303.5	(3)	(3)	142.4	(3)	(3)	(3)	92.4
Tennessee	do	1932	10.8	72	46	7.5	3.4	3.4	1.1	6.2	3.9	60.2	.2	.9	2.9	91.5	51.3	11.7	88.2	63.6	115.2	102.2	122.3	113.4	51.8	4.4	64.8	
		1931	11.2	87	61	8.7	2.4	6.4	2.4	3.2	3.4	84.3	.6	.9	2.9	105.7	52.5	11.6	97.0	60.3	134.6	121.1	164.9	152.6	50.9	4.0	63.5	
		1930	11.6	76	49	9.2	3.3	9.4	1.6	5.6	4.8	65.9	.9	.8	16.6	119.6	49.5	10.4	103.4	61.7	134.8	123.1	147.2	134.3	57.7	3.9	79.1	
		1929	15.3	108	78	9.4	2.3	3.3	3.0	7.0	5.5	341.6	.8	.3	2.0	137.1	53.6	11.1	105.7	57.5	155.4	144.1	177.5	162.4	55.1	3.2	71.4	
Virginia	do	1932	11.7	72	36	9.4	3.5	7.1	1.6	19.1	8.5	49.5	.7	.8	1.3	95.5	68.5	15.9	119.1	94.5	203.2	194.7	118.5	105.6	49.1	5.4	98.6	
		1931	14.2	94	(3)	8.5	5.0	2.3	3.7	4.8	137.4	.3	.5	3.5	97.7	65.1	18.6	148.2	119.4	249.6	231.1	176.6	160.3	50.9	6.5	115.0		
		1930	12.8	76	(3)	5.8	4.0	2.2	13.7	7.2	58.4	.4	.3	4.5	95.8	64.8	17.1	135.6	104.0	228.1	205.8	151.7	133.5	57.6	6.2	103.7		
		1929	15.9	101	(3)	1.5	2.5	1.5	12.3	7.4	314.0	.7	1.5	1.9	102.1	64.8	63.4	150.4	107.3	242.0	219.8	141.4	126.8	49.6	5.2	114.5		
West Virginia	do	1932	10.2	(3)	(3)	5.4	5.1	16.3	3.4	15.7	11.9	65.4	.4	.4	1.6	57.3	58.9	15.0	113.7	82.8	128.0	115.5	125.1	113.9	51.3	7.8	71.6	
		1931	10.6	(3)	(3)	5.0	6.0	2.5	2.5	6.2	4.8	88.1	.9	.4	1.5	57.4	55.8	13.3	91.8	65.9	149.9	121.6	174.9	163.2	51.9	7.1	64.6	
		1930	10.1	(3)	(3)	6.1	5.6	4.7	5.6	47.5	5.6	47.5	.7	.7	1.2	74.3	51.7	12.6	89.5	59.6	160.6	125.3	132.3	121.8	57.5	13.1	59.4	
		1929	13.9	(3)	(3)	6.7	8.5	5.0	1.9	15.9	4.5	306.6	.7	1.2	1.7	76.4	59.8	11.2	96.3	55.3	192.4	123.4	183.7	148.5	56.7	13.6	61.5	
Wisconsin	do	1932	10.6	58	22	4.5	.3	.9	2.8	3.1	2.7	46.2	.8	1.2	1.1	49.4	112.0	26.1	(3)	(3)	93.4	234.0	(3)	97.7	(3)	5.2	72.0	
		1931	11.4	67	(3)	5.2	.4	1.5	2.3	2.0	2.7	40.9	.3	1.1	2.0	51.9	116.3	(3)	(3)	(3)	(3)	(3)	119.6	(3)	7.1	60.0		
		1930	11.0	68	(3)	5.2	.3	5.8	3.4	3.0	3.0	27.3	.3	1.1	2.0	52.2	117.1	(3)	(3)	(3)	(3)	(3)	107.3	(3)	6.2	71.1		
		1929	12.7	78	(3)	1.3	2.2	3.5	3.1	2.6	130.8	.1	1.5	7.7	62.8	102.8	(3)	(3)	(3)	(3)	(3)	(3)	128.8	(3)	13.1	(3)	13.1	

1 No deaths.

2 Not available.

COURT DECISION RELATING TO PUBLIC HEALTH

Damages allowed for contraction of tuberculosis by person engaged in "sand blasting."—(Missouri Supreme Court; *Dodd v. Independence Stove and Furnace Co.*, 51 S. W. (2d) 114; decided Apr. 8, 1932.) A statute of Missouri provided as follows:

* * * In all processes of manufacture or labor referred to in this section which are productive of noxious or poisonous dusts, adequate and approved respirators shall be furnished and maintained by the employer in good condition and without cost to the employees, and such employees shall use such respirators at all times while engaged in any work productive of noxious or poisonous dusts.

In an action for damages brought against the defendant company by a former employee, the plaintiff alleged that he had contracted tuberculosis while in the defendant's employ. The claim was that the disease resulted from the inhalation of dust which was generated in the manufacturing process in which plaintiff was employed. This process was called "sand blasting" and was used to clean, smooth, and polish cast-iron parts for stoves and furnaces. In the process fine sand was projected with considerable force by compressed air through a hose against the surface to be cleaned. The work was carried on in a small room about 8 feet square maintained for the purpose. The plaintiff was furnished, and used, a "helmet" or "mask" as a protection from the sand and dust, but his evidence was to the effect that this device, even when in good condition, did not prevent the inhalation of dust. The plaintiff's cause of action was based upon defendant's alleged failure to furnish him with an adequate respirator as required by statute. Damages were awarded plaintiff in the trial court and, on appeal to the supreme court, the judgment was affirmed.

One of the points urged by the defendant on appeal was the refusal of the trial court to give a certain instruction relative to the construction of the statute involved. This instruction, in substance, was that the words "noxious dusts," as used in the statute, meant only such dusts as were inherently harmful by reason of the component elements therein and did not mean dust which may be harmful by reason of the amount thereof or the manner of the handling of the same. The trial court had defined noxious dust as dust which was hurtful or harmful to employees using the same. The supreme court refused to agree with defendant's contention as to the construction of the statute and held that the requested instruction had been properly refused.

DEATHS DURING WEEK ENDED AUGUST 8, 1932

Summary of information received by telegraph from industrial insurance companies for the week ended August 8, 1932, and corresponding week of 1931. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)

	Week ended Aug. 8, 1932	Corresponding week, 1931
Policies in force.....	71, 503, 898	75, 039, 929
Number of death claims.....	11, 858	11, 944
Death claims per 1,000 policies in force, annual rate..	8. 7	8. 8
Death claims per 1,000 policies, first 31 weeks of year, annual rate.....	10. 0	10. 2

Deaths¹ from all causes in 85 large cities of the United States during the week ended August 8, 1932, infant mortality, annual death rate, and comparison with corresponding week of 1931. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)

[The rates are based upon mid-year population estimates derived from the 1930 census]

City	Week ended Aug. 8, 1932				Corresponding week, 1931		Death rate ² for the first 31 weeks	
	Total deaths	Death rate ³	Deaths under 1 year	Infant mortality rate ⁴	Death rate ³	Deaths under 1 year	1932	1931
Total.....	6, 268	8. 9	502	4. 42	10. 4	649	11. 6	12. 5

¹ Deaths of nonresidents are included. Stillbirths are excluded.

