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COLLECTION OF MORBIDITY DATA AND OTHER SANITARY INFORMATION BY THE UNITED STATES PUBLIC HEALTH SERVICE.

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It is quite natural that, in the evolution of its various public-health functions, the Public Health Service has become the central clearing agency for the United States for the collection and distribution of morbidity statistics and general sanitary information. Its present value in this respect, and it is admitted that much is still to be desired, has been brought about through the continually increasing cooperation of State and city health authorities no less than as a result of the efforts of the officers of the Public Health Service in making the information that is collected, compiled, and published of value to the health officers, and, therefore, their cooperation worth while to them. An important point to be borne in mind in considering the development of the collection of morbidity statistics for the United States is that the Federal plan has been almost entirely dependent upon the cooperation of the State and local health authorities, the degree of success and the extent of the work varying with that cooperation and the success and completeness of reporting in the various States and cities.

The following are two important constitutional principles in the development of the functions of the United States Public Health Service: First, that the Federal Government may exercise only the powers clearly granted to it by the Constitution, and, second, that where the Constitution clearly grants a power to the Federal Government, the action of that Government in the exercise of such a power is binding upon the States, even in case of conflict between National and State law. In other words, the Federal Government is a Government of enumerated powers; and where no power is granted it by the Constitution, the presumption is in favor of that power being lodged in the States. It is generally known that the health powers of the Federal Government have not come through its constitutional authority to provide for the common defense and general welfare, but through its power to lay and collect taxes, duties, etc., and the power to regulate commerce.

It is especially to be noted, however, that whereas some of the public-health activities of the United States Public Health Service in its relation to the States have been based on the fundamental constitutional principles noted, no Federal legislation has been possible requiring the reporting of morbidity data to the Public Health Service, the development of which, as far as the Federal Government is concerned, has depended almost entirely upon the voluntary support and aid rendered by the State and city departments of health. There has, however, been ample Federal legislation authorizing the Public Health Service to collect and publish morbidity reports and sanitary information, and it is under the authority of this legislation that the Division of Sanitary Reports and Statistics functions.

In considering the question of the cooperation of the States in this matter, we must not lose sight of the duties and obligations of the Public Health Service, under acts of Congress, that are not necessarily cooperative and do not depend on State health work, such as national quarantine, the prevention of interstate spread of certain diseases, and the carrying out of treaty obligations. Under the international sanitary convention signed at Paris, January 17, 1912, the United States is obligated to furnish to the other signatory powers information as to the sanitary conditions in the United States. The collection of morbidity reports is, therefore, a Federal obligation as well as a State and local one. As a Federal obligation, however, it is not an interference on the part of the National Government with the police powers of the States; but it is obvious that these functions can best be performed in cooperation with State and local health authorities.

The Public Health Service has developed out of the Marine Hospital Service, which was created in 1798 by an act passed for the "relief of sick and disabled seamen." But even before this time, Congress had taken cognizance of health matters and had passed a law (April 3, 1794) providing that—

"Whenever Congress is about to convene, and from the prevalence of contagious sickness, or the existence of other circumstances, it would, in the opinion of the President, be hazardous to the lives or health of the Members to meet at the seat of government, the President is authorized, by proclamation, to convene Congress at such other place as he may judge proper."

In 1799 the first Federal quarantine law was passed, requiring that "The quarantines and other restraints established by the health laws of any State * * * shall be duly observed by officers of the customs revenue of the United States * * *." In 1832 an act authorizing the use of the Federal revenue cutters to enforce State quarantine and health regulations was passed. In the years following, various laws were passed by Congress enlarging the scope

of the Marine Hospital Service and broadening its powers regarding its cooperation with State and local health authorities in the control of disease, but not until the act of April 29, 1878, did Congress make any provision for collecting morbidity data, and then only for information from the American consuls to be used in connection with quarantines. This act, among other things, provided as follows:

"That whenever any infectious or contagious disease shall appear in any foreign port or country, and whenever any vessel shall leave any infected foreign port, or, having on board goods or passengers coming from any place or district infected with cholera or yellow fever, shall leave any foreign port, bound for any port in the United States, the consular officer or other representative of the United States at or nearest such foreign port shall immediately give information thereof to the Supervising Surgeon General of the Marine Hospital Service, and shall report to him the name, the date of departure, and the port of destination of such vessel; and shall also make the same report to the health officer of the port of destination in the United States, and the consular officers of the United States shall make weekly reports to him of the sanitary condition of the ports at which they are respectively stationed * * *."

No appropriation was made in this act, however, for the collection or publication of morbidity data; but the existing Government machinery (consuls, customs officials, and Marine Hospital Service) was utilized and abstracts were prepared from the weekly consular sanitary reports and forwarded with other pertinent information to collectors of the customs and health authorities. These abstracts were titled "Bulletins of the Public Health." Later in the same year, December 21, 1878, $50,000 was appropriated for the investigation of "the origin and causes of epidemic diseases, especially yellow fever and cholera, and the best method of preventing their introduction and spread in the United States." Not until the sundry civil appropriation act of March 3, 1879, was a specific appropriation made for the collection and publication of morbidity data. This act provided: "* * * To meet the expenses of collecting the data upon which to prepare bulletins of health, to be issued from the office of the Surgeon General of the United States Marine Hospital, $5,000, under direction of the Secretary of the Treasury; to be paid out of the permanent appropriation for the above service."

Another act of Congress of March 3, 1879, established a National Board of Health, the duties of which were "to obtain information upon all matters affecting the public health, to advise the several departments of the Government, the executives of the several States, and the Commissioners of the District of Columbia, on all questions submitted by them, or whenever in the opinion of the board such advice may tend to the preservation and improvement of the public health." By the act of June 2, 1879, it was directed to "cooperate with

and, so far as it lawfully may, aid State and municipal boards of health in the execution and enforcement of the rules and regulations of such boards to prevent the introduction of contagious or infectious diseases into the United States from foreign countries and into one State from another." This act also imposed upon the National Board of Health the duty of obtaining "information of the sanitary condition of foreign ports" through weekly reports from the American consuls, and, from State and municipal sanitary authorities throughout the United States, weekly reports of sanitary conditions and information of other conditions affecting the public health. It was specified that this latter was to be done by means of the "voluntary cooperation of State and municipal authorities."

The act of February 15, 1893, provides, among other things, as follows:

"* * * and the Secretary of the Treasury shall also obtain through all sources accessible, including State and municipal sanitary authorities throughout the United States, weekly reports of the sanitary condition of ports and places within the United States, and shall prepare, publish, and transmit to collectors of customs and to State and municipal health officers and other sanitarians weekly abstracts of the consular sanitary reports and other pertinent information received by him."

In 1902, in order to secure uniformity in the registration of morbidity statistics, Congress enacted a law directing the Surgeon General to provide forms for the collection and compilation of such data.

Forty-six numbers of the abstracts, or "Bulletins of the Public Health," had been issued—July 13, 1878, to May 24, 1879—when the law creating the National Board of Health transferred this function to that new agency. On the discontinuance of the National Board of Health in 1883, the Marine Hospital Service resumed the publication of these weekly bulletins under the new title of "Abstract of Sanitary Reports," the first number of which appeared January 20, 1887. Publication of morbidity data was continued weekly under this title until December 27, 1895. With Volume XI, number 1, issue of January 3, 1896, the title was changed to "Public Health Reports," and since that date the Public Health Reports has been the medium of the Public Health Service for the publication of current morbidity data and other sanitary information.

Morbidity and Mortality Reports.

The first morbidity reports collected by the Public Health Service were those received from the consuls and related principally to yellow fever, cholera, plague, and smallpox. These were published as short paragraphs in text form in the weekly "Bulletins of the Public Health." Gradually, other diseases were included and

morbidity data for cities and States were received, and morbidity and mortality tables were compiled. As better reporting has developed in the cities and States, the information furnished the Public Health Service by State and municipal health authorities has increased in volume and completeness, and therefore in value. The reports collected in 1888, were meager, but they have increased in volume and improved in reliability up to the present time, when the Public Health Service is receiving reports of some kind from 568 cities out of 767 in the United States with a population of 10,000 or more, from practically all of the States, from the insular possessions, and from American consuls and medical officers of the Public Health Service in foreign ports. At the present time practically the total population of Continental United States is covered by morbidity or mortality reports of some kind and of some degree of regularity.

