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SICKNESS AMONG MALE INDUSTRIAL EMPLOYEES DURING THE SECOND QUARTER AND THE FIRST HALF OF 1934¹

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The incidence or frequency rate of cases of sickness and nonindustrial accidents causing absence from work for more than 1 week, as shown by the reports of a group of 34 corporations employing about 169,000 males, was approximately the same during the second quarter of 1934 as in the corresponding quarter of 1933. Some allowance should be made, however, for delayed reports of cases which had their onset in the second quarter of this year. The corrected rates, available later, probably will reveal a slightly higher frequency of disabling sickness during April, May, and June 1934 than in the same period of the preceding year; but the corrected rates undoubtedly will show that the incidence of illness was about 20 percent below the average rate for the second quarter of the years 1929 to 1933, inclusive.

During the first half of 1934 the frequency of illnesses and nonindustrial injuries causing disability for 8 days and longer was less by about 15 percent than in the first 6 months of 1933. Thus a lower sickness rate for the full year than occurred last year may be anticipated if no serious epidemic develops during the second half of 1934.

In the second quarter the frequency of diseases of the respiratory system was about 12 percent higher than in the corresponding quarter of 1933, but the rate for the first 6 months of 1934 shows a decrease of more than 25 percent from the incidence recorded for the first half of 1933.

¹ The report for the first quarter of 1934 was published in the Public Health Reports for June 29, 1934, vol. 49, no. 26.

Influenza was reported oftener in the second quarter than in the same period of 1933, but for the first 6 months the rate was slightly more than half that shown for the corresponding months of 1933. The low rate of influenza is one of the most noteworthy facts in the morbidity experience of this group of the population during the first half of 1934.

For pneumonia (all forms) a higher rate is indicated during the second quarter than in the same period of 1933, and also a slightly greater frequency in the first half than in the same period of the preceding year. However, when the pneumonia rates were computed for all reporting companies except those engaged in iron and steel manufacturing, it was found that they were practically the same as in the corresponding months of the preceding year. The greater frequency of pneumonia this year in the population under consideration appears to be associated with the higher rate of steel-mill activity than occurred in the spring months of 1933. A 5-year record showing the relationship between the occurrence of pneumonia and the nature of certain occupational exposures affords a basis for the expectation of an increase in the number of cases of this disease among iron and steel workers when the production of steel is materially increased.²

Respiratory tuberculosis continues to exhibit a downward trend in frequency, the rate being definitely lower in the second quarter and also in the first half of 1934 than in the corresponding periods of 1933. The difference in the rates is wide enough to render this statement valid even though a number of disabilities for which the cause of illness is not yet determined may be diagnosed later as tuberculosis. In correspondence with this trend, the rate of death from tuberculosis among industrial workers continues to decrease. The Metropolitan Life Insurance Co. states that the outstanding public health achievement of the year is still another reduction in the tuberculosis death rate—to a new low point for this part of the year (first 6 months of 1934).³

² *cf.* The Frequency of Pneumonia among Iron and Steel Workers. Public Health Bulletin No. 202. Government Printing Office, Washington, D. C., 1932.

³ Statistical Bulletin, Metropolitan Life Insurance Co., vol. 15, no. 7, July 1934, p. 3.

TABLE 1.—Frequency of disability lasting 8 calendar days or longer in the second quarter of 1934, compared with the same quarter of preceding years and in the first half of 1934 as compared with the corresponding period of 1933 (male morbidity experience of industrial companies which reported their cases to the United States Public Health Service) ¹

Diseases and disease groups which caused disability (numbers in parentheses are disease title numbers from the International List of the Causes of Death, fourth revision, Paris, 1929).	Annual number of disabilities per 1,000 men				
	Second quarter of—			First half of—	
	1934	1933	5 years 1929-33	1934	1933
Sickness and nonindustrial injuries ²	71.2	70.7	90.8	79.3	94.0
Nonindustrial injuries.....	9.6	9.2	11.5	10.5	9.6
Sickness ²	61.6	61.5	79.3	68.8	84.4
Respiratory diseases.....	20.6	17.9	28.0	27.2	38.1
Bronchitis, acute and chronic (106).....	2.4	2.1	3.4	3.4	2.8
Diseases of the pharynx and tonsils (115a).....	5.0	3.7	6.2	4.7	4.7
Influenza and grippe (11).....	7.2	6.2	10.8	11.9	23.5
Pneumonia, all forms (107-109).....	2.0	1.5	2.2	2.3	2.1
Tuberculosis of the respiratory system (23).....	.8	1.2	1.2	.7	1.0
Other respiratory diseases (104, 105, 110-114).....	3.2	3.2	4.2	4.2	4.0
Nonrespiratory diseases.....	41.0	43.6	51.3	41.6	46.3
Diseases of the stomach, cancer excepted (117-118).....	3.1	3.4	4.3	3.1	3.4
Diarrhea and enteritis (120).....	1.2	1.2	1.1	1.0	.9
Appendicitis (121).....	3.9	3.2	4.2	3.8	3.1
Hernia (122a).....	1.4	1.3	1.7	1.3	1.5
Other digestive diseases (115b, 116, 122b-129).....	2.8	3.4	3.2	2.7	3.5
Rheumatic group, total.....	8.9	10.2	11.5	9.1	11.5
Rheumatism, acute and chronic (56, 57).....	4.4	5.7	6.2	4.5	6.5
Diseases of the organs of locomotion (156b).....	2.6	2.4	3.2	2.7	2.7
Neuralgia, neuritis sciatica (87a).....	1.9	2.1	2.1	1.9	2.3
Neurasthenia and the like (part of 87b).....	1.0	.8	1.4	.8	.8
Other diseases of the nervous system (78-85, part of 87b).....	1.3	1.3	1.3	1.4	1.5
Diseases of the heart and arteries and nephritis (90-99, 102, 130-132).....	2.9	4.4	4.3	3.2	4.5
Other genito-urinary diseases (133-138).....	2.3	2.2	2.4	2.4	2.1
Diseases of the skin (151-153).....	2.2	1.9	3.3	2.3	2.2
Epidemic and endemic diseases except influenza (1-10, 12-18, 33, 37, 38, part of 39 and 44).....	2.6	2.3	2.9	3.1	2.6
Ill-defined and unknown causes (200).....	1.6	1.8	1.9	1.8	1.9
All other diseases (19-22, 24-32, 36, part of 39 and 44, 40-43, 45-55, 58-77, 88, 89, 100, 101, 103, 154-156a, 157, 162).....	5.8	6.2	7.8	5.5	6.8
Average number of males covered in the record.....	168,859	132,847	151,143	160,649	134,112
Number of companies included.....	34	34			

¹ In 1933 and 1934 the same companies are included.

² Exclusive of disability from venereal diseases.

For nonrespiratory diseases as a whole the rate in the second quarter and also in the first half of the year was lower than in the corresponding period of 1933. In the second quarter the rate was about 20 percent below the 5-year average (1929-33) for this period of the year.

Certain diseases in this broad category appear to have increased in frequency. Disabilities on account of appendicitis occurred oftener in the second quarter and in the first half of 1934 than in the same periods of 1933. A higher rate is shown for the epidemic and endemic diseases (exclusive of influenza), due largely to an outbreak of amoebic dysentery in one of the reporting plants in Chicago.

There was virtually no change in the frequency of diseases of the nervous system. Cases of neurasthenia, however, appear to have

occurred in the second quarter at a rate definitely below the average frequency recorded for this part of the years 1929 to 1933, inclusive.

Diseases of the skin have decreased markedly from the rates found in 1928 and 1929. The rate appears to have attained its nadir, however, and to be tending slightly upward.

The comparison of rates in 1934 with those for 1933 is based on the reports of identical companies. The number of companies included may be insufficient to afford an adequate sample of the sickness experience of industrial workers in the country as a whole. Although the sample includes employees in almost all parts of the country, the majority of men covered in the record live in the North Central, North Atlantic, and New England States. The illnesses reported are those for which sick-benefits are paid (for cases causing disability lasting longer than one week) from funds to which payments are made either by the employee, by the employer, or by both.

EFFECTIVENESS AND ECONOMY OF COUNTY HEALTH DEPARTMENT PRACTICE¹

**Brunswick-Greenville Health Administration Studies No. 1. Description
of Study²**

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NEED FOR STUDIES

Through the course of years a limited number of activities have been selected for emphasis by health departments and voluntary agencies working in the same general field. These activities when taken together are commonly spoken of as the public health program, notwithstanding the fact that other services maintained by the community may also affect health either directly or indirectly. While wide variations may be found in both the scope and intensity of programs of health departments, the following services may be regarded as common to most county health departments: Control of communicable diseases, promotion of maternity and child health, and general sanitation. County health departments may have some responsibility for the collection of vital statistics, sanitary control of foods, or perhaps certain clinical and laboratory services.

Attempts have been made to develop standards of practice which are both qualitative and quantitative in character. Qualitative standards may be determined quite readily when the procedure involves a technique, such as immunization, which is susceptible to

¹ From Office of Studies of Public Health Methods, in cooperation with Division of Domestic Quarantine.

² Grateful acknowledgment is made to the State Health Department of Virginia for assistance in selecting the area and for entrée to the counties; to Dr. Thomas Valentine and members of the staff of the county health department for making the records available; and to Edgar Sydenstricker and Marian G. Randall, of the Milbank Memorial Fund, New York City, and Selwyn D. Collins and Lily Vanzee, Office of Statistical Investigations, U. S. Public Health Service, for assistance in the early stages of the study.

study under controlled conditions. The amount of artificial immunization necessary to protect a community cannot, however, be stated with the same certainty. The problem of establishing either qualitative or quantitative standards becomes much more difficult when a broader service such as the nursing program, a child hygiene clinic, or a system of sanitation is the subject for consideration. Any one of these services is not a single technique, selective in its effect, but a collection of activities designed to influence conditions which arise, perhaps, from a multiplicity of causes. Administrative considerations, however, frequently compel a person responsible for health services to take a definite position with regard to any one of the following points: The concentration of service necessary to accomplish a purpose which may be desired, the utility of certain procedures, the number and kinds of people to be employed, the amount and distribution of the budget, or possibly other related questions which he would prefer answering on the basis of established facts. The health officer when confronted with these questions must rely on his individual experience, or he may have recourse to the pooled experience of others working in the several branches of public health service. Standards based on individual or group judgment are of doubtful validity at best, but nothing more reliable is available for many of those procedures which consume the largest proportion of health-department budgets. Notwithstanding the difficulties inherent in studies of administrative practice, public health officials feel that efforts should be made to develop better methods for evaluating established practices and for planning programs than have hitherto been available.

With these as well as other considerations in mind, the United States Public Health Service inaugurated a series of studies into four fundamental questions involved in public health administration:

Health problems of people in representative counties.

Quality and quantity of service performed by county health departments.