² These rates represent annual rates per 1,000 population, as estimated for 1932 and 1931 by the arithmetical method.

³ Deaths under 1 year of age per 1,000 estimated live births.

⁴ Data for 81 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 August 13, 1932, and August 15, 1931

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended August 13, 1932, and August 15, 1931

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931
New England States:								
Maine.....					9	1	0	2
New Hampshire.....					3		0	0
Vermont.....	2				12	6	0	0
Massachusetts.....	29	31	1	1	71	65	0	1
Rhode Island.....		2				21	0	0
Connecticut.....	4	13		1	14	23	1	0
Middle Atlantic States:								
New York.....	54	62	11	12	176	126	4	11
New Jersey.....	16	19	3	2	70	27	0	5
Pennsylvania.....	29	50			72	111	5	6
East North Central States:								
Ohio.....	31	21	10	10	55	105	2	6
Indiana.....	27	13	16		2	6	3	2
Illinois.....	34	41	4	2	34	67	7	4
Michigan.....	17	21			168	34	0	4
Wisconsin.....	6	10	13	12	35	40	0	0
West North Central States:								
Minnesota.....	7	14	1	1	8	5	1	1
Iowa.....	6	6			1	3	0	0
Missouri.....	15	15	2		3	3	1	1
North Dakota.....	7	4				10	0	1
South Dakota.....	2	2			1		0	0
Nebraska.....	3				3	3	1	0
Kansas.....	10	3	1		9	6	1	1
South Atlantic States:								
Delaware.....					1	1	0	0
Maryland.....	6	7	1	2	4	6	0	2
District of Columbia.....	3	7	1				0	1
Virginia.....	22				17		1	
West Virginia.....	11	5	61		14	55	1	1
North Carolina.....	15	22	20	1	31	16	1	1
South Carolina.....	6	11	88	68	7	11	0	1
Georgia.....	11	17	5	6		14	2	0
Florida.....	14	3	4	1		1	0	0
East South Central States:								
Kentucky.....	25					11	2	1
Tennessee.....	9	14	6	13	5	4	1	4
Alabama.....	28	16	1	3		17	0	6
Mississippi.....	21	11					0	0

See footnotes at end of table.

*Cases of certain communicable diseases reported by telegraph by State health officers
for weeks ended August 13, 1932, and August 15, 1931—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931
West South Central States:								
Arkansas.....	5	27	2				0	2
Louisiana.....	17	12	10	5	11	1	0	0
Oklahoma.....	22	6	16	5		2	0	0
Texas.....	53	18	22	6	7	4	0	0
Mountain States:								
Montana.....			4		15	6	0	0
Idaho.....							0	0
Wyoming.....	1	1			4		0	2
Colorado.....	7	9			2		0	0
New Mexico.....	22	1	2		1	1	1	0
Arizona.....				4	6	2	0	0
Utah.....				6		4	0	0
Pacific States:								
Washington.....	1	3	1		3	3	0	1
Oregon.....		2	4	5	10	4	0	0
California.....	24	36	53	12	34	53	2	3
Total	622	555	353	171	919	884	37	69

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931
New England States:								
Maine.....	3	2	16	4	0	0	4	1
New Hampshire.....	0	3	5	4	0	0	2	1
Vermont.....	0	5	4	12	0	2	0	0
Massachusetts.....	2	90	80	50	0	0	7	12
Rhode Island.....	0	18	5	3	0	0	0	7
Connecticut.....	0	67	11	12	0	0	4	6
Middle Atlantic States:								
New York.....	17	600	120	77	0	1	59	42
New Jersey.....	15	97	27	29	0	0	14	11
Pennsylvania.....	71	8	68	76	0	0	33	37
East North Central States:								
Ohio.....	7	9	111	75	3	2	64	33
Indiana.....	0	3	13	10	3	5	26	7
Illinois.....	6	23	94	54	1	7	79	27
Michigan.....	3	33	74	59	0	7	15	7
Wisconsin.....	1	24	6	16	0	2	4	1
West North Central States:								
Minnesota.....	5	29	21	19	0	0	1	3
Iowa.....	3	1	7	10	2	9	3	3
Missouri.....	1	0	13	8	2	1	20	3
North Dakota.....	0	0	1	1	5	2	4	23
South Dakota.....	0	1	0	0	0	0	0	1
Nebraska.....	1	0	6	2	1	0	3	7
Kansas.....	0	0	11	12	4	3	21	7
South Atlantic States:								
Delaware.....	0	0	2	4	0	0	2	3
Maryland.....	2	1	15	10	0	0	46	22
District of Columbia.....	0	1	6	1	0	0	3	1
Virginia.....	1		37		0		64	
West Virginia.....	2	2	6	7	0	0	46	32
North Carolina.....	2	10	27	29	0	0	44	50
South Carolina.....	1	0	3	5	0	0	56	70
Georgia.....	0	1	2	4	0	2	55	69
Florida.....	0	0	1	2	0	0	4	4
East South Central States:								
Kentucky.....	1	0	7	7	3	0	130	65
Tennessee.....	4	0	31	18	0	34	132	94
Alabama.....	0	0	14	14	0	0	31	44
Mississippi.....	0	1	5	8	1	12	36	22

See footnotes at end of table.

*Cases of certain communicable diseases reported by telegraph by State health officers
for weeks ended August 13, 1932, and August 15, 1931—Continued*

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	1932	1931	1932	1931	1932	Week ended Aug. 15, 1931	Week ended Aug. 13, 1932	Week ended Aug. 15, 1931
West South Central States:								
Arkansas.....	1	0	1	3	0	2	26	56
Louisiana.....	3	0	6	4	2	1	31	51
Oklahoma ¹	2	1	15	12	0	2	74	42
Texas ¹	0	1	23	12	4	1	47	43
Mountain States:								
Montana.....	0	1	12	12	8	2	3	3
Idaho.....	0	0	0	0	0	0	2	3
Wyoming.....	0	0	0	0	0	0	0	0
Colorado.....	1	0	5	2	0	0	3	12
New Mexico.....	0	0	2	4	0	1	15	6
Arizona.....	1	0	2	1	0	0	0	0
Utah ¹	0	0	2	2	0	0	0	2
Pacific States:								
Washington.....	1	3	14	5	4	5	7	4
Oregon.....	0	0	4	4	0	9	2	5
California.....	5	2	40	21	13	1	16	18
Total.....	162	1,040	976	724	56	113	1,243	965

¹ New York City only.

² Week ended Friday.

³ Typhus fever, 35 cases; week ended Aug. 13, 1932, 2 cases in Maryland, 1 case in Virginia, 9 cases in Georgia, 2 cases in Florida, 1 case in Alabama, and 20 cases in Texas.

⁴ Figures for 1932 are exclusive of Oklahoma City and Tulsa and for 1931 are exclusive of Tulsa only.

⁵ Typhoid fever figures published for New York State for the weeks ended Apr. 30 to July 23, 1932, with the exception of the week ended June 18, are exclusive of New York City.