The current reports include weekly telegraphic or prompt mail reports received regularly from 37 States and the District of Columbia, weekly reports from approximately 560 cities of 10,000 population or over, and the reports of the American consuls and medical officers stationed in foreign countries. In addition to these reports received directly by the Public Health Service, there is also published in Public Health Reports a weekly "health index," based on mortality statistics compiled each week by the Bureau of the Census, giving the annual mortality rates and the infantile mortality rates for approximately 70 large cities with a combined population of approximately 30,000,000 persons. The above reports contain the latest available information.

It is realized that, because of some delay in the publication (sometimes due to delay in receipt) of these reports, they are not as valuable to health officers as they would be if they could be issued more promptly. So far it has not been possible to lessen the period of time between the receipt of the information and the issuance of it in printed form in Public Health Reports. There seems to be no doubt, however, of the value of these data, even though publication is somewhat delayed; and the Public Health Service is under obligation to publish all official morbidity reports that are received, even though they be too late for immediate use by the health officers. The printing of such reports is required by treaty obligations and by Federal law, and the data are made available for use at later dates for statistical purposes and furnish a comparative basis for future improvement.

The following is a detailed statement of the morbidity and sanitary data and other pertinent information collected and published at the present time by the Public Health Service, through the Division of Sanitary Reports and Statistics.

Current morbidity reports.—The following constitute the current reports that are published each week in Public Health Reports:

(1) Weekly telegraphic reports from State health officers.

(2) Weekly mail reports from city health officers.

(3) Weekly consular reports.

(4) Telegraphic reports, in case epidemic or unusual conditions prevail, from State health officers, United States Public Health Service officers, and American consuls.

Monthly reports.—Monthly morbidity reports of the notifiable diseases are furnished by the State health officers on forms agreed upon by resolutions adopted by the Tenth Annual Conference of State and Territorial Health Authorities with the Public Health Service in Washington, June 1, 1912, and subsequent annual conferences. A brief summary of these reports is published each week as they are received, and they are later compiled by quarterly periods and published in Public Health Reports. No statistical analysis is made of any of these current or monthly reports; they are merely compiled and published.

Annual summaries.—Annual morbidity and mortality summaries of the reports of notifiable diseases are received from the States and cities. These data for the States are summarized for certain diseases, the case rates and death rates being computed for the total population for which reports are received. The data are also published in tabular form, under each disease, by States, giving the monthly prevalence, medians, case rates, death rates, and case fatality rates. The medians are those for a period of years and are given for purposes of comparison.

Similar data for cities are issued in two separate compilations, one for cities having 100,000 population or more and the other for cities having from 10,000 to 100,000 population. The statistical treatment of the data for cities is similar to that for States, case, death, and case fatality rates being computed.

The data for States for 1922 included the following diseases:

Anthrax.
Cerebrospinal meningitis.
Chicken pox.
Dengue.
Diphtheria.
Gonorrhea.
Influenza.
Malaria.
Measles.
Mumps.
Pellagra.
Pneumonia (all forms).
Poliomyelitis.
Rabies in animals.
Rabies in man.
Rocky Mountain spotted fever.
Scarlet fever.
Septic sore throat.
Smallpox.
Syphilis.
Tuberculosis (all forms and pulmonary).
Typhoid fever.
Typhus fever.
Whooping cough.

The following table shows the States (including the District of Columbia and insular possessions) for which morbidity and mortality data were received for 1922:

Morbidity.	Mortality.	Morbidity.	Mortality.
Alabama	Alabama.	Nebraska	Nebraska.
Arizona	Arizona.	Nevada	Nevada.
Arkansas	Arkansas.	New Hampshire	
California	California.	New Jersey	New Jersey.
Colorado	Colorado.	New Mexico	New Mexico.
Connecticut	Connecticut.	New York	New York.
Delaware	Delaware.	North Carolina	North Carolina.
District of Columbia	District of Columbia.	North Dakota	North Dakota.
Florida	Florida.	Ohio	Ohio.
Georgia	Georgia.	Oklahoma	Oklahoma.
Hawaii	Hawaii.	Oregon	Oregon.
Idaho	Idaho.	Pennsylvania	Pennsylvania.
Illinois	Illinois.	Philippine Islands [2]	Philippine Islands.[2]
Indiana	Indiana.	Porto Rico	Porto Rico.
Iowa	Iowa.	Rhode Island	
Kansas	Kansas.	South Carolina	South Carolina.
Kentucky	Kentucky.	South Dakota	South Dakota.
Louisiana	Louisiana.	Tennessee	Tennessee.
Maine	Maine.	Texas	Texas.
Maryland	Maryland.	Vermont	Vermont.
Massachusetts	Massachusetts.	Virginia	Virginia.[1]
Michigan	Michigan.	Washington	Washington.
Minnesota	Minnesota.	West Virginia	West Virginia.
Mississippi	Mississippi.[1]	Wisconsin	Wisconsin.
Missouri	Missouri.	Wyoming	Wyoming.
Montana	Montana.		

[1] Data not given by months. [2] Data given by quarters only.

These compilations for States have been published annually since 1913.

The data for large cities for 1922 included the following diseases:

Anthrax.
Cerebrospinal meningitis.
Chicken pox.
Dengue.
Diphtheria.
Influenza.
Malaria.
Measles.
Mumps.
Pellagra.
Pneumonia (all forms).
Poliomyelitis.
Rabies in animals.
Rabies in man.
Scarlet fever.
Septic sore throat.
Smallpox.
Tuberculosis (all forms and pulmonary).
Typhoid fever.
Typhus fever.
Whooping cough.

The total population covered in these cities was approximately 30,000,000. These compilations have been issued annually since 1912.

The data for smaller cities, between 10,000 and 100,000, for 1922 have not yet been published, as the estimates of population have not yet been made available. The reports from cities of this class for 1921 included practically all cities which had records of morbidity from communicable diseases of value for statistical purposes. The following diseases were included:

Anthrax.
Cerebrospinal meningitis.
Diphtheria.
Influenza.
Malaria.
Measles.
Pellagra.
Pneumonia (all forms).
Poliomyelitis (infantile paralysis).
Rabies in animals.
Rabies in man.
Scarlet fever.
Smallpox.
Tuberculosis (all forms and pulmonary).
Typhoid fever.
Typhus fever.

These data for small cities have also been compiled and issued annually since 1912.

The annual State morbidity and mortality summaries have grown in size from a pamphlet of from 16 to 20 pages to over 100 pages, representing increased volume of reports and fuller statistical treatment.

Foreign reports.—The American consuls stationed throughout the world report by cable the outbreak of such diseases as cholera, plague, and yellow fever at new foci in their respective jurisdictions, or any unusual epidemic conditions, and report weekly by mail a statement of the number of cases reported of and deaths registered from the more important communicable diseases.

Medical officers of the Public Health Service stationed outside continental United States report immediately by telegraph the first reported occurrence of cases of cholera, yellow fever, plague (human or rodent), or of an unusual outbreak of any communicable disease dangerous to the public health at or in the general vicinity of the place at which they may be stationed. Through sanitary treaties, the Governments signatory thereto are obligated to give prompt notification to the other signatory Governments whenever such diseases as cholera, plague, or yellow fever occur within their respective countries. All of this information is published weekly in the Public Health Reports.

Sanitary Legislation and Other Information.

Sanitary legislation.—The laws and regulations adopted by the States and the ordinances and regulations adopted by municipalities on matters relating to the public health are obtained as soon as possible after adoption through the State or municipal health departments, and published. The data for States are compiled by calendar years and arranged according to States. The data for municipalities are also compiled by calendar years, but the legislation is arranged according to the subject dealt with.

Court decisions on matters relating to the public health are abstracted and published currently in Public Health Reports.

Other information.—The Division of Sanitary Reports and Statistics also compiles separate annual directories of State health authorities, giving information as to appropriations and publications, of city health authorities in cities of 10,000 or more population, and of whole-time county health officers.

Sources of information.—The information regarding State health legislation is first secured by checking the session laws of the different States in the library, usually the Supreme Court Library, and selecting those laws relating to the public health. A request is then made to the State health officers for those particular laws. If the State health officer is unable to furnish them or does not do so, a request is made of the Secretary of State, and if they are not supplied by him they must be copied from the session laws in the library.

The regulations of the State departments of health are secured from the State health officers. At the beginning of each year a circular letter is sent out to them requesting copies of the regulations passed or adopted during the preceding calendar year.

Copies of the public health ordinances and regulations adopted by cities of 10,000 or more population are secured from the city health officers, to whom a request is also sent out at the beginning of each year.

