

Public Health Reports

Vol. 55 • MARCH 15, 1940 • No. 11

PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

January 28–February 24, 1940

The accompanying table summarizes the prevalence of eight important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State are published in the PUBLIC HEALTH REPORTS under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4-week period ended February 24, 1940, the number reported for the corresponding period in 1939, and the median number for the years 1935–39.

DISEASES ABOVE MEDIAN PREVALENCE

Influenza.—There was a sharp increase in influenza from approximately 48,000 cases during the 4 weeks ended January 27 to 64,676 cases during the 4 weeks ended February 24. The South Atlantic and West South Central regions continued to report the highest incidence, with rather sharp rises in the number of cases in the East South Central and Pacific regions. The South Atlantic region reported about 3,000 fewer cases than occurred during the preceding 4 weeks, but in the West South Central region the number of cases was almost twice the number reported during the preceding 4-week period. In the Mountain region the incidence dropped from approximately 8,000 cases during the month of December to approximately 1,500 cases during the current period, and the West North Central region reported a decline from the preceding 4-week period, which apparently was the peak incidence for that region.

Compared with preceding years, the current incidence (64,676 cases) was more than 2.7 times that recorded for the corresponding period in 1939 and about two and one-half times the 1935–39 median expectancy for this period. With the exception of the year 1937, when more than 100,000 cases were reported for this period, the current incidence is the highest in the 12 years for which these data are available. In 1939 the peak of the influenza rise was not reached until March, while in preceding years it reached its highest level during

the months of January or February. As there has been a decline in the number of cases since the week ended February 3, it is possible that the incidence in that week (approximately 18,000 cases) will be the highest level attained during this season.

Poliomyelitis.—There were 109 cases of poliomyelitis reported during the current 4-week period, as compared with 66, 89, and 80 cases for the corresponding period in 1939, 1938, and 1937, respectively. While the disease is showing the usual seasonal decline, every region except the South Atlantic and East South Central reported a relatively high incidence. In general, the number of cases is the highest since 1932, when 130 cases were reported for the period corresponding to the current one.

*Number of reported cases of 8 communicable diseases in the United States during the 4-week period Jan. 28–Feb. 24, 1940, the number for the corresponding period in 1939, and the median number of cases reported for the corresponding period in 1935–39*¹

Division	Current period	1939	5-year median	Current period	1939	5-year median	Current period	1939	5-year median	Current period	1939	5-year median
	Diphtheria			Influenza ²			Measles ³			Meningococcus meningitis		
United States ¹	1,565	1,994	2,369	64,676	23,994	25,391	21,999	53,546	53,546	178	227	525
New England.....	23	39	43	57	122	122	3,191	6,201	5,686	2	12	12
Middle Atlantic.....	265	331	394	285	840	287	1,688	5,590	8,659	51	50	60
East North Central.....	304	411	500	2,412	5,016	2,532	2,067	5,799	5,799	10	19	98
West North Central.....	104	168	196	833	793	1,285	3,724	8,274	6,372	19	13	54
South Atlantic.....	266	383	403	22,527	9,184	8,761	1,519	9,968	9,232	36	41	93
East South Central.....	125	139	178	5,571	2,196	3,630	812	1,494	1,494	22	51	92
West South Central.....	286	299	366	26,225	4,322	5,058	1,334	2,117	1,667	16	20	43
Mountain.....	77	86	71	1,528	1,170	1,170	1,860	3,251	2,628	12	11	23
Pacific.....	115	138	146	5,238	351	2,390	5,804	10,852	2,764	10	10	18
	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever		
United States ¹	109	66	80	19,277	22,169	26,877	257	1,554	1,144	292	433	433
New England.....	3	0	1	1,050	1,539	1,585	0	0	0	24	12	12
Middle Atlantic.....	12	7	7	6,038	5,100	5,836	0	0	0	46	50	54
East North Central.....	20	9	9	6,368	8,659	8,767	47	749	196	44	52	52
West North Central.....	10	4	5	1,796	2,507	3,765	102	254	413	20	18	28
South Atlantic.....	14	17	17	1,127	1,087	1,034	3	7	5	46	74	84
East South Central.....	12	14	14	735	623	614	13	42	9	20	47	47
West South Central.....	13	6	6	439	764	654	14	273	228	50	144	141
Mountain.....	6	4	3	734	586	897	67	134	126	14	13	17
Pacific.....	19	5	16	990	1,304	1,352	11	95	148	28	23	26

¹ 48 States. Nevada is excluded and the District of Columbia is counted as a State in these reports.

² 44 States and New York City.

³ 47 States. Mississippi is not included.

DISEASES BELOW MEDIAN PREVALENCE

Diphtheria.—The incidence of diphtheria continued at a low level, the reported cases numbering 1,565, which is about 75 percent of the number recorded for the corresponding period in 1939, and about 65 percent of the 1935–39 average incidence for this period. All

regions participated in the low record except the Mountain region; there the number of cases was about 10 percent above the median expectancy.

Measles.—The number of cases of measles reported was approximately 22,000, an increase of about 6,000 cases over the preceding 4-week period. All regions contributed to the increase except the East North Central. In that region a decrease of about 300 cases was reported. An increase of this disease is normally expected at this season of the year. For the country as a whole the current incidence is about 40 percent of the 1935-39 median incidence for the corresponding period, and, with the exception of the year 1937 when the cases numbered approximately 21,000, the incidence is the lowest for this period in the 12 years for which these data are available.

Meningococcus meningitis.—For the 4 weeks ended February 24, there were 178 cases of meningococcus meningitis reported, as compared with 227, 378, and 678 cases for the corresponding period in 1939, 1938, and 1937, respectively. Each region of the country shared in the favorable situation of this disease that now exists, the incidence in each section being considerably below the 1935-39 median incidence for this period.

Scarlet fever.—The scarlet fever incidence was also comparatively low—19,277 cases as compared with 22,169 in 1939, and with an average of approximately 27,000 cases for the corresponding period in 1935-39. The Middle Atlantic, South Atlantic, and East South Central regions reported a few more cases than might normally be expected, but in all other regions the incidence was relatively low. This disease has also reached a new low level, the current incidence being the lowest in the 12 years for which these data are available.

Smallpox.—The number of cases of smallpox (257) was the lowest on record for this period. About 65 percent of the total was reported from 5 States, Colorado (59), Minnesota (33), Iowa (29), Missouri (25), and Wisconsin (23). The most significant decreases were reported from the North Central and Pacific regions where the current incidence was the lowest on record for this period. While the figures from other regions were not the lowest on record, they represented very appreciable decreases from those of the past 2 or 3 years when smallpox was unusually prevalent in the Mountain, Pacific, and North Central regions.

Typhoid fever.—The typhoid fever incidence was also below normal—292 cases as compared with 433, 523, and 390 for the corresponding period in 1939, 1938, and 1937, respectively. The number of cases in the New England region was twice the median expectancy, and the Mountain and Pacific regions reported about the average number of cases, but in all other regions the incidence was relatively low.

MORTALITY, ALL CAUSES

The average mortality rate from all causes in large cities for the 4 weeks ended February 24, based on data received from the Bureau of the Census, was 13.2 per 1,000 population (annual basis). The current rate was the same as that for the corresponding period in 1939, and the 1935-39 average rate was also 13.2. The highest weekly death rate (13.6) in large cities occurred during the week ended February 3, and the largest number of cases of influenza reported to date occurred during the same week. By the last week of the current period the weekly death rate had dropped to 12.6 and the influenza incidence had dropped about 25 percent. It thus becomes apparent that the presence of influenza greatly affects the death rate at this season of the year. For the years of about normal influenza incidence the average death rate for this period is about 12 per 1,000 inhabitants.

THE NATIONAL HEALTH SURVEY*
**SOME GENERAL FINDINGS AS TO DISEASE, ACCIDENTS, AND
IMPAIRMENTS IN URBAN AREAS**

By **ROLLO H. BRITTEN**, *Senior Statistician*, **SELWYN D. COLLINS**, *Principal Statistician*, and **JAMES S. FITZGERALD**, *Research Analyst*, *United States Public Health Service*

CONTENTS

	Page
General rates	445
Causes of disabling illness	448
Illness in particular age groups	449
Income, employment status, and illness	452
Chronic disease	456
Impairments	460
Accidents	463
Summary	464

In a preceding article¹ have been discussed the scope, method, and general definitions of the National Health Survey, a house-to-house canvass of 703,092 urban families in 18 States and 36,801 families in certain rural areas, made to determine the frequency of serious disabling illness, medical care received therefor, and their relation to social and economic conditions. The survey was patterned on previous ones conducted by the United States Public Health Service and in general followed the established techniques developed in such surveys, information being obtained by trained enumerators from the

*From the Division of Public Health Methods, National Institute of Health. The project was executed with the aid of grants from the Works Progress Administration. Acknowledgment is made to various members of the National Health Survey staff for assistance in the preparation of this article.

¹ The National Health Survey: Scope and method of a Nation-wide canvass of sickness in relation to its social and economic setting. By George St. J. Perrott, Clark Tibbitts, and Rollo H. Britten. Pub. Health Rep., 54: 1663 (1939).

housewife or other responsible member of the household. In this instance, periodic visits were impracticable, necessitating some modification of the type of illness data requested. On the other hand, more detailed information on chronic diseases and impairments was collected than in previous surveys. The present report summarizes data collected in the urban survey on disease, accidents, and impairments. The population covered is 2,502,391 white and colored persons, or 3.6 percent of the urban population of the United States (1930).²

GENERAL RATES

Several measures of illness were employed, the rates for which are summarized in table 1. Because of the recognized impossibility of complete enumeration of illness, some of these rates are somewhat below the true values.

TABLE 1.—*Rates of illness according to several measures*¹

Item	Type of information	Rate
1	Percentage of persons disabled on day of visit *	4.4
2	Percentage of persons disabled for the whole 12 months immediately preceding visit *	1.2
3	Percentage of persons reported as having a chronic ^b disease or impairment ^{c d} Illnesses disabling for a week or longer during the 12 months immediately preceding the visit: * f	17.7
	Frequency per 1,000 persons:	
4	All illnesses.....	171
5	Acute.....	123
6	Chronic ^b	48
7	Diseases.....	45
8	Impairments ^c	2.9
9	Excluding persons disabled for the whole period.....	159
	Number of days of disability per person observed: *	
10	All illnesses.....	9.9
11	Acute.....	2.6
12	Chronic.....	7.3
13	Diseases.....	6.3
14	Impairments.....	1.0
15	Excluding persons disabled for the whole period.....	5.6
	Number of days of disability per case: *	
16	All illnesses.....	58
17	Acute.....	21
18	Chronic.....	154
19	Excluding persons disabled for the whole period.....	36
20	Percentage of workers ^h (15-64 years of age) who were reported to be "unemployable" by reason of disability ⁱ	1.1

¹ Table and chart references will be found in the appendix.

Proportion of persons disabled on an average winter day.—As shown in table 1 (item 1), 4.4 percent of the enumerated population were reported as disabled on the day of the visit. Disability was defined to mean inability to work, attend school, care for home, or carry on

² The sample was chosen to be representative in general of cities in the United States according to region and size. In large cities (100,000 and over) the population to be canvassed was determined by a random selection of many small districts based on those used in the United States Census of 1930. In the smaller cities selected for study the population was enumerated completely. See the article cited above for a more detailed account of the sampling procedure and a comparison of certain characteristics of the population enumerated with those of the urban population as a whole (Census, 1930).

National Health Survey data published in *Health as an Element in Social Security*, by George St. J. Perrott and Dorothy F. Holland, in *The Annals of the Academy of Political and Social Science*, March 1939, are for white persons only; therefore some of the rates differ somewhat from corresponding rates in the present article.

other usual pursuits by reason of disease, accident, or physical or mental impairment.³ Since the survey was conducted from November 1935 to March 1936,⁴ a higher rate of prevalence would be expected than if the canvassing had been spread over the entire year. The occurrence of a mild epidemic of influenza in the spring of 1936⁵ no doubt resulted in a larger percentage of persons being disabled on any one day than would be the case in a nonepidemic year. The rate is also higher than figures obtained in previous surveys⁶ because of the inclusive nature of the definition of illness. (For instance, of the 4.4 percent about a fourth (see item 2) were recorded as having been disabled for the entire 12 months immediately preceding the visit.)

Proportion of persons reported as having a chronic disease or impairment.—The 4.4 percent disabled on a single day falls far short of the proportion actually suffering from disease, since nondisabling conditions were not included therein. No inquiry was made in this survey as to acute affections which did not cause disability; but, because of the importance of potentially disabling chronic diseases, certain information in regard to them was requested. In addition a record was made of orthopedic impairments (loss of members or presence of impaired or crippled members and of deformities), blindness, and deafness. As shown in table 1 (item 3), 17.7 percent of all persons enumerated were reported as having one or more chronic diseases⁷ or impairments. Although the above rate is influenced by the lack of an objective standard of severity (as a basis for inclusion or exclusion), the measure is useful in indicating the magnitude of the

³ Persons in institutions for the care of physical or mental diseases were not directly enumerated in the survey, but the family was asked to report any such persons who had formerly lived in the household. The record obtained was incomplete. For instance, the frequency of cases in institutions for the care of disease for the whole 12 months immediately preceding the visit was 0.8 per 1,000 persons in the entire population, giving 0.29 days per person. On the basis of data given in the census of hospitals of the American Medical Association for the year 1935, hospital days for patients in tuberculosis and mental hospitals in the country as a whole amounted to 1.63 per person in the entire population (Hospital Service in the United States, J. Am. Med. Assoc., 106: 783 (1936) (see p. 790.)).

⁴ The record of the disabling illness present on the day of the visit therefore refers to a varying day, but each family enters into the picture only once.

⁵ See Influenza Mortality in the United States, 1936. By Mary Gover. Pub. Health Rep., 51: 1399 (1936).

⁶ Only 1.9 percent of 637,038 persons surveyed by the Metropolitan Life Insurance Co. were disabled on an average spring day, 1915-17; in the 10 localities covered the figure ranged from 1.4 to 3.1 percent.

The Health and Depression Studies made by the U. S. Public Health Service of about 24,000 persons in 6 large cities (200,000 to 2,000,000 population, 1930) in the early spring of 1933 showed a prevalence rate of disabling illness of 2.3 percent. (Corresponding data have not been tabulated for the other cities included in the studies.)

In 6 canvasses of about 5,000 to 12,000 inhabitants of 17 mill villages of South Carolina at different seasons in 1917, the prevalence rate varied from 1.5 to 3.2 percent. Among 4,161 inhabitants of 7 mill villages of South Carolina in May-June of 1916, the prevalence rate was 4.5 percent, but the observations were made during the height of the pellagra season.