Relationship of county health department programs to the health needs of the people.

Specific effect of health department procedures on individual health problems.

SELECTION OF AREA

Rural areas with organized health departments were chosen in preference to urban communities as places for initiating studies of this type for several reasons. The health departments, as a rule, are small and therefore the program can be encompassed with a relatively small study staff. A still more important point in favor of the rural area is the relative ease with which the individual and his problems may be seen in relation to social, economic, and environmental factors

which may influence his health. It is also possible to determine more readily the knowledge as well as the interest of the rural dweller, since active participation on his part is required in many activities, particularly environmental sanitation, designed for the protection of health. Many services and facilities having a bearing on health are taken as a matter of course by people living in cities, often without their full significance being understood. The same necessity for studies in administrative practice exists in cities even with well established health departments, but the problems differ in many respects and the techniques would of necessity have to be altered, depending on the subject under investigation.

DESCRIPTION OF AREA

The study area comprised the adjoining counties of Brunswick and Greenville, situated in south-central Virginia and bordering on North Carolina. They form a part of the Piedmont Plateau. The total population in 1930 was approximately 34,000, of which 58 percent was colored. Only 4,666 people lived in 4 incorporated places, the populations of which in 1930 were 2,144, 1,629, 365, and 328. In the United States census of 1930, the entire area was therefore classed as rural. Excluding the 4 incorporated places, the population density was about 34 per square mile. Agriculture was the principal pursuit, and the main crops were cotton, tobacco, wheat, peanuts, and corn. Ten lumber mills, two brick factories, a stone quarry, a peanut mill, and a railroad repair shop constituted the industries of greatest importance. It was estimated that less than 600 persons found employment in these industries. Taxable resources of the area were rather low, the assessed valuation being only \$15,000,000, while the per capita income was estimated to be about \$147.00 in Brunswick County and \$134.40 in Greenville County.

According to vital statistics records³ on file in the State health department, the health problems for the period 1921-30, as may be judged from mortality, were quite similar to those in neighboring Southern States. The gross mortality for the period was 11.2 per thousand. The stillbirth rate, 46.5, may be considered high, perhaps reflecting the influence of a rather low grade of midwife practice. The maternal mortality rate was 6.0, but this rate was based on a small number of cases. The infant death rate, comparatively speaking, was not excessive, being 71.4. Intestinal infections constituted a problem of public health importance, as may be judged from the typhoid fever death rate of 11.0 and the rate of 41.0 for diarrhea and enteritis in children under 2 years of age. As a general rule, acute communicable diseases of the exanthematous type are mild

³ Total birth and total death rates per 1,000 population; stillbirth, infant mortality, and maternal mortality rates per 1,000 live births; other death rates per 100,000 population.

in southern climates, but in this area death rates were high. For example, the rate for measles was 7.2, whooping cough 16.7, diphtheria 12.5. A tuberculosis rate of 106.0, while high, is not above what may be expected in a population with a large percentage of negroes. Malaria was seldom given as a cause of death. Pellagra was a problem of some importance, with a rate of 11.6. Death rates for diseases peculiar to mature years, such as heart disease, cancer, and kidney disorders, were somewhat lower than for the country as a whole; but this may be explained in part by the age and color composition of the population, and in some measure perhaps, by the lack of facilities for diagnosis and institutional care. When these rates were broken down by color, the white rate was low while the rate for the negroes was uniformly high in comparison. During the period 1921-30, a falling trend could be discerned in infant deaths and deaths from typhoid fever, diarrhea, and dysentery, when the rates for the first 5-year period were compared with those of the second.

Certain major communicable diseases, when seen by a physician, were said to be reported with a fair degree of regularity. Except in a few families of the privileged class, communicable diseases presenting only mild symptoms were seldom seen by a physician and, therefore, were reported infrequently or not at all. No method had been devised for determining the occurrence of other types of illness. The data at hand on morbidity, therefore, could not be regarded as sufficient for making any estimate of the amount of illness by various types in the general population.

Medical facilities for care of the sick were perhaps below what may be found in many areas otherwise comparable. Eighteen physicians engaged in active practice and five dentists resided in the area. All physicians and dentists might be classed as general practitioners. About 75 percent of the births were attended by midwives who had little or no training for this type of work. The nearest hospitals were in adjoining counties. A large percentage of the people seeking hospital care, however, went to Richmond, Va., which is about 70 miles to the north.

THE HEALTH DEPARTMENT

A sanitation officer was employed for the first time by Greenville County about 1920. This service was continued until merged with the Brunswick-Greenville Health Department. Community nursing service developed in and around Lawrenceville in 1922, and a full-time health officer for Brunswick County was employed in 1924. Both the nurse and the health officer services were interrupted several times prior to the organization of the Brunswick-Greenville Health Department. The Brunswick-Greenville Bi-County Health

Department was organized in July 1928 and continued without lapse in service. The staff of the health department at the time of the study consisted of a medical health officer, a sanitation officer, two public health nurses, and a clerk. All members, except the clerk, served on a whole-time basis during the study period. Official headquarters were located in Lawrenceville, the county seat of Brunswick County; but there was a suboffice in Emporia, the county seat of Greensville County. The health officer and the sanitation officer served the area, but a nurse was assigned to each county. The annual budget of the health department was approximately \$12,000. About 50 percent of the funds were derived from local sources, and the remainder was obtained from the State and other extra-county sources.

The program in a large measure was influenced by the policies of the State health department. Quarantine and isolation measures for the control of communicable diseases were instituted on cases coming to the attention of the local health department. Active programs of immunization were being conducted for the prevention of typhoid fever and diphtheria. Vaccination against smallpox was required for school attendance by the local school authorities. An itinerant chest clinic financed by the State health department visited both counties once and occasionally twice each year. Cases found by this method and other cases reported directly by practicing physicians were registered for follow-up nursing service. The program of maternity and infancy hygiene was essentially an instructive visiting nursing service. Children attending school were given the screening type of examination by the teacher, and selected children were referred to the nurse or the health officer for further check. A small refraction clinic and a tonsil clinic were conducted each year by the health department. The luncheon clubs of each county sponsored an orthopedic clinic, which was attended largely by crippled children. With the exception of this limited clinic service, the responsibility for corrective work was placed on the families, many of whom were living at or below a subsistence level. The sanitation program for the most part was confined to excreta disposal, which practically always involved privy construction and maintenance. While the control of milk and other foods was vested by law in the State department of agriculture, the county health department cooperated in the enforcement of State laws and local ordinances. Laboratory service required in the local health department program was supplied by the State health department. In addition to the specific activities enumerated above, the local health department offered a rather general type of personal consultation service regarding health habits, general physical condition, and type of medical service indicated. This service was available to the individual or some official who might need medical consultation in the handling of a special case or situation. Practicing physicians also

frequently called on the health officer for consultation in the diagnosis of communicable disease or to assist in the procurement of special services beyond the resources of the patient.

The program as briefly outlined above continued without change during the study period. The group engaged on the study did not supplement or influence in any way the normal activities of the regular health department staff.

Prior to the study, records on file in the office, though meager, were perhaps equal to those usually found in a small county health department. The staff relied very much on memory in handling cases or problems on which they were working, making only such entries on notes or case records as might be required for reference in compiling reports for the State health department and other agencies contributing to the budget. Nursing case records were opened only on those individuals with health problems for which repeat visits were planned. A formal record was not opened where it was felt that no more than a single contact would be made. No account was kept of time spent on activities essentially administrative in character, such as record keeping, staff meetings, and conferences with persons not receiving individual health service, such as public officials, community leaders, teachers, and other persons occupying similar positions. A large percentage of health department activities never entered the records.

METHOD OF STUDY

Owing to limitation in the size of the study staff, it was necessary in the beginning to confine the investigations to a single health unit. The area chosen is believed to present problems typical of a large number of southern counties and the services are regarded as similar to those performed by many county health departments with a small number of employees. The study in this area was designed primarily to determine the health needs of the general population and the actual services rendered by each member of the health department.

The health needs of the general population could not be determined from the records available at the time the study was begun. A field canvass of a representative sample of the population was adopted as the method for securing this information on the community as a whole. This procedure is relatively inexpensive but, when properly conducted, it gives general information possessing a reasonable degree of reliability.

A preliminary reconnaissance of the area revealed considerable variation in the character and composition of the population with regard to race, social and economic circumstances, and mode of life. Certain areas were selected to show these differences, and every effort was made to secure information on all persons in those areas.

A total of 1,009 families was visited. On checking the information obtained on these families with the 1930 United States Census data for the same area, a remarkable similarity was found.

The data obtained on this sample of 1,009 families included information of the following types:

For the family: Color, economic status, source of income, service by the health department.

For each individual: Age, sex, relationship to household head, occupation, illness, disability, medical service, service from health department.

For the premises: Location, adequacy of housing, general sanitary conditions, and auxiliary sources of subsistence, such as livestock and garden.

The health department, while regarding its system of records and reports on current activities as being suited to local uses, readily conceded the necessity for more complete data for analytical purposes. A new system of records and reports was therefore devised, and the study of health-department activities was projected forward for a period of time considered sufficient to collect a volume of work which would be adapted to statistical treatment and at the same time take into account seasonal variations in program.

Several weeks were required in determining the exact nature of the several services comprising the local program and in devising forms for recording activities without unduly burdening the regular staff of the health department. Following the experimental period, a clerk was employed to edit the current records of the health department and transcribe the data to additional forms used by the staff engaged on the study proper.

When devising the record system, and in its usage, special emphasis was made on the following points:

Identification of the individual by name, relationship to household head, age, color, and location of residence.

Source of call, such as individual served, physician, neighbor, routine visit on part of health department, or casual contact.

Name of worker, place of contact, such as home, office or school, time consumed on records, travel, actual service, and office work.

Purpose of call, condition found, service indicated, service rendered.

Effect of service rendered, such as improvement in health of individual, change in habits or practices, correction of physical defects, or sanitary improvement on premises.

Distribution of time on work largely administrative in character.

SUBSEQUENT PAPERS

In the series of articles which are to follow shortly in later issues of the PUBLIC HEALTH REPORTS, the data derived from the family canvass and the study of health department activities will be analyzed from several points of view.

From the data obtained through the canvass of families will be presented the distribution of health department service as reported by them. The kind of service reported and the personnel rendering it will be related to the age, color, and economic status of the persons receiving the service and the environmental conditions in and about the home. The distribution of service by locality, for example, county seats, small village settlements, and isolated rural homes, will be considered. Items such as illness in the family and sanitary conditions on the premises, which reveal the need for service, will be contrasted with medical, nursing, and inspection service received. Preventive measures, such as immunization, physical inspections, or educational measures, will be related to the individual receiving same from the standpoint of age, color, and other factors which may influence the need for and effectiveness of such service. The analysis of these data, where possible, will show problems of health, sanitation, and medical service which may not be receiving attention from any source.