Court decisions are secured by checking the current monthly digests.

Information regarding the directory of State health authorities as well as that of whole-time county health officers is also furnished by the State health officers. The data regarding municipal health authorities are furnished by the cities.

From this brief outline of the collection of morbidity data and other information it can readily be appreciated to what extent the Federal Public Health Service is dependent upon the support rendered by the State and city health authorities themselves.

Value of Morbidity Reports.

For several years the Public Health Service has printed in italics over the section of Public Health Reports dealing with the prevalence of disease the axiomatic statement that "No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring." The necessity for securing prompt reports of cases of communicable diseases for the protection of the health of the citizens of a community, a State, or even an entire country has passed the controversial period and become an accepted, self-evident truth. The modern development in the means of transportation and the consequent increase in the amount and rate of travel, greatly facilitating the rapid and extensive dissemination of such diseases, have accentuated this necessity, and as one result, Federal and State laws and regulations governing the movement of persons infected with communicable diseases, and State laws requiring the notification of the occurrence of certain diseases, have been enacted.

Although legal quarantine restrictions have been imposed for a great many years, laws requiring the notification of the occurrence of cases of communicable diseases are of comparatively recent origin. At this time, however, in every State of the United States there are laws or regulations requiring the reporting of certain diseases to officials whose duty it is to record and act upon the information given. In some States the diseases required to be reported are included in a general designation, such as "contagious or infectious diseases dangerous to the public health," or "occupational diseases." In

others each notifiable disease is specified. The number of diseases reportable varies in the different States.

The value of morbidity statistics, especially of the preventable communicable diseases, is recognized not only by all persons who are actually engaged in public health work, but also by members of the medical profession. Effective results in public-health work necessarily depend largely upon the use of information obtained from the knowledge of the time of occurrence, the degree of prevalence, and the geographic distribution of these diseases. The ability to control and prevent such diseases and the degree of protection of the health of a community vary directly according to prompt and adequate notification. Each case of a communicable disease constitutes a focus from which it may spread, and an early knowledge of its occurrence and locality of occurrence is essential to prevent its spread. To prevent noncommunicable but preventable diseases, a knowledge of the occurrence of cases and of conditions under which they occur is likewise necessary in order to combat them successfully. Knowledge obtained from detailed morbidity data is the very foundation of public-health systems and is essential to the practical application of preventive medicine by education, sanitation, and quarantine. For the medical profession, statistics on the incidence of disease have a particular value. In studying the etiology and epidemiology of a particular malady, information regarding its geographical occurrence, and the age, sex, race, and other conditions of life most affected by it, are essential. Much of the information in the medical student's text book has been derived from hospital records.

Completeness and Accuracy of the Reports and Difficulties in Collecting the Data.

It is unnecessary to call attention to the difference in the completeness of reporting with respect to the different communicable diseases and with respect to different localities. This factor is so large and so variable that in publishing the figures reported and the annual rates computed from them, the Public Health Service always includes a note of caution against making comparisons. A relatively large number of reported cases of a communicable disease as indicated by a high case rate (and more especially when accompanied by a relatively small number of deaths, as indicated by a low fatality rate) usually means that the health department is active and that the cases of the disease are being well reported by the practicing physicians. It does not necessarily mean that the disease is more prevalent than in other localities. A high fatality rate may mean that the disease was unusually virulent, that the physicians did not treat the disease in that locality with the success usual elsewhere, or that the practicing physicians did not report all of their cases. And, on the other hand, an unusually low fatality rate may be due to the fact that the disease

was unusually mild, that the physicians treated it with unusual success, that the practicing physicians reported their cases satisfactorily, or that the registration of deaths was incomplete or the assignment of the causes of death inaccurate.

The first and most important link in the chain of morbidity statistics is, obviously, that of getting the physicians to report his cases. There are three important means that have been employed to secure these reports: Laws providing penalties for failure to report, pecuniary inducement, and the education of physicians as to their duty to the public and to their profession. Of these, the last would appear to approach more nearly the ideal measure. When it is shown that the reporting of cases of communicable diseases is essential for the welfare of the public and, at the same time, a contribution to the advancement of science, probably the great majority of physicians will gladly accept the added burden and report their cases as provided by law, prompted by a sense of duty rather than by a fear of the enforcement of a penalizing statute. Moreover, the privilege to practice medicine conferred by the State carries a concomitant obligation on the part of the physician, in the exercise of that privilege, to render such service to the State as may be required for the well-being of its citizens; and as the necessary information regarding the occurrence of cases of communicable diseases can be secured only through the practicing physician, the State has the right to require him to report or refuse him the privilege. The mere fact that the privilege of treating the sick is sometimes granted to incompetent persons should not deter a physician from discharging his obligation.

The difficulties involved in the accuracy of morbidity reports with reference to diagnosis of cases of communicable diseases are not so great as those which confront the Bureau of the Census in dealing with mortality statistics, because of the large number of instances in which two or more causes of death are given. For statistical purposes, only one cause can be tabulated for each death, necessitating some method of selection which may considerably influence the resulting statistics. To this difficulty another is being added by the increasing number of persons who are legally qualified to practice the art of healing and sign death certificates, but who are not physicians. At the last meeting of the American Medical Association, in San Francisco, June, 1923, Dr. Paul A. Turner, director of health of the State of Washington, cited some instances of this coming under his observation on the Pacific coast. One practitioner of a certain cult gave as a cause of death, "acute indigestion and gases of stomach pressing against heart." Another gave this: "Primary —dropsy and complications; contributory—heart falior." The answer as to what test confirmed the diagnosis, was "urinalasis."

On further query he dealt in "subluxations" and the impairment of the "normal flow of vital energy." At another time, this same practitioner gave, as a cause of death, "Chronic soar throat and complications; contributory—heart disease."

While the Division of Sanitary Reports and Statistics does not have "subluxations" to contend with in its morbidity reports, it has to be constantly vigilant to detect erroneous reports before they are published. Some errors are obvious and are caught; others do not arouse suspicion, and pass to print. Eternal vigilance is none the less the price of accuracy than it is the price of liberty. The text of the statistician should be: "Prove all things; hold fast that which is good." Recently, in the annual morbidity and mortality summary for cities for 1922, one city reported 660 deaths from tuberculosis. The mortality rate was computed on this figure and published. It should have been 560, with a mortality rate of 0.92 instead of 1.09. The Public Health Service was called to task, but the blame for the mistake was finally placed on the "office boy" in the city health department. Although the equation of human liability to error in simple mechanical tasks, such as copying and checking figures, can be made small, its minimum can never be made equal to zero.

Frequently, cases of rabies are reported when what was meant was only "dog bite." "Typhus fever" is commonly reported for "typhoid fever," especially by consuls who are intending to record "typhus abdominalis." Whenever such report received from health officers in this country is suspicious or comes from a new focus, a letter is written asking for further information as to the correctness of the report and the possible source of infection. Recently a reply to such a query was received confirming the original report of three cases of typhus fever and giving the sources of the infection as follows:

Case 1: Wet weather spring.

Case 2: Not known.

Case 3: Bad sewage emptying into Blank Creek.

This health officer was an M. D.

In compiling the annual directory of city health officers, information is requested as to whether or not the official is a whole-time health officer, and this query is made on the blank form. The answer to one of these queries recently was: "No; my term expires December 31, 1923." This man also was an M. D.

Occasionally a city health officer, in reporting "anthrax in man," will scratch out the word "man" and substitute "woman." It is not definitely known whether this is due to the risibilities of the health officer or to his ignorance of the fact that the word "man" is used in the collective sense.

Improving Morbidity Reports.

In view of the continued increase in the volume, accuracy, and completeness of morbidity reports, the question of improving them and of making them of greater value increases in importance. Several means of improvement suggest themselves, e. g., improvement in completeness of the reports, securing them more promptly, getting fuller epidemiological data in the reports, and the creation of a morbidity registration area somewhat similar to the registration area for deaths of the Bureau of the Census. This latter may be considered rather as a means for improving morbidity reporting.