SUMMARY OF MONTHLY REPORTS FROM STATES

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

State	Me-ningo-coccus menin-gitis	Diph-theria	Influ-enza	Malaria	Measles	Pel-lagra	Polio-mye-litis	Scarlet fever	Small-pox	Ty-phoid fever
June, 1933										
Mississippi.....	1	19	546	3,625	30	899	5	15	30	157
July, 1933										
Alabama.....	5	70	29	280	3	128	3	54	28	142
Arizona.....		2	4		6		0	8	5	10
Indiana.....	22	76	58		86		4	115	15	102
Maryland.....	1	21	6		42	1	2	63	0	63
Michigan.....	6	62	18	3	2,809		6	543	6	38
North Dakota.....	2	10	3		33		8	17	6	6
Tennessee.....	7	25	34	301	4	75	1	38	14	585
Vermont.....		2			210		0	29	2	4
Wyoming.....	1			1	29		2	9	0	0

June, 1932		July, 1932	
Mississippi:	Cases	Actinomycosis:	Cases
Chicken pox.....	199	North Dakota.....	2
Dengue.....	5	Chicken pox:	
Dysentery (amebic).....	57	Alabama.....	21
Mumps.....	97	Arizona.....	4
Ophthalmia neonatorum.....	8	Indiana.....	58
Puerperal septicemia.....	24	Maryland.....	60
Rabies in animals.....	14	Michigan.....	294
Trachoma.....	7	North Dakota.....	12
Undulant fever.....	1	Tennessee.....	21
Whooping cough.....	685	Vermont.....	52
		Wyoming.....	2

Diarrhea:	Cases	Septic sore throat:	Cases
Maryland.....	139	Maryland.....	11
Dysentery:		Michigan.....	8
Indiana (amebic).....	1	Tennessee.....	1
Indiana (bacillary).....	1	Wyoming.....	2
Maryland.....	37	Tetanus:	
Tennessee.....	108	Maryland.....	4
German measles:		North Dakota.....	1
Maryland.....	3	Trachoma:	
Tennessee.....	40	Arizona.....	6
Impetigo contagiosa:		Indiana.....	1
Maryland.....	8	Tennessee.....	33
Tennessee.....	1	Tularæmia:	
Lethargic encephalitis:		Alabama.....	4
Alabama.....	2	Tennessee.....	1
Maryland.....	4	Wyoming.....	9
Michigan.....	4	Typhus fever:	
North Dakota.....	2	Alabama.....	17
Mumps:		Maryland.....	4
Alabama.....	73	Tennessee.....	1
Arizona.....	3	Undulant fever:	
Indiana.....	91	Alabama.....	4
Maryland.....	183	Maryland.....	1
Michigan.....	224	Michigan.....	6
North Dakota.....	7	Vermont.....	3
Tennessee.....	11	Vincent's angina:	
Vermont.....	215	Maryland.....	11
Wyoming.....	5	Tennessee.....	17
Ophthalmia neonatorum:		Vincent's infection:	
Tennessee.....	4	North Dakota.....	19
Paratyphoid fever:		Whooping cough:	
Tennessee.....	8	Alabama.....	175
Puerperal septicæmia:		Arizona.....	85
Tennessee.....	2	Indiana.....	335
Rabies in animals:		Maryland.....	290
Maryland.....	1	Michigan.....	1,010
Tennessee.....	19	North Dakota.....	6
Rocky Mountain spotted or tick fever:		Tennessee.....	214
Maryland.....	5	Vermont.....	109
Wyoming.....	8	Wyoming.....	3

PLAGUE-INFECTED GROUND SQUIRRELS IN CALIFORNIA

The director of Public Health of California reported, under date of August 12, 1932, that plague had been proved by animal inoculation in two ground squirrels from a ranch 20 miles east of Hollister, San Benito County, Calif. These squirrels were shot August 5, 1932, in the course of routine plague-prevention work.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 95 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 83,895,000. The estimated population of the 88 cities reporting deaths is more than 32,340,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended August 6, 1932, and August 8, 1931

	1932	1931	Estimated expectancy
<i>Cases reported</i>			
Diphtheria:			
46 States.....	565	476	-----
95 cities.....	167	202	361
Measles:			
45 States.....	1,372	1,238	-----
95 cities.....	387	383	-----
Meningococcus meningitis:			
46 States.....	43	72	-----
95 cities.....	9	24	-----
Pollomyelitis:			
46 States.....	99	1,029	-----
Scarlet fever:			
46 States.....	898	812	-----
95 cities.....	299	294	267
Smallpox:			
46 States.....	56	159	-----
95 cities.....	7	20	19
Typhoid fever:			
46 States.....	1,067	1,071	-----
95 cities.....	146	140	122
<i>Deaths reported</i>			
Influenza and pneumonia:			
88 cities.....	271	308	-----
Smallpox:			
88 cities.....	0	1	-----
Minneapolis, Minn.....	0	1	-----

City reports for week ended Aug. 6, 1932

The "estimated expectancy" given for diphtheria, pollomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that 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 weeks 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 non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1923 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases re- ported	Mumps, cases re- ported	Pneu- monia, deaths reported
		Cases, estimated expect- ancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND								
Maine:								
Portland.....	2	0	0	-----	0	0	0	2
New Hampshire:								
Concord.....	0	0	0	-----	0	0	0	0
Nashua.....	0	0	0	-----	0	0	0	0
Vermont:								
Barre.....	0	0	0	-----	0	1	0	0
Burlington.....	0	0	0	-----	0	0	0	0
Massachusetts:								
Boston.....	16	13	13	-----	0	14	25	5
Fall River.....	0	1	1	-----	0	4	0	2
Springfield.....	0	1	0	-----	0	4	0	3
Worcester.....	2	1	2	-----	0	7	0	4
Rhode Island:								
Pawtucket.....	0	0	0	-----	0	0	0	0
Providence.....	4	3	1	-----	1	1	1	0
Connecticut:								
Bridgeport.....	0	1	0	-----	0	6	1	0
Hartford.....	0	1	0	-----	0	0	0	0
New Haven.....	0	0	0	-----	0	1	5	1