In the opinion of many observers, the vitality of a people as expressed by physical and mental vigor, age at death, kind and amount of illness, and growth of population must be affected by influences apart from those services of a community which are specifically related to health. It is hoped that future studies of the general population may throw some light on the nature and effect of biological, social, and economic forces which, as a rule, are not considered in community programs for health.

From the data on activities of the health officer, sanitation officer, and nurses it will be possible to determine the number of families, individuals, and premises which have received any attention from the health department; also the amount and character of this attention. The distribution of service can be shown by age, color, location, type of problem, and other determining factors. For those services rendered in response to a call, the source of the call may prove to be one criterion by which to judge the need physicians, educators, county officials, and individual citizens feel for the services of the health department. The time analyses will show the time consumed in each procedure. The figures on time required in the performance of any given service can be translated into unit costs, and accomplishments can then be measured in terms of expenditures. Where figures from other organizations are available, they are being used for comparison. The unique feature of this study, however, is the bringing into focus all services of the health department which are brought into play on the problems of the individual. Other studies of a similar character have been confined to a single type of activity, usually nursing alone.

The third question propounded in the early part of this article, namely, "relationship of county health-department programs to the needs of the people", should finally be answered by information of the type gathered in the study of families and the study of health-department activities. The data at hand, however, cover only a single type of health organization—a small county health department with a program essentially educational and regulatory in character, serving a rural area with rather limited facilities for medical care. Quite obviously, organizations of other types must be studied in relation to local problems before conclusions can be drawn regarding the suitability of prevailing practices of county health departments to the needs of people in rural areas scattered throughout the United States. Studies similar to those of the Brunswick-Greensville area are therefore being extended to three additional counties.

ADDITIONAL STUDY AREAS

Fairfax County, Va., adjacent to Washington, D.C., has been selected, since it operates on a program quite similar to that described for the Brunswick-Greensville area. This county differs from Brunswick-Greensville in that it has the advantage of the clinical facilities in and around Washington. Montgomery County, Md., also adjacent to Washington, has been selected because the health department program is essentially educational and regulatory in character, but the intensity of service and the community organization are well above those found in all but a few counties. The clinical facilities, too, are beyond those of counties not adjacent to large medical centers. Most of this county is truly rural, but there is also the complicating factor of a small area around Washington with a large suburban population. The third county, Forsyth, is in North Carolina. The program of its health department differs quite markedly from any of those described so far. In fact it may be regarded as a departure from the orthodox program. The program contains a much greater amount of personal service in the form of medical care and other relief measures. The clinical facilities provided through a local public hospital and a county tuberculosis sanatorium are comparatively well developed.

COMMENTS

The study here described is essentially a photographic process for determining the health problems of representative families in selected areas and the operations of health departments conforming to different types. By this eclectic plan of study, it should be possible to derive information from which may be drawn certain conclusions regarding the suitability of prevailing county health department programs to the health needs of the people. The method pursued in

the initial study does not reveal the information considered sufficient for determining what actually followed as a result of health department contacts. The plan whereby the individual worker is expected to report on the effect of the previous visit is not adapted to the study of a health department where the great majority of services involve but a single contact. Furthermore, it is questionable whether a worker can honestly appraise the effect of his own efforts. Future studies contemplate the establishment of criteria which will be objective and the measurement of results by persons not involved in the performance of the service.

There will still remain the problem of determining the intrinsic value of the individual items of service which comprise the public health program. This is the fourth and final question raised at the outset of the article. Some information of this character will be obtained through studies such as the one just described. But the final determination of the specific value of individual procedures such as periodic health examinations, correction of physical defects, administration of different immunizing agents, or the installation of a sanitary device, will involve clinical and epidemiological research. Ultimately, the present plan of study must be broadened or cooperative agreements must be entered into with those who are especially equipped for such types of research work. Until additional information is available on the value of specific procedures, the performance of generally accepted health services must of necessity be assumed for study purposes to be good public health practice. Furthermore, in administrative studies, emphasis can very well be placed at this time on a determination of the effectiveness and economy of established practices in relation to the needs of people, since this subject has never received consideration commensurate with its importance.

PROVISIONAL SUMMARY OF MORTALITY STATISTICS FOR THE UNITED STATES, 1931, 1932, AND 1933

According to figures compiled by the Bureau of the Census there were 1,342,073 deaths from all causes in the United States in 1933, representing a mortality rate of 10.7 per 1,000 estimated population. This is the lowest death rate since the annual collection of mortality statistics was begun in 1900. With the admission of Texas to the death registration area in 1933, the Census Bureau is now able, for the first time, to publish deaths and death rates complete for the entire population of continental United States.

The accompanying table gives the number of deaths and the death rates in each year from 1931 to 1933, inclusive, for each cause, according to the titles of the International List of Causes of Death.

Of the 18 groups of causes of death into which this table is divided, 11 show decreases in rates as compared with the preceding year; 5 show virtually no change, and only 1, "diseases of the circulatory system", shows a significant increase. The cause within this group which showed the greatest increase, both in the number of deaths and in the death rate, was "diseases of the coronary arteries." The 1933 rate for diseases of the digestive system (73.6) shows a slight increase over that for 1932 (72.7), but both rates are lower than that for 1931 (79.8).

The death rate from "cancers and other tumors" has steadily increased during the past 15 years. In 1933, as in 1929, this increase was halted temporarily and the rates were slightly lower than for the next preceding years, 1932 and 1928, respectively.

Of the decreases in death rates for 1933 those for the following groups are noteworthy: "Infectious and parasitic diseases", "diseases of the respiratory system", and "diseases of the genitourinary system." The decrease for the first of these groups is largely accounted for by the drop in the number of deaths from influenza and tuberculosis. In the second group the decrease is attributable mainly to the lower rates for the pneumonias. The decrease in rate for the third group is in keeping with the decline during the last few years in the death rate from "chronic nephritis." The decrease in "diseases of pregnancy, childbirth, and the puerperal state" was approximately the same from 1932 to 1933, as from 1931 to 1932, and is due in large measure to the lesser number of deaths from puerperal albuminuria and eclampsia, and puerperal septicemia.

Although the rate for "violent and accidental deaths" was slightly lower in 1933 than in 1932, it will be found that within this group the rates for some of the individual causes, notably "homicide" and "automobile accidents", are higher.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
Total deaths (all causes exclusive of stillbirths).....	1,342,073	1,308,529	1,322,587	1,067.7	1,089.3	1,107.5
<i>I. Infectious and parasitic diseases.....</i>	<i>166,813</i>	<i>166,979</i>	<i>168,166</i>	<i>124.0</i>	<i>130.7</i>	<i>136.6</i>
Typhoid fever.....	4,389	4,363	5,298	3.5	5.6	4.4
Paratyphoid fever.....	84	78	84	.1	.1	.1
Typhus fever.....	81	36	27	.1	(1)	(1)
Undulant fever.....	72	62	66	.1	.1	.1
Smallpox.....	39	38	95	(1)	(1)	.1
Measles.....	2,813	1,941	3,576	2.2	1.6	3.0
Scarlet fever.....	2,546	2,577	2,650	2.0	2.1	2.2
Whooping cough.....	4,463	5,364	4,619	3.6	4.5	3.9
Diphtheria.....	4,936	6,418	5,738	3.9	4.5	4.8

Footnotes at end of table.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933—Continued

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
<i>I. Infectious and parasitic diseases—Contd.</i>						
Influenza.....	33,193	37,066	31,701	26.4	30.9	26.5
Respiratory complications specified.....	21,052	24,120	20,187	16.7	20.1	16.9
Respiratory complications not specified.....	12,141	12,946	11,514	9.7	10.8	9.6
Dysentery.....	2,814	2,083	2,441	2.2	1.7	2.0
Erysipelas.....	2,017	1,934	2,275	1.6	1.6	1.9
Acute poliomyelitis, acute polioencephalitis.....	797	828	2,096	.6	.7	1.8
Lethargic or epidemic encephalitis.....	1,357	874	972	1.1	.7	.8
Epidemic cerebrospinal meningitis.....	1,482	1,677	2,832	1.2	1.4	2.4
Anthrax (bacillus anthracis) malignant pustule.....	11	12	12	(1)	(1)	(1)
Rabies.....	65	55	55	.1	(1)	(1)
Tetanus.....	1,253	1,119	1,116	1.0	.9	.9
Tuberculosis (all forms).....	74,836	75,509	81,395	59.5	62.9	68.2
Respiratory system.....	67,417	67,789	72,515	53.6	56.4	60.7
Meninges and central nervous system.....	2,212	2,317	2,709	1.8	1.9	2.3
Intestines and peritoneum.....	1,814	1,942	2,203	1.4	1.6	1.8
Vertebral column.....	755	809	888	.6	.7	.7
Bones and joints (vertebral column excepted).....	382	426	500	.3	.4	.4
Skin and subcutaneous cellular tissue.....	38	50	37	(1)	(1)	(1)
Lymphatic system (bronchial, mesenteric, and retroperitoneal glands excepted).....	177	164	187	.1	.1	.2
Genito-urinary system.....	564	520	612	.4	.4	.5
Other organs.....	101	119	142	.1	.1	.1
Disseminated tuberculosis.....	1,376	1,364	1,602	1.1	1.1	1.3
Acute.....	1,195	1,193	1,364	1.0	1.0	1.1
Chronic and unspecified.....	181	171	238	.1	.1	.2
Leprosy.....	27	25	22	(1)	(1)	(1)
Syphilis.....	11,039	10,684	10,592	8.8	8.9	8.9
Gonococcus infection and other venereal diseases.....	998	916	1,127	.8	.8	.9
Purulent infection, septicemia (nonpuerperal).....	931	869	913	.7	.7	.8
Malaria.....	4,678	2,568	2,536	3.7	2.1	2.1
Other diseases due to protozoal parasites.....	61	52	73	(1)	(1)	.1
Ankylostomiasis.....	20	24	20	(1)	(1)	(1)
Hydatid cysts.....	36	36	34	(1)	(1)	(1)
Liver.....	26	24	28	(1)	(1)	(1)
Other organs.....	10	12	6	(1)	(1)	(1)
Other diseases caused by helminths.....	101	114	112	.1	.1	.1
Mycoses.....	260	249	268	.2	.2	.2
Other infectious and parasitic diseases.....	414	408	421	.3	.3	.4
<i>II. Cancers and other tumors</i>						
	154,535	128,597	124,026	107.0	107.1	103.9
Cancer and other malignant tumors.....	128,475	122,739	118,141	102.2	102.2	98.9
Of the buccal cavity and pharynx.....	4,845	4,596	4,567	3.9	3.8	3.8
Lip.....	692	670	630	.6	.6	.5
Tongue.....	1,036	946	919	.8	.8	.8
Mouth.....	505	441	462	.4	.4	.4
Jaw.....	1,054	1,034	1,013	.8	.9	.8
Other and unspecified parts of the buccal cavity.....	620	585	539	.5	.5	.5
Pharynx.....	938	920	1,004	.7	.8	.8
Of the digestive tract and peritoneum.....	63,174	60,810	58,783	50.3	50.6	49.2
Esophagus.....	2,111	2,063	2,038	1.7	1.7	1.7
Stomach and duodenum.....	26,565	25,909	25,397	21.1	21.6	21.3
Intestines (except duodenum, rectum, anus).....	12,972	12,137	11,495	10.3	10.1	9.6
Rectum and anus.....	6,372	5,890	5,451	5.1	4.9	4.6
Liver and biliary passages.....	10,595	10,452	10,290	8.4	8.7	8.6
Pancreas.....	3,566	3,371	3,139	2.8	2.8	2.6
Mesentery and peritoneum.....	915	927	911	.7	.8	.8
Others under this title.....	78	61	62	.1	.1	.1
Of the respiratory system.....	4,939	4,549	4,039	3.9	3.8	3.4
Larynx.....	1,078	1,048	925	.9	.9	.8
Lungs and pleura.....	3,410	3,166	2,846	2.7	2.6	2.4
Other respiratory organs.....	451	335	268	.4	.3	.2
Of the uterus.....	15,220	14,908	14,464	12.1	12.4	12.1
Of other female genital organs.....	2,890	2,684	2,565	2.3	2.2	2.1
Ovary and Fallopian tube.....	2,304	2,167	2,051	1.8	1.8	1.7
Vagina and vulva.....	534	478	478	.4	.4	.4
Other female genital organs.....	52	39	36	(1)	(1)	(1)
Of the breast.....	12,484	11,889	11,444	9.9	9.9	9.6
Of the male genito-urinary organs.....	10,455	9,594	9,184	8.3	8.0	7.7
Kidneys and suprarenals (male).....	1,040	945	960	.8	.8	.8
Bladder (male).....	2,725	2,493	2,661	2.2	2.1	2.2
Prostate.....	5,960	5,466	4,924	4.8	4.6	4.1