None of these studies made any special inquiries about blindness, crippling defects, mental and nervous patients in institutions, or mental defectives not in institutions, all of which classes the Health Survey attempted to record.

⁷ Diseases the symptoms of which were stated to have been present for 3 months or longer, whether or not disabling, have been classified as chronic.

problem of chronic disease and impairment in special population groups (i. e., when the population is classified, for instance, by age or family income).

Annual frequency of illnesses disabling for a week or longer.—The frequency of illnesses causing disability (as defined above) of at least 7 consecutive days in a 12-month period was 171 per 1,000 persons.⁸ Because of the fact that the illness record for a 12-month period was necessarily obtained at a single visit, the above minimum (7 consecutive days of disability) was chosen to avoid too great losses due to the difficulty of recalling minor cases of illness. It is important to note that such a limitation not only reduces the frequency rate greatly, but increases the proportion of cases due to chronic disease or specific diagnoses, the proportion in different age groups, and many other relationships. Although the limitation makes difficult comparison with the results of other surveys, it has the advantage of concentrating attention on illnesses most likely to be a serious economic burden.

Cases disabling for a week or longer have been classified as acute or chronic (see footnote 7). The annual frequency of acute illness was 123 per 1,000 persons, that of illness due to chronic affections was 48 per 1,000 persons.

Disability.—The annual number of days of disability (from illnesses disabling for a week or more) was 10 days per person under observation; days of disability per case were 58 (items 10 and 16 of table 1). Inclusion of illnesses disabling for less than a week, had this been possible, would have increased the days per person somewhat⁹ and, of course, greatly decreased the average duration of disability per case. Days per case, it should be observed, are not necessarily based on the total duration of disability of the case, but only on that part accruing within the 12-month period whether or not the case terminated within such period.

For acute illnesses the days per person per year were 2.6 and the days per case 21 (items 11 and 17 of table 1); for illnesses due to chronic affections these rates were, respectively, 7.3 and 154 (items 12 and 18). The importance of chronic diseases and impairments in

⁸ See article cited in footnote 1 for definitions.

Certain points require emphasis.

(a) One person may have had more than one recorded illness during the year.

(b) An illness due to more than one diagnosis was counted only once in the computation of this rate.

(c) Cases with onset of disability prior to the 12-month period were included, the frequency of such cases being 18 per 1,000 persons.

(d) Records of all confinements, hospital cases, and deaths were taken without limitation as to the duration of disability. The rate for cases in these categories which had disabled for less than 7 days was 4 per 1,000 persons.

⁹ Unpublished data from the survey made by the Committee on the Costs of Medical Care show 0.73 days of disability per person per year for cases disabling for less than 7 consecutive days (exclusive of hospital cases).

the disability picture is manifest, since 74 percent of the days of disability were due to such conditions.

In the discussion of the percentage disabled on the day of the visit, mention was made of persons disabled for the entire 12 months immediately preceding the visit. Although this group is responsible for only a small proportion of the illnesses disabling for a week or more, it is responsible for a large part of the disability. In table 1, rates are given with this group excluded (items 9, 15, and 19).

"Unemployables."—An item on the schedule regarding the employment status of individuals furnished a further measure of illness. The question was whether the person, if not employed and not seeking work, was prevented from so doing by physical or mental disability.¹⁰ The group was made up largely of individuals with severe chronic disease or incapacitating impairments; hence the term "unemployable" may be applied, with some reservations, to the group. All discussions relative to this group will be limited to the ages 15-64, because of uncertainty as to the classification of persons of other ages. Special mention should be made of the fact that all persons in institutions for the care of disease for the entire 12 months immediately preceding the visit have been excluded from the group under consideration.

The percentage of the total enumerated population (ages 15-64) falling in the "unemployable" group was 0.45; however, since these persons, by definition, would have been in the labor market if they had not been incapacitated by disease or impairment, a more useful index can be obtained by limiting the base to persons who were working or seeking work (plus the unemployables themselves). The percentage, given as item 20 in table 1, is 1.1 for the age group 15-64.

CAUSES OF DISABLING ILLNESS

The annual frequency of illnesses disabling for a week or longer and the days of disability per person observed are shown in table 2 for particular diagnoses or groups of diagnoses. Classification is by the sole or primary diagnosis.¹¹ The most common causes of the serious illnesses recorded in this study were respiratory in nature (colds, influenza, tonsillitis, pneumonia, tuberculosis). Second in rank were the common communicable diseases of childhood.

¹⁰ Enumerators were instructed not to include as unemployable, "persons who have an acute illness at present * * * and will return to work or will seek work on recovery."

¹¹ The primary diagnosis is that which had been associated with the disability for the longest period; or, if a separate period of disability was not specified for any diagnosis, the primary diagnosis is the one which was regarded by the family as the most important cause of the disability.

Cases are classified by diagnosis in this report in accordance with the statements given by the family. (See article cited in footnote 1 for discussion of use made of confirmations of diagnoses received from physicians.)

Syphilis and gonorrhea, although of recognized importance as causes of disability, are not given separately in the table because of the incompleteness of reports of such diseases in a house-to-house canvass.

TABLE 2.—*Annual frequency and disability rates of illnesses disabling for 1 week or longer,* by diagnosis †*

Diagnosis	Frequency (per 1,000 persons)	Days of disability per person observed ‡
All diagnoses †.....	171	9.9
Communicable diseases:		
Common communicable diseases of childhood.....	29.1	26.3
Other.....	2.9	.13
Cancer and other tumors.....	2.9	.29
Diabetes mellitus.....	.89	.15
Rheumatism and allied diseases.....	5.9	.71
Cardiovascular-renal diseases.....	11.0	1.34
Nervous and mental diseases.....	5.4	1.02
Diseases of ear and mastoid process.....	2.0	.068
Diseases of respiratory system:		
Tuberculosis (including nonrespiratory).....	1.3	.32
Pneumonia (all forms).....	4.7	.18
Tonsillitis (including tonsillectomies).....	9.9	.14
Other diseases of respiratory system (colds, influenza, etc.).....	35.0	.84
Diseases of digestive system:		
Appendicitis (including appendectomies).....	5.0	.20
Hernia.....	1.0	.094
Diseases of teeth, mouth, and gums.....	.52	.017
Other diseases of the digestive system.....	7.7	.54
Diseases of thyroid gland.....	.62	.061
Anemia.....	.47	.067
Hemorrhoids.....	.72	.033
Varicose veins.....	.38	.040
Diseases of bladder, urethra, urinary passages, and male genital organs.....	1.3	.10
Diseases of female genital organs and complications of pregnancy.....	3.2	.22
Confinements.....	15.0	.38
Diseases of skin and cellular tissue.....	2.0	.11
Accidents.....	15.4	.75
Orthopedic impairments.....	2.5	.86
Blindness and deafness.....	.40	.14
Other and ill-defined diagnoses.....	6.6	.58

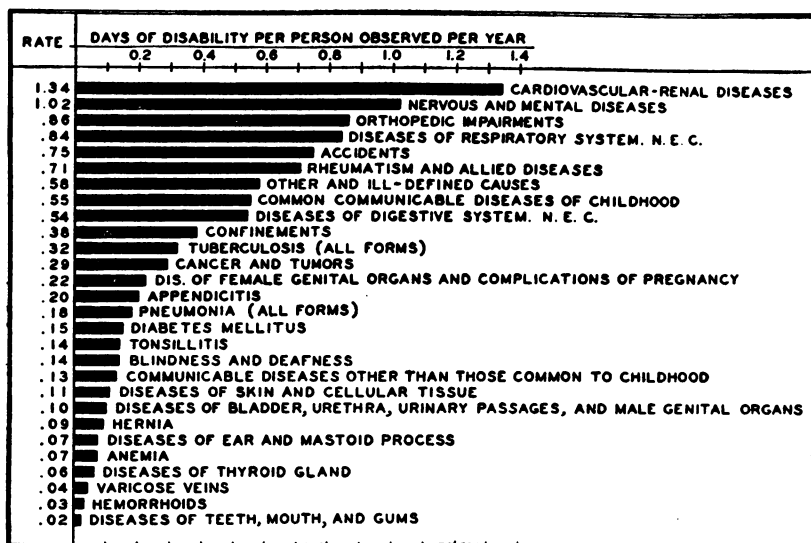
† Live birth rate is 14.0 per 1,000 persons.

Since previous studies have largely been concerned with frequency rates, in this report it is desirable to place special emphasis on diagnoses in relation to the volume of disability (i. e., days of disability per person observed) associated with them. Hence, the disability rates are shown graphically in figure 1.

The cardiovascular-renal group of diseases is responsible for 1.34 days of disability per year per person observed. Second is the group of nervous and mental diseases, with 1.02 days. This figure would undoubtedly be raised considerably if persons confined in institutions for the care of mental disease could have been completely reported (see footnote 3). Orthopedic impairments caused a loss of 0.86 days per person, and accidents 0.75 days. Respiratory conditions, taken as a group, were responsible for 1.48 days per person per year (tuberculosis, 0.32; pneumonia, 0.18; tonsillitis, 0.14; others, including colds and influenza, 0.84). Rheumatism and allied diseases caused 0.71 days per person per year.

ILLNESS IN PARTICULAR AGE GROUPS

Judged by the frequency of illnesses disabling for a week or longer, childhood and old age are especially prone to sickness. The severity

FIGURE 1.—Disability rate by diagnosis¹ for illnesses disabling for one week or longer.^{2/}

(days of disability per case), however, is least in childhood and increases steadily throughout life. The number of days of disability per person observed—a rate which expresses the combined effect of frequency and severity—is about the same in childhood and youth, and then increases rapidly. These facts are brought out in table 3, which gives the annual frequency and the days of disability per case and per person for illnesses disabling for a week or longer during the 12 months immediately preceding the visit.

TABLE 3.—Annual frequency and disability rates of illnesses disabling for 1 week or longer,^a according to age¹

Age in years	Frequency (per 1,000 persons)	Days of disability	
		Per case	Per person observed
All ages.....	171	58	9.9
Under 15.....	214	27	5.7
15-24.....	131	42	5.4
25-64.....	153	69	10.5
65 and over.....	279	131	36.1

The change in severity of illness with increasing age indicates a shift from acute to chronic disease. Table 4 distinguishes the cases on this basis and also separates those which caused disability for the full year under study.

Mention should be made of a number of important points which are brought out in this table:

TABLE 4.—*Annual frequency of acute and chronic illnesses disabling for a week or longer,* according to age †*

Age in years	All illnesses	Acute	Chronic *		
			Total	Disabled for 12 months immediately preceding visit	Other
ANNUAL FREQUENCY PER 1,000 PERSONS					
All ages.....	171	123	48	12	36
Under 15.....	214	198	16	3	13
15-24.....	131	109	22	5	18
25-64.....	153	96	57	13	44
65 and over.....	279	102	177	63	114
DAYS OF DISABILITY PER CASE #					
All ages.....	58	21	154	(12 months by definition)	86
Under 15.....	27	19	130		82
15-24.....	42	21	141		82
25-64.....	69	23	147		84
65 and over.....	131	27	191		96
DAYS OF DISABILITY PER PERSON OBSERVED PER YEAR #					
All ages.....	9.9	2.6	7.3	4.3	3.1
Under 15.....	5.7	3.7	2.0	1.0	1.1
15-24.....	5.4	2.3	3.1	1.7	1.5
25-64.....	10.5	2.2	8.4	4.7	3.7
65 and over.....	36.1	2.7	33.4	22.6	10.8

1. Even when limited to cases disabling for a week or longer, the diseases of childhood are overwhelmingly of an acute nature, the ratio of acute to chronic being 12 to 1.

2. On the other hand, among persons aged 65 years and over, a majority of the serious illnesses were chronic, and about a third of these were in the group of cases disabling for the full year. Among these persons over 65 years of age, the ratio of acute to chronic illness was 0.6 to 1.

3. The duration of disability per case increased rapidly with age (from 27 days among children to 131 in the group 65 years of age and older).

4. The duration of disability per case for acute or chronic diseases, taken separately, also increased with age, but not in such a marked degree.

5. The ratio between the duration of disability per case for acute and for chronic diseases was practically constant from age to age.

6. Of the 36 days of disability per person per year among those 65 years of age and over, 23 days were contributed by the group disabled for the entire 12 months.

The above indications are based on rates of illnesses in specific age groups; in terms of the actual number of cases in such age groups, chronic disease and invalidism offer especially difficult problems in the productive ages. (See further discussion on p. 458.)

7. In summary, the increase in the amount of disability with advancing age reflects primarily an increasing proportion of chronic cases and, among the chronic cases, an increasing proportion of persons disabled throughout the year of the study.

INCOME, EMPLOYMENT STATUS, AND ILLNESS

Illness is greatest in the population group least able to bear the economic burden involved. Although this fact is well known, the National Health Survey data are of value as corroborative evidence and also contribute information on certain novel aspects. No attempt will be made to assess the proportion of the total excess which is due to factors connected with low income, or the proportion in which low income has resulted from chronic sickness. The point to be made is that, regardless of cause, the groups in poor economic circumstances have excessive illness rates.¹²

*Distribution of persons surveyed by family income and relief status.*¹³—Persons in families with annual incomes under \$1,000 comprised about 40 percent of the surveyed group; about 65 percent were in families with annual incomes under \$1,500, and 80 percent in families with incomes under \$2,000. Almost one half of the lowest income group had received relief during the year 1935.

Frequency of serious illness at different income levels.—In table 5 is given the frequency of illnesses disabling for a week or more according to the income and relief status of the family. The excess in the relief group over the rate in the group with incomes of \$5,000 or more is 59 percent for all causes, 49 percent for acute diseases and 85 percent for chronic diseases (see footnote 7). There is also a definite excess for the nonrelief group with incomes below \$1,000, and some excess in the next higher group. However, above the \$1,500 level there is no excess.¹⁴

Amount of disability at different income levels.—The excess in the low income groups is greater in terms of days of disability per person per year than in terms of frequency, because of a longer average duration of cases in the low income groups. The relief group shows an excess

¹² In the Health Survey, families were classified by income received during the 12 months preceding the interview and also according to whether or not relief had been received during that time. Information on employment status of the individual was obtained as of the day of the canvass. Again reference is made to definitions given in the paper cited in footnote 1.

¹³ For the purpose of this comparison, all persons living in a household are classified according to the total income of related members of that household. See appendix table C in paper cited in footnote 1 for detailed distributions of persons by annual family income, color, and sex.