The idea of a morbidity registration area is not new. For several years past the question has been taken up at the annual conference of State and Territorial health officers with the United States Public Health Service. For six or seven years the United States Public Health Service has been endeavoring to get a sufficient appropriation to start a registration area for morbidity. In 1914, with the purpose in view of furthering the cooperation between the Public Health Service and the State health authorities and improving morbidity reporting, the Public Health Service appointed collaborating epidemiologists for duty with a few of the State boards of health in States in which the State laws and regulations were such as to indicate that such action would be of mutual benefit. Later this plan was extended and assistant collaborating epidemiologists were appointed in local health jurisdictions. Appointments are made on recommendation of the State health officers. The remuneration is nominal. The plan involved in this scheme of collecting morbidity data is that physicians report to the assistant collaborating epidemiologists on duty at local health offices, who in turn report to the collaborating epidemiologist at the State board of health, who reports to the Public Health Service, which compiles and publishes the data. The Public Health Service supplies cards for these reports. At the present time there are 42 collaborating epidemiologists and 4,216 assistant collaborating epidemiologists on duty in 42 States. This plan has been considered a step toward the establishment of a morbidity registration area.

An important fundamental question in the establishment of a morbidity registration area is the measure of the degree of completeness of reporting which shall be used to determine the eligibility of a State or city for admission to the area. The admissibility to the census registration area for deaths is based on the assumption that it can be determined that the registration of deaths is 90 per cent of those which actually occur.

Doctor Fulton, of Maryland, has long taken an active interest in the question of a registration area for morbidity, and as far back as

1914 he began summarizing the experience of the States which at that time were having a considerable degree of success in the registration of current morbidity, with the purpose in view of getting at a reliable index of the effectiveness of notification laws and a measure of the actual notification for four diseases. Beginning with reports for the year 1912, Doctor Fulton summarized the following four diseases: Typhoid fever, scarlet fever, measles, and diphtheria. His idea was to use the apparent fatality rate. He found that the fatality rate for typhoid fever showed greater constancy than that for any of the other three diseases, and he believed that it could be used, or tried, at least, as a measurement to determine admissibility to a morbidity registration area.

Many of the details connected with establishing a morbidity area will, necessarily, have to grow and mature out of experience. At the Nineteenth Annual Conference of State and Territorial Health Officers with the United States Public Health Service, at Boston in 1921, Doctor Leathers, of Mississippi, said:

"There are a number of points in connection with working out a morbidity area—whether or not it should be done by counties or whether the entire State should be considered as the unit in getting into the morbidity registration area is a matter for consideration. Without going into it very carefully, it seems to me the county might be considered the unit rather than the entire State, because the problem of securing morbidity reports is different from that of securing reports of deaths and births. I can conceive of a very happy rivalry existing between counties in a State in getting reports. In concluding, I think this is the most important problem that is facing us at this time in health work. It is basic in health work to obtain reasonably accurate morbidity reports."

The present status of morbidity reporting is not entirely satisfactory, but it shows great progress and growth in the various States and cities during the past few years and reflects an increasing interest in this field and a cooperation of the State and city health authorities with the United States Public Health Service. In extending its function in this work, the Public Health Service desires the continuance of that cooperation and support, for it is only by such "teamwork" that success can be assured and the protection of the citizens of the United States can best be accomplished.

The Powers, Duties, and Policies of the Sanitary Water Board of the Commonwealth of Pennsylvania.[1]

By W. L. STEVENSON, Chief Engineer, Pennsylvania State Department of Health, and Secretary, Sanitary Water Board.

Eighteen years ago the Legislature of Pennsylvania created the State Department of Health and vested in the commissioner of health, jurisdiction over discharge of sewage through the "purity of waters act" (approved April 22, 1905, P. L. 260).

This act prohibits the discharge of any sewage to the waters of the State except—

(*a*) From private sewers in operation at the time of the passage of the act and where the commissioner of health has not ordered discontinuance of discharge.

(*b*) From public sewers in operation at the time of the passage of the act and not subsequently extended.

(*c*) From public sewers constructed or extended subsequent to the passage of the act and where the public authorities having, by law, charge of the sewer system make application for a permit, and the governor, attorney general, and the commissioner of health unanimously agree that the general interests of the public health would be subserved and the commissioner of health issues a permit stipulating the conditions under which sewage may be discharged.

Fourteen years ago the legislature enacted another law intended to give State control over discharge of certain industrial wastes detrimental to fish life (sec. 16, act approved May 1, 1909, P. L. 353).

Section 100 of the "fish law" of 1917 (act approved July 28, 1917, P. L. 1215) prohibits the discharge to the waters of the State of any substance deleterious, destructive, or poisonous to fish unless every reasonable and practicable means has been used to abate and prevent pollution.

These and other relevant acts all relate to the control of stream pollution; but inasmuch as the purity of waters act referred to the public health, it was administered by the commissioner of health, and the industrial waste pollution detrimental to fish was administered by the commissioner of fisheries.

One of the principles of reorganization of the State government proposed by Governor Pinchot was the coordination of duties and authority having a common purpose, and to that end "The Administrative Code" approved June 7, 1923, created in the department of health the sanitary water board, to have jurisdiction over stream pollutions of all kinds.

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[1] Presented at the Conference on Pollution of Streams, held by the Engineers' Club of Philadelphia and the Philadelphia section of the American Society of Civil Engineers, Philadelphia, Pa., Oct. 16, 1923, and published in Engineers and Engineering, November, 1923, pp. 281-284.

This board consists of the secretary of health, as chairman, the secretary of forests and waters, the attorney general, the commissioner of fisheries, and the chairman of the public service commission.

The powers and duties of the sanitary water board include—

(*a*) The administration of the laws of the Commonwealth prohibiting the pollution of the waters of the State.

(*b*) The study, investigation, and reporting upon ways and means of eliminating and preventing stream pollutions which are detrimental to the public health, the health of animals, fish or aquatic life, or to the recreational use thereof.

The principal advantages to be obtained from vesting all the anti-stream pollution laws in a board instead of the separate administration as heretofore, are uniformity of policy and the classification of streams to provide for the several kinds of uses of the waters of the State, and expediting action in cases involving the jurisdiction of the several departments concerned.

The sanitary water board has established a number of fundamental policies through the adoption of resolutions, the more important of which are given hereinafter as an appendix.

The first resolution adopted by the board approved certain policies of the department of health relevant to sewerage and stream control—the agreement made in 1922 between Pennsylvania and New Jersey relative to the Delaware River, and the joint policy of the departments of health and forestry relative to camping upon watersheds in the State forest lands used for public water supply.

The policies of the department of health approved as aforesaid include among other things, the following:

That streams which are used as sources of public water supply after filtration should, in addition to being reasonably clean, provide a raw water sufficiently low in organic and pathogenic bacterial content that it can be safely and reasonably economically purified for domestic purposes.

That streams which are used as sources of public water supply with only chlorination should be kept free from all artificial sewage pollution unless adequate assured long-time storage is used for the water supply, and in such cases the sewage effluent should be adequately disinfected as a further safeguard.

Requirements made to restore sewage-polluted streams not used as sources of public water supply, or to maintain clean streams in a clean condition, should be begun at the head waters and progress down stream.

Requirements made to protect sources of public water supplies should be, in general and subject to local conditions, begun at the first source of sewage contamination above the waterworks intake and progress upstream.

The approved agreement between Pennsylvania and New Jersey is as follows:

"Uniform policy as to degree of treatment of sewage discharged into the Delaware River adopted by the Departments of Health of the States of Pennsylvania and New Jersey.

"1. Sewage discharged into the Delaware River from the northern limits of the State of Pennsylvania and New Jersey to a line above the city of Easton and the town of Phillipsburg shall be treated to such an extent as to produce a clarified and oxidized effluent; and also, so far as legally possible, the State department of health will prevent the discharge of untreated industrial wastes into this portion of the river.

"2. Sewage discharged into the Delaware River from a line above the city of Easton and the town of Phillipsburg to a line above the borough of Morrisville and the city of Trenton shall be treated to such an extent as to effect the removal of settleable matter by means of efficient sedimentation; provided, however, that in cases where such settled sewage may be discharged into this portion of the river that may prejudicially affect a water supply, the effluent shall be further treated to adequately safeguard the purified water supply obtained from the river; and further provided, that when plans for sewage treatment works are approved, where the sedimentation of sewage is the only treatment required under this policy, the approval shall be subject to the condition that means for the further purification of the tank effluent shall be installed when deemed necessary by the State department of health; and also, that so far as legally possible, the State department of health will restrict the discharge of untreated industrial wastes which might be a menace to public health or create a nuisance to either sight or smell.