Footnotes at end of table.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933—Continued

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
II. Cancers and other tumors—Continued.						
Cancer and other malignant tumors—Contd.						
Of the male genito-urinary organs—Contd.						
Testes.....	394	352	345	0.3	0.3	0.3
Scrotum.....	34	44	37	(1)	(1)	(1)
Other male genito-urinary organs.....	282	294	257	.2	.2	.2
Of the skin.....	3,358	3,137	2,986	2.7	2.6	2.5
Of other or unspecified organs.....	11,110	10,572	10,109	8.8	8.8	8.5
Kidneys and suprarenals (female).....	812	762	691	.6	.6	.6
Bladder (female).....	1,368	1,266	1,213	1.1	1.1	1.0
Brain.....	1,018	932	844	.8	.8	.7
Bones (except jaw).....	1,814	1,639	1,644	1.4	1.4	1.4
Other or unspecified organs.....	6,098	5,973	5,717	4.0	5.0	4.8
Nonmalignant tumors.....	4,054	3,897	3,839	3.2	3.2	3.2
Ovary.....	156	167	142	.1	.1	.1
Uterus.....	2,484	2,432	2,539	2.0	2.0	2.1
Other female genital organs.....	3	12	4	(1)	(1)	(1)
Brain and other organs.....	1,411	1,286	1,154	1.1	1.1	1.0
Tumors of which the nature is not specified.....	2,006	1,981	2,046	1.6	1.6	1.7
Ovary.....	21	22	40	(1)	(1)	(1)
Uterus.....	10	18	21	(1)	(1)	(1)
Other female genital organs.....	2	1	3	(1)	(1)	(1)
Brain and other organs.....	1,973	1,920	1,982	1.6	1.6	1.7
III. Rheumatic diseases, nutritional diseases, diseases of the endocrine glands, and other general diseases						
Acute rheumatic fever.....	41,614	40,985	40,626	33.1	34.1	34.0
Chronic rheumatism, osteoarthritis.....	2,570	2,601	2,620	2.0	2.2	2.2
Gout.....	1,615	1,501	1,511	1.3	1.2	1.3
Diabetes mellitus.....	3	1	2	(1)	(1)	(1)
Scurvy.....	26,835	26,368	24,331	21.3	22.0	20.4
Beriberi.....	28	33	38	(1)	(1)	(1)
Pellagra.....	1	5	3	(1)	(1)	(1)
Rickets.....	3,955	3,694	5,091	3.1	3.1	4.3
Osteomalacia.....	339	354	455	.3	.3	.4
Diseases of the pituitary body.....	18	13	22	(1)	(1)	(1)
Diseases of thyroid and parathyroid glands.....	70	60	42	.1	(1)	(1)
Simple goiter.....	4,114	4,344	4,449	3.3	3.6	3.7
Exophthalmic goiter.....	277	290	300	.2	.2	.3
Others under this title.....	3,398	3,666	3,791	2.7	3.1	3.2
Diseases of the thymus gland.....	439	388	358	.3	.3	.3
Diseases of the adrenals (Addison's disease, not specified as tuberculous).....	1,259	1,230	1,239	1.0	1.0	1.0
Other general diseases.....	366	357	343	.3	.3	.3
Other general diseases.....	441	422	480	.4	.4	.4
IV. Diseases of the blood and blood-making organs						
Hemorrhagic conditions.....	10,188	9,868	9,668	8.1	8.2	8.1
Anemias.....	829	791	918	.7	.7	.8
Pernicious anemia.....	4,268	4,390	4,195	3.4	3.7	3.5
Other anemias.....	3,703	3,890	3,734	2.9	3.2	3.1
Leukemias and pseudoleukemias.....	585	500	461	.5	.4	.4
True leukemias.....	4,528	4,142	4,002	3.6	3.4	3.4
Pseudoleukemias (Hodgkin's disease).....	3,088	2,802	2,730	2.5	2.3	2.3
Diseases of the spleen.....	1,440	1,340	1,272	1.1	1.1	1.1
Other diseases of blood and blood-making organs.....	412	431	436	.3	.4	.4
V. Chronic poisonings and intoxications						
Alcoholism (acute or chronic).....	129	117	117	.1	.1	.1
Chronic poisoning by other organic substances.....	3,561	3,300	4,239	2.8	2.7	3.5
Chronic poisoning by mineral substances.....	123	146	155	.1	.1	.1
Lead.....	141	105	151	.1	.1	.1
Others under this title.....	117	78	111	.1	.1	.1
VI. Diseases of the nervous system and of the organs of special sense						
Encephalitis (non-epidemic).....	150,957	129,665	129,934	104.2	107.9	108.8
Meningitis.....	1,535	1,293	1,415	1.2	1.1	1.2
Simple meningitis.....	2,411	2,359	2,782	1.9	2.0	2.3
Non-epidemic cerebrospinal meningitis.....	2,108	2,037	2,355	1.7	1.7	2.0
Progressive locomotor ataxia (tabes dorsalis).....	303	322	427	.2	.3	.4
Progressive locomotor ataxia (tabes dorsalis).....	1,126	1,188	1,200	.9	1.0	1.0

Footnotes at end of table.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933—Continued

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
VI. Diseases of the nervous system and of the organs of special sense—Continued.						
Other diseases of the spinal cord	3,014	3,026	3,282	2.4	2.5	2.7
Cerebral hemorrhage, cerebral embolism, and thrombosis	105,554	104,897	103,411	84.0	87.3	86.6
Cerebral hemorrhage	94,572	94,694	93,819	75.2	78.8	78.6
Cerebral embolism and thrombosis	5,930	5,397	4,592	4.7	4.5	4.2
Softening of brain	703	688	601	.6	.6	.5
Hemiplegia and other paralysis, cause unspecified	4,349	4,118	4,035	3.5	3.4	3.4
General paralysis of the insane	4,538	4,573	4,662	3.6	3.8	3.9
Dementia praecox and other psychoses	1,449	1,342	1,517	1.2	1.1	1.3
Epilepsy	2,724	2,842	2,962	2.2	2.4	2.5
Convulsions (under 5 years of age)	797	841	931	.6	.7	.8
Other diseases of the nervous system	3,750	3,367	3,547	3.0	2.8	3.0
Diseases of the organs of vision	85	77	93	.1	.1	.1
Diseases of the ear and mastoid process	3,974	3,960	4,132	3.2	3.2	3.5
Diseases of ear	2,404	2,322	2,414	1.9	1.9	2.0
Diseases of mastoid process	1,570	1,538	1,718	1.2	1.3	1.4
VII. Diseases of the circulatory system						
	514,000	295,509	281,255	249.8	246.0	236.5
Pericarditis	879	907	973	.7	.8	.8
Acute endocarditis	3,433	3,559	3,686	2.7	3.0	3.1
Specified as acute	2,828	2,953	3,067	2.3	2.5	2.6
Unspecified (under 45 years of age)	604	606	619	.5	.5	.5
Chronic endocarditis, valvular diseases	58,900	61,335	62,473	46.9	51.1	52.3
Endocarditis, specified as chronic, and other valvular diseases	55,008	57,358	58,568	43.9	47.7	49.0
Endocarditis, unspecified (45 years and over)	3,892	3,977	3,905	3.1	3.3	3.3
Diseases of the myocardium	130,484	125,526	117,904	103.8	104.5	98.7
Acute myocarditis	4,357	4,375	4,195	3.5	3.6	3.5
Myocarditis, unspecified (under 45 years)	1,251	1,457	1,611	1.0	1.2	1.3
Chronic myocarditis, myocardial degeneration	94,720	91,181	84,989	75.4	75.9	71.2
Unspecified	30,186	28,513	27,109	24.0	23.7	22.7
Diseases of coronary arteries, angina pectoris	47,456	37,346	32,080	37.8	31.1	26.9
Angina pectoris	19,996	19,893	19,218	15.9	16.6	16.1
Diseases of coronary arteries	27,490	17,453	12,862	21.9	14.5	10.8
Other diseases of the heart	45,174	40,923	36,989	35.9	33.3	30.9
Functional diseases of heart	855	716	666	.7	.6	.6
Other and unspecified	44,319	39,307	36,203	35.3	32.7	30.3
Aneurysm (except of heart)	2,281	2,181	2,042	1.8	1.8	1.7
Arteriosclerosis (coronary arteries excepted)	21,062	20,534	21,027	16.8	17.1	17.6
Gangrene	959	924	1,008	.8	.8	.8
Other diseases of the arteries	1,529	1,526	1,429	1.2	1.3	1.2
Diseases of veins (varices, hemorrhoids, phlebitis, etc.)	700	698	789	.6	.6	.7
Diseases of lymphatic system (lymphangitis, etc.)	656	529	547	.5	.4	.5
Idiopathic anomalies of the blood pressure	283	249	235	.2	.2	.2
VIII. Diseases of the respiratory system						
	100,546	106,955	110,975	80.0	88.2	92.9
Diseases of the nasal fossae and annexae	1,041	1,089	1,194	.8	.9	1.0
Diseases of nasal fossae	311	381	385	.2	.3	.3
Others under this title	730	708	809	.6	.6	.7
Diseases of the larynx	504	488	455	.4	.4	.4
Bronchitis	4,062	4,338	4,586	3.2	3.6	3.8
Acute	1,276	1,597	1,667	1.0	1.3	1.4
Chronic	1,853	1,840	1,881	1.5	1.5	1.6
Unspecified (under 5 years of age)	933	245	323	.7	.2	.3
Bronchopneumonia (including capillary bronchitis)	37,209	39,174	40,108	29.6	32.6	33.6
Bronchopneumonia	36,827	38,706	39,615	29.3	32.2	33.2
Capillary bronchitis	382	466	493	.3	.4	.4
Lobar pneumonia	45,738	49,524	53,093	36.4	41.2	44.5
Pneumonia, unspecified	4,000	3,776	3,773	3.2	3.1	3.2
Pleurisy	2,646	2,618	2,739	2.1	2.2	2.3
Congestion, edema, embolism, hemorrhagic infarct, thrombosis of lungs	1,063	1,798	1,789	1.6	1.5	1.5
Pulmonary embolism and thrombosis	536	442	475	.4	.4	.4
Others under this title	1,427	1,356	1,314	1.1	1.1	1.1
Asthma	1,863	1,804	1,880	1.5	1.5	1.6
Pulmonary emphysema	147	114	114	.1	.1	.1
Other diseases of the respiratory system (tuberculosis excepted)	1,373	1,212	1,244	1.1	1.0	1.0