¹⁴ There is some difference in the age composition of the various groups, which explains the slight rise in the rate for chronic diseases at the higher income levels.

of 132 percent over the \$5,000 class, and the nonrelief group under \$1,000 an excess of 68 percent. Above \$1,500 there is no excess. The rates are presented in figure 2, which gives a vivid portrayal of the problem of illness in the low income groups.¹⁵

TABLE 5.—*Annual frequency of acute and chronic illnesses disabling for 1 week or longer* (per 1,000 persons) as related to economic status^f*

Annual family income and relief status	All illnesses	Acute	Chronic ^b
All incomes.....	171	123	48
Relief.....	232	160	72
Nonrelief:			
Under \$1,000.....	176	120	56
\$1,000 to \$1,500.....	155	117	38
\$1,500 to \$2,000.....	146	111	35
\$2,000 to \$3,000.....	145	110	36
\$3,000 to \$5,000.....	145	109	36
\$5,000 and over.....	146	107	39
Relief and nonrelief under \$1,000.....	200	153	63

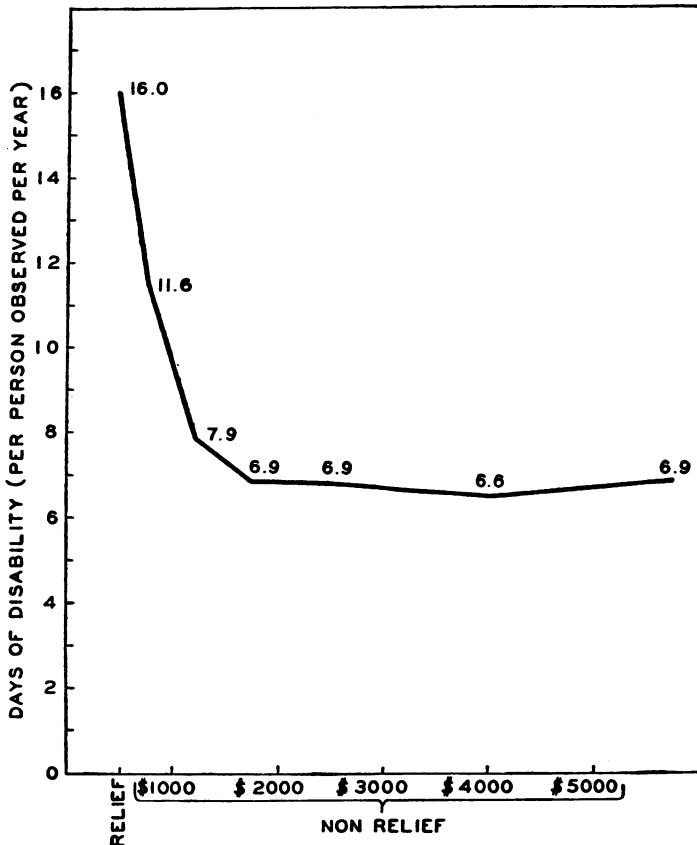


FIGURE 2.—Disability rate according to annual family income and relief status.⁴⁷

¹⁵ The income for the relief group is placed at \$500 in the chart, which figure was taken as a rough estimate of the average annual income of urban relief families.

Differences by age.—The greatest relative excess of illness in the lower income groups over the higher is found in the productive ages, as shown in figure 3 and table 6. The excess in the relief group over the \$5,000 class is as follows for the different ages:

Age	Percentage excess
Under 15.....	8
15-24.....	177
25-64.....	263
65 and over.....	139

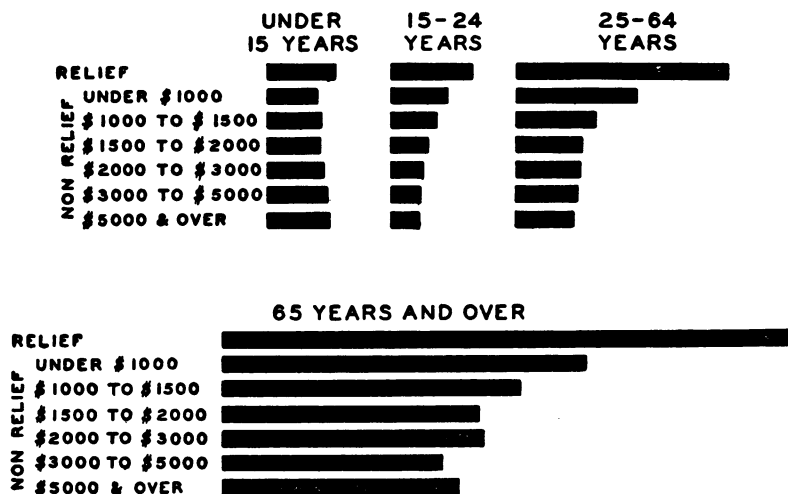


FIGURE 3.—Disability rate according to age and annual family income and relief status.^a

TABLE 6.—Days of disability (per person observed per year)* for persons of different ages, according to economic status[†]

Annual family income and relief status:	All ages	Under 15	15-24	25-64	65 and over
All incomes.....	9.9	5.7	5.4	10.5	36.1
Relief.....	16.0	6.8	8.6	21.8	58.3
Nonrelief:					
Under \$1,000.....	11.6	5.0	5.9	12.4	37.6
\$1,000 to \$1,500.....	7.9	5.4	4.7	8.0	30.7
\$1,500 to \$2,000.....	6.9	5.3	4.2	6.8	26.7
\$2,000 to \$3,000.....	6.9	5.7	3.6	6.6	27.0
\$3,000 to \$5,000.....	6.6	5.8	3.4	6.4	22.8
\$5,000 and over.....	6.9	6.3	3.1	6.0	24.6
Relief and nonrelief under \$1,000.....	13.5	6.0	7.1	16.0	44.4

Diagnoses chiefly responsible for excess amount of disability in low-income groups.—Further light is thrown on the problem of excessive illness rates in the lower income groups by consideration of the degree of excess for specific diagnoses. A later report will deal with this aspect in greater detail; hence, for simplicity, the data given at this time (table 7) will be limited to the ratios of the annual per capita volume of disability for different income groups to that in the group

with annual incomes of \$3,000 or more.¹⁶ The highest ratios are found for hernia, tuberculosis, varicose veins, blindness and deafness, diabetes, diseases of female genital organs, hemorrhoids, orthopedic impairments, miscellaneous digestive diseases, and rheumatism. In general, diagnoses of an acute nature show much less association than chronic diagnoses.

TABLE 7.—Ratio ¹ of annual per capita volume of disability * for different income groups to that in the highest income group, according to diagnosis ¹ *

Diagnosis ¹	Annual family income and relief status					
	Relief	Nonrelief				
		Under \$1,000	\$1,000 to \$1,500	\$1,500 to \$2,000	\$2,000 to \$3,000	\$3,000 and over
Hernia.....	1,261	435	304	191	200	100
Tuberculosis (including nonrespiratory).....	886	392	253	177	139	100
Varicose veins.....	714	329	171	193	136	100
Blindness and deafness.....	562	312	171	146	150	100
Diabetes mellitus.....	423	231	154	141	128	100
Diseases of female genital organs and complications of pregnancy.....	420	230	160	150	150	100
Hemorrhoids.....	371	182	153	129	135	100
Orthopedic impairments.....	367	251	153	123	112	100
Diseases of digestive system other than appendicitis, hernia, and diseases of teeth, mouth, and gums.....	361	191	121	97	100	100
Rheumatism and allied diseases.....	351	202	132	105	110	100
Anemia.....	310	198	133	110	124	100
Diseases of bladder, urethra, urinary passages, and male genital organs.....	304	174	110	101	88	100
Nervous and mental diseases.....	298	212	140	120	112	100
Confinements.....	289	200	205	168	142	100
Diseases of skin and cellular tissue.....	279	176	137	101	97	100
Diseases not elsewhere classified.....	276	168	118	105	103	100
Cardiovascular-renal diseases.....	272	158	112	101	101	100
All diagnoses.....	266	167	121	107	106	100
Cancer and other tumors.....	248	148	114	114	100	100
Accidents.....	213	167	124	109	107	100
Pneumonia (all forms).....	193	120	100	93	107	100
Diseases of respiratory system other than tuberculosis, pneumonia, and tonsillitis.....	192	125	92	90	95	100
Communicable diseases other than those common to childhood.....	183	125	83	73	78	100
Diseases of teeth, mouth, and gums.....	147	147	100	100	87	100
Tonsillitis (including tonsillectomies).....	138	108	100	100	108	100
Diseases of ear and mastoid process.....	132	101	93	87	101	100
Diseases of thyroid gland.....	122	94	61	68	69	100
Common communicable diseases of childhood.....	110	86	93	95	100	100
Appendicitis (including appendectomies).....	104	83	87	83	87	100

¹ Based on rates adjusted to the age composition of the total population specified in reference ¹.

Proportion of employed and unemployed workers disabled on the day of the visit.—Intertwined with the problem of illness in the low-income groups is that of illness among the unemployed. Since employment status was recorded in the survey as of the day of the visit, the most appropriate illness measure is the percentage of persons unable to work on that day. The comparison in figure 4 excludes persons who had been removed from the labor market by reason of chronic disease or impairment—the “unemployables” previously mentioned. Had they been included the contrast between the illness rates for the em-

¹⁶ Persons in institutions for the care of disease for the entire 12 months immediately preceding the visit are excluded from these comparisons.

ployed and the unemployed would have been far greater. Also many of the disabled persons in the unemployed group presented in figure 4 are potential "unemployables." However, the data bring out the great excess of illness among unemployed persons who have not yet abandoned the hope of working. As stated previously, the rates for all groups are higher than they would have been had the visits not been confined largely to winter months.

A more intensive study, to be published later in this series, will show that the illness rate among the unemployed is related to the relief status of the families and of the worker. The rate is higher in relief than in nonrelief families, and among relief families it is higher for workers who were not on work relief than for those who were.

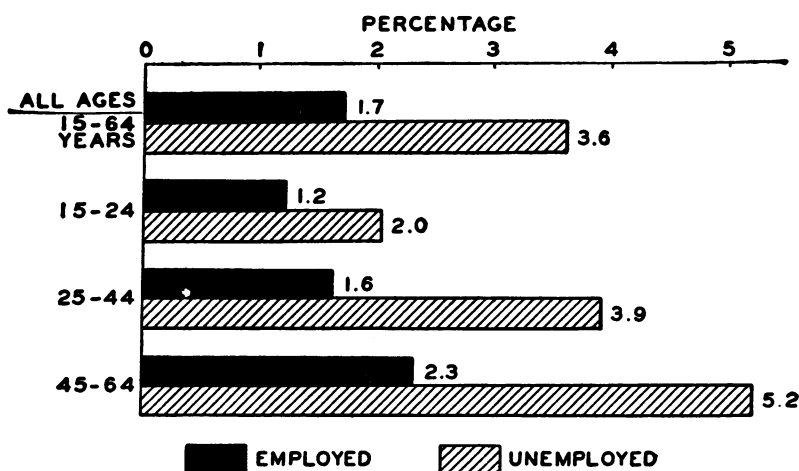


FIGURE 4.—Percentage of employed and unemployed workers disabled on the day of the canvass, in different age groups.

Proportion of "unemployables" in different income groups.—A still further aspect of the problem of illness and income is the concentration of persons reported to be "unemployable" by reason of disability in the low-income groups and especially in the relief group. As in table 1 (item 20) the base for these calculations is the number of workers plus the unemployables themselves. Figure 5 shows the relationship, the comparison being limited to the ages 15-64. In proportion to the number of persons, there were 13 times as many unemployables in the relief group as in the group with incomes of \$5,000 and over (table 8). The relative excess is greatest in the age group 35-44.

CHRONIC DISEASE

With the reduction in mortality from acute diseases and the aging of the population, chronic diseases are assuming a more and more important place in the field of public health. This fact was recognized

in planning the Health Survey, and special effort was made to obtain information on disability from chronic diseases and some estimate of

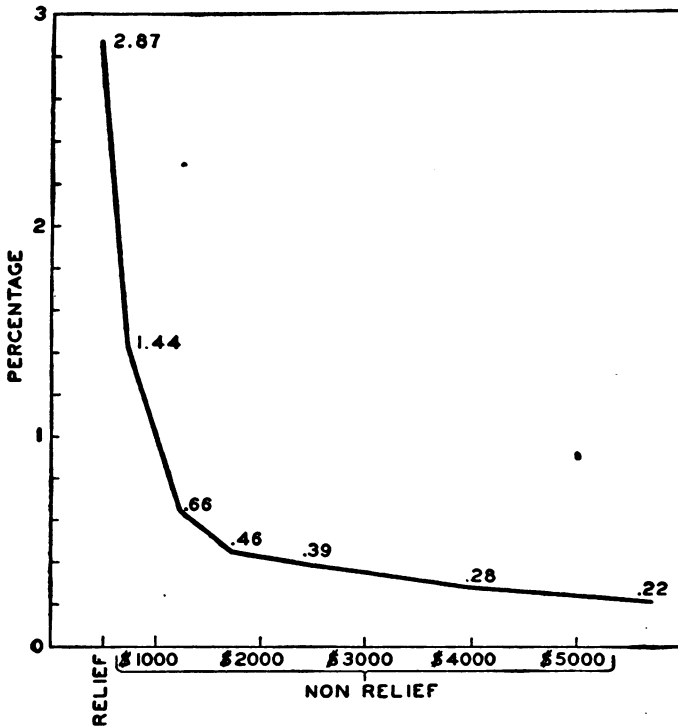


FIGURE 5.—Percentage of workers ^a prevented from being employed or seeking work by reason of chronic disability, according to annual family income and relief status.^{1b}

their prevalence. Although the data collected with respect to any particular chronic disease must be given careful scrutiny not practicable in this summary report, certain broad findings may be presented.

TABLE 8.—Percentage of working population^a reported to be “unemployable” by reason of chronic disability, classified by age and economic status¹

Annual family income and relief status	Percentage prevented from seeking work, in specified age groups					
	Total, 15-64	15-24	25-34	35-44	45-54	55-64
All incomes.....	1.10	.17	.42	1.08	1.78	3.99
Relief.....	2.87	.34	1.36	3.07	4.83	9.49
Nonrelief:						
Under \$1,000.....	1.44	.18	.47	1.47	2.35	4.99
\$1,000 to \$1,500.....	.66	.11	.22	.64	1.09	2.68
\$1,500 to \$2,000.....	.46	.10	.19	.39	.73	1.85
\$2,000 to \$3,000.....	.39	.11	.19	.30	.50	1.58
\$3,000 to \$5,000.....	.28	.08	.08	.16	.39	1.18
\$5,000 and over.....	.22	.10	.14	.11	.20	.78

Frequency of disabling illnesses classified as chronic.—Table 1 (item 7) shows that the annual frequency of illnesses disabling for a

week or longer in which the cause was a chronic disease (i. e., where the disease symptoms had been noticed for 3 months or longer) was 45 per 1,000 persons. In addition, about 60 percent of the illnesses with an impairment as the sole or primary diagnosis (item 8) had a disease as the underlying cause. (See table 2 for frequency rates of various chronic disease groups.)