"3. Sewage discharged into the tidal portion of the Delaware River, from and including Morrisville and Trenton and to and including Philadelphia and Camden, shall be treated by means of sedimentation and the effluent discharged through submerged outlets into deep water in the Delaware River; provided, however, that in cases where such settled sewage is or would be discharged into the said tidal portion of the Delaware River at such a distance above or below a waterworks intake that it may prejudicially affect such water supply, the effluent shall be further treated to adequately safeguard the purified water supply obtained from the river; and further provided, that when plans for sewage treatment works are approved, where sedimentation of sewage is the only treatment required under this policy, the approval shall be subject to the condition that means for the further purification of the tank effluent shall be installed when deemed necessary by the State department of health.

"3–A. From data now available it is considered that the discharge of only settled sewage into the aforesaid tidal portion of the Delaware River within 2 miles of a waterworks intake of an efficient filtration plant may prejudicially affect such water supply.

"4. In case the said point of sewage discharge is from one State and the said waterworks intake is in the other State, so that the sewage effluent while discharged within the aforesaid 2 miles would have to cross the river to reach the water intake, then before a decision is reached by the State department of health having jurisdiction over the discharge of sewage, the case shall be taken up with

the other State department of health for a careful determination of the probability of the discharge of only settled sewage prejudicially affecting the water supply.

"Adopted by the Department of Health, Commonwealth of Pennsylvania, July 7, 1922.

(Signed) "EDWARD MARTIN,
"*Commissioner of Health.*

"Adopted by the Department of Health of the State of New Jersey, July 13, 1922.

(Signed) "J. C. PRICE,
"*Director of Health.*"

The eighth resolution of the sanitary water board adopted August 8, 1923, for classification of streams, is as follows:

Whereas the degree of pollution of the waters of the State varies widely from the pristine purity of a small stream flowing through a virgin forest to the grossly polluted stream draining a valley given over to intense municipal and industrial development, and

Whereas such differences in condition and the present and probable future use of the streams must be recognized in determining the required degree of treatment of sewage and industrial wastes, and

Whereas the natural powers of streams to inoffensively assimilate and dispose of polluting matters by dilution must be utilized so far as compatible with the general interests of the public in order to establish a practicable and economical program for stream control; therefore

Resolved, That the waters of the State be classified as follows:

RELATIVELY CLEAN AND PURE STREAMS.

CLASS "A."

Streams in their natural state probably subject to chance contamination by human beings but unpolluted or uncontaminated from any artificial source, hence generally fit for domestic water supply after chlorination, will support fish life and may be safely used for recreational purposes.

STREAMS IN WHICH POLLUTION SHALL BE CONTROLLED.

CLASS "B."

Streams more or less polluted, where the extent of regulation, control, or elimination of pollution will be determined by a consideration of (*a*) the present and probable future use and condition of the stream; (*b*) the practicability of remedial measures for abatement of pollution; and (*c*) the general interests of the public through the protection of the public health, the health of animals, fish, and aquatic life, and the use of the stream for recreational purposes.

CLASS "C."

Streams now so polluted that they can not be used as sources of public water supplies, will not support fish life, and are not used for recreational purposes, and also from the standpoint of the public interests and practicability, it is not now necessary, economical, or advisable to attempt to restore them to a clean condition; and further

Resolved, That all artificial pollution of Class "A" streams shall be prohibited, and any sewage or industrial wastes on the watershed shall be treated to such a degree that the effluent shall be practically free from suspended matter, nonputrescent, and disinfected, and that recreational use shall not be sanctioned within prejudicial influence of waterwork's intakes; and further

Resolved, That the degree of treatment of sewage and industrial wastes discharged into Class "B" streams shall be determined for each particular stream or portion thereof after consideration of the general interests of the public and the economics of the particular case; and further

Resolved, That sewage and industrial wastes may be discharged into Class "C" streams: *Provided, however*, That such discharge shall not create any public nuisance or menace to health.

This resolution establishes the policy that streams now relatively clean and pure shall be kept in that condition. No future pollution thereof will be permitted.

It also recognizes that, due to existing intense industrial development on certain watersheds, the streams thereof have become so polluted that they are now totally unfit for use as sources of public water supply, nor will they support fish life, and hence are practically set aside for the disposal of industrial wastes. The cost of construction and maintenance of works for the abatement of the pollution of such streams will far exceed the value of the benefits to be derived by the public through their restoration to a clean condition.

Therefore, efforts will not be made at this time to accomplish any more than the prevention of menace to the public health and creation of nuisance in streams which may be designated as Class "C."

The majority of the larger streams draining developed areas will naturally be found in the middle group and will be designated as Class "B."

The resolution recognizes the natural powers of streams to inoffensively assimilate a certain amount of polluting matter and that the use of the scientific method of disposal by dilution is essential to the success of any program for stream control because of the economics of the problem.

The usual requirement to be met in determining the pollution load which a stream can receive when considering disposal by dilution is the maintenance of the stream in a clean condition as measured by sight or smell.

But when the sanitary water board designates any stream as Class "B" it will also determine the degree of treatment of polluting matter, and this will be based upon the use and condition of the stream both at present and in the probable future, in order to compare the cost of treatment on the one hand with the value of the benefits to the public obtained through protection to sources of public water supplies, fish life, and recreational use of the stream.

The cooperation of municipalities and private persons and corporations with the State is essential to the success of the comprehensive program of the board for stream control, and hence a resolution has been adopted authorizing the secretary of health to notify all municipalities on the watershed of any stream that has been classified, as to the required degree of treatment of sewage.

Thus each municipality along the classified stream will know that as the means for abatement of pollution are progressively installed from the headwaters on downstream, they will benefit by the expenditures of their upstream neighbors, and in justice they must do likewise for other municipalities situated on downstream.

Existing law requires the issuance of a State permit before public sewers can be constructed, and provides penalties for unlawful discharge of sewage; hence, the sanitary water board, in administering the law, will both confer privileges and impose obligations upon municipalities.

The board has established the policy that good faith must be shown by municipalities in complying with requirements of sewage permits before they are granted further privileges or are relieved from penalties.

For extending the limits of cleanliness of streams whose headwaters are not now polluted, plans have been made to have such streams examined by State employees whose regular duty includes the traversing of them in order to ascertain the first source of pollution; and thereafter, if the board shall deem it expedient, means will be adopted to secure abatement.

In this way the cleanliness of headwater streams will be gradually extended and increase the available sources of public water supplies, benefit riparian owners along the banks, and provide more clean streams in the State for the pleasure of the public, who are learning the healthfulness and value of recreation in the open through camping, hunting, and fishing.

Various State officials and departments are constantly in receipt of complaints from the public concerning pollution of streams or the destruction of fish. Occasionally these complaints are concise and well founded, but generally they are vague and indefinite.

The board has therefore established the policy that only well-founded and concise complaints will be considered. Forms are sent to complainants in duplicate for furnishing the data, and the statements made must be sworn to. Upon receipt of the properly filled in complaint form charging violation of law against any person, firm, or corporation, the copy thereof is sent to the respondent, who is afforded opportunity to make abatement or to submit defense of the charge in the complaint.

After consideration of the formal complaint and the respondent's reply thereto, an investigation is made; and if violation of law is found and abatement is not made, prosecution is instituted.

The board has, by resolution, placed the matter of handling complaints relative to destruction of fish with the commissioner of fisheries, pursuant to section 501 of The Administrative Code.

The funds available are insufficient at this time to inaugurate any extensive investigations such as were conducted by the Royal Com-

mission on Sewage Disposal of Great Britain, who most thoroughly studied for many years the whole question of stream pollution.

However, many data are now available, and, in the regular field investigations made preliminary to issuance of waterworks and sewerage permits and for other purposes, the required information will gradually be accumulated for the classification of streams and determining degree of treatment of polluting matter.

The magnitude of the task confronting the sanitary water board may be seen when it is realized that 15 per cent of the 4,419 named streams of Pennsylvania have drainage areas of over 25 square miles and an aggregate length of 13,000 miles and, by proportion, it is probable that the total length of all named streams is about 100,000 miles. Also, it is estimated that the total average flow in Pennsylvania streams is at a rate of about 2,600,000,000 gallons an hour.

The sources of pollution are innumerable, diverse in character, and of both public and private origin—e. g., there are 974 municipalities in the State, of which only one-half have public sewer systems from which sewage or sewage effluent is discharged to the streams, also many towns have storm drains to which sewage connections have been made and countless private sewers discharge sewage. In addition to sewage, the board must also consider industrial wastes.

It has been estimated that stream pollutions may be caused from about 2,500 industrial places, representing a capital investment of over $1,000,000,000 and yielding products valued at over $1,500,000,000 a year.