Footnotes at end of table.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933—Continued

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
<i>IX. Diseases of the digestive system</i>	92,570	87,300	95,283	73.6	72.7	79.8
Diseases of buccal cavity and annexa and of pharynx, tonsils.....	5,680	5,191	5,713	4.5	4.3	4.8
Diseases of pharynx and tonsils.....	4,747	4,350	4,814	3.8	3.6	4.0
Others under this title.....	933	841	899	.7	.7	.8
Diseases of esophagus.....	155	140	144	.1	.1	.1
Ulcer of stomach and duodenum.....	7,538	7,192	7,259	6.0	6.0	6.1
Ulcer of stomach.....	5,197	4,909	4,978	4.1	4.1	4.2
Ulcer of duodenum.....	2,341	2,283	2,281	1.9	1.9	1.9
Other diseases of stomach (cancer excepted).....	3,853	3,670	3,917	3.1	3.1	3.3
Diarrhea and enteritis (under 2 years of age).....	15,706	14,375	18,704	12.5	12.0	15.7
Diarrhea and enteritis (2 years and over).....	5,966	5,244	6,019	4.7	4.4	5.0
Appendicitis.....	17,717	17,111	18,113	14.1	14.2	15.2
Hernia, intestinal obstruction.....	12,607	12,269	12,539	10.0	10.2	10.5
Hernia.....	4,931	4,863	4,794	3.9	4.0	4.0
Intestinal obstruction.....	7,676	7,406	7,745	6.1	6.2	6.5
Other diseases of intestines.....	1,369	1,185	1,242	1.1	1.0	1.0
Cirrhosis of liver.....	9,349	8,681	8,851	7.4	7.2	7.4
Other diseases of liver (including yellow atrophy of liver).....	1,678	1,615	1,665	1.3	1.3	1.4
Yellow atrophy of liver.....	500	491	519	.4	.4	.4
Others under this title.....	1,178	1,124	1,146	.9	.9	1.0
Biliary calculi.....	4,541	4,577	4,745	3.6	3.8	4.0
Other diseases of gall-bladder, biliary passages.....	4,118	3,866	4,068	3.3	3.2	3.4
Diseases of pancreas.....	677	677	677	.5	.6	.6
Peritonitis, cause not specified.....	1,616	1,507	1,095	1.3	1.3	1.3
<i>X. Diseases of the genito-urinary system</i>	121,571	120,631	120,009	96.7	100.4	100.5
Acute nephritis (including unspecified under 10 years of age).....	4,732	4,323	4,562	3.8	3.6	3.8
Chronic nephritis.....	90,804	92,051	90,985	72.2	76.6	76.2
Nephritis, unspecified (10 years and over).....	8,727	8,377	8,572	6.9	7.0	7.2
Other diseases of kidneys and ureters (puerperal diseases excepted).....	3,513	3,382	3,373	2.8	2.8	2.8
Calculi of urinary passages.....	1,238	1,183	1,093	1.0	1.0	.9
Diseases of bladder (tumor excepted).....	750	751	723	.6	.6	.6
Diseases of urethra, urinary abscess, etc.....	514	410	437	.4	.3	.4
Diseases of prostate.....	7,690	6,730	6,541	6.1	5.6	5.5
Diseases of male genital organs, not specified as venereal.....	109	125	108	.1	.1	.1
Diseases of female genital organs, not specified as venereal.....	3,494	3,299	3,613	2.8	2.7	3.0
Cysts of ovary.....	697	700	725	.6	.6	.6
Other diseases of ovaries, diseases of tubes and parametrium.....	1,911	1,723	1,959	1.5	1.4	1.6
Diseases of uterus.....	814	787	827	.6	.7	.7
Nonpuerperal diseases of breast (cancer excepted).....	11	18	26	(1)	(1)	(1)
Others under this title.....	61	71	76	(1)	.1	.1
<i>XI. Diseases of pregnancy, childbirth, and the puerperal state</i>	14,384	13,293	14,239	10.3	11.1	11.9
Abortion with septic conditions.....	2,037	2,057	2,105	1.6	1.7	1.8
Abortion without mention of septic conditions (including hemorrhages).....	640	717	666	.5	.6	.6
Ectopic gestation.....	610	571	598	.5	.5	.5
Septic conditions specified.....	121	108	110	.1	.1	.1
Septic conditions not mentioned.....	489	463	488	.4	.4	.4
Other accidents of pregnancy (not to include hemorrhages).....	86	86	91	.1	.1	.1
Puerperal hemorrhage.....	1,339	1,392	1,464	1.1	1.2	1.2
Placenta prævia.....	411	422	482	.3	.4	.4
Other puerperal hemorrhages.....	928	970	982	.7	.8	.8
Puerperal septicemia (not specified as due to abortion).....	2,720	2,774	3,230	2.2	2.3	2.7
Puerperal septicemia and pyemia.....	2,719	2,761	3,218	2.2	2.3	2.7
Puerperal tetanus.....	10	13	12	(1)	(1)	(1)
Puerperal albuminuria and eclampsia.....	2,520	2,692	3,068	2.0	2.2	2.6
Other toxemias of pregnancy.....	535	499	539	.4	.4	.5
Puerperal phlegmasia, alba dolens, embolus, sudden death (not specified as septic).....	592	628	640	.5	.5	.5
Other accidents of childbirth.....	1,749	1,827	1,782	1.4	1.5	1.5
Other and unspecified conditions of puerperal state.....	45	50	56	(1)	(1)	(1)

Footnotes at end of table.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933—Continued

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
<i>XII. Diseases of the skin and cellular tissue.....</i>	<i>2, 133</i>	<i>1, 855</i>	<i>2, 158</i>	<i>1.7</i>	<i>1.6</i>	<i>1.8</i>
Furuncle, carbuncle.....	634	538	613	.5	.4	.5
Phlegmon, acute abscess.....	753	654	790	.6	.5	.7
Other diseases of skin and annexa, and of cellular tissue.....	746	703	755	.6	.6	.6
<i>XIII. Diseases of the bones and organs of locomotion.....</i>	<i>1, 596</i>	<i>1, 606</i>	<i>1, 572</i>	<i>1.3</i>	<i>1.3</i>	<i>1.3</i>
Osteomyelitis.....	1, 071	1, 070	1, 059	.9	.9	.9
Other diseases of the bones (tuberculosis excepted).....	177	179	177	.1	.1	.1
Diseases of joints and other organs of locomotion.....	348	357	336	.3	.3	.3
<i>XIV. Congenital malformations.....</i>	<i>12, 112</i>	<i>12, 363</i>	<i>13, 103</i>	<i>9.6</i>	<i>10.3</i>	<i>11.0</i>
Congenital hydrocephalus.....	1, 542	1, 642	1, 639	1.2	1.4	1.4
Spina bifida and meningocele.....	1, 257	1, 400	1, 418	1.0	1.2	1.2
Congenital malformations of the heart.....	6, 206	6, 294	6, 873	4.9	5.2	5.8
Others under this title.....	3, 105	3, 027	3, 173	2.5	2.5	2.7
<i>XV. Diseases of early infancy.....</i>	<i>51, 450</i>	<i>51, 671</i>	<i>54, 323</i>	<i>40.9</i>	<i>42.9</i>	<i>45.5</i>
Congenital debility.....	4, 067	3, 860	4, 402	3.2	3.2	3.7
Premature birth.....	32, 951	33, 143	34, 477	26.2	27.6	28.9
Injury at birth.....	9, 506	9, 631	10, 217	7.6	8.1	8.6
Other diseases peculiar to early infancy.....	4, 926	4, 887	5, 227	3.9	4.1	4.4
<i>XVI. Senility.....</i>	<i>11, 318</i>	<i>10, 807</i>	<i>10, 435</i>	<i>9.0</i>	<i>8.5</i>	<i>8.7</i>
<i>XVII. Violent and accidental deaths.....</i>	<i>123, 201</i>	<i>117, 830</i>	<i>125, 059</i>	<i>98.0</i>	<i>98.1</i>	<i>104.7</i>
Suicide.....	19, 993	20, 927	20, 068	15.9	17.4	16.8
By solid or liquid poisons or by absorption of corrosive substances.....	3, 141	3, 320	3, 760	2.5	2.8	2.7
By poisonous gas.....	2, 694	3, 001	2, 834	2.1	2.5	2.4
By hanging or strangulation.....	3, 543	3, 632	3, 572	2.8	3.0	3.0
By drowning.....	990	996	952	.8	.8	.8
By firearms.....	7, 798	8, 075	7, 543	6.2	6.7	6.3
By cutting or piercing instruments.....	821	874	973	.7	.7	.8
By jumping from high places.....	689	702	622	.5	.6	.5
By crushing.....	141	156	163	.1	.1	.1
By other means.....	186	171	189	.1	.1	.1
Homicide.....	12, 123	11, 035	11, 160	9.6	9.2	9.3
By firearms.....	7, 862	7, 458	7, 532	6.3	6.2	6.3
By cutting or piercing instruments.....	2, 065	1, 650	1, 735	1.6	1.4	1.5
By other means.....	2, 196	1, 927	1, 893	1.8	1.6	1.6
Accidental, other, or undefined.....	91, 085	85, 868	93, 811	72.5	71.5	78.6
Attack by venomous animals.....	155	127	116	.1	.1	.1
Poisoning by food.....	639	636	774	.5	.5	.6
Absorption of poisonous gas.....	1, 594	1, 988	2, 062	1.3	1.7	1.7
Supplemental.....	74	64	33	.1	.1	(1)
Other acute accidental poisonings (gas excepted).....	1, 490	1, 605	1, 813	1.2	1.3	1.5
Conflagration.....	1, 521	1, 555	1, 497	1.2	1.3	1.3
Burns (conflagration excepted).....	5, 232	5, 358	5, 374	4.2	4.5	4.8
Supplemental.....	589	561	519	.5	.5	.4
Mechanical suffocation.....	934	904	972	.7	.8	.8
Supplemental.....	65	40	56	.1	(1)	(1)
Drowning.....	6, 219	6, 199	6, 635	4.9	5.2	5.6
Supplemental.....	1, 246	1, 228	910	1.0	1.0	.8
Traumatism:						
By firearms (wounds of war excepted).....	3, 025	2, 923	3, 041	2.4	2.4	2.5
By cutting or piercing instruments (wounds of war excepted).....	836	757	842	.7	.6	.7
Supplemental.....	265	230	334	.2	.2	.3
By fall, crushing, landslide.....	29, 376	26, 677	27, 105	23.4	22.2	22.7
By fall.....	18, 933	17, 834	17, 467	15.1	14.8	14.6
Supplemental.....	2, 813	2, 606	2, 889	2.2	2.2	2.4
By crushing, landslide.....	556	502	572	.4	.4	.5
Supplemental.....	7, 074	5, 735	6, 177	5.6	4.8	5.2
Cataclysm.....	303	404	61	.4	.3	.1
Injuries by animals.....	591	571	585	.5	.5	.5
Hunger and thirst.....	39	27	33	(1)	(1)	(1)
Excessive cold.....	319	287	161	.3	.2	.1
Excessive heat.....	1, 025	689	2, 768	.8	.6	2.3