Disability from chronic disease.—Table 1 (item 13) also shows that 6.3 days per person observed were lost annually from work or other usual pursuit by reason of chronic disease which disabled for a week or more. Again, 60 percent of the days of disability for illnesses with an impairment as the sole or primary diagnosis (item 14) had a disease as the underlying cause. (See figure 1 and table 2 for rates of disability of various chronic disease groups.)

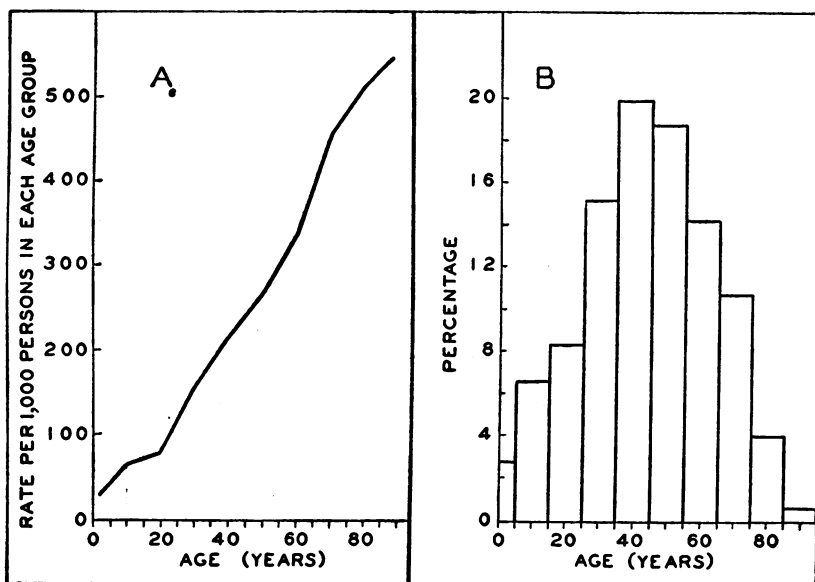


FIGURE 6.—(A) Proportion of persons in each age group reported to have a chronic disease or impairment and (B) percentage distribution by age.

Proportion of persons with a chronic disease or impairment.—In table 1 (item 3) is given the percentage of persons reported to have a chronic disease or impairment (17.7). A discussion of the subjective nature of this criterion has been given previously (p. 446). For purposes of relative comparisons this measure may be taken essentially as one of chronic disease, since the proportion in the group who had an impairment but not a chronic disease is nominal.¹⁷

In figure 6 and table 9 are presented the percentage distribution according to age of persons with a chronic disease or impairment and also the rate per 1,000 persons in each age group.

¹⁷ The percentage of persons with a chronic disease is about 15.6, as against the total rate of 17.7 (from a tabulation of a random sample of punched cards).

TABLE 9.—*Proportion of persons reported to have a chronic ^b disease or impairment ^a and percentage distribution, according to age ^d*

Age in years	Rate per 1,000 persons in each age group	Per-centage distribution	Age in years	Rate per 1,000 persons in each age group	Per-centage distribution
All ages.....	177	100.0	35-44.....	221	19.9
Under 5.....	34	1.4	45-54.....	274	18.8
5-14.....	68	6.6	55-64.....	344	14.2
15-24.....	83	8.4	65-74.....	466	10.8
25-34.....	159	15.3	75-84.....	522	4.1
			85 and over.....	557	.7

That chronic ailments are not merely a problem of old age is manifest. Half of the persons with a chronic disease or impairment were below 45 years of age, the greatest number being found in the age group 35-44. The rate of prevalence rises rapidly with age, but is by no means negligible in young and middle adult life.

Proportion of persons disabled for the whole 12 months immediately preceding the visit.—Equally interesting distributions for persons disabled for the full year under study are given in table 10. Although some persons in the group may be expected to recover their health, the number is probably more than counterbalanced by those who became permanently disabled during the 12-month period. Hence, the group may be regarded as representing an "invalid" population. Although the frequency rate rises rapidly with age, half of the "invalid" group was below the age of 55 years.

TABLE 10.—*Persons disabled for the entire 12 months immediately preceding the visit—frequency per 1,000 persons and percentage distribution according to age ^a*

Age in years	Rate per 1,000 persons in each age group	Per-centage distribution	Age in years	Rate per 1,000 persons in each age group	Per-centage distribution
All ages.....	11.7	100.0	35-44.....	10.8	14.6
Under 5.....	1.6	1.0	45-54.....	16.2	16.8
5-14.....	3.1	4.6	55-64.....	28.5	17.9
15-24.....	4.6	7.1	65-74.....	55.0	19.2
25-34.....	5.7	8.0	75-84.....	76.1	9.1
			85 and over.....	101.0	1.9

In table 11 this invalid population is classified according to the sole or primary diagnosis of the illness. Because of the incompleteness of the information on institutionalized cases, as brought out previously, the rates for nervous and mental diseases and for tuberculosis are too low. Syphilis, although in its later stages a major cause of invalidism, must be omitted because of incompleteness of reports for this disease in a house-to-house canvass. For the purpose of this table, cases with a sole or primary diagnosis of "orthopedic impairment" (233 per 1,000 persons) have been classified under the

reported cause of the impairment, thus giving a more complete picture of the disease causes of invalidism. The major diagnoses in the invalid group were cardiovascular-renal diseases, nervous and mental diseases, rheumatism and allied affections, permanent results of accidents, and tuberculosis.

TABLE 11.—*Proportion of persons disabled for entire 12 months immediately preceding visit, according to sole or primary diagnosis **

Diagnosis *	Rate per 100,000 persons
All diagnoses.....	1,173
Cardiovascular-renal diseases.....	284
With permanent crippling effects.....	(94)
Nervous and mental diseases.....	216
Rheumatism and allied diseases.....	119
Permanent results of accidents.....	103
Senility and other and ill-defined diseases.....	68
Tuberculosis (all forms).....	61
Blindness and diseases of eye.....	42
Chronic diseases of digestive system, not elsewhere classified.....	31
Diabetes mellitus.....	28
Chronic results of communicable disease.....	23
Infantile paralysis.....	(14)
Asthma.....	23
Cancer and other tumors.....	23
Chronic diseases of respiratory system, not elsewhere classified.....	19
Diseases of female genital organs.....	16
Diseases of gall bladder and liver.....	13
Ulcers of stomach and duodenum.....	13
Hernia.....	12
Congenital and early infancy causes.....	12
Diseases of bladder, urethra, urinary passages, and male genital organs.....	11
Deafness and diseases of ear.....	11
Anemia.....	10
Chronic diseases of skin and cellular tissue.....	8.1
Chronic bronchitis.....	7.4
Diseases of bones, joints, and organs of locomotion.....	6.8
Diseases of the thyroid gland.....	6.7
Varicose veins.....	5.1

IMPAIRMENTS

Specific inquiry was made as to the presence of orthopedic impairments, blindness, and deafness, both disabling and nondisabling. Thus the survey yields a type of information which is unique for the general population. The figures represent, for these impairments, the permanent effects of disease and injury over the entire lifetime of living individuals in the surveyed population, and depend in part on changes in the risk.

Prevalence of orthopedic impairments.—About 2 percent of the population enumerated (18.8 per 1,000) were reported to have a permanent orthopedic impairment of such a serious nature that they were considered to be partially or completely crippled, deformed, or paralyzed. About 20 percent of this group were incapacitated throughout practically the whole year.¹⁸ Table 12 gives the rate of prevalence for

¹⁸ The rate of orthopedic impairments disabling for a week or more (sole, primary, and contributory diagnoses) was 3.5 per 1,000 persons. The word "incapacitated" is used in the text because of the long period of disability associated with disabling orthopedic impairments (344 days for sole and primary diagnoses within the 12 months preceding the visit, calculated from table 2).

specific impairments. Since, generally speaking, only one orthopedic impairment was coded for each individual, all references to total prevalent cases can also be considered as representing the total number of individuals affected.¹⁹ It will be seen that the lost parts are mostly fingers, while the impaired members are usually "major", i. e., other than fingers or toes.

TABLE 12.—Prevalence of specified orthopedic impairments per 1,000 persons *

Member or part of body affected *	Total	Lost members	Impaired members
All parts.....	18.8	7.0	11.8
Major members:			
Entire body.....	.83		.83
Foot (feet) or leg(s).....	6.7	.95	5.7
Hand(s) or arm(s).....	2.1	.51	1.6
Back, side, trunk, or head.....	2.7		2.7
Fingers and toes:			
Finger(s).....	6.0	5.1	.88
Toe(s).....	.64	.45	.09

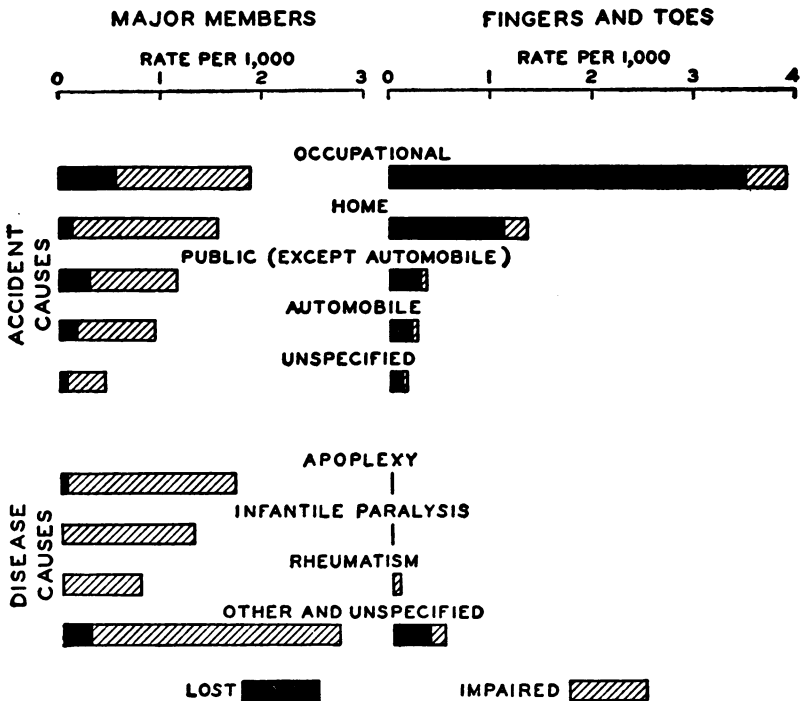


FIGURE 7.—Prevalence of orthopedic impairments according to their cause.**

Causes of orthopedic impairments.—The prevalence of orthopedic impairments according to their causes is given in figure 7 and table 13.

¹⁹ It is obvious from the stub of table 12 that "one orthopedic impairment" may be inclusive of more than one member or part of the body. Limitations of the diagnosis code used necessitated the coding of a relatively few persons (0.55 per 1,000) as having two orthopedic impairments.

All impairments except those of fingers and toes have been combined as "major members," the separation being retained as to whether lost or impaired.

TABLE 13.—*Prevalence of orthopedic impairments per 1,000 persons according to their causes **

Cause	All orthopedic impairments	Lost and impaired		Lost		Impaired	
		Major members	Fingers and toes	Major members	Fingers and toes	Major members	Fingers and toes
Total.....	18.8	12.3	6.5	1.5	5.6	10.8	.96
Accidents.....	11.8	5.9	6.0	1.2	5.2	4.7	.75
Place of occurrence (not including automobile):							
Occupational.....	5.8	1.9	3.9	.56	3.5	1.3	.38
Home.....	2.9	1.6	1.3	.12	1.1	1.4	.23
Public.....	1.5	1.1	.37	.28	.30	.85	.07
Unspecified.....	.57	.41	.16	.06	.13	.35	.03
Automobile.....	1.1	.91	.21	.16	.17	.75	.04
Diseases.....	7.0	6.4	.57	.28	.36	6.2	.21
Apoplexy.....	1.7	1.7	.01	.03	.01	1.7	(1)
Infantile paralysis.....	1.3	1.3	.01	(1)	(1)	1.3	.01
Rheumatism and allied diseases.....	.80	.75	.06	.01	.01	.74	.05
Other and unspecified.....	3.2	2.7	.50	.24	.35	2.5	.15

* Rates less than 0.005.

Of the total number of orthopedic impairments reported, 63 percent were said to be due to accidents and 37 percent to disease. The important role of accidents in creating an impaired population is thus manifest. In the case of lost members, accidents were the cause in 90 percent, whereas for impaired members this percentage was 46; in the case of major members these percentages were 80 and 43, respectively.

For impairments due to accidents (with known place of occurrence), the percentages by place were: Occupational, 51; home, 26; public (including automobile), 23. For impairments affecting major members, these percentages were: Occupational, 35; home, 29; public (including automobile), 36. The different proportions in these two series are largely due to a high rate of lost fingers in occupational accidents.

Of the impairments due to accidents (with known place of occurrence), 10 percent were the result of automobile accidents. It will be realized that the population dealt with excludes any persons killed in automobile accidents. It is also to be noted that the population impaired by automobile accidents would be greater if the risk of today had been present over the entire lifetime of the persons under consideration.

Major disease causes of impairments were apoplexy, infantile paralysis, and rheumatic affections. It is notable that more than 1

in 1,000 persons in the general population were reported to be crippled (in some degree) as a result of infantile paralysis.

Prevalence of blindness.—Inquiry was made as to the number of persons in a given household who were blind in one or both eyes.²⁰ In this general report, data will be included only on those blind in both eyes. Although some cases of "economic," but not complete, blindness have no doubt been included, it is believed that the rate is essentially that of total or practically total blindness. The figure obtained in the survey was 83 per 100,000 persons.

The percentage distribution of these cases by age and the rate of prevalence in each age group is shown in table 14. It is interesting that half of the blind are below the age of 65. On the other hand, the prevalence rate at any given age rises from 12 per 100,000 in the age group under 15 to over 2,900 per 100,000 in the age group 85 and over.