Hence the solution of the problem confronting the sanitary water board must be approached sanely and deliberately, with recognition of the financial aspects, so as successfully to carry out in an orderly and logical sequence a comprehensive, practicable program for stream control in the Commonwealth of Pennsylvania.

APPENDIX.

CERTAIN RESOLUTIONS OF THE SANITARY WATER BOARD, COMMONWEALTH OF PENNSYLVANIA.[1]

APPROVING EXISTING POLICIES—DEPARTMENT OF HEALTH.

Whereas it will require time for the sanitary water board to establish policies relative to the classification of streams, degree of treatment of sewage, and similar matters, and

Whereas it is necessary that public business shall be continued without undue delay, therefore

Resolved, That the sanitary water board approve the existing policies of the department of health concerning the classification of streams, degree of treatment of sewage, agreement made with the Department of Health of New Jersey in July, 1922, relative to the Delaware River, and the joint policy of the departments of health and forestry relative to camping on State forest land used as watershed for public water supply as the said policies are set forth in Exhibit HD 10 attached to the report of the engineers' committee dated July, 1923; and further,

[1] See also resolution in regard to Class "A," "B" and "C" streams.

Resolved, That the department of health be requested to make the necessary investigations and reports, and authorized to prepare sewerage permits in accordance with the aforesaid policies.

INSPECTION OF CLEAN STREAMS.

Whereas the reclamation of the waters of the State should logically begin by regulation, control, or elimination of pollution at or near the headwaters of streams and then proceed progressively downstream with corrective measures, and,

Whereas the department of health, the department of forests and waters, and the board of fish commissioners have employees whose regular field duties include traversing the streams of the State; therefore,

Resolved, That the said departments and boards be requested to furnish the sanitary water board with the names and locations of streams which at their headwaters are known to be relatively clean and pure, and also with information concerning the location and character of the first source of pollution below the clean headwaters and the party deemed responsible for pollution.

NOTICE TO MUNICIPALITIES.

Whereas the sanitary water board has by resolution adopted August 8, 1923, provided for the classification of the waters of the State and for the principles to be used in determining the degree of treatment of sewage prior to its discharge; and

Whereas it will be helpful to municipalities to have knowledge concerning the required degree of treatment of sewage before beginning the preparation of plans of sewerage projects; therefore,

Resolved, That as the sanitary water board designates the class of any stream or portion thereof and determines the degree of treatment of sewage discharged therein, the secretary of health shall notify all municipalities situated on the watershed of the said stream or portion thereof concerning the said action of the board.

DESIGN DATA TO BE SUBMITTED.

Whereas it is necessary in the preparation of plans for a sewerage project to determine certain basic data, such as present and probable future population tributary to sewers, gauged or estimated rate of flow of sewage and storm water, estimated rate of infiltration of ground water, nominal retention and sludge capacity in sedimentation tanks, rates of application upon various kinds of filters, and other pertinent and relevant matters; and

Whereas tentative acceptance of the data prior to the preparation of detail plans would result in economy in the preparation of the said plans and minimize the requirements for revision in design; and

Whereas the submission of these data with the plans would facilitate and expedite the examination thereof; therefore,

Resolved, That the sanitary water board requests municipalities to direct their authorized engineers to confer with the bureau of engineering of the department of health during the preparation of plans of sewerage projects; and, further

Resolved, That the data upon which the design of sewerage projects is based and such relevant calculations as may be required by the said bureau shall be submitted as part of the application for issuance of sewerage permit.

EVIDENCE OF GOOD FAITH REQUIRED.

Whereas the act approved April 22, 1905 (P. L. 260), prohibits the discharge of sewage from municipal sewers except, inter alia, when a permit shall be duly issued therefor; and

Whereas the administrative code empowers the sanitary water board to authorize the granting of such permits; and

Whereas the records of the department of health show that many municipalities have not as yet complied with requirements of previously issued sewerage permits and decrees; and

Whereas there should be evidence of good faith on the part of the municipal authorities in complying with requirements heretofore made, before further privileges are granted by the State and the municipalities relieved from the penalties for unlawful discharge of sewage; therefore,

Resolved, That in cases where requirements of prior permits and decrees have not been fulfilled the sanitary water board will not favorably consider applications for discharge of sewage; and, further

Resolved, That in cases where the sanitary water board has determined that the sewage of any municipality should be treated, and a permit or decree issued requiring such treatment, permission to discharge sewage shall be conditioned upon good faith shown by the municipality in carrying out an approved program for the construction of the required sewers, works, and appurtenances needed to effect the treatment of the sewage.

COMPLAINTS IN RE FISH.

Resolved, That the matters involved in complaints about fish be referred by the chairman of the sanitary water board to the board of fish commissioners for investigation, where required, and further advice to the sanitary water board.

Resolved, That in all cases wherein complaints of stream pollution, in violation of the laws to protect fish and aquatic life, are brought to the attention of the board and wherein prosecution is ordered by the board, it shall be the duty of the commissioner of fisheries, unless otherwise ordered by the board, to cause prosecution to be brought by such employee of the board of fish commissioners as he shall designate on behalf of the department of health as the enforcement agent of the board, pursuant to section 501 of the administrative code.

ALGÆCIDES AND GERMICIDES.

Whereas at times the presence of algæ in sources of water supply is the cause of offensive tastes and odors in the water as used by the consumers, which constitutes an indirect menace to the public health; and

Whereas bathing in streams tributary to reservoirs which are the source of unfiltered public water supplies constitutes a direct menace to the public health; and

Whereas the usual remedial measures for these conditions are the reasonable use of copper sulphate as an agæcide, or the use of chlorine as a germicide; therefore,

Resolved, That the reasonable use, under the direction or with the sanction of the department of health, of copper sulphate as an algæcide in reservoirs, lakes, or ponds used as sources of public water supply or of chlorine as a germicide in bathing pools on streams tributary to reservoirs which are the source of unfiltered public water supplies shall not be deemed a violation of the fish law of 1917.

MINE DRAINAGE.

Whereas the decision of the courts in the case of the Pennsylvania Coal Co. *v.* Sanderson appears to establish the right of coal mine operators to discharge mine drainage to streams even though it renders the waters thereof unfit for domestic purposes; and

Whereas the decision of the court of common pleas of Fayette County in the case of of the Mountain Water Supply Co. et al. *v.* The Melcroft Coal Co. et al. was in favor of the continuance of the discharge of mine drainage by the coal mine companies even though it affects the public interests; and

Whereas the latter case has been appealed to the Supreme Court and no decision yet rendered; therefore,

Resolved, That pending a final decision of this matter in the courts, the sanitary water board will defer action on the discharge of mine drainage to the waters of the State.

THE "NATIONAL BOARD BULLETIN."

A New Publication Issued by the National Board of Medical Examiners.

In order to have an official medium of its own through which it may inform all persons interested in its work and progress, the National Board of Medical Examiners is beginning the publication of the "National Board Bulletin," the first issue of which is dated October, 1923. The Bulletin is to be issued bimonthly. The initial number contains the following announcement of its purpose:

"In starting the publication of the Bulletin, the National Board of Medical Examiners recognizes the need of a medium through which its candidates, diplomates, subsidiary board members, and others interested may be kept more fully informed of its work and progress. Its aim will be to cover the news of the organization primarily, but if space permits it may include occasional items of particular interest to medical students and associates of the board which might not reach them through other news channels."

The first number presents a brief review of the origin and work of the National Board of Medical Examiners, founded in 1915 by Dr. W. L. Rodman, then president of the American Medical Association, and states its aims and purposes as follows:

"To establish a standard of examination and certification of graduates in medicine for the whole United States and its Territories, through which, by the cooperation of the State and Territorial boards of medical examiners, its diplomates may be recognized for licensure to practice medicine."

The constitution of the board provides that the members shall include the following: The Surgeon General of the United States Army, the Surgeon General of the United States Navy, the Surgeon General of the United States Public Health Service; each of the surgeons general shall appoint 1 additional representative of his respective service; 3 members to be appointed by the Federation of State Medical Examining Boards; 12 members to be appointed at large.

During the past year the following-named seven State boards of medical examiners have perfected arrangements for the acceptance of the certificate of the national board, in lieu of their own examination of candidates for licensure: Illinois, Maine, Massachusetts, New York, South Carolina, Tennessee, and Texas. In Illinois, Massachusetts, New York, and Teaxs it was necessary to amend the medical practice acts so as to give the State boards authority to take discretionary action. In the other States the present laws were sufficiently broad to permit recognition by direct action of the board.