City reports for week ended Aug. 6, 1932—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MIDDLE ATLANTIC								
New York:								
Buffalo.....	0	6	0	-----	0	7	0	7
New York.....	46	98	37	3	2	105	72	67
Rochester.....	1	1	2	-----	0	1	2	0
Syracuse.....	3	0	0	-----	0	2	4	3
New Jersey:								
Camden.....	0	2	2	-----	0	1	0	0
Newark.....	2	8	0	2	0	19	26	1
Trenton.....	0	1	0	-----	0	5	0	4
Pennsylvania:								
Philadelphia.....	6	27	4	-----	0	10	7	11
Pittsburgh.....	4	9	1	1	1	2	1	5
Reading.....	1	1	1	-----	0	3	0	2
EAST NORTH CENTRAL								
Ohio:								
Cincinnati.....	0	3	0	-----	0	2	0	3
Cleveland.....	10	13	0	1	0	4	5	7
Columbus.....	2	2	5	-----	0	1	0	1
Toledo.....	3	2	2	1	1	0	0	2
Indiana:								
Fort Wayne.....	0	1	11	-----	0	1	0	0
Indianapolis.....	1	2	1	-----	0	0	13	4
South Bend.....	0	0	0	-----	0	0	0	0
Terre Haute.....	-----	0	-----	-----	-----	-----	-----	-----
Illinois:								
Chicago.....	14	48	13	-----	0	13	6	10
Springfield.....	0	0	2	-----	0	0	0	2
Michigan:								
Detroit.....	8	21	10	-----	1	103	3	9
Flint.....	0	1	0	-----	0	1	0	2
Grand Rapids.....	1	1	0	-----	0	0	5	1
Wisconsin:								
Kenosha.....	0	0	0	-----	0	7	0	0
Madison.....	3	0	1	-----	6	1	-----	-----
Milwaukee.....	11	6	1	2	2	6	3	3
Racine.....	3	0	0	-----	0	0	1	0
Superior.....	2	1	0	-----	0	0	3	0
WEST NORTH CENTRAL								
Minnesota:								
Duluth.....	0	0	0	-----	0	0	0	0
Minneapolis.....	3	7	0	-----	0	2	0	1
St. Paul.....	7	3	0	-----	0	1	4	3
Iowa:								
Des Moines.....	0	0	3	-----	-----	0	0	-----
Sioux City.....	0	0	0	-----	-----	0	0	-----
Waterloo.....	0	0	1	-----	-----	0	0	-----
Missouri:								
Kansas City.....	0	1	0	-----	0	2	0	2
St. Joseph.....	0	0	0	-----	0	0	0	2
St. Louis.....	0	11	3	1	1	0	1	2
North Dakota:								
Fargo.....	3	0	0	-----	0	0	0	0
Grand Forks.....	0	0	0	-----	-----	1	0	-----
South Dakota:								
Aberdeen.....	3	0	0	-----	-----	0	0	-----
Nebraska:								
Omaha.....	0	1	1	-----	0	1	1	3
Kansas:								
Topeka.....	0	0	3	-----	0	2	2	0
Wichita.....	0	0	0	-----	0	0	0	1
SOUTH ATLANTIC								
Delaware:								
Wilmington.....	0	1	0	-----	0	0	0	0
Maryland:								
Baltimore.....	6	7	3	1	0	1	14	10
Cumberland.....	0	0	0	-----	0	0	0	1
Frederick.....	0	0	0	-----	0	0	0	0
District of Columbia:								
Washington.....	1	5	0	-----	0	0	0	8
Virginia:								
Lynchburg.....	0	0	0	-----	0	2	0	0
Norfolk.....	0	0	0	-----	0	0	0	1
Richmond.....	0	2	0	-----	0	0	0	1
Roanoke.....	0	0	1	-----	0	0	0	0

City reports for week ended Aug. 6, 1932—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneu- monia, deaths reported
		Cases, estimated expect- ancy	Cases reported	Cases reported	Deaths reported			
SOUTH ATLANTIC— continued								
West Virginia:								
Charleston.....	0	0	0	-----	0	0	0	1
Huntington.....	0	-----	0	-----	-----	0	0	-----
Wheeling.....	0	1	1	-----	0	3	0	0
North Carolina:								
Raleigh.....	1	0	0	-----	0	0	0	0
Wilmington.....	0	0	0	-----	0	0	0	0
Winston-Salem.....	0	1	0	1	0	6	0	2
South Carolina:								
Charleston.....	0	0	0	6	0	0	0	1
Columbia.....	0	0	1	-----	0	1	0	3
Georgia:								
Atlanta.....	0	2	1	4	0	0	0	8
Brunswick.....	0	0	0	-----	0	0	0	0
Savannah.....	0	1	1	13	0	12	0	1
Florida:								
Miami.....	0	1	1	-----	0	0	0	1
Tampa.....	0	0	1	1	1	0	0	0
EAST SOUTH CENTRAL								
Kentucky:								
Covington.....	-----	0	-----	-----	-----	-----	-----	-----
Lexington.....	0	-----	0	-----	0	0	0	0
Tennessee:								
Memphis.....	0	1	0	-----	0	0	0	2
Nashville.....	0	1	0	-----	1	0	0	2
Alabama:								
Birmingham.....	0	1	0	-----	0	0	0	2
Mobile.....	0	0	0	-----	0	0	0	0
Montgomery.....	0	0	0	0	-----	0	0	-----
WEST SOUTH CENTRAL								
Arkansas:								
Fort Smith.....	0	0	0	-----	-----	0	0	-----
Little Rock.....	0	0	0	-----	0	0	0	2
Louisiana:								
New Orleans.....	0	5	7	-----	0	0	0	6
Shreveport.....	0	0	0	-----	0	0	2	2
Oklahoma:								
Muskogee.....	0	-----	1	-----	0	0	0	0
Oklahoma City.....	0	1	1	2	0	0	0	1
Tulsa.....	0	0	1	-----	-----	2	5	-----
Texas:								
Dallas.....	0	2	14	-----	0	0	0	5
Fort Worth.....	0	1	3	-----	0	0	2	4
Galveston.....	0	0	0	-----	0	0	0	0
Houston.....	0	2	2	-----	0	1	0	2
San Antonio.....	0	1	0	-----	0	0	0	1
MOUNTAIN								
Montana:								
Billings.....	1	0	0	-----	0	0	0	0
Great Falls.....	0	0	0	-----	0	0	1	0
Helena.....	0	0	0	-----	0	0	0	0
Missoula.....	0	0	0	-----	0	0	0	0
Idaho:								
Boise.....	-----	0	-----	-----	-----	-----	-----	-----
Colorado:								
Denver.....	5	5	4	-----	0	2	7	7
Pueblo.....	1	0	0	-----	0	0	0	0
New Mexico:								
Albuquerque.....	0	0	0	-----	0	0	1	0
Utah:								
Salt Lake City.....	2	1	0	1	1	2	0	0
Nevada:								
Reno.....	0	0	0	0	0	0	0	0
PACIFIC								
Washington:								
Seattle.....	6	1	0	-----	-----	2	1	-----
Spokane.....	2	1	0	-----	-----	3	0	-----
Tacoma.....	1	1	0	-----	0	0	0	1
Oregon:								
Portland.....	1	3	0	-----	0	4	0	2
Salem.....	1	0	1	1	-----	1	0	-----
California:								
Los Angeles.....	11	17	16	22	0	8	7	9
Sacramento.....	0	1	0	-----	0	0	0	1
San Francisco.....	9	5	0	1	0	5	1	9