TABLE 14.—*Blind persons (both eyes)—rate per 100,000 persons and percentage distribution by age **

Age in years	Prevalence per 100,000 persons in each age group	Percentage distribution	Age in years	Prevalence per 100,000 persons in each age group	Percentage distribution
All ages.....	83	100.0	45-54.....	90	13.2
Under 15.....	12	3.4	55-64.....	187	16.5
15-24.....	15	3.1	65-74.....	453	22.7
25-34.....	27	5.5	75-84.....	1,096	18.6
35-44.....	49	9.4	85 and over.....	2,916	7.6

Impaired hearing.—Findings relative to impaired hearing, based on the Health Survey and a supplementary study, will be published separately.

ACCIDENTS

Table 2 shows that the annual frequency of illnesses disabling for a week or longer in which an accident was the sole or primary cause was 15.4 per 1,000 persons (9 percent of such illnesses). If to these cases are added those in which the accident was contributory to another diagnosis,²¹ the rate becomes 16.0 per 1,000 persons. The latter type of rate will be employed in this discussion, as it forms a more complete statement of the incidence of accidents than that based on the sole and primary diagnoses.

Since accidents vary widely in severity, perhaps more than any other cause of illness, it is clear that only a small proportion of the

²⁰ The enumerator was not asked to inquire in regard to partial blindness, but was instructed to enter it when the information was volunteered.

²¹ A small number of accident diagnoses contributory to another accident diagnosis have been included for convenience of tabulating. The rate of such cases was 0.25 per 1,000 persons (1.6 percent of accident diagnoses).

total number occurring during a year will cause disability for a week or more; however, it is convenient to have a line of demarcation for relative comparisons. Thus, the distribution of the more serious accidents, judged on this basis, by place of occurrence and means of injury, is of real interest. The rates per 1,000 persons for accidents disabling for a week or more, by place of occurrence and means of injury, are shown in table 15.

TABLE 15.—*Annual frequency of accidents disabling for a week or more * per 1,000 persons, by place of occurrence and means of injury **

Means of injury [†]	Place of occurrences				
	Total	Home	Public	Occupational	Unspecified
Total.....	16.0	4.7	6.4	3.9	.95
Falls by persons.....	5.7	2.6	2.2	.94	.02
Automobiles.....	3.2	.04	3.0	.14	.01
Poisonings.....	.65	.07	.02	.06	.50
Burns.....	.60	.38	.03	.17	.03
Cutting or piercing instruments.....	.59	.27	.09	.22	.01
Machinery.....	.47	.10	.01	.36	(1)
Transportation (except automobile).....	.29	.01	.19	.08	(1)
All other known means.....	.53	.10	.16	.07	.20
Unspecified means.....	3.9	1.1	.76	1.9	.18

[†] Less than .005.

Of the accidents with known place of occurrence, 43 percent occurred in public places, 31 percent occurred in the home, and 26 percent were occupational.

The percentage of accidents due to different means of injury was as follows: Falls, 47; automobile, 26; poisonings, 5.4; burns, 5.0; cutting and piercing instruments, 4.9; machinery, 3.9; transportation (except automobile), 2.4; other known, 4.4.

SUMMARY

The present report summarizes the illness data collected in a house-to-house canvass of more than 700,000 urban families (2,500,000 white and colored persons) in 18 States, made from November 1935 to March 1936. Because of the recognized impossibility of complete enumeration of illness, some of the rates given are somewhat below the true values.

General rates.—Four and one-half percent of the persons were disabled on the day of the canvass, including one-fourth of this number who had been disabled for the entire 12 months immediately preceding the visit. Eighteen percent were reported as having a chronic disease or impairment.

The annual frequency of illness disabling for a week or longer (including hospital cases, confinements, and fatal illnesses of any duration of disability) was 171 cases per 1,000 persons. The number of

days of disability per person observed per year was 10; and the number of days per case was 58.

One percent of workers aged 15-64 were reported to be "unemployable" by reason of disability.

Diagnosis.—The most common causes of illnesses disabling for a week or longer during a year were respiratory in nature (colds, influenza, tonsillitis, pneumonia, tuberculosis). Second in rank were the common communicable diseases of childhood. With respect to total days of disability, the cardiovascular-renal group ranked first and the group of nervous and mental diseases second.

Illness in particular age groups.—By age the annual frequency of illnesses disabling for a week or more was: Under 15, 214; 15-24, 131; 25-64, 153; 65 and over, 279. The corresponding values for days of disability per person were 5.7, 5.4, 10.5, 36.1.

Income, employment status, and illness.—The annual frequency of illnesses disabling for a week or more was much higher in the relief and low-income groups than in the groups above \$1,500. In terms of volume of disability the contrast was even greater, the excess over the highest income group (\$5,000 and over) being 132 percent and 68 percent, respectively, for the relief group and the next lowest income group. The change with income was most marked in the productive period of life. Chronic diagnoses showed the most marked differences in relative volume of disability between the low and high income groups, particularly hernia, tuberculosis, varicose veins, and blindness and deafness.

The unemployed workers had much higher illness rates than the employed. In the ages 15-64, 1.7 percent of the employed were disabled on the day of the visit, as against 3.6 for the unemployed workers.

There was a marked concentration in the low-income group of persons who were reported to be "unemployable" by reason of disability. In relief families the percentage of workers so classified was 2.9; in nonrelief families with incomes under \$1,000 it was 1.4. The proportion continued to decrease with rising family income, reaching 0.22 in the group with incomes of \$5,000 and over.

Chronic disease.—Six and a half days per person per year were lost from work or other usual pursuit by reason of illnesses due to chronic diseases which disabled for a week or longer, or two-thirds of the total amount of disability of this minimum duration. The annual frequency of such illnesses was 45 per 1,000 persons.

Chronic disease is not merely a problem of old age—half of the persons with a chronic disease or impairment were below 45 years of age. In the case of "invalids" (persons disabled for 12 months immediately preceding the visit), half were below the age of 55. The major diagnoses in the "invalid" group were cardiovascular-renal diseases,

nervous and mental diseases, rheumatism and allied affections, permanent results of accidents, and tuberculosis.

Impairments.—About 2 percent of the population enumerated were reported to have a permanent orthopedic impairment of such serious nature that they were considered to be partially or completely crippled, deformed, or paralyzed. About 20 percent of this group were incapacitated throughout practically the whole year. Of the total number of orthopedic impairments reported, 63 percent were due to accidents and 37 percent to disease. Of those due to accidents (with known place of occurrence), the percentages by place were: Occupational, 51; home, 26; public (including automobile), 23. Ten percent were the result of automobile accidents. Major disease causes of impairments were apoplexy, infantile paralysis, and rheumatic affections.

A rate of 83 per 100,000 persons was obtained for total or practically total blindness in both eyes, half of the cases being below the age of 65.

Accidents.—The annual frequency of accidents disabling for a week or more over the period of a year was 16 per 1,000 persons. The percentage distribution of such accidents by known place of occurrence was public, 43; home, 31; and occupational, 26. Falls were the most common means of injury, being responsible in 47 percent of all cases with known means. Twenty-six percent of accidents disabling for a week or longer were automobile accidents.

Appendix

REFERENCES TO TABLES AND CHARTS

(These references are to be considered as supplementary to the basic description of the National Health Survey technique and definitions which have been given in "Scope and method of a Nation-wide canvass of sickness in relation to its social and economic setting," by George St. J. Perrott, Clark Tibbitts, and Rollo H. Britten, *Pub. Health Rep.*, 54: 1663 (1939).)

- Based on 2,502,391 persons in 83 cities, distributed by age (years) as follows:

Under 5--	175, 653	35-44----	395, 525	75-84-----	34, 857
5-14-----	427, 161	45-54----	303, 008	85 and over	5, 385
15-24----	446, 369	55-64----	182, 754	Unknown--	4, 211
25-34----	425, 301	65-74----	102, 167		

• "Chronic" refers to illnesses the disease symptoms of which had been observed for at least 3 months before the day of visit.

• "Impairment" includes impaired or lost members, deafness and blindness. (A person may have had more than one chronic disease and/or impairment.)

• Based on 12,512 punch cards selected at random (every 200th card) from among those for 2,502,391 persons in 83 cities. (See • above.)

• Includes some cases which had been disabled for less than 1 week, viz, fatal cases, confinements, and hospitalized cases. (See footnote 9 of text.)

• Based on 2,350,951 persons of known age and known annual family income in 83 cities. Limited to cases and persons within the following definition:

Geographic region	Size of city	Color
Northeast and North Central.....	500,000 and over.....	All.
Do.....	Under 500,000.....	White only.
South.....	All.....	White and Negro only.
West.....	do.....	White only.

Such persons are distributed by age (years) and annual family income as follows:

	Under 15	15-24	25-64	65 and over
Relief.....	147,984	79,226	181,030	21,211
Nonrelief:				
Under \$1,000.....	126,250	99,976	290,732	45,227
\$1,000 to \$1,500.....	129,087	92,128	283,296	25,843
\$1,500 to \$2,000.....	86,842	67,947	218,821	17,922
\$2,000 to \$3,000.....	55,301	48,562	160,314	13,565
\$3,000 to \$5,000.....	18,867	19,870	64,984	6,148
\$5,000 and over.....	7,793	8,401	30,020	3,603

* Based on cases with known duration of disability. (Those with unknown duration of disability amount to only 0.4 percent of all cases.)

† Calculated according to the formula $\frac{100 D}{W+D}$,

where D =number of persons in the general population (see † below) who were, because of chronic disease or impairment, prevented from seeking work, and

W =number of workers. (See † below.)

‡ Based on 982,440 persons of known annual family income in 83 cities (see † above), distributed by age (years) and annual family income as follows:

	15-24	25-34	35-44	45-54	55-64
Relief.....	41,974	35,958	35,130	27,680	15,051
Nonrelief:					
Under \$1,000.....	50,985	64,879	56,798	42,075	24,974
\$1,000 to \$1,500.....	45,894	64,226	53,798	36,965	18,615
\$1,500 to \$2,000.....	35,316	46,993	41,778	29,952	14,477
\$2,000 to \$3,000.....	25,673	33,918	30,562	22,722	11,522
\$3,000 to \$5,000.....	10,558	13,626	11,772	10,029	5,501
\$5,000 and over.....	3,960	5,827	5,306	4,952	2,964

§ Sole or primary diagnoses grouped as follows:

Common communicable diseases of childhood: Measles, mumps, chickenpox, whooping cough, scarlet fever, German measles, diphtheria.

Other communicable diseases: Malaria, erysipelas, typhoid fever, smallpox, local infections, other infectious and parasitic diseases, except tuberculosis and influenza.

Cancer and other tumors: Malignant and nonmalignant tumors.

Diabetes mellitus.

Rheumatism and allied diseases: Rheumatism, arthritis, gout, neuralgia, neuritis, lumbago, acute rheumatic fever, stiff neck, and other muscular pains.

Cardiovascular-renal diseases: Heart diseases (including diseases of coronary arteries), arteriosclerosis, hypertension, cerebral hemorrhage, kidney diseases, current paralysis except paresis.

Nervous and mental diseases: Neurasthenia, nervous breakdown, epilepsy, chorea, locomotor ataxia, paresis, insanity, other diseases of the nervous system.

Diseases of ear and mastoid process.

Tuberculosis: All forms of tuberculosis.

Pneumonia: All forms of pneumonia (not including hypostatic pneumonia).

Tonsillitis: Including quinsy, tonsillectomies, and adenoidectomies.

Other diseases of respiratory system: Influenza, grippe, colds, bronchitis, sinusitis, throat affections other than those of the tonsils, pleurisy, asthma, hay fever, other diseases of the respiratory system.

Appendicitis: Including appendectomies.

Hernia.

Diseases of the teeth, mouth, and gums: Including toothache.

Other diseases of digestive system: Ulcers of the stomach or duodenum, indigestion, biliousness, diarrhea, enteritis, colitis, gall bladder and liver diseases, other digestive diseases.

Diseases of thyroid gland: All types of goiter and thyroid and parathyroid diseases.

Anemia: All forms of anemia.

Hemorrhoids.

Varicose veins: Varicose veins or ulcers, varicocele.

Diseases of bladder, urethra, urinary passages, and male genital organs: Including prostatitis and circumcision; excludes venereal diseases.

Diseases of female genital organs and complications of pregnancy: Menstrual disorders including menopause, cysts of ovaries, uterus, and tubes, diseases of breast, other diseases of female genital organs and diseases and toxemias of pregnancy without loss of fetus; excludes venereal diseases, cancer, and other tumors.

Confinements: Live births, stillbirths, miscarriages, abortions, ectopic pregnancies.

Diseases of skin and cellular tissue: Abscesses, ulcers, boils, impetigo, eczema, scabies, itch, urticaria, other diseases of the skin and cellular tissue.

Accidents: Accidents of all types; excludes suicides and homicides and attempted suicides and homicides.

Orthopedic impairments: Orthopedic impairments of all types.

Blindness and deafness: Including blindness in one eye and deaf-mutism.

Other and ill-defined causes: All diagnoses not included above (particularly, other diseases of the circulatory system, diseases of the lymphatic system, eyes, bones, joints, organs of locomotion, congenital malformations, and diseases of early infancy).

* Exclusive of persons who had been in institutions for the care of disease or impairment for the entire 12 months (or longer) immediately preceding the visit.

¹ "Employed worker" is a person engaged in regular (not work relief) full- or part-time gainful employment on the day of the visit, without regard to whether he was, on that day, actually at work, not required to be at work, on strike, or temporarily disabled because of illness.

"Unemployed worker" is a person who was reported as seeking work on the day of the visit whether or not he had previously been employed (or if temporarily disabled because of illness on that day, would seek work upon recovering sufficiently to be able to do so) or a person who was on work relief on the day of the visit.

Persons who were, because of chronic disease or impairment, prevented from seeking work, are not included as "workers."

* Based on 971,620 workers (see ¹ above) aged 15-64 years in families with known annual income in 83 cities, distributed by age (years) and employment status as follows:

	15-24	25-44	45-64
Employed.....	138,958	413,956	203,688
Unemployed.....	75,043	82,974	57,001

In the calculation of the rates, workers who had claimed workmen's compensation are excluded from the numerator; this exclusion was made to facilitate tabulation and does not change the comparisons since only 0.1 percent of all workers are affected.

• Causes of disability grouped as follows:

Cardiovascular-renal diseases: Heart diseases (including diseases of coronary arteries), arteriosclerosis, hypertension, cerebral hemorrhage, kidney diseases, current paralysis except paresis. "With permanent crippling effects" refers to cases reported by the family informant as having an orthopedic impairment.

Nervous and mental diseases: Neurasthenia, nervous breakdown, epilepsy, chorea, locomotor ataxia, paresis, other diseases of the nervous system.

Rheumatism and allied diseases: Rheumatism, arthritis, gout, neuralgia, neuritis, lumbago, acute rheumatic fever, stiff neck, and other muscular pains.