Twenty-eight States now accept the national board's certificate. These States are Alabama, Arizona, Colorado, Connecticut, Delaware, Georgia, Idaho, Illinois, Iowa, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Nebraska, New Hampshire, New Jersey, New

York, North Carolina, North Dakota, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, and Washington.

The National Board of Medical Examiners has set aside 50 cents of each registration fee to cover the candidate's subscription to the Bulletin. Subscriptions at the rate of 50 cents per year will also be received from its diplomates and other persons interested in the work of the board.

DEATHS DURING WEEK ENDED NOVEMBER 17, 1923.

Summary of information received by telegraph from industrial insurance companies for week ended November 17, 1923, and corresponding week of 1922. (From the Weekly Health Index, November 20, 1923, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Nov. 17, 1923.	Corresponding week, 1922.
Policies in force	54,844,356	50,649,653
Number of death claims	9,435	9,492
Death claims per 1,000 policies in force, annual rate	9.0	9.8

Deaths from all causes in certain large cities of the United States during the week ended November 17, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, November 20, 1923, issued by the Bureau of the Census, Department of Commerce.)

City.	Week ended Nov. 17, 1923.		Annual death rate per 1,000, corresponding week, 1922.	Deaths under 1 year.		Infant mortality rate, week ended Nov. 17, 1923.[2]
	Total deaths.	Death rate.[1]		Week ended Nov. 17, 1923.	Corresponding week, 1922.	
Total	6,933	12.4	12.1	820	831	.....
Akron, Ohio	33	8.3	6.0	3	5	35
Albany, N. Y.[3]	34	15.1	16.2	1	3	22
Atlanta, Ga	69	16.1	16.4	11	7	.....
Baltimore, Md.[3]	206	13.9	12.0	23	28	68
Birmingham, Ala	60	16.0	10.1	7	8	.....
Boston, Mass	218	14.8	15.1	37	27	106
Bridgeport, Conn	31	11.3	12.0	5	3	09
Buffalo, N. Y	119	11.6	14.3	12	27	50
Cambridge, Mass	31	14.5	11.8	1	6	18
Camden, N. J.[3]	23	9.7	16.3	3	7	50
Chicago, Ill.[3]	576	10.4	10.0	90	65	81
Cincinnati, Ohio	108	13.9	13.4	17	6	112
Cleveland, Ohio[3]	171	10.0	10.4	26	26	71
Columbus, Ohio	62	12.4	12.3	3	10	31
Dallas, Tex	37	10.9	6.1	5	5	.....
Denver, Colo	90	17.3	17.9	9	11	.....
Des Moines, Iowa	31	11.5	.....	0	.....	.....
Detroit, Mich	231	12.1	10.5	40	32	80
Duluth, Minn	23	11.3	.....	2	.....	46
Erie, Pa	21	9.7	8.6	2	3	41
Fall River, Mass.[3]	20	8.6	18.6	5	6	71
Flint, Mich	19	8.4	10.7	4	5	79
Fort Worth, Tex	17	6.2	9.5	3	3	.....
Grand Rapids, Mich	23	8.2	9.1	2	2	32
Houston, Tex	34	11.4	10.1	3	2	.....
Indianapolis, Ind	95	14.5	12.0	11	9	85
Jacksonville, Fla	36	18.8	17.6	3	3	.....
Jersey City, N. J	78	13.2	14.0	13	12	87
Kansas City, Kans	31	14.0	10.1	3	2	69
Kansas City, Mo	94	13.9	13.9	12	15	.....

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.
[3] Deaths for week ended Friday, Nov. 17, 1923.

Deaths from all causes in certain large cities of the United States during the week ended November 17, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, November 20, 1923, issued by the Bureau of the Census, Department of Commerce.)—Continued.

City.	Week ended Nov. 17, 1923.		Annual death rate per 1,000, corresponding week, 1922.	Deaths under 1 year.		Infant mortality rate, week ended Nov. 17, 1923.
	Total deaths.	Death rate.		Week ended Nov. 17, 1923.	Corresponding week, 1922.	
Los Angeles, Calif.	229	17.9	15.3	28	24	105
Louisville, Ky.	76	15.4	18.3	8	13	86
Lowell, Mass.	31	14.0	10.9	4	2	70
Lynn, Mass.	20	10.2	.....	5	.....	132
Memphis, Tenn.	60	18.4	18.9	5	6	.....
Milwaukee, Wis.	102	11.0	7.5	13	9	65
Minneapolis, Minn.	91	11.6	9.9	7	9	38
Nashville, Tenn.[a]	41	17.6	10.8	3	5	.....
New Bedford, Mass.	16	6.4	11.0	2	4	31
New Haven, Conn.	38	11.5	10.7	7	2	91
New Orleans, La.	148	19.1	18.1	15	11	.....
New York, N. Y.	1,250	11.0	10.8	143	141	57
Bronx Borough	135	8.4	8.2	11	9	39
Brooklyn Borough	418	10.1	9.8	45	55	48
Manhattan Borough	584	13.4	12.8	78	68	76
Queens Borough	86	8.4	9.4	6	7	32
Richmond Borough	27	11.0	13.4	3	2	55
Newark, N. J.	88	10.5	13.5	9	15	42
Norfolk, Va.	29	9.5	11.7	1	2	18
Oakland, Calif.	51	11.1	11.6	2	4	26
Omaha, Nebr.	49	12.5	12.2	1	6	11
Paterson, N. J.	42	15.7	12.0	5	7	80
Philadelphia, Pa.	474	12.9	14.3	45	70	58
Pittsburgh, Pa.	178	15.1	13.4	21	23	73
Portland, Oreg.	70	13.3	10.7	7	6	71
Providence, R. I.	63	13.6	12.8	6	3	49
Richmond, Va.	53	15.3	14.3	6	4	74
Rochester, N. Y.	62	10.2	11.5	5	14	39
St. Louis, Mo.	246	16.0	12.5	20	7	.....
St. Paul, Minn.	56	12.1	12.8	5	8	46
Salt Lake City, Utah[a]	28	11.6	20.2	2	10	33
San Antonio, Tex.	72	20.3	12.9	17	8	.....
San Francisco, Calif.	137	13.2	14.2	10	8	60
Seattle, Wash.	60	9.9	8.6	6	1	53
Springfield, Mass.	23	8.3	10.1	2	4	29
Syracuse, N. Y.	39	11.0	12.7	7	7	91
Toledo, Ohio.	70	13.6	14.2	8	11	81
Trenton, N. J.	35	14.3	11.3	4	7	68
Utica, N. Y.	38	19.2	.....	5	.....	106
Washington, D. C.	127	15.1	15.0	13	18	74
Wilmington, Del.	28	12.4	10.4	5	7	102
Worcester, Mass.	43	11.7	13.6	4	8	46
Yonkers, N. Y.	20	9.7	9.9	5	6	108
Youngstown, Ohio.	29	11.4	11.0	3	3	41

[a] Deaths for week ended Friday, Nov. 16, 1923.

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 STATE SUMMARIES.

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

Reports for Week Ended November 24, 1923.

ALABAMA.

	Cases.
Anthrax	1
Chicken pox	32
Diphtheria	59
Influenza	101
Malaria	65
Measles	170
Pneumonia	73
Scarlet fever	40
Smallpox	1
Tuberculosis	31
Typhoid fever	18
Whooping cough	15

ARIZONA.

Chicken pox	2
Diphtheria	3
Measles	13
Mumps	1
Scarlet fever	16
Trachoma	10
Tuberculosis	15
Whooping cough	1

ARKANSAS.

Chicken pox	9
Diphtheria	30
Influenza	101
Malaria	63
Measles	44
Mumps	2
Paratyphoid fever	3
Pellagra	4
Scarlet fever	21
Smallpox	10
Trachoma	3
Tuberculosis	11
Typhoid fever	17
Whooping cough	26

CALIFORNIA.

	Cases.
Cerebrospinal meningitis:	
Gilroy	1
Long Beach	1
Sacramento	1
San Francisco	1
Diphtheria	338
Influenza	28
Lethargic encephalitis:	
Los Angeles	1
San Francisco	1
Measles	286
Poliomyelitis:	
Kern County	1
Long Beach	1
Los Angeles	2
Los Angeles County	2
Monrovia	1
Orange County	2
Scarlet fever	223
Smallpox:	
Los Angeles	35
Los Angeles County	20
Scattering	27
Typhoid fever	25

COLORADO.