City reports for week ended Aug. 6, 1932—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re-ported	Typhoid fever			Whoop- ing cough, cases re-ported	Deaths, all causes
	Cases, esti- mated expec- tancy	Cases re- ported	Cases, esti- mated expec- tancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expec- tancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland.....	0	2	0	0	0	2	0	0	0	9	23
New Hampshire:											
Concord.....	0	0	0	0	0	0	0	0	0	0	5
Nashua.....	0	0	0	0	0	0	0	0	0	0	0
Vermont:											
Barre.....	0	0	0	0	0	0	0	0	0	0	2
Burlington.....	0	0	0	0	0	0	0	0	0	0	5
Massachusetts:											
Boston.....	17	27	0	0	0	8	2	1	0	50	165
Fall River.....	1	1	0	0	0	0	0	0	0	1	17
Springfield.....	1	3	0	0	0	0	0	0	0	0	27
Worcester.....	2	4	0	0	0	3	0	0	0	7	37
Rhode Island:											
Pawtucket.....	0	0	0	0	0	0	0	0	0	0	14
Providence.....	3	5	0	0	0	2	1	1	1	24	43
Connecticut:											
Bridgeport.....	1	3	0	0	0	1	0	1	0	2	20
Hartford.....	1	0	0	0	0	2	0	0	0	0	31
New Haven.....	0	0	0	0	0	0	0	0	0	4	26
MIDDLE ATLANTIC											
New York:											
Buffalo.....	6	5	0	0	0	8	0	0	0	33	107
New York.....	30	38	0	0	0	80	21	46	1	122	1,161
Rochester.....	3	5	0	0	0	0	0	0	0	5	64
Syracuse.....	1	3	0	0	0	0	0	0	0	27	38
New Jersey:											
Camden.....	1	2	0	0	0	2	1	0	0	0	27
Newark.....	4	11	0	0	0	5	1	2	0	20	56
Trenton.....	0	1	0	0	0	4	0	1	0	3	28
Pennsylvania:											
Philadelphia.....	16	20	0	0	0	19	5	5	0	47	375
Pittsburgh.....	8	5	0	0	0	9	0	1	0	20	128
Reading.....	0	0	0	0	0	1	0	0	0	7	20
EAST NORTH CENTRAL											
Ohio:											
Cincinnati.....	4	9	0	0	0	8	1	3	1	13	88
Cleveland.....	10	22	0	0	0	19	2	3	0	59	159
Columbus.....	1	1	0	0	0	8	1	2	0	9	67
Toledo.....	2	3	0	0	0	2	1	1	0	19	42
Indiana:											
Fort Wayne.....	0	0	0	0	0	3	0	0	0	0	26
Indianapolis.....	2	2	2	0	0	3	1	3	0	0	-----
South Bend.....	1	0	0	0	0	2	0	0	0	1	11
Terre Haute.....	0	-----	0	-----	-----	-----	0	-----	-----	-----	-----
Illinois:											
Chicago.....	33	26	0	0	0	36	5	4	1	94	515
Springfield.....	1	3	0	0	0	0	0	3	0	6	17
Michigan:											
Detroit.....	22	22	1	0	0	20	4	4	1	84	198
Flint.....	4	5	1	0	0	1	0	1	0	8	16
Grand Rapids.....	3	4	0	0	0	1	0	0	0	19	26
Wisconsin:											
Kenosha.....	0	0	1	0	0	0	0	0	0	3	6
Madison.....	1	0	0	-----	-----	0	0	0	-----	15	-----
Milwaukee.....	5	4	0	0	0	4	1	0	0	89	84
Racine.....	1	0	0	0	0	0	0	0	0	4	7
Superior.....	1	0	0	0	0	0	0	1	0	0	5
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	4	1	0	0	0	0	0	1	0	0	17
Minneapolis.....	10	0	0	0	0	2	0	0	0	4	86
St. Paul.....	6	2	1	0	0	0	2	0	0	32	35
Iowa:											
Des Moines.....	1	3	0	0	-----	-----	0	0	-----	1	23
Sioux City.....	1	0	0	1	-----	-----	0	0	-----	2	-----
Waterloo.....	0	0	1	0	-----	-----	0	0	-----	0	-----

City reports for week ended Aug. 6, 1932—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST NORTH CENTRAL—contd.											
Missouri:											
Kansas City.....	2	2	0	0	0	5	3	0	0	8	76
St. Joseph.....	0	0	0	0	0	0	0	0	0	2	12
St. Louis.....	7	3	1	0	0	4	5	6	1	14	160
North Dakota:											
Fargo.....	0	0	0	0	0	0	0	1	0	1	1
Grand Forks.....	0	0	1	0	—	—	0	0	—	0	—
South Dakota:											
Aberdeen.....	0	0	0	0	—	—	0	0	—	0	—
Nebraska:											
Omaha.....	1	4	0	0	0	0	1	0	0	4	41
Kansas:											
Topeka.....	0	0	0	0	0	0	1	0	0	0	12
Wichita.....	1	1	1	0	0	0	0	0	0	1	18
SOUTH ATLANTIC											
Delaware:											
Wilmington.....	0	0	0	0	0	0	0	1	0	1	25
Maryland:											
Baltimore.....	4	10	0	0	0	14	6	2	0	34	163
Cumberland.....	0	0	0	0	0	0	0	0	0	4	12
Frederick.....	0	2	0	0	0	0	0	0	0	0	1
District of Colum- bia:											
Washington.....	4	2	0	0	0	6	4	0	0	5	130
Virginia:											
Lynchburg.....	0	1	0	0	0	1	1	1	0	36	8
Norfolk.....	0	1	1	0	0	0	1	1	0	3	—
Richmond.....	2	2	0	0	0	1	1	2	0	0	—
Roanoke.....	1	0	1	0	0	0	0	2	0	0	17
West Virginia:											
Charleston.....	0	1	0	0	0	1	1	0	0	0	22
Huntington.....	—	0	—	0	—	—	—	0	—	0	—
Wheeling.....	0	0	0	0	0	0	1	0	0	0	15
North Carolina:											
Raleigh.....	0	0	0	0	0	1	0	0	1	8	22
Wilmington.....	0	0	0	0	0	0	0	0	0	1	7
Winston-Salem.....	0	1	0	0	0	1	1	0	0	13	24
South Carolina:											
Charleston.....	0	1	0	0	0	2	1	4	2	0	24
Columbia.....	0	0	0	0	0	1	1	2	0	3	19
Georgia:											
Atlanta.....	2	2	1	0	0	6	3	6	3	4	78
Brunswick.....	0	0	0	0	0	0	0	0	0	0	2
Savannah.....	0	0	0	0	0	1	1	2	0	1	15
Florida:											
Miami.....	0	0	0	0	0	0	0	0	0	0	14
Tampa.....	0	0	0	0	0	0	0	1	0	0	17
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	0	—	0	—	—	—	1	—	—	—	—
Lexington.....	—	0	—	0	0	2	—	2	0	0	16
Tennessee:											
Memphis.....	1	0	0	0	0	4	10	8	1	9	71
Nashville.....	1	1	0	0	0	1	5	2	0	0	40
Alabama:											
Birmingham.....	2	0	0	0	0	3	4	2	0	4	43
Mobile.....	0	0	0	0	0	0	1	0	0	0	13
Montgomery.....	0	0	0	0	—	—	2	0	—	1	—
WEST SOUTH CEN- TRAL											
Arkansas:											
Fort Smith.....	1	0	0	0	—	—	0	0	—	0	—
Little Rock.....	0	0	0	0	0	1	1	0	0	0	8
Louisiana:											
New Orleans.....	4	3	0	0	0	9	5	2	1	2	126
Shreveport.....	0	0	0	0	0	3	1	4	1	1	23