Permanent results of accidents: Impairment or loss of members resulting from accidents which occurred more than 12 months prior to the visit. Attempted suicides and homicides are not considered to be accidents.

Senility and other ill-defined diseases: Senility, debility, asthenia, fatigue, exhaustion, malnutrition, aneurysm (except of the heart), gangrene, diseases of circulatory system not elsewhere classified, hemorrhoids, pellagra, diseases of lymphatic system, results of attempted suicides and homicides, other general, ill-defined or unknown causes.

Tuberculosis: All forms of tuberculosis.

Blindness and diseases of eye: Including blindness in one eye.

Chronic diseases of digestive system not elsewhere classified: Indigestion, biliousness, diseases of mouth, teeth, and gums; diarrhea, enteritis, appendicitis, other and ill-defined stomach diseases; and other and ill-defined diseases of the digestive system. Excludes diseases of the gall bladder and liver, hernia, and ulcers of the stomach or duodenum.

Diabetes mellitus.

Chronic results of communicable disease: Infantile paralysis, other communicable diseases.

Asthma.

Cancer and other tumors: Malignant and nonmalignant tumors.

Chronic diseases of respiratory system not elsewhere classified: Sinusitis, pleurisy, throat affections, pneumonia, colds, influenza, grippe, hay fever, other diseases of the respiratory system not elsewhere classified. Excludes tuberculosis, asthma, and bronchitis.

Diseases of female genital organs: Menstrual disorders including menopause, complications of childbirth and pregnancy, diseases of the breast, other and ill-defined diseases of the female genital organs. Excludes venereal diseases, cancer, and other tumors.

Diseases of gall bladder and liver.

Ulcers of stomach and duodenum.

Hernia.

Congenital and early infancy causes: Congenital malformations or deformities including those of the heart, congenital debility, pyloric stenosis, injury at birth, other early infancy causes.

Diseases of bladder, urethra, urinary passages, and male genital organs: Excludes venereal diseases.

Deafness and diseases of ear, including deaf-mutism.

Anemia: All forms of anemia.

Chronic diseases of skin and cellular tissue: Abscesses, ulcers, boils, impetigo, eczema, scabies, itch, urticaria, other diseases of the skin and cellular tissue.

Chronic bronchitis.

Diseases of bones, joints, and organs of locomotion: Excludes lumbago, myalgia, and other muscular pains.

Diseases of thyroid gland: All types of goiter and thyroid and parathyroid diseases.

Varicose veins: Varicose veins or ulcers, varicocele.

* Based on 2,498,180 persons of known age in 83 cities. (See "above.")

* When more than one member or part of the body was lost or impaired the following rules (for the purpose of this article) were applied:

(1) For a combination of lost part(s) and impaired part(s), in general (see footnote 19 to text), only the lost part(s) is shown.

(2) For combinations of lost parts only and for combinations of impaired parts only, selection of the impairment to be shown was based on the order in table 12; for instance, combinations of a lost foot and a lost arm would be shown only under "lost foot."

Back, side, trunk, or head: Includes spine, shoulder, chest, skull, and face.

Joints in the hand, wrist, elbow, or shoulder are classified as impaired hand(s) or arm(s); joints in the foot, ankle, knee, or hip as impaired foot (feet) or leg(s).

* Apoplexy, including embolism, thrombosis, softening of the brain, arteriosclerosis, hypertension, and paralysis.

Rheumatism and allied diseases, including arthritis, gout, neuralgia, and lumbago.

Other and unspecified causes: In the order of their frequency, weakness of arch(es) (foot); tuberculosis, osteomyelitis, and other diseases of the bones and joints; abscesses, local infections, and septicemia; diabetes and gangrene; other infectious and nervous system diseases, including meningitis and encephalitis; cancer and tumors; etc.

* Automobile (as a means of injury) refers to any accident in which an automobile was involved, including collisions with trains, streetcars, and pedestrians.

Poisoning: Poisoning by food, chemicals, drugs, plants, gas, etc.

Machinery: Includes accidental traumatism in mines and quarries.

Other means of injury: In the order of their frequency, attack by animals, venomous and other; excessive heat or cold; firearms, except when used in war; etc.

Injuries from attempted suicides and homicides are not classified as accidents.

SANITARY UNITS ON SHIPS¹

ORGANIZATION AND OPERATION

By G. C. SHERRARD, *Acting Assistant Surgeon, United States Public Health Service*

In the past the problem of ship sanitation has been principally the concern of the Federal Government whose representatives inspected the vessels at various intervals while in port. Since the greater part of a ship's life is spent at sea it is evident that the maintenance of satisfactory sanitary conditions on board is a joint responsibility in which the officers and crew play the major role. The development

¹ This paper is based upon an outline prepared by Sanitary Inspector Louis Lindcop of the New York Quarantine Station, where the organization described is in effective operation at present.

of this responsibility, applicable to all vessels, has been intensified by the inauguration of radio pratique, whereby selected passenger vessels are permitted to enter certain United States ports without stopping for the customary quarantine inspection. As the granting of this privilege is premised on the maintenance of acceptable sanitary conditions on the vessel, this article is presented in the hope that owners and operators of all vessels will avail themselves of the benefit of this or similar plans to the end that their vessels may be maintained in a satisfactory sanitary condition, thereby avoiding any quarantine delay and expense resulting from or incident to insanitary conditions.

In order to attain desired sanitary objectives a system has been devised whereby the responsibility for the maintenance of a satisfactory sanitary status is placed upon certain members of a vessel's personnel while at sea, reinforced by specialized personnel while in port. Under this plan a sanitary inspector, representing the United States Public Health Service, inspects a vessel upon arrival in a United States port at least once in 90 days, making such recommendations for the correction of insanitary conditions as may be indicated. During an inspection each organized department of the vessel is visited, in company with the head of the department; each compartment is inspected and conditions such as dirt, waste food, rubbish, improperly handled garbage, excess gear and dunnage, and evidence of insect or rodent infestation are noted and recommendations made for their correction.

The ship sanitation organization effected by some of the large steamship lines at the port of New York is shown in figure 1.

Under this plan the chief officer of the vessel is the directing head of the organization at sea, operating through a sanitary officer appointed from among the junior deck officers. This sanitary officer makes periodical inspections of the vessel, reporting to the chief officer insanitary conditions and the progress made in correcting defects previously reported.

Each department head then designates a trustworthy member who is charged with the responsibility of maintaining the various sections of his own department in a clean and sanitary condition and also insuring their freedom from insect and rodent infestation. This personnel, together with the junior and chief officer, comprise the sanitary unit of a vessel.

Upon completion of a voyage the chief officer renders a written report on the sanitary condition of the vessel, stating what special measures were applied during the voyage, the sections in which the work was done, and listing the sections, if any, in which rodent or vermin infestation is known to exist. This report is given to the shore officials of the line and a copy is kept on the ship for the information of the Public Health Service.

The sanitary inspector representing the steamship lines is usually a full-time employee who, in addition to his regular duties, is charged with the supervision of the sanitary problems of the vessel while in port. He either has had experience with the various problems of ship sanitation or is capable of learning the essentials within a short training period. He can be made responsible to any department of the company but it is desirable that he operate under the medical department, when such an organization exists. His duties are to

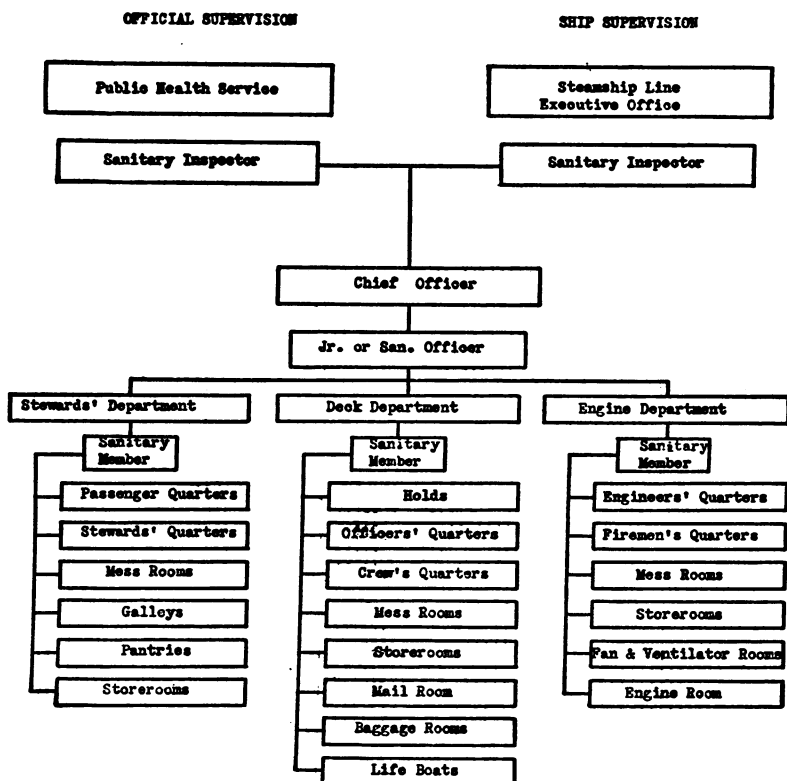


FIGURE 1.—Ship sanitation organization.

assume full and complete charge of the following sanitary work while the vessel is in port:

1. The proper fending off dock and the placing of effective rat guards on all lines.
2. The proper collection, protection, and disposal of garbage.
3. The systematic inspection of the vessel for insanitary conditions, rodent and insect infestation.
4. The institution of measures for the correction of any insanitary condition, guidance being afforded by the chief officer's report. In addition to transmitting the chief officer's sanitary report to the proper line official, he should supplement it with a concise report of his own.

5. Contact with the Public Health Service representative during that official's tour of inspection and cooperation in carrying out the recommendations made.

6. The reporting to the chief officer, prior to the vessel's departure, of uncorrected conditions, these to be remedied while the vessel is at sea.

The plan of sanitary organization as outlined may be contracted, expanded, or otherwise changed, as conditions warrant, so long as the steady flow of sanitary information from the vessel to the operating executives of the steamship line and the Public Health Service is maintained, with corrective measures flowing in the opposite direction. The three key positions in this set-up are the chief officer, the shore sanitary inspector of the steamship company, and the United States Public Health Service inspector.

SKIN HAZARDS IN AMERICAN INDUSTRY, PART III¹

A Review

This is the third of the series of publications on the studies of skin hazards in American industry made in factories by the Office of Dermatoses Investigations of the United States Public Health Service.

Studies made in 11 industries are included in this bulletin.

1. Studies were made in the citrus fruit industry in Florida and California, and the skin hazards from fertilizers, insecticides, thorns, citrus juices, and oils are discussed. No cases of dermatitis were found to be due to the dyes used on citrus fruit.

2. Studies on cigar manufacture were made in Pennsylvania and Florida. Skin hazards in this industry are very few and there were no cases of hypersensitivity found that were due to tobacco alone.

3. Acids are divided into organic and inorganic, and a brief description of their manufacture is given. The skin hazards in their use are discussed.

4. The skin hazards in pulp and paper manufacture consist principally of alkali burns.

5. The skin hazards in the manufacture of various organic solvents are discussed. These solvents cause dermatitis because of their property of extracting fat from the skin. Particular attention is paid to turpentine manufacture and the skin lesions caused by it.

6. In the manufacture of chromic acid and the chromates, ulceration of the skin and of the nasal mucous membranes is quite common. Dermatitis due to hypersensitivity to the chromates is not so common.

7. The skin hazards in iron and steel manufacture consist of burns and intertrigo due to heat, acid burns from the pickling solutions,

¹ Public Health Bulletin No. 249, same title as above. By Louis Schwartz. Available from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 15 cents per copy.

and alkali burns from the lime used in pickling and cutting compounds. Folliculitis and boils occur from petroleum oils used on various kinds of machinery.

8. Dermatitis from paints, varnishes, and lacquers is usually caused by hypersensitivity to vegetable oils, by volatile solvents used as thinners, alkalies and acids used as paint removers, and but very rarely from pigments and dyes.

9. In the manufacture of glass, dermatitis occurs from alkalies and arsenic. Various stigmata, such as calluses, and deformities of the teeth are also observed.

10. The skin hazards in photographing, photoengraving, and the like, are usually from the developers and the cleaning solutions used by the workers to remove chemicals from their hands. Authentic cases of dermatitis from carbon paper, typewriter ribbons, and hectograph inks are exceedingly rare.

11. Dermatitis in the manufacture of explosives has been greatly reduced since the World War. Worthy of note is the occurrence of symptoms of chronic alcoholism among munition workers exposed to the fumes of alcohol used in the manufacturing of gun cotton, and the occurrence of a blue line on the gums resembling that of lead poisoning in workers exposed to the action of TNT.

Methods of prevention and an extensive bibliography are included. The bulletin contains 22 illustrations.

DEATHS DURING WEEK ENDED FEBRUARY 24, 1940

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

	Week ended Feb. 24, 1940	Correspond- ing week, 1939
Data from 88 large cities of the United States:		
Total deaths.....	9, 409	10, 096
Average for 3 prior years.....	9, 597	
Total deaths, first 8 weeks of year.....	77, 350	75, 540
Deaths under 1 year of age.....	490	589
Average for 3 prior years.....	597	
Deaths under 1 year of age, first 8 weeks of year.....	4, 333	4, 433
Data from industrial insurance companies:		
Policies in force.....	66, 131, 396	68, 013, 875
Number of death claims.....	12, 624	12, 447
Death claims per 1,000 policies in force, annual rate.....	10.0	9.5
Death claims per 1,000 policies, first 8 weeks of year, annual rate.....	10.4	10.0

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

REPORTS FROM STATES FOR WEEK ENDED MARCH 9, 1940

Summary

For the week ended March 9, 1940, the incidence of each of the 9 important communicable diseases reported weekly to the Public Health Service by the State health officers was below the median expectancy based on the median for the corresponding week of the 5-year period 1935-39. For the first time this year the weekly influenza incidence dropped below the 5-year median, and for the second time this year the weekly incidence of poliomyelitis was below the median expectancy.

For the current week, 9,590 cases of influenza were reported, as compared with 11,533 for the preceding week and with 11,131 for the median week of the preceding 5 years. All geographic areas which have been reporting the largest numbers of cases registered declines for the current week, with the exception of the East North Central group, where the number of cases reported from Wisconsin increased from 173 to 420.

As compared with the preceding week, increases are shown in the current reports for diphtheria, measles, smallpox, typhoid fever, and whooping cough. Of the total of 94 cases of smallpox reported during the current week, 42 cases were reported in Oklahoma.