Footnotes at end of table.

Provisional summary of mortality statistics for the United States for the years 1931, 1932, 1933—Continued

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
<i>XVII. Violent and accidental deaths—Con.</i>						
<i>Accidental, other, or undefined—Continued.</i>						
Lightning.....	372	362	444	0.3	0.3	0.4
Due to electric currents.....	575	589	692	.5	.5	.6
Supplemental.....	194	86	97	.1	.1	.1
Other accidents.....	34,082	31,858	36,732	27.1	26.5	30.8
Foreign bodies.....	669	633	692	.5	.5	.6
Others under this title.....	4,311	3,835	4,393	3.4	3.2	3.7
Supplemental.....	29,192	27,390	31,647	23.2	22.8	26.5
Violent deaths of unknown nature.....	11	5	6	(1)	(1)	(1)
Wounds of war.....	2	—	7	(1)	—	(1)
Legal executions.....	153	131	142	.1	.1	.1
<i>XVIII. Ill-defined causes of death.....</i>	<i>22,026</i>	<i>20,999</i>	<i>22,517</i>	<i>17.5</i>	<i>17.5</i>	<i>18.9</i>
Sudden death.....	2,089	1,951	1,968	1.7	1.6	1.6
Cause of death not specified or ill-defined.....	19,937	19,048	20,549	15.9	15.9	17.2
Ill-defined.....	5,474	4,804	5,352	4.4	4.0	4.5
Not specified or unknown.....	14,463	14,244	15,197	11.5	11.9	12.7

*Includes 96.3 percent of the population of the United States.

† Less than 1/10 of 1 per 100,000 population.

The following tabulation is made in accordance with the requirements of the International Conference at Paris, 1929. The deaths included represent a reclassification of accidental deaths for comparison with figures reported in prior years.

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932*	1931*	1933	1932*	1931*
Accidents in mines and quarries.....	1,338	1,529	1,849	1.1	1.3	1.5
Accidents from agricultural machinery.....	275	285	212	.2	.2	.3
Elevator accidents.....	217	218	286	.2	.2	.2
Accidents from machinery used for recreation.....	8	14	16	(1)	(1)	(1)
Other machinery accidents.....	931	878	1,016	.7	.7	.9
Railroad and automobile collisions.....	1,437	1,466	1,651	1.1	1.2	1.4
Other railroad accidents.....	3,973	3,502	3,592	3.2	2.9	3.0
Street car and automobile collisions.....	318	304	419	.3	.3	.4
Other street car accidents.....	529	523	675	.4	.4	.6
Automobile accidents (primary).....	29,323	26,350	30,042	23.3	21.9	25.2
Motorcycle accidents.....	285	241	317	.2	.2	.3
Other land transportation accidents.....	1,235	1,131	1,184	1.0	.9	1.0
Water transportation accidents.....	1,029	1,122	813	.8	.9	.7
Air transportation accidents.....	458	396	499	.3	.3	.4

Deaths in the preceding table are included under their appropriate titles of the International List in the following table:

Cause of death	Number of deaths			Rate per 100,000 estimated population		
	1933	1932 *	1931 *	1933	1932 *	1931 *
Absorption of poisonous gas.....	74	64	33	0.1	0.1	(1)
Burns (conflagration excepted).....	588	561	519	.5	.5	0.4
Mechanical suffocation.....	65	40	56	.1	(1)	(1)
Drowning.....	1,246	1,228	910	1.0	1.0	.8
Cutting or piercing instruments.....	265	230	334	.2	.2	.3
Fall.....	2,813	2,906	2,889	2.2	2.2	2.4
Crushing.....	7,074	5,735	6,177	5.6	4.8	5.2
Due to electric currents.....	104	86	97	.1	.1	.1
Other accidents.....	29,102	27,390	31,647	23.2	22.8	26.5

* Includes 96.3 percent of the population of the United States.

† Less than 1/10 of 1 per 100,000 population.

COURT DECISION ON PUBLIC HEALTH

Collection and disposal of garbage by city held to be a governmental function.—(Louisiana Court of Appeal; *Manguno v. City of New Orleans*, 155 So. 41; decided May 21, 1934.) An action was brought against the city of New Orleans to recover damages alleged to have resulted when one of the city's steel garbage trailers broke loose from the truck that was hauling it and ran into the automobile that the plaintiff was driving in the opposite direction. The appellate court said that it experienced little difficulty in reaching the conclusion that the defendant's employees were guilty of negligence, but that the question of law presented, i. e., whether or not the operation of the garbage incinerator plants and their auxiliaries by the city was a governmental or municipal function, was not so easy of solution. "The acts of the legislature under which the incinerators are operated", said the court, "do not impose upon the city, as an agency of the State, the duty of operating them. The city authorities have the right to contract with third persons for the operation of municipal garbage incinerators or operate them themselves." The law was stated by the court to be well settled that, where the State as a sovereign delegates governmental functions to a municipality, it could not be held liable for the tortious acts of its officials, representatives, and employees in discharging and performing those duties, but that municipalities were liable in damages for the negligence and carelessness of their officials, representatives, and employees in performing municipal or corporate functions. The court reached the conclusion that the defendant city was not liable, its finding being summed up in the following, quoted from the opinion:

In the instant case there can be no doubt that the maintenance and operation of a garbage collection and disposal system is for the protection and preservation of the public health and welfare and, as such, is a delegation of a governmental

function by the sovereign State to the city. The municipality does not make any charge or assess any fee in connection with this service, the system being maintained and operated out of the general tax fund. We conclude that the employee was engaged in a governmental function at the time of the unfortunate accident and, therefore, the city is exempt from liability for the tortious acts of its employees or representatives.

DEATHS DURING WEEK ENDED SEPTEMBER 29, 1934

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

	Week ended Sept. 29, 1934	Correspond- ing week, 1933
Data from 86 large cities of the United States:		
Total deaths.....	7,278	7,157
Deaths per 1,000 population, annual basis.....	10.1	10.0
Deaths under 1 year of age.....	560	540
Deaths under 1 year of age per 1,000 estimated live births.....	52	47
Deaths per 1,000 population, annual basis, first 39 weeks of year.....	11.4	10.9
Data from industrial insurance companies:		
Policies in force.....	67,147,726	67,661,518
Number of death claims.....	11,123	11,704
Death claims per 1,000 policies in force, annual rate.....	8.6	9.0
Death claims per 1,000 policies, first 39 weeks of year, annual rate.....	10.0	9.8

¹ Data for 81 cities.

PREVALENCE OF DISEASE

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

UNITED STATES

CURRENT WEEKLY STATE REPORTS

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

Reports for Weeks Ended Oct. 6, 1934, and Oct. 7, 1933

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Oct. 6, 1934, and Oct. 7, 1933

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933
New England States:								
Maine.....		1				3	0	0
New Hampshire.....		1			1		0	0
Vermont.....							0	0
Massachusetts.....	13	24			7	34	0	1
Rhode Island.....	2	3			2		0	0
Connecticut.....			3		17	5	0	0
Middle Atlantic States:								
New York.....	15	30	17	110	36	82	1	2
New Jersey.....	23	9	10	8	23	19	0	0
Pennsylvania.....	59	51			215	34	5	4
East North Central States:								
Ohio.....	67	50	3	4	29	7	2	0
Indiana.....	48	65	18	31	40	5	1	2
Illinois.....	32	38	7	13	40	6	3	2
Michigan.....	10	17		4	32	8	1	0
Wisconsin.....	2	9	3	34	66	16	2	1
West North Central States:								
Minnesota.....	10	14	2	2	30	2	0	0
Iowa ¹	13	14	2		15	2	1	0
Missouri.....	44	80	35	3	32		1	1
North Dakota.....	3	3	5		54	3	0	0
South Dakota.....	4	3			6	10	0	0
Nebraska.....	7	6	2	7	17	1	0	1
Kansas.....	12	21	3		12	5	0	0
South Atlantic States:								
Delaware.....	1				2		0	0
Maryland ¹	13	8	21	12	10	1	0	0
District of Columbia.....	15	8		1		1	0	0
Virginia.....	74	94			27	5	0	1
West Virginia.....	68	90	12	25	28	4	0	0
North Carolina ¹	131	127		12	11	18	1	0
South Carolina ¹	17	34	191	192	5	14	0	0
Georgia ¹	56	60				15	1	0
Florida ¹	11	10			3		0	0

Footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Oct. 6, 1934, and Oct. 7, 1933—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933
East South Central States:								
Kentucky.....	129	116	34	23	20		0	0
Tennessee.....	64	95	12	13	2	26	1	1
Alabama ¹	59	78	9	28	21	4	1	0
Mississippi ¹	26	42					0	0
West South Central States:								
Arkansas.....	15	36	5	1		16	0	0
Louisiana.....	10	32	3	2	4	2	1	0
Oklahoma ⁴	3	76	17	19	1		1	0
Texas ¹	40	110	45	109	13	12	1	5
Mountain States:								
Montana.....	1	1	4		49	1	0	1
Idaho.....				1			0	0
Wyoming.....	1				1	1	0	0
Colorado.....	13	7			29	2	0	1
New Mexico.....	3	12	1	3		8	0	0
Arizona.....	3	2	4		2	2	0	0
Utah ¹		3			7	4	0	0
Pacific States:								
Washington.....		11			62	42	1	0
Oregon.....	3		22	19	10	8	0	0
California.....	27	18	10	38	55	134	1	1
Total.....	1,147	1,509	490	614	1,036	562	25	24

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933
New England States:								
Maine.....	0	3	10	11	0	0	1	2
New Hampshire.....	0	1	12	19	0	0	1	0
Vermont.....	0	1	3	6	0	0	1	0
Massachusetts.....	4	8	69	99	0	0	3	6
Rhode Island.....	0	1	12	9	0	0	1	3
Connecticut.....	0	5	11	26	0	0	0	2
Middle Atlantic States:								
New York.....	6	59	127	140	0	0	34	37
New Jersey.....	0	20	41	50	0	0	8	7
Pennsylvania.....	5	28	226	226	0	0	31	59
East North Central States:								
Ohio.....	12	10	277	229	0	0	34	27
Indiana.....	1	4	53	99	0	0	12	17
Illinois.....	8	12	304	161	0	1	43	21
Michigan.....	16	4	110	125	0	0	30	17
Wisconsin.....	20	3	181	36	1	2	4	6
West North Central States:								
Minnesota.....	4	27	39	39	3	0	3	7
Iowa ¹	3	4	28	43	1	0	23	5
Missouri.....	1	2	50	71	0	0	60	22
North Dakota.....	1	1	19	8	0	0	5	5
South Dakota.....	3	3	18	11	1	0	0	5
Nebraska.....	1	0	20	7	1	0	0	1
Kansas.....	2	1	23	77	0	0	5	12
South Atlantic States:								
Delaware.....	0	1	4	6	0	0	4	1
Maryland ¹	0	5	24	45	0	0	9	31
District of Columbia.....	1	2	16	5	0	0	1	2
Virginia.....	8	4	81	108	0	0	16	21
West Virginia.....	6	5	113	132	0	1	46	66
North Carolina ¹	1	0	74	84	0	0	7	22
South Carolina ¹	0	0	7	9	0	0	15	35
Georgia ¹	0	0	17	16	0	0	8	11
Florida ¹	0	0	1	1	0	0	0	1

Footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Oct. 6, 1934, and Oct. 7, 1933—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933	Week ended Oct. 6, 1934	Week ended Oct. 7, 1933
East South Central States:								
Kentucky.....	8	5	94	105	0	0	39	37
Tennessee.....	4	6	89	101	0	0	39	30
Alabama ¹	0	0	22	36	0	0	9	13
Mississippi ²	0	0	12	18	0	0	7	4
West South Central States:								
Arkansas.....	0	0	5	17	0	1	5	15
Louisiana.....	0	1	9	8	1	0	13	11
Oklahoma ⁴	1	2	13	7	0	2	10	46
Texas ³	5	1	27	33	0	12	38	70
Mountain States:								
Montana.....	10	0	13	19	0	0	7	11
Idaho.....	7	0	3	5	0	0	22	3
Wyoming.....	1	2	3	5	0	1	1	0
Colorado.....	0	0	52	8	1	8	10	8
New Mexico.....	0	0	17	14	0	1	7	31
Arizona.....	6	0	16	4	0	0	5	2
Utah ¹	1	0	12	6	0	0	1	2
Pacific States:								
Washington.....	47	5	55	22	1	2	2	8
Oregon.....	3	4	36	21	0	4	3	14
California.....	51	4	138	128	0	6	17	22
Total.....	247	244	2,626	2,462	10	41	640	778

¹ New York City only.

² Week ended earlier than Saturday.

³ Typhus fever, week ended Oct. 6, 1934, 18 cases, as follows: North Carolina, 1; South Carolina, 2; Georgia, 5; Florida, 1; Alabama, 6; Texas, 3.

⁴ Exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

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

State	Menin- gococ- cus menin- gitis	Diph- theria	Influ- enza	Malaria	Measles	Pel- lagra	Polio- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
<i>July 1934:</i>										
Nevada.....	1				31		4		0	3
<i>August 1934</i>										
Mississippi.....		55	1,431	14,506	151	400	2	42	0	76
Nevada.....					1		0	1	0	0
<i>September 1934</i>										
Arkansas.....		25	1	140		18		16	2	33
Connecticut.....	1	4	12		44		5	35	0	9
Delaware.....		1			4		0	7	0	16
Dist. of Columbia.....		30	1		5	3	1	45	0	8
Vermont.....		1			3			31	0	5

July 1934		September 1934		September 1934—Continued	
Nevada:	Cases	Chicken pox:	Cases		Cases
Chicken pox.....	2	Arkansas.....	3	Rocky Mountain spotted fever:	
Dysentery.....	2	Connecticut.....	56	District of Columbia...	1
Septic sore throat.....	1	Delaware.....	4	Connecticut.....	3
Tularaemia.....	1	District of Columbia...	2	Tetanus:	
Whooping cough.....	4	Vermont.....	32	Connecticut.....	2
		Conjunctivitis:		Trachoma:	
		Connecticut.....	1	Arkansas.....	13
August 1934		Dysentery:		Connecticut.....	1
Mississippi:		Connecticut (bacillary).....	44	Typhus fever:	
Chicken pox.....	156	Delaware.....	1	Arkansas.....	6
Dengue.....	67	German measles:		Connecticut.....	3
Dysentery (amoebic).....	88	Connecticut.....	5	Vermont.....	1
Hookworm disease.....	287	Lead poisoning:		Whooping cough:	
Mumps.....	154	Connecticut.....	2	Arkansas.....	83
Puerperal septicemia.....	27	Mumps:		Connecticut.....	147
Trachoma.....	4	Arkansas.....	13	Delaware.....	17
Tularaemia.....	4	Connecticut.....	24	District of Columbia...	21
Whooping cough.....	509	Delaware.....	1	Vermont.....	109
Nevada:		Paratyphoid fever:			
Chicken pox.....	3	Connecticut.....	3		
Whooping cough.....	2	Rabies in animals:			
		Connecticut.....	1		

DENGUE IN SOUTHEASTERN STATES

During the week ended October 6, 1934, 93 cases of dengue were reported in Georgia.

On October 5 it was estimated that there were approximately 500 cases of dengue in Miami, Fla. There was said to be approximately 100 new cases. Conditions continued to improve.

Cases of dengue were reported in Florida during the week ended October 6, 1934, as follows:

Locality	County	Number of cases	Locality	County	Number of cases
Fort Lauderdale.....	Broward.....	1	Orlando.....	Orange.....	2
Francis.....	Putnam.....	1	Panama City.....	Bay.....	16
MacClenny.....	Baker.....	9	Pompano.....	Broward.....	1
Miami.....	Dade.....	26	Tampa.....	Hillsborough.....	2

The age distribution of the above cases was as follows:

	Cases		Cases
Under 1 year.....	1	35-49.....	6
1-5.....	2	50-69.....	4
6-13.....	3	70 years and over.....	0
14-17.....	0	Not stated.....	33
18-34.....	9		

WEEKLY REPORTS FROM CITIES

City reports for week ended Sept. 29, 1934

[This table summarizes the reports received regularly from a selected list of 121 cities for the purpose of showing a cross-section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.]

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0		0	0	3	2	0	2	0	7	17
New Hampshire:											
Concord	0		0	0	0	0	0	0	0	0	12
Nashua	0		0	0	0	0	0	0	0	0	
Vermont:											
Barre											
Burlington	1		0	0	0	3	0	0	0	0	4
Massachusetts:											
Boston	4		0	0	10	15	0	6	1	35	155
Fall River	0		0	0	1	0	0	0	0	3	23
Springfield	0		0	1	1	2	0	3	0	6	26
Worcester	0		0	1	3	4	0	1	0	1	35
Rhode Island:											
Pawtucket	0		0	0	0	0	0	0	0	0	14
Providence	0		0	4	4	2	0	3	0	27	50
Connecticut:											
Bridgeport	0		0	0	0	0	0	2	0	0	21
Hartford											
New Haven	0	1	0	0	1	0	0	0	0	0	26
New York:											
Buffalo	0		1	1	10	6	0	7	0	12	166
New York	26	3	4	11	78	31	0	79	11	255	1,301
Rochester											
Syracuse	0		0	2	1	2	0	0	0	15	39
New Jersey:											
Camden	1		0	0	3	2	0	0	0	20	28
Newark	1	9	1	1	2	3	0	5	1	25	86
Trenton	0		0	0	0	3	0	3	0	1	25
Pennsylvania:											
Philadelphia	4	2	0	4	14	27	0	29	8	167	401
Pittsburgh	8		0	4	17	32	0	3	6	18	139
Reading	1		0	1	0	0	0	1	0	13	24
Scranton	0			7		1	0		0	4	
Ohio:											
Cincinnati	8		0	0	4	14	0	7	0	4	103
Cleveland	3	12	0	1	10	18	0	8	0	27	158
Columbus	3		0	2	6	24	0	1	1	9	66
Toledo	2		0	1	2	5	0	4	1	8	79
Indiana:											
Fort Wayne	2		1	0	1	1	0	1	0	2	
Indianapolis	6		0	0	11	20	0	3	2	3	
South Bend	0		0	19	1	1	0	0	0	1	13
Terre Haute	0		0	0	2	0	0	1	0	0	18
Illinois:											
Chicago	2	2	2	6	30	69	0	38	6	55	677
Springfield	0		0	4	3	2	0	0	0	0	15
Michigan:											
Detroit	7		2	4	11	27	0	14	2	33	196
Flint	0		0	1	1	4	0	2	0	6	15
Grand Rapids	0		0	2	3	10	0	1	0	1	31
Wisconsin:											
Kenosha	0		0	4	0	0	0	0	0	15	3
Milwaukee	0	1	0	2	6	89	0	5	0	54	99
Racine	0		0	1	0	4	0	0	0	4	14
Superior	0		0	2	0	0	0	0	0	0	8
Minnesota:											
Duluth	0		0	8	3	2	0	0	0	0	27
Minneapolis	6		0	10	4	10	0	3	0	5	97
St. Paul	0		0	1	3	3	0	0	4	5	44
Iowa:											
Davenport	0			0		1	0		0	0	
Des Moines	0			0		7	0		0	0	16
Sioux City	0			0		0	0		0	2	
Waterloo	1			0		0	0		1	0	
Missouri:											
Kansas City	1		0	1	13	3	0	6	1	0	97
St. Joseph	6		0	1	1	1	0	0	0	0	20
St. Louis	7		0	0	5	6	0	7	0	4	213