Division, State, and city	Scarlet fever		Smallpox			Tuber- culo- sis, death re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST SOUTH CENTRAL—continued											
Oklahoma:											
Muskogee.....	0	0	—	0	0	0	—	0	0	0	—
Oklahoma City.....	1	3	0	0	0	3	0	1	0	52	
Tulsa.....	0	0	0	0	—	1	7	—	27		
Texas:											
Dallas.....	3	4	2	0	0	2	4	1	6	56	
Fort Worth.....	1	0	0	2	0	2	3	0	0	37	
Galveston.....	0	0	0	0	0	0	0	0	0	13	
Houston.....	1	0	0	0	0	2	1	0	0	54	
San Antonio.....	0	0	0	0	0	1	1	0	0	51	
MOUNTAIN											
Montana:											
Billings.....	0	0	0	0	0	0	0	0	0	2	
Great Falls.....	0	0	0	0	0	0	0	0	0	8	
Helena.....	0	0	0	0	0	0	0	0	0	3	
Missoula.....	0	0	0	1	0	0	0	0	0	2	
Idaho:											
Boise.....	0	—	0	—	—	0	—	—	—	—	
Colorado:											
Denver.....	3	3	0	0	0	0	0	0	13	61	
Pueblo.....	0	0	0	0	0	0	3	0	0	7	
New Mexico:											
Albuquerque.....	0	0	0	0	0	3	0	0	1	8	
Utah:											
Salt Lake City.....	1	2	0	0	0	2	0	0	12	22	
Nevada:											
Reno.....	0	0	0	0	0	0	0	0	0	2	
PACIFIC											
Washington:											
Seattle.....	3	1	1	0	—	1	1	—	2	—	
Spokane.....	1	0	1	3	—	0	1	—	0	—	
Tacoma.....	2	3	1	0	0	1	0	0	0	24	
Oregon:											
Portland.....	1	2	4	2	0	1	0	0	0	62	
Salem.....	0	0	0	0	—	0	0	—	4	—	
California:											
Los Angeles.....	11	14	2	2	0	14	3	0	72	208	
Sacramento.....	1	0	0	0	0	4	1	0	1	—	
San Francisco.....	5	0	1	0	0	7	1	0	10	145	

[illegible]

City reports for week ended Aug. 6, 1932—Continued

Division, State, and city	Meningo-coccus meningitis		Lethargic encephalitis		Pellagra		Polymyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases estimated expect- ancy	Cases	Deaths
EAST NORTH CENTRAL									
Ohio:									
Cincinnati.....	0	0	0	0	0	0	0	1	0
Cleveland.....	0	0	0	0	0	1	1	1	0
Indiana:									
Indianapolis.....	2	1	0	0	0	0	0	0	0
Illinois:									
Chicago.....	2	0	1	1	0	0	2	5	0
Michigan:									
Detroit.....	0	0	0	0	0	0	0	1	0
Flint.....	0	0	0	0	0	0	0	1	0
Wisconsin:									
Superior.....	0	0	0	1	0	0	0	0	0
WEST NORTH CENTRAL									
Minnesota:									
St. Paul.....	0	0	0	0	0	0	0	1	0
Missouri:									
St. Louis.....	0	0	0	0	0	0	0	1	0
North Dakota:									
Fargo.....	0	0	0	0	0	0	0	1	0
SOUTH ATLANTIC									
Maryland:									
Baltimore ¹	1	1	0	0	0	0	0	0	0
District of Columbia:									
Washington.....	0	0	0	0	0	0	0	1	0
Virginia:									
Richmond.....	0	0	0	0	0	0	0	1	0
Roanoke.....	0	0	0	0	0	1	0	0	0
North Carolina:									
Raleigh.....	0	0	0	0	1	1	0	0	0
Wilmington.....	0	0	0	0	1	0	0	0	0
South Carolina:									
Charleston ¹	0	0	0	0	0	1	0	3	0
Georgia:									
Savannah ¹	0	0	0	0	6	0	0	0	0
EAST SOUTH CENTRAL									
Alabama:									
Montgomery.....	0	0	0	0	1	0	0	0	0
WEST SOUTH CENTRAL									
Louisiana:									
New Orleans ¹	0	0	0	0	0	1	0	1	1
Oklahoma:									
Oklahoma City.....	0	0	0	0	0	1	0	0	0
Texas:									
Dallas ¹	0	0	0	0	1	1	0	0	0
Houston ¹	0	0	0	0	0	1	0	0	0
San Antonio.....	0	0	0	0	0	1	0	0	0
MOUNTAIN									
New Mexico:									
Pueblo.....	0	0	0	0	0	0	0	1	1
PACIFIC									
California:									
Los Angeles.....	1	0	0	1	0	1	2	2	0

¹ Typhus fever, 11 cases: 1 case at Baltimore, Md.; 1 case at Charleston, S. C.; 6 cases at Savannah, Ga.; 1 case at New Orleans, La.; 1 case at Dallas, Tex.; and 1 case at Houston, Tex.

The following table gives the rates per 100,000 population for 98 cities for the 5-week period ended August 6, 1932, compared with those for a like period ended August 8, 1931. The population figures used in computing the rates are esti-

mated mid-year populations for 1931 and 1932, respectively, derived from the 1930 census. The 98 cities reporting cases have an estimated aggregate population of more than 34,000,000. The 91 cities reporting deaths have more than 32,400,000 estimated population.

Summary of weekly reports from cities, July 3 to August 6, 1932—Annual rates per 100,000 population, compared with rates for the corresponding period of 1931¹

DIPHTHERIA CASE RATES

	Week ended—									
	July 9, 1932	July 11, 1931	July 16, 1932	July 18, 1931	July 23, 1932	July 25, 1931	July 30, 1932	Aug. 1, 1931	Aug. 6, 1932	Aug. 8, 1931
98 cities.....	31	43	31	42	27	33	25	35	26	32
New England.....	46	60	60	65	29	50	50	53	41	65
Middle Atlantic.....	28	50	28	37	21	34	19	31	21	26
East North Central.....	23	41	25	50	20	39	16	38	26	31
West North Central.....	40	31	45	31	30	33	21	17	15	29
South Atlantic.....	31	19	29	24	22	28	31	32	18	26
East South Central.....	6	23	12	29	25	12	12	12	0	41
West South Central.....	106	61	63	47	46	24	89	61	76	64
Mountain.....	17	17	17	61	34	35	26	35	36	26
Pacific.....	11	41	23	51	63	16	25	47	30	18

MEASLES CASE RATES

98 cities.....	242	316	235	181	144	133	84	93	60	60
New England.....	558	351	395	317	247	209	115	132	91	135
Middle Atlantic.....	188	311	214	144	143	111	94	84	69	57
East North Central.....	409	527	419	316	239	214	131	153	83	87
West North Central.....	74	103	81	61	55	34	36	27	15	15
South Atlantic.....	104	259	63	107	29	83	31	47	49	34
East South Central.....	0	17	6	117	0	106	0	47	0	12
West South Central.....	33	27	23	17	23	14	10	10	3	3
Mountain.....	267	122	155	122	112	174	52	209	36	70
Pacific.....	185	182	145	123	80	125	40	57	34	43

SCARLET FEVER CASE RATES

98 cities.....	83	79	84	70	63	53	52	47	46	46
New England.....	201	142	165	149	156	111	105	82	108	43
Middle Atlantic.....	82	89	98	68	57	56	50	52	40	51
East North Central.....	110	90	91	106	66	69	66	52	59	59
West North Central.....	45	44	72	42	59	29	30	31	25	19
South Atlantic.....	43	49	39	34	53	38	47	42	43	38
East South Central.....	0	53	37	23	25	6	16	35	16	41
West South Central.....	10	34	33	34	43	44	10	20	23	41
Mountain.....	86	52	9	26	78	0	52	61	45	61
Pacific.....	46	49	57	12	38	12	36	16	34	22

SMALLPOX CASE RATES

98 cities.....	1	2	1	3	1	3	2	2	1	3
New England.....	0	2	0	0	0	0	0	0	0	0
Middle Atlantic.....	0	0	0	0	0	0	0	0	0	0
East North Central.....	0	1	0	4	0	2	0	1	0	2
West North Central.....	2	4	0	4	2	10	6	11	2	13
South Atlantic.....	0	4	0	0	0	0	0	2	0	2
East South Central.....	6	6	0	0	0	6	0	6	0	0
West South Central.....	0	10	0	7	0	0	0	3	0	0
Mountain.....	43	0	26	0	0	0	25	0	9	9
Pacific.....	4	8	10	22	11	20	10	8	10	14

See footnotes at end of table.