Current reports include 19 cases of endemic typhus fever (7 in South Carolina), 1 case of tularaemia (in Maryland), and 5 cases of undulant fever (all in the South and Eastern States).

Telegraphic morbidity reports from State health officers for the week ended March 9, 1940, and comparison with corresponding week of 1939 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none were reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis. men- ingococcus		
	Week ended		Med- ian, 1935- 39	Week ended		Med- ian, 1935- 39	Week ended		Med- ian, 1935- 39	Week ended		Med- ian, 1935- 39
	Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939	
NEW ENG.												
Maine.....	1	6	2	1	103	103	236	16	147	1	1	0
New Hampshire.....	0	0	0	-----	-----	-----	140	2	16	0	0	0
Vermont.....	0	0	0	-----	-----	-----	7	19	19	0	0	0
Massachusetts.....	2	4	4	-----	-----	-----	266	815	810	2	0	2
Rhode Island.....	0	0	1	-----	1	-----	161	9	39	1	0	0
Connecticut.....	3	1	2	9	141	26	238	595	595	0	0	0
MID. ATL.												
New York.....	17	37	37	140	157	147	467	1,482	1,881	2	7	11
New Jersey.....	7	7	14	13	19	28	183	41	1,058	0	1	3
Pennsylvania.....	35	44	47	-----	-----	-----	221	174	776	6	8	6
E. NO. CEN.												
Ohio.....	22	17	21	36	-----	28	27	16	258	2	0	9
Indiana.....	9	16	18	86	315	82	12	5	15	1	0	3
Illinois.....	23	33	36	56	838	71	58	23	57	1	5	5
Michigan ¹	5	8	12	12	674	6	319	373	373	1	1	1
Wisconsin.....	4	0	3	420	1,516	91	377	781	781	1	0	0
W. NO. CEN.												
Minnesota.....	1	8	5	4	40	2	240	1,046	272	0	0	1
Iowa.....	4	5	4	28	695	8	328	290	163	0	1	1
Missouri.....	11	6	21	8	678	243	8	14	63	0	1	3
North Dakota.....	2	1	4	36	741	6	6	113	9	0	1	0
South Dakota.....	1	1	1	1	50	1	2	146	14	0	0	0
Nebraska.....	2	1	3	7	1	1	33	38	38	0	2	1
Kansas.....	11	2	4	29	226	43	522	49	49	1	0	0
SO. ATL.												
Delaware.....	0	2	2	-----	-----	0	1	0	28	0	0	0
Maryland ¹	2	7	7	53	53	64	5	1,020	195	0	1	2
Dist. of Col.....	6	1	9	-----	11	4	0	30	30	0	1	3
Virginia.....	18	21	12	1,182	1,991	-----	48	424	401	1	2	4
West Virginia.....	11	7	8	893	71	135	10	15	15	4	2	5
North Carolina ¹	14	13	14	116	386	278	170	1,068	607	0	1	2
South Carolina ²	7	4	4	766	1,142	1,005	18	36	44	1	2	2
Georgia ¹	3	5	13	287	420	420	156	192	0	0	1	1
Florida ²	5	8	8	26	3	20	137	46	36	1	0	0
E. SO. CEN.												
Kentucky.....	8	9	14	83	1,792	103	56	102	102	1	1	6
Tennessee.....	4	2	11	261	469	452	117	117	89	1	0	4
Alabama ³	13	9	9	501	1,126	1,126	174	396	396	1	0	4
Mississippi ^{1,2}	6	5	5	-----	-----	-----	-----	-----	-----	2	1	1
W. SO. CEN.												
Arkansas.....	5	11	8	501	1,532	260	6	39	39	0	0	1
Louisiana.....	7	25	18	135	82	82	5	201	70	0	2	2
Oklahoma.....	4	7	11	355	387	337	7	257	83	0	0	9
Texas ¹	34	38	54	2,854	968	1,279	745	139	309	2	1	5
MOUNTAIN												
Montana.....	9	2	2	8	125	23	28	494	80	0	0	0
Idaho.....	1	0	0	2	14	5	58	59	29	2	3	0
Wyoming.....	0	1	0	10	8	-----	39	7	12	1	0	0
Colorado.....	4	12	9	30	136	-----	25	200	200	1	0	0
New Mexico.....	0	1	2	3	677	9	9	27	44	0	0	0
Arizona.....	4	11	2	273	191	105	42	38	42	0	2	0
Utah ²	1	1	0	9	119	-----	264	145	23	0	0	0
PACIFIC												
Washington.....	0	3	3	3	3	3	930	560	207	0	0	2
Oregon.....	2	1	0	42	261	144	471	41	41	0	0	1
California ¹	20	28	32	411	73	377	417	3,504	598	2	4	7
Total.....	348	431	524	9,590	18,135	11,131	7,789	15,224	15,224	39	52	174
10 weeks.....	4,064	5,370	6,327	133,764	69,182	69,182	52,508	121,348	121,348	390	533	1,161

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended March 9, 1940, and comparison with corresponding week of 1939 and 5-year median—Con.

Division and State	Polio-myelitis			Scarlet fever			Smallpox			Typhoid and para-typhoid fever		
	Week ended		Med-ian, 1935-39	Week ended		Med-ian, 1935-39	Week ended		Med-ian, 1935-39	Week ended		Med-ian, 1935-39
	Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939	
NEW ENG.												
Maine.....	0	0	0	13	20	17	0	0	0	0	4	0
New Hampshire.....	0	0	0	2	9	13	0	0	0	0	0	0
Vermont.....	0	0	0	23	15	17	0	0	0	0	0	0
Massachusetts.....	0	0	0	140	219	256	0	0	0	1	1	1
Rhode Island.....	0	0	0	16	5	15	0	0	0	0	0	0
Connecticut.....	0	0	0	69	111	111	0	0	0	2	1	0
MID ATL.												
New York.....	1	0	1	933	747	952	0	0	0	2	6	6
New Jersey.....	0	0	0	380	161	166	0	0	0	1	4	2
Pennsylvania.....	1	1	0	430	649	675	0	0	0	47	7	6
E. NO. CEN.												
Ohio.....	0	1	1	307	511	471	0	27	2	3	1	3
Indiana.....	0	1	0	288	224	237	2	33	3	1	1	0
Illinois.....	0	1	2	655	543	888	3	9	22	3	3	5
Michigan ¹	0	0	0	299	609	609	0	14	1	5	1	2
Wisconsin.....	4	1	0	149	238	379	6	10	10	3	0	1
W. NO. CEN.												
Minnesota.....	0	0	0	98	121	153	12	7	7	0	0	0
Iowa.....	0	0	0	65	198	198	4	31	31	1	0	1
Missouri.....	0	0	0	70	93	195	8	11	11	2	10	5
North Dakota.....	0	0	0	25	13	53	1	0	3	0	2	0
South Dakota.....	0	0	0	13	26	40	0	8	8	0	1	0
Nebraska.....	0	0	0	26	41	57	1	19	17	0	0	0
Kansas.....	0	0	0	82	127	207	1	0	26	0	1	1
SO. ATL.												
Delaware.....	0	0	0	14	0	10	0	0	0	1	0	0
Maryland ¹	0	0	0	57	41	74	0	0	0	3	0	2
Dist. of Col.....	0	0	0	35	15	24	0	0	0	0	2	0
Virginia.....	0	1	0	61	36	36	0	0	0	3	3	2
West Virginia.....	1	0	0	56	48	49	0	1	0	3	9	3
North Carolina ¹	0	0	0	61	57	41	0	0	0	1	6	3
South Carolina ¹	0	1	0	5	8	5	0	0	0	0	6	3
Georgia ¹	1	0	0	22	17	12	1	0	0	2	2	1
Florida ¹	0	0	0	10	16	8	0	0	0	45	1	1
E. SO. CEN.												
Kentucky.....	0	1	1	69	96	72	0	1	1	4	3	3
Tennessee.....	0	0	0	76	49	30	0	2	2	0	0	2
Alabama ¹	2	0	1	13	23	17	0	0	0	1	2	2
Mississippi ^{1,2}	0	3	1	7	5	8	1	0	0	1	1	1
W. SO. CEN.												
Arkansas.....	0	0	0	7	15	12	5	2	2	1	6	2
Louisiana.....	0	0	0	26	14	14	0	1	2	2	56	13
Oklahoma.....	0	1	0	15	33	33	42	47	3	0	3	3
Texas ¹	0	1	1	52	79	112	0	30	28	3	8	9
MOUNTAIN												
Montana.....	0	0	0	42	25	36	0	0	7	0	0	0
Idaho.....	0	0	0	15	30	19	1	6	4	0	1	1
Wyoming.....	0	0	0	9	11	19	0	0	2	1	1	0
Colorado.....	0	0	0	43	44	45	1	16	3	0	0	0
New Mexico.....	0	1	0	11	34	30	0	1	0	0	0	0
Arizona.....	0	0	0	4	12	12	0	10	0	1	1	0
Utah ¹	0	0	0	17	31	57	0	0	0	1	0	0
PACIFIC												
Washington.....	0	1	0	35	67	67	0	0	14	0	1	2
Oregon.....	0	0	0	23	59	54	0	19	19	3	0	0
California ¹	2	1	1	156	273	266	5	21	11	2	3	4
Total.....	12	16	17	5,024	5,818	7,739	94	326	285	69	158	106
10 weeks.....	287	161	211	45,937	53,966	65,463	734	3,923	2,942	4,739	1,195	1,173

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended March 9, 1940, and comparison with corresponding week of 1939 and 5-year median—Con.

Division and State	Whooping cough		Division and State	Whooping cough	
	Week ended—			Week ended—	
	Mar. 9, 1940	Mar. 11, 1939		Mar. 9, 1940	Mar. 11, 1939
NEW ENG.			SO. ATL.—Continued		
Maine.....	50	53	South Carolina ¹	15	85
New Hampshire.....	10	5	Georgia ²	38	59
Vermont.....	25	36	Florida ³	14	57
Massachusetts.....	178	187	E. SO. CEN.		
Rhode Island.....	9	30	Kentucky.....	72	9
Connecticut.....	20	89	Tennessee.....	36	55
MID. ATL.			Alabama ⁴	23	20
New York.....	404	575	Mississippi ¹ ²		
New Jersey.....	108	412	W. SO. CEN.		
Pennsylvania.....	472	482	Arkansas.....	7	25
E. NO. CEN.			Louisiana.....	1	29
Ohio.....	138	110	Oklahoma.....	2	0
Indiana.....	40	29	Texas ⁴	195	119
Illinois.....	138	336	MOUNTAIN		
Michigan ⁵	115	206	Montana.....	3	5
Wisconsin.....	113	251	Idaho.....	0	2
W. NO. CEN.			Wyoming.....	4	0
Minnesota.....	33	55	Colorado.....	11	72
Iowa.....	23	18	New Mexico.....	19	13
Missouri.....	27	17	Arizona.....	44	47
North Dakota.....	8	6	Utah ¹	217	41
South Dakota.....	2	2	PACIFIC		
Nebraska.....	3	5	Washington.....	32	12
Kansas.....	38	23	Oregon.....	56	14
SO. ATL.			California ¹	246	164
Delaware.....	8	3	Total.....	3, 443	4, 232
Maryland ¹	250	14	10 weeks.....	28, 701	42, 416
Dist. of Col.....	24	36			
Virginia.....	36	38			
West Virginia.....	32	50			
North Carolina ¹	95	336			

¹ New York City only.

² Period ended earlier than Saturday.

³ Typhus fever week ended Mar. 9, 1940, 19 cases as follows: North Carolina, 1; South Carolina, 7; Georgia, 1; Florida, 2; Alabama, 3; Mississippi, 1; Texas, 3; California, 1.

⁴ Later information reduces to 3 and 2, respectively, the reported numbers of typhoid fever cases in Florida and Pennsylvania for the weeks ended Feb. 10 and 17, Public Health Reports, Feb. 16 and 23, 1940, pp. 296 and 336.

WEEKLY REPORTS FROM CITIES

City reports for week ended Feb. 24, 1940

This table summarizes the reports received weekly from a selected list of 140 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table.

State and city	Diph- theria cases	Influenza		Mea- sles cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Data for 90 cities: 5-year average.....	173	996	147	6,263	976	2,209	33	400	20	1,162	-----
Current week ¹	83	666	104	1,220	708	1,591	0	333	9	662	-----
Maine:											
Portland.....	0	-----	0	17	1	2	0	0	0	0	18
New Hampshire:											
Concord.....	0	-----	0	2	0	2	0	0	0	0	14
Manchester.....	0	-----	0	8	0	0	0	0	0	0	5
Nashua.....	0	-----	0	0	0	0	0	0	0	0	0
Vermont:											
Barre.....	0	-----	0	0	-----	0	0	-----	0	0	-----
Burlington.....	0	-----	0	0	0	0	0	0	0	0	7
Rutland.....	0	-----	0	0	0	0	0	0	0	0	5
Massachusetts:											
Boston.....	1	-----	1	17	21	24	0	9	0	33	269
Fall River.....	0	-----	0	13	2	2	0	0	0	20	25
Springfield.....	0	-----	0	0	0	13	0	1	0	2	34
Worcester.....	0	-----	0	4	15	3	0	2	0	3	65
Rhode Island:											
Pawtucket.....	0	-----	0	0	0	2	0	0	0	6	23
Providence.....	0	-----	1	86	7	7	0	3	0	1	76
Connecticut:											
Bridgeport.....	0	-----	0	0	2	5	0	1	0	0	29
Hartford.....	0	-----	0	0	3	4	0	2	4	2	49
New Haven.....	0	1	1	0	2	2	0	0	0	1	48
New York:											
Buffalo.....	0	-----	0	1	13	20	0	6	0	2	185
New York.....	21	44	7	48	116	412	0	63	0	65	1,575
Rochester.....	0	1	0	1	2	10	0	0	0	2	80
Syracuse.....	0	-----	0	0	2	8	0	1	0	18	57
New Jersey:											
Camden.....	1	1	1	0	4	11	0	1	0	0	26
Newark.....	0	6	1	31	5	15	0	0	0	10	110
Trenton.....	0	-----	0	0	2	6	0	2	0	0	35
Pennsylvania:											
Philadelphia.....	1	9	5	6	23	84	0	22	0	50	543
Pittsburgh.....	3	8	7	1	26	40	0	7	0	10	203
Reading.....	0	-----	1	0	7	0	0	0	0	8	46
Scranton.....	1	-----	0	1	0	2	0	0	0	0	1
Ohio:											
Cincinnati.....	3	1	3	0	13	7	0	6	0	8	165
Cleveland.....	1	116	4	0	20	39	0	5	0	17	191
Columbus.....	1	5	5	0	5	3	0	0	0	3	81
Toledo.....	0	-----	0	1	6	15	0	3	0	7	60
Indiana:											
Anderson.....	0	-----	0	0	2	3	0	0	0	3	10
Fort Wayne.....	0	-----	0	0	1	0	0	1	0	2	24
Indianapolis.....	1	-----	1	1	15	21	0	2	0	7	147
Muncie.....	0	-----	1	0	0	3	0	1	0	0	14
South Bend.....	0	-----	0	0	2	0	0	0	0	0	18
Terre Haute.....	0	-----	1	0	2	0	0	0	0	0	19
Illinois:											
Alton.....	0	-----	0	0	0	1	0	0	0	1	8
Chicago.....	10	26	4	20	44	408	0	41	0	24	801
Elgin.....	0	-----	0	0	2	2	0	0	0	5	10
Moline.....	0	-----	0	0	0	2	0	0	0	0	6
Springfield.....	0	-----	0	1	4	4	0	0	0	1	29
Michigan:											
Detroit.....	2	2	2	12	12	85	0	13	0	29	266
Flint.....	0	-----	0	1	5	12	0	1	0	15	30
Grand Rapids.....	0	-----	1	3	1	26	0	0	0	4	44
Wisconsin:											
Kenosha.....	0	1	0	0	0	0	0	0	0	2	8
Madison.....	0	-----	-----	-----	-----	3	0	0	0	10	-----
Milwaukee.....	0	-----	0	13	8	31	0	1	0	7	193
Racine.....	0	-----	0	3	0	2	0	0	0	1	10
Superior.....	0	-----	0	9	0	0	0	0	0	0	7

¹ Figures for Concord, Boise, and Tacoma estimated; reports not received.