(Exclusive of Denver.)

Chicken pox	39
Diphtheria	35
Measles	172
Mumps	39
Scarlet fever	29
Tuberculosis	57
Typhoid fever	15
Whooping cough	1

CONNECTICUT.

	Cases.
Cerebrospinal meningitis	1
Chicken pox	104
Diphtheria	78
German measles	1
Influenza	8
Malaria	1
Measles	157
Mumps	24
Pneumonia (lobar)	23
Poliomyelitis	1
Scarlet fever	87
Septic sore throat	10
Smallpox	1
Tetanus	1
Tuberculosis (all forms)	35
Typhoid fever	4
Whooping cough	40

DELAWARE.

Chicken pox	5
Diphtheria:	
Wilmington	10
Scattering	4
Measles	22
Pneumonia	3
Scarlet fever	16
Tuberculosis	8
Typhoid fever	2
Whooping cough	5

FLORIDA.

Diphtheria	26
Influenza	6
Malaria	13
Pneumonia	2
Scarlet fever	2
Smallpox	6
Typhoid fever	2

GEORGIA.

Chicken pox	8
Diphtheria	27
Hookworm disease	6
Influenza	2
Malaria	15
Measles	184
Mumps	4
Pellagra	2
Pneumonia	17
Scarlet fever	11
Smallpox	2
Tuberculosis (all forms)	9
Typhoid fever	2
Whooping cough	19

ILLINOIS.

Cerebrospinal meningitis:	
Cook County	1
Douglas County	1
Franklin County	1
Menard County	1
Stephenson County	1
Diphtheria:	
Cook County	178
Jasper County	8

ILLINOIS—continued.

	Cases.
Diphtheria—Continued.	
Kane County	17
Madison County	14
St. Clair County	11
Scattering	81
Influenza	35
Lethargic encephalitis—Cook County	3
Measles	185
Pneumonia	283
Poliomyelitis:	
Cook County	4
Rock Island County	1
Stephenson County	1
Scarlet fever:	
Cook County	115
La Salle County	11
Scattering	120
Smallpox	4
Tuberculosis	305
Typhoid fever	69
Whooping cough	127

INDIANA.

Diphtheria	201
Influenza	2
Measles	196
Pneumonia	6
Poliomyelitis—St. Joseph County	1
Scarlet fever	107
Smallpox	37
Tuberculosis	53
Typhoid fever	12

IOWA.

Diphtheria	59
Scarlet fever	54
Smallpox	13
Typhoid fever	3

KANSAS.

Chicken pox	131
Diphtheria	119
German measles	8
Influenza	1
Measles	160
Mumps	75
Pneumonia	10
Poliomyelitis	2
Scarlet fever	119
Septic sore throat	1
Smallpox	11
Tuberculosis	77
Typhoid fever	25
Whooping cough	95

LOUISIANA.

Cerebrospinal meningitis	3
Diphtheria	31
Influenza	11
Malaria	13
Measles	314
Pneumonia	38
Scarlet fever	9
Smallpox	10
Tuberculosis	31
Typhoid fever	8

MAINE.

	Cases.
Chicken pox	34
Diphtheria	23
Measles	25
Pneumonia	13
Scarlet fever	20
Smallpox	1
Tuberculosis	12
Typhoid fever	12
Whooping cough	41

MARYLAND.[1]

Chicken pox	77
Diphtheria	69
Dysentery	1
Influenza	29
Malaria	2
Measles	34
Mumps	5
Paratyphoid fever	3
Pneumonia (all forms)	64
Scarlet fever	70
Septic sore throat	1
Smallpox	1
Tuberculosis	80
Typhoid fever	35
Whooping cough	86

MASSACHUSETTS.

Cerebrospinal meningitis	2
Chicken pox	373
Conjunctivitis (suppurative)	4
Diphtheria	360
German measles	8
Influenza	3
Lethargic encephalitis	3
Malaria	1
Measles	293
Mumps	184
Ophthalmia neonatorum	15
Pellagra	1
Pneumonia (lobar)	63
Poliomyelitis	11
Scarlet fever	284
Septic sore throat	3
Trachoma	2
Tuberculosis (all forms)	129
Typhoid fever	11
Whooping cough	100

MICHIGAN.

Diphtheria	208
Measles	419
Pneumonia	97
Scarlet fever	268
Smallpox	105
Tuberculosis	250
Typhoid fever	27
Whooping cough	66

MINNESOTA.

Chicken pox	29
Diphtheria	157
Measles	149
Pneumonia	10
Poliomyelitis	2

[1] Week ended Friday.

MINNESOTA—continued.

	Cases.
Scarlet fever	312
Smallpox	25
Tuberculosis	72
Typhoid fever	6
Whooping cough	14

MISSISSIPPI.

Diphtheria	46
Scarlet fever	9
Smallpox	15
Typhoid fever	10

MISSOURI.

Cerebrospinal meningitis	1
Chicken pox	79
Diphtheria	138
Influenza	8
Measles	209
Mumps	22
Pneumonia	24
Poliomyelitis	1
Scarlet fever	155
Septic sore throat	2
Smallpox	84
Tetanus	2
Trachoma	105
Tuberculosis	59
Typhoid fever	17
Whooping cough	87

MONTANA.

Diphtheria	9
Poliomyelitis—Kalispell, R. D. 1	1
Scarlet fever	24
Smallpox	68
Typhoid fever	19

NEW JERSEY.

Cerebrospinal meningitis	3
Chicken pox	223
Diphtheria	150
Influenza	17
Malaria	2
Measles	160
Pneumonia	102
Poliomyelitis	5
Scarlet fever	115
Smallpox	2
Trachoma	1
Typhoid fever	10
Whooping cough	64

NEW MEXICO.

Chicken pox	12
Diphtheria	12
Influenza	3
Measles	84
Mumps	2
Scarlet fever	11
Septic sore throat	1
Trachoma	13
Tuberculosis	28
Typhoid fever	6
Whooping cough	3

NEW YORK.

(Exclusive of New York City and Buffalo.)

	Cases.
Cerebrospinal meningitis	2
Diphtheria	287
Influenza	14
Lethargic encephalitis	3
Measles	640
Pneumonia	159
Poliomyelitis	11
Scarlet fever	304
Smallpox	3
Typhoid fever	30
Whooping cough	262

NORTH CAROLINA.

Chicken pox	145
Diphtheria	155
German measles	3
Measles	528
Ophthalmia neonatorum	1
Poliomyelitis	1
Scarlet fever	113
Septic sore throat	4
Smallpox	81
Typhoid fever	10
Whooping cough	334

OREGON.

Chicken pox	37
Diphtheria	30
Measles	428
Mumps	2
Pneumonia	19
Scarlet fever	21
Smallpox	10
Tuberculosis	6
Typhoid fever	2
Whooping cough	1

SOUTH DAKOTA.

Chicken pox	23
Diphtheria	11
Influenza	4
Measles	32
Pneumonia	3
Poliomyelitis	1
Scarlet fever	38
Smallpox	2
Tuberculosis	1
Whooping cough	5

TEXAS.

Anthrax	1
Chicken pox	37
Dengue	1
Diphtheria	51
Influenza	36
Measles	150
Mumps	17
Pneumonia	5
Scarlet fever	22
Smallpox	2
Tuberculosis	37
Typhoid fever	11
Whooping cough	7

[1] Deaths.

VERMONT.

	Cases.
Chicken pox	7
Diphtheria	10
Measles	30
Pneumonia	1
Scarlet fever	12
Smallpox	17
Typhoid fever	2
Whooping cough	83

VIRGINIA.

Poliomyelitis—Arlington County	1

WASHINGTON.

Chicken pox	92
Diphtheria:	
Spokane	13
Scattering	23
Measles:	
Asotin County	20
Clarke County	31
Klickitat County	13
Seattle	72
Spokane	309
Stevens County	11
Yakima	26
Scattering	41
Mumps	18
Pneumonia	2
Scarlet fever:	
Spokane	21
Tacoma	12
Scattering	30
Smallpox:	
Snohomish County	11
Spokane	17
Scattering	23
Tuberculosis	22
Typhoid fever	14
Whooping cough	15

WEST VIRGINIA.

Diphtheria	23
Scarlet fever	37
Typhoid fever	8

WISCONSIN.

Milwaukee:	
Chicken pox	105
Diphtheria