Summary of weekly reports from cities, July 3 to August 6, 1932—Annual rates per 100,000 population, compared with rates for the corresponding period of 1931 — Continued.

TYPHOID FEVER CASE RATES

	Week ended—									
	July 9, 1932	July 11, 1931	July 16, 1932	July 18, 1931	July 23, 1932	July 25, 1931	July 30, 1932	Aug. 1, 1931	Aug. 6, 1932	Aug. 8, 1931
98 cities.....	' 12	14	' 13	13	' 21	16	' 20	27	' 23	22
New England.....	5	2	7	12	5	10	12	12	7	14
Middle Atlantic.....	5	8	8	8	10	8	14	13	24	16
East North Central.....	10	5	13	5	13	5	12	12	' 14	10
West North Central.....	11	19	13	2	30	19	13	31	15	19
South Atlantic.....	24	28	18	47	43	69	63	77	45	53
East South Central.....	' 69	59	' 69	35	' 69	47	' 81	65	' 75	29
West South Central.....	46	81	33	58	125	10	49	169	40	95
Mountain.....	17	35	9	26	0	0	34	17	' 27	44
Pacific.....	4	6	10	6	11	27	6	4	11	14

See footnotes at end of table.

INFLUENZA DEATH RATES

91 cities.....	' 2	3	' 2	2	' 3	1	' 2	3	' 2	2
New England.....	0	2	7	0	2	0	0	2	2	2
Middle Atlantic.....	2	4	1	0	4	1	1	4	1	3
East North Central.....	3	2	2	4	1	2	1	2	' 2	1
West North Central.....	0	0	0	3	3	0	0	0	3	0
South Atlantic.....	0	4	6	4	2	2	8	6	2	0
East South Central.....	' 7	6	' 0	0	' 0	0	' 7	13	' 7	13
West South Central.....	3	7	0	3	13	3	3	0	0	3
Mountain.....	9	0	9	0	0	0	0	0	' 9	0
Pacific.....	0	0	0	0	0	2	5	7	0	5

PNEUMONIA DEATH RATES

91 cities.....	' 49	59	' 45	47	' 49	44	' 48	48	' 42	48
New England.....	53	79	74	50	62	31	41	41	41	34
Middle Atlantic.....	63	59	46	63	49	55	46	59	44	52
East North Central.....	32	47	31	29	33	32	41	30	' 25	35
West North Central.....	35	88	41	71	70	53	87	47	41	56
South Atlantic.....	67	71	57	40	73	44	49	65	71	79
East South Central.....	' 27	51	' 20	45	' 34	45	' 48	51	' 41	64
West South Central.....	57	86	91	45	67	52	50	59	61	62
Mountain.....	43	61	52	35	78	17	52	44	' 63	44
Pacific.....	37	31	32	24	37	43	49	36	46	38

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, 1932, and 1931, respectively.

² Covington, Ky., not included.

³ Terre Haute, Ind., Covington, Ky., and Boise, Idaho, not included.

⁴ Terre Haute, Ind., not included.

⁵ Boise, Idaho, not included.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—Week ended July 30, 1932.—The Department of Pensions and National Health of Canada reports cases of certain communicable diseases for the week ended July 30, 1932, as follows: Provinces not given in the table did not report any case of any disease included in the table.

Province	Cerebro-spinal fever	Influenza	Lethargic encephalitis	Poliomyelitis	Small-pox	Typhoid fever
Nova Scotia.....						2
New Brunswick.....						2
Quebec.....	1			15		34
Ontario.....			2	1		4
Manitoba.....	1				1	1
Alberta.....				2		
British Columbia.....		1				2
Total.....	2	1	2	18	1	45

Ontario Province—Communicable diseases—Comparative—Five weeks ended July 30, 1932.—The Department of Health of the Province of Ontario, Canada, reports certain communicable diseases for the five weeks ended July 30, 1932, and the corresponding period of 1931, as follows:

Disease	Five weeks, 1932		Five weeks, 1931	
	Cases	Deaths	Cases	Deaths
Cerebrospinal meningitis.....	1	2	4	2
Chancroid.....	1			
Chicken pox.....	480		328	
Conjunctivitis.....			1	
Diphtheria.....	98	8	103	7
Erysipelas.....	5			
German measles.....	16		17	
Gonorrhoea.....	319		296	
Influenza.....		4	8	
Jaundice.....	1			
Leprosy.....	1			
Lethargic encephalitis.....	2	1	1	1
Measles.....	1,944		570	1
Mumps.....	289		132	
Paratyphoid fever.....	14		367	2
Pneumonia.....		92		79
Poliomyelitis.....	5		6	1
Puerperal septicemia.....	1	1		
Scarlet fever.....	142		210	2
Septic sore throat.....	33		29	
Smallpox.....	1		22	
Syphilis.....	269		245	1
Tuberculosis.....	244	53	112	33
Typhoid fever.....	42	1	44	4
Undulant fever.....	19		22	
Whooping cough.....	463	3	317	1

Quebec Province—Communicable diseases—Week ended July 30, 1932.—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the week ended July 30, 1932, as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	1	Poliomyelitis.....	15
Chicken pox.....	7	Scarlet fever.....	37
Diphtheria.....	14	Tuberculosis.....	41
Erysipelas.....	2	Typhoid fever.....	34
German measles.....	1	Whooping cough.....	33
Measles.....	40		

LATVIA

Communicable diseases—May, 1932.—During the month of May, 1932, cases of certain communicable diseases were reported in the Republic of Latvia as follows:

Disease	Cases	Disease	Cases
Anthrax.....	2	Paratyphoid fever.....	14
Cerebrospinal meningitis.....	7	Poliomyelitis.....	4
Diphtheria.....	42	Puerperal fever.....	11
Erysipelas.....	23	Scarlet fever.....	42
Influenza.....	327	Tetanus.....	1
Leprosy.....	1	Trachoma.....	108
Lethargic encephalitis.....	1	Typhoid fever.....	32
Measles.....	50	Whooping cough.....	198
Mumps.....	172		

MEXICO

Tampico—Communicable diseases—July, 1932.—During the month of July, 1932, certain communicable diseases were reported in Tampico, Mexico, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Diphtheria.....	13	1	Paratyphoid fever.....	1	1
Enteritis (various).....	77	59	Tuberculosis.....	33	22
Influenza.....	35	—	Typhoid fever.....	4	1
Malaria.....	321	6	Whooping cough.....	29	—