City reports for week ended Feb. 24, 1940—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								
Minnesota:											
Duluth.....	0	-----	0	212	0	1	0	2	0	1	30
Minneapolis.....	0	-----	0	2	8	21	0	1	0	2	126
St. Paul.....	0	-----	0	3	0	16	0	0	0	5	72
Iowa:											
Cedar Rapids.....	0	-----	-----	8	-----	1	0	-----	0	0	-----
Davenport.....	1	-----	-----	0	-----	1	0	-----	0	0	-----
Des Moines.....	0	-----	0	3	0	16	0	0	0	0	33
Sioux City.....	0	-----	-----	1	-----	5	1	-----	0	0	-----
Waterloo.....	1	-----	-----	1	-----	0	0	-----	0	0	-----
Missouri:											
Kansas City.....	0	7	4	3	15	15	0	5	0	0	131
St. Joseph.....	1	-----	2	1	7	2	0	0	0	0	27
St. Louis.....	2	8	1	0	27	22	0	11	0	5	246
North Dakota:											
Fargo.....	0	-----	0	0	2	0	0	0	0	0	5
Grand Forks.....	0	-----	-----	0	-----	0	1	-----	0	4	-----
Minot.....	0	-----	0	1	0	1	0	0	0	0	7
South Dakota:											
Aberdeen.....	0	-----	-----	0	-----	0	0	-----	0	0	-----
Sioux Falls.....	0	-----	0	0	0	0	0	0	0	0	9
Nebraska:											
Lincoln.....	0	-----	-----	1	-----	3	0	-----	0	0	-----
Omaha.....	0	-----	0	3	6	5	0	1	0	0	62
Kansas:											
Lawrence.....	0	10	0	0	0	0	0	0	0	0	4
Topeka.....	0	-----	0	1	3	2	0	0	0	0	11
Wichita.....	2	2	0	232	5	4	0	0	0	1	41
Delaware:											
Wilmington.....	0	-----	0	0	4	3	0	1	0	1	26
Maryland:											
Baltimore.....	0	27	3	2	24	11	0	12	0	138	247
Cumberland.....	0	-----	0	0	2	1	0	0	0	0	22
Frederick.....	0	-----	0	0	2	0	0	0	0	0	6
District of Colum- bia:											
Washington.....	5	8	2	2	15	25	0	10	0	24	165
Virginia:											
Lynchburg.....	1	-----	0	0	5	2	0	0	0	2	21
Richmond.....	1	-----	6	2	8	4	0	2	0	3	77
Roanoke.....	0	-----	0	1	0	2	0	0	0	0	16
West Virginia:											
Charleston.....	0	2	1	0	3	1	0	1	0	0	14
Huntington.....	0	-----	-----	0	-----	1	0	-----	0	0	-----
Wheeling.....	0	-----	0	0	1	2	0	2	0	1	23
North Carolina:											
Gastonia.....	0	1	-----	2	-----	1	0	-----	0	0	-----
Raleigh.....	0	-----	0	1	1	0	0	0	0	0	16
Wilmington.....	0	-----	-----	0	2	0	0	0	0	0	9
Winston-Salem.....	0	-----	0	1	1	2	0	0	0	0	17
South Carolina:											
Charleston.....	0	70	0	0	1	1	0	0	0	0	22
Florence.....	0	12	0	0	1	0	0	0	1	0	8
Greenville.....	1	-----	0	0	2	0	0	0	0	0	14
Georgia:											
Atlanta.....	0	26	1	27	12	1	0	7	0	1	91
Brunswick.....	0	-----	0	4	0	0	0	0	0	0	2
Savannah.....	0	22	0	0	1	0	0	1	1	0	29
Florida:											
Miami.....	0	3	2	0	4	0	0	2	1	0	58
Tampa.....	3	-----	0	33	3	1	0	1	0	0	31
Kentucky:											
Ashland.....	1	-----	0	1	0	0	0	0	0	0	6
Covington.....	0	1	0	1	2	4	0	3	0	2	15
Lexington.....	1	-----	0	1	2	0	0	2	0	1	17
Louisville.....	0	43	1	1	12	22	0	1	0	23	87
Tennessee:											
Knoxville.....	0	17	0	0	0	10	0	0	1	0	21
Memphis.....	0	63	12	12	9	24	0	3	0	8	110
Nashville.....	0	-----	4	11	6	1	0	6	0	2	61
Alabama:											
Birmingham.....	1	8	0	2	6	2	0	0	0	1	66
Mobile.....	1	9	2	0	2	2	0	1	0	0	32
Montgomery.....	0	1	-----	6	-----	2	0	-----	0	1	-----

City reports for week ended Feb. 24, 1940—Continued

State and city	Diph- theria cases	Influenza		Mea- sles cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Arkansas:											
Fort Smith.....	0	21		0		2	0		0	0	
Little Rock.....	0	30	1	0	6	0	0	3	0	0	
Louisiana:											
Lake Charles.....	0		0	0	1	0	0	0	1	0	8
New Orleans.....	3	23	4	2	29	5	0	10	1	22	230
Shreveport.....	0		2	1	7	1	0	1	0	0	40
Oklahoma:											
Oklahoma City.....	0	12	0	2	12	1	0	1	0	0	35
Tulsa.....	0			0		5	0		0	14	
Texas:											
Dallas.....	4	6	0	3	5	5	0	5	0	6	78
Fort Worth.....	0		0	0	11	3	0	0	1	14	45
Galveston.....	0		0	2	4	1	0	2	0	0	25
Houston.....	0	10	0	3	15	6	0	7	0	2	109
San Antonio.....	0	25	7	53	19	2	0	7	1	1	95
Montana:											
Billings.....	1		0	1	1	0	0	0	0	0	11
Great Falls.....	0		0	0	2	0	0	0	1	0	8
Helena.....	0		0	0	0	1	0	0	0	0	8
Missoula.....	0	4	0	0	1	1	0	0	0	1	9
Idaho:											
Boise.....											
Colorado:											
Colorado Springs.....	0		0	0	1	3	0	2	0	0	16
Denver.....	5		1	5	13	4	0	3	0	1	94
Pueblo.....	0			1	2	6	0	0	0	3	5
New Mexico:											
Albuquerque.....	0		0	0	1	1	0	0	0	0	6
Utah:											
Salt Lake City.....	0		0	55	3	4	0	2	0	38	35
Washington:											
Seattle.....	0		3	152	2	10	0	5	0	11	82
Spokane.....	0		0	1	2	5	0	1	0	0	36
Tacoma.....											
Oregon:											
Portland.....	1	5	0	133	4	3	0	3	1	19	87
Salem.....	0			13		2	0		0	0	
California:											
Los Angeles.....	1	90	2	11	7	38	0	8	0	18	288
Sacramento.....	3	5	0	0	4	1	0	4	0	4	29
San Francisco.....	4		0	1	5	17	0	17	1	12	190

State and city	Meningitis, meningococcus		Polio- mye- litis cases	State and city	Meningitis, meningococcus		Polio- mye- litis cases
	Cases	Deaths			Cases	Deaths	
Massachusetts:				Iowa:			
Boston.....	0	0	1	Des Moines.....	1	1	0
New York:				Kansas:			
New York.....	1	0	1	Wichita.....	0	1	0
New Jersey:				South Carolina:			
Newark.....	1	0	0	Florence.....	0	1	0
Pennsylvania:				Kentucky:			
Pittsburgh.....	1	0	0	Lexington.....	1	0	0
Scranton.....	1	1	0	Louisville.....	1	1	0
Illinois:				Texas:			
Chicago.....	2	1	0	Dallas.....	1	0	0
Minnesota:				California:			
Minneapolis.....	1	0	0	Los Angeles.....	1	0	1
St. Paul.....	0	1	0				

Encephalitis, epidemic or lethargic.—Cases: New York, 1; Pittsburgh, 1; Cleveland, 1; Wichita, 3.

Pellagra.—Cases: Lynchburg, 1; Charleston, S. C., 1; Atlanta, 1; Little Rock, 2; New Orleans, 2; Dallas, 1; Los Angeles, 2.

Rabies in man.—Deaths: Cincinnati, 1.

Typhus fever.—Cases: New Orleans, 1.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended December 30, 1939.—During the week ended December 30, 1939, cases of certain communicable diseases were reported by the Department of Pensions and National Health of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Cerebrospinal meningitis		1		2						3
Chickenpox		4	3	65	358	82	58	16	30	616
Diphtheria			2	24	2	10		3		41
Influenza		59			42				18	119
Measles		1	4	151	295	41	6	15	10	523
Mumps			2	8	98	4	18	5	6	141
Pneumonia		16			25		1		5	47
Poliomyelitis					1					1
Scarlet fever	1	5	10	142	165	22	15	30	6	396
Tuberculosis	1	6	3	13	32	4	11			70
Typhoid and paratyphoid fever				9	1	6		4	1	21
Whooping cough		7	1	40	62	45	16	7	6	184

FINLAND

Communicable diseases—December 1939.—During the month of December 1939, cases of certain communicable diseases were reported in Finland as follows:

Disease	Cases	Disease	Cases
Diphtheria	223	Poliomyelitis	2
Influenza	1,731	Scarlet fever	357
Paratyphoid fever	155	Typhoid fever	16

ITALY

Communicable diseases—4 weeks ended December 3, 1939.—During the 4 weeks ended December 3, 1939, cases of certain communicable diseases were reported in Italy as follows:

Disease	Nov. 6-13	Nov. 13-19	Nov. 20-26	Nov. 27- Dec. 3
Anthrax.....	24	18	10	14
Cerebrospinal meningitis.....	18	17	20	18
Chickenpox.....	152	230	196	282
Diphtheria.....	921	899	836	839
Dysentery (amoebic).....	13	16	21	16
Dysentery (bacillary).....	8	15	6	7
Hookworm disease.....	10	8	36	34
Lethargic encephalitis.....	1	-----	2	1
Measles.....	629	644	693	792
Mumps.....	141	165	153	146
Paratyphoid fever.....	105	101	91	73
Pellagra.....	-----	-----	-----	1
Poliomyelitis.....	100	70	51	45
Puerperal septicemia.....	25	27	31	24
Scarlet fever.....	304	314	322	301
Typhoid fever.....	734	611	540	522
Undulant fever.....	49	41	42	30
Whooping cough.....	277	203	200	294

YUGOSLAVIA

Communicable diseases—4 weeks ended January 28, 1940.—During the 4 weeks ended January 28, 1940, certain communicable diseases were reported in Yugoslavia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	10	1	Poliomyelitis.....	3	1
Cerebrospinal meningitis.....	110	27	Scarlet fever.....	237	2
Diphtheria and croup.....	605	70	Sepsis.....	6	-----
Dysentery.....	7	1	Tetanus.....	13	4
Erysipelas.....	192	7	Typhoid fever.....	298	42
Favus.....	4	-----	Typhus fever.....	60	6
Paratyphoid fever.....	6	-----			

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—A cumulative table giving current information regarding the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS of February 23, 1940, pages 342-345. A similar table will appear in future issues of the PUBLIC HEALTH REPORTS for the last Friday of each month.

Cholera

Indochina (French)—Vientiane.—During the week ended February 17, 1940, 1 fatal case of cholera was reported in Vientiane, French Indochina.

Plague

Hawaii Territory—Island of Hawaii—Hamakua District—Kukaiu (vicinity of).—One rat found on February 1, and another rat found on February 7, 1940, in the vicinity of Kukaiu, Hamakua District, Island of Hawaii, T. H., were proved positive for plague.

Indochina (French)—Pnom-Penh.—During the week ended February 24, 1940, 1 fatal case of plague was reported in Pnom-Penh, French Indochina.

Peru.—During the month of December 1939, plague was reported in Peru, by Departments, as follows: Ancash, 1 case; Cajamarca, 1 case, 1 death; Lambayeque, 4 cases, 3 deaths; Libertad, 10 cases, 5 deaths; Lima, 12 cases, 5 deaths; Piura, 5 cases, 1 death.

Typhus Fever

Mexico.—During the month of November 1939, typhus fever was reported in Mexico as follows: Aguascalientes, Aguascalientes State, 1 case; Mexico, D. F., 10 cases, 5 deaths; Queretaro, Queretaro State, 1 case, 1 death; Saltillo, Coahuila State, 2 cases; San Luis Potosi, San Luis Potosi State, 2 cases, 3 deaths.

Venezuela—Valencia.—During the period January 15–31, 1940, 1 case of typhus fever was reported in Valencia, Venezuela.

Yellow Fever

Brazil—Espírito Santo State.—During the period January 26–30, 1940, deaths from yellow fever (jungle type) were reported in Espírito Santo State, Brazil, as follows: Cachoeiro Itapemirim, 2; Itapemirim, 1; Joao Neiva, 1; Santa Leopoldina, 1.

Colombia.—Yellow fever has been reported in Colombia as follows: Antioquia Department, February 3, 1 death; Caldas Department, February 17, 1 death.