City reports for week ended Sept. 29, 1934—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
North Dakota:											
Fargo.....	0		0	1	0	0	0	0	1	7	5
Grand Forks.....	0			0		0	0		2	0	
South Dakota:											
Aberdeen.....	0			0		0	0		0	4	
Sioux Falls.....	0			0		0	0		0	0	6
Nebraska:											
Omaha.....	3		0	1	5	6	0	2	0	0	53
Kansas:											
Topeka.....	1		0	0	1	1	0	0	0	8	16
Wichita.....	0		0	0	2	0	0	2	0	0	25
Delaware:											
Wilmington.....	0		0	0	0	0	0	0	1	0	18
Maryland:											
Baltimore.....	3	3	1	1	11	7	0	15	3	39	200
Cumberland.....	0		0	1	0	1	0	0	0	0	15
Frederick.....	0		0	0	0	2	0	1	0	0	4
District of Columbia:											
Washington.....	8		0	2	10	17	0	15	0	5	173
Virginia:											
Lynchburg.....	3		0	0	0	2	0	0	1	2	14
Norfolk.....	0		0	0	4	1	0	1	0	2	28
Richmond.....	4		0	0	1	5	0	4	0	0	55
Roanoke.....	3		0	0	3	4	0	0	0	2	18
West Virginia:											
Charleston.....	5		0	0	0	1	0	2	0	0	27
Huntington.....	4		0	0		3	0		0	0	
Wheeling.....	0		0	0	2	12	0	0	0	0	18
North Carolina:											
Raleigh.....											
Wilmington.....	0		0	0	0	0	0	0	0	0	
Winston-Salem.....	9		0	0	0	5	0	1	0	8	8
South Carolina:											
Charleston.....	0	12	0	0	1	0	0	1	1	0	14
Columbia.....	0		0	0	0	0	0	0	0	0	13
Greenville.....	1		0	0	5	5	0	0	0	1	30
Georgia:											
Atlanta.....	12	7	0	0	1	6	0	3	2	11	66
Brunswick.....	0		0	0	0	0	0	1	0	2	3
Savannah.....	2	9	0	0	2	1	0	2	0	1	33
Florida:											
Miami.....	1		0	0	2	1	0	2	0	0	23
Tampa.....	2		0	1	2	0	0	0	0	1	24
Kentucky:											
Ashland.....	1		0	0	0	1	0	0	2	0	1
Lexington.....	2		0	0	2	0	0	2	0	0	22
Louisville.....	25		0	2	8	8	0	1	6	2	73
Tennessee:											
Memphis.....	1		0	1	8	4	0	3	1	9	88
Nashville.....	2		0	0	5	10	0	4	7	5	45
Alabama:											
Birmingham.....	3		0	0	1	4	0	4	3	1	55
Mobile.....	2		0	0	1	0	0	2	0	0	16
Montgomery.....	1		0	0		1	0		0	0	
Arkansas:											
Fort Smith.....	0		0	0		1	0		0	2	
Little Rock.....	2		0	0	2	1	0	2	0	0	6
Louisiana:											
New Orleans.....	6	1	1	0	9	4	0	5	0	0	141
Shreveport.....	0		0	0	1	1	0	3	0	0	33
Oklahoma:											
Oklahoma City.....	1		2	0	3	1	0	0	0	0	44
Texas:											
Dallas.....	4		0	0	4	6	0	3	1	0	63
Fort Worth.....	1		0	0	1	0	0	3	1	0	32
Galveston.....	0		0	0	2	0	0	3	1	0	17
Houston.....	0		0	0	4	0	0	3	1	0	79
San Antonio.....	0		0	0	4	1	0	2	0	0	63
Montana:											
Billings.....	0		0	1	0	0	0	0	0	0	9
Great Falls.....	0		0	0	1	0	0	0	0	0	4
Helena.....	0		0	1	0	0	0	0	0	0	3
Missoula.....	0		0	0	0	0	0	0	0	0	8
Idaho:											
Boise.....	0		0	0	0	0	0	0	2	0	5

City reports for week ended Sept. 29, 1934—Continued

State and city	Diphtheria cases		Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
	Cases	Deaths	Cases	Deaths								
Colorado:												
Denver.....	2	47	0	0	1	3	30	0	7	1	8	76
Fueblo.....	0		0	0	0	0	0	0	1	1	0	4
New Mexico:												
Albuquerque.....	0		0	0	0	1	3	0	2	0	0	9
Utah:												
Salt Lake City..	0		0	0	0	1	3	0	0	0	11	31
Nevada:												
Reno.....	0		0	0	0	0	0	0	0	0	0	5
Washington:												
Seattle.....	0		0	0	2	3	9	1	5	0	6	83
Spokane.....	0		0	0	0	1	1	0	0	0	6	22
Tacoma.....	1		0	0	0	1	3	4	0	0	1	37
Oregon:												
Portland.....	0	1	0	0	0	5	14	0	3	1	0	73
Salem.....	0	4	0	0	0	0	0	0	0	0	0	
California:												
Los Angeles.....	16	9	1	7	7	7	31	0	19	2	2	266
Sacramento.....	1		0	0	0	2	1	0	3	0	1	34
San Francisco....	1		0	3	5	5	12	0	9	0	15	135

State and city	Meningococcus meningitis		Polio-myelitis cases	State and city	Meningococcus meningitis		Polio-myelitis cases
	Cases	Deaths			Cases	Deaths	
Connecticut:				Kansas:			
New Haven.....	1	0	0	Topeka.....	0	0	1
New York:				Maryland:			
Buffalo.....	0	0	2	Baltimore.....	0	0	1
New York.....	2	0	5	Cumberland.....	0	0	1
New Jersey:				District of Columbia:			
Newark.....	0	0	1	Washington.....	0	0	1
Pennsylvania:				Kentucky:			
Pittsburgh.....	1	0	1	Louisville.....	0	0	2
Ohio:				Tennessee:			
Cincinnati.....	0	0	2	Memphis.....	0	0	2
Cleveland.....	0	0	5	Texas:			
Toledo.....	2	1	0	San Antonio.....	0	0	1
Indiana:				Montana:			
Indianapolis.....	3	0	1	Helena.....	0	0	2
Illinois:				Utah:			
Chicago.....	2	0	4	Salt Lake City.....	0	0	1
Michigan:				Oregon:			
Detroit.....	1	0	4	Portland.....	1	0	0
Grand Rapids.....	0	0	1	Washington:			
Wisconsin:				Seattle.....	0	0	6
Milwaukee.....	1	0	0	Spokane.....	0	0	4
Minnesota:				Tacoma.....	0	0	1
Duluth.....	0	0	1	California:			
Minneapolis.....	1	0	0	Los Angeles.....	0	1	9
Missouri:				San Francisco....	0	0	1
St. Louis.....	1	1	0				

Dengue.—Cases: Savannah, 10; Miami, 41; Birmingham, 4.

Lethargic encephalitis.—Cases: New York, 3; Toledo, 6; Chicago, 1; Frederick, 1; Atlanta, 1; San Francisco, 1.

Pella-gra.—Cases: Charleston, S.C., 1; Savannah, 1; New Orleans, 3; Los Angeles, 1.

Typhus fever.—Cases: Atlanta, 2; Tampa, 2; Montgomery, 1.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—2 weeks ended September 22, 1934.—During the 2 weeks ended September 22, 1934, 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	Alber-ta	British Colum-bia	Total
Cerebrospinal meningitis.....				1	1					2
Chicken pox.....		1		33	120	35	24	1	12	226
Diphtheria.....	2	2	6	29	8	19	24	1	3	94
Dysentery.....				1	7		1		4	13
Erysipelas.....				13	1	3	1	1	2	21
Influenza.....		3		2					9	14
Measles.....		2		50	33	22	67		3	177
Mumps.....					60	1	6		14	81
Paratyphoid fever.....					12					12
Pneumonia.....					5		2		7	14
Poliomyelitis.....				19	38		2		1	60
Scarlet fever.....		11	8	91	97	34	25	5	26	297
Smallpox.....						1				1
Trachoma.....									17	17
Tuberculosis.....	2	1	14	93	125	38	12	7	24	316
Typhoid fever.....	1	3	10	55	63	8	4	4	7	165
Undulant fever.....					6					6
Whooping cough.....		4		366	211	51	294	7	29	962

CUBA

Provinces—Communicable diseases—4 weeks ended August 25, 1934.—During the 4 weeks ended August 25, 1934, cases of certain communicable diseases were reported in the Provinces of Cuba, as follows:

Disease	Pinar del Rio	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer.....	1			10		1	12
Chicken pox.....					4	1	5
Diphtheria.....		1	1	8	2	3	15
Hookworm disease.....	1			2			3
Leprosy.....			1	1			2
Malaria.....	347	21	18	315	159	1,699	2,559
Measles.....		5	3	1			14
Pollomyelitis.....		3	1	2		1	7
Scarlet fever.....				1			1
Tuberculosis.....	1	31	7	53	4	27	123
Typhoid fever.....	1	15	6	64	82	110	278

CZECHOSLOVAKIA

Communicable diseases—July 1934.—During the month of July 1934, certain communicable diseases were reported in Czechoslovakia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	9	.....	Paratyphoid fever.....	27	1
Cerebrospinal meningitis.....	2	1	Poliomyelitis.....	11	1
Chicken pox.....	124	.....	Puerperal fever.....	46	19
Diphtheria.....	1, 692	114	Scarlet fever.....	1, 824	18
Dysentery.....	82	5	Trachoma.....	102	.....
Influenza.....	27	.....	Typhoid fever.....	488	46
Lethargic encephalitis.....	2	1	Typhus fever.....	3	1
Malaria.....	966	1			

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

(NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for Sept. 23, 1934, pp. 1154-1167. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued Oct. 26, 1934, and thereafter, at least for the time being, in the issue published on the last Friday of each month.)

Plague

Dutch East Indies—Java—Batavia.—A report dated October 9, 1934, states that 3 fatal cases of pulmonary plague, 2 cases of which were imported, have been reported in Batavia, Java, Dutch East Indies.

Smallpox

Ceylon—Colombo.—During the week ended September 15, 1934, four cases of smallpox were reported in Colombo, Ceylon.

Typhus fever

Cuba—Oriente Province.—During the week ended July 14, 1934, two cases of typhus fever were reported in Oriente Province, Cuba.

Yellow fever

Brazil—Ceara State—Iguatu.—One July 14, 1934, one death from yellow fever was reported in Iguatu, Ceara State, Brazil.

Ivory Coast—Abidjan.—On September 29, 1934, one case of yellow fever was reported in Abidjan, Ivory Coast.

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