From medical officers of the Public Health Service, American consuls, International Office of Public Hygiene, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given

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

[illegible]

Place	Janu- ary, 1932	Febru- ary, 1932	March, 1932	April, 1932	May, 1932	June, 1932	Place	Janu- ary, 1932	Febru- ary, 1932	March, 1932	April, 1932	May, 1932	June, 1932
British East Africa (see also table above): Kenya.....	O						Peru.....	11	2	1	2	5	2
Ecuador: Provinces—							Department—	8	2				
Chimborazo.....	C	13		6	10	2	Cañete.....	3					
Loja.....	C						Lambayeque.....	6					2
Indo-China.....	D	P	P	9	2	1	Lima.....	1	1	1	2	1	
Madagascar: Province—				6	1	1	Plura.....	1					
Ambohitampy.....	C	40	25				Senegal: Dakar.....			10			
Ambositra.....	D	38	25				Louga.....			5			
Antsirabe.....	D	166	81	19			Rufisque.....					3	1
Meavatanana.....	D	132	81	17	26		Yombel.....					2	1
Miarinarivo.....	D	53	45	21	26							3	21
Moramanga.....	D	51	45	21	26							3	17
Tananarive.....	D	15	13	4						9			
	D	16	12	9	1					5			
	D	13	9	3									
	D	203	148	71	42	20							
	D	196	140	70	40	20							

* 139 cases of plague with 35 deaths were reported in Oramboland, Southwest Africa, up to July 2, 1932. Anti-plague measures have been taken.

† Reports incomplete.

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

SMALLPOX

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

Place	Week ended—									
	May, 1932					June, 1932				
	7	14	21	28		4	11	18	25	July, 1932 2 9 16 23 30
Feb. 7- Mar. 6, 1932	Mar. 6- Apr. 2, 1932	Apr. 3-30, 1932								
Aden.....		1								
Algeria.....										
Algiers.....							1	1		
Constantine Department.....			1							
Philippeville.....										
Southern Territories.....	2									
Brazil:										
Porto Alegre (alastrim).....	19	5	2		8		2	3	2	3
Santos.....		1								
British East Africa: Tanganyika.....	5	P	11			19				2
British South Africa:	2					11		4		
Northern Rhodesia.....							4			
Southern Rhodesia.....										
Canada:		4			7					
British Columbia.....	17	9							11	
Manitoba.....	9	3								
Nova Scotia.....					1					
Ontario.....	21	4			6					11
Quebec.....	8			23						
Saskatchewan.....	20	6			8		1		11	13
China:										
Amoy.....	121	45	17				2		1	
Canton.....	44	25	11				2		1	
Foochow.....	44	79	81				9	3	3	1
Hankow.....	P	P	P				P		P	P
Harbin.....	4	5	3				1			
Hong Kong.....	1									
Manchuria: Dairen.....	81	45	55				7	5	2	1
Shanghai.....	23	28	20				2	4	6	1
	1	16	8				1	1	1	2
			2					2	3	1
			1					2	2	
			1					3	1	
			16				6	3		
	107	102	90				5	2		
	457	45	35					1		

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

SMALLPOX--Continued

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

Place	Feb. 7- Mar. 6, 1932	Mar. 6- Apr. 2, 1932	Apr. 3-30, 1932	Week ended—											
				May, 1932				June, 1932				July, 1932			
				7	14	21	28	4	11	18	25	2	9	16	23
India (French):															
Karikal.....	4	19	21	4		2				2					
Pondicherry.....	4	9	12	2		2				1					
	20	28	22	1		2				4					
	20	20	19	28		11				2					
				11						4					
Indo-China (see also table below):															
Pnompenh.....	2	1													
Saigon and Cholon.....	145	212	113	88		3				3					
	85	174	101	7		3				3					
Iraq:															
Baghdad.....	4	10	27	7		3				3					
	4	4	10	3		14				9					
Basra.....	2	11	4	1		2				4					
			4	1		4				2					
			4	1		1				4					
Ivory Coast (see table below).										1					
Japan:															
Kobe.....	1	2	1												
		1		7		2									
Nagasaki.....															
Osaka Prefecture.....				4		4				1					
Osaka.....		93		48											
Taiwan.....				1											
Mexico:	58	1	1												
Chihuahua.....															
Durango.....	3	1		1						5			1	2	
Jalisco (State)—Guadalajara.....		1		1											
Mexico City and surrounding territory.....	33	6	16	3		9				4			5	3	
			2	2		4				7			2	1	
Monterrey.....	1	1	2	1											
Saltillo.....	8		2												
San Luis Potosi.....				1		2									
Torreón.....	2	3	2	1		1				1					
	3	2	3	3		1				1					
		2	2	2		1				1					
		2	3	3		1				1					

Morocco (see table below),

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

SMALLPOX—Continued

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

Place	January, 1932	February, 1932	March, 1932	April, 1932			May, 1932			June, 1932	
				1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20
Gold Coast.....	2								2		
Indo-China (see also table above).....	1										
Ivory Coast.....	309	660	727	175	247	146	211	78	61	130	
	148	231	842	80	97	64	46	37	27	41	
Syria: Beirut.....	5			1						1	

Place	January, 1932	February, 1932	March, 1932	April, 1932	May, 1932	June, 1932	Place	January, 1932	February, 1932	March, 1932	April, 1932	May, 1932	June, 1932
Chosen.....	C	1	6	55	55		Guatemala.....	C	5				
	D		30	5	8		Morocco.....	C	1				
			9				Turkey (see also table above).....	C	488	368	308	101	101
Greece.....	C		1	8				C	31	22	2		27
								D	1				

TYPHUS FEVER

Place	Jan. 10- Feb. 6, 1932	Feb. 7- Mar. 5, 1932	Mar. 6- Apr. 2, 1932	Apr. 3-30, 1932	Week ended—												
					May, 1932				June, 1932				July, 1932				
					7	14	21	28	4	11	18	25	2	9	16	23	30
Algeria:																	
Algiers.....	1	3	7	40	7	23	31		8	5	5	12	23	9			
Constantine Department.....	7		7						1							60	24
Geryville.....	7	1	7														
Oran.....			1					4	10								

YELLOW FEVER

Place	Feb. 7- Mar. 5, 1932	Mar. 6- Apr. 2, 1932	Apr. 3-30, 1932	Week ended—													
				May, 1932				June, 1932				July, 1932					
				7	14	21	28	4	11	18	25	2	9	16			
Bolivia. ¹																	
Brazil:																	
Bahia State—Esplanada	C			1													
Ceara State	D			1													
Espirito Santo State	D	2		1													
Santa Teresa (about 56 miles from Victoria)	D	2		1													
Parahyba State	D	1															
Pernambuco State	D																
Dahomey: Porto Novo	D		1	1													
Gold Coast:	D		1	1													
Avudua	C		1	1													
Cape Coast	C		P														
Tamale	C		1														
Yapel	C																
Nigeria	C	1															
Upper Volta	D																

¹ Indirect reports show cases suspected to have been yellow fever in southern Bolivia during April, 1932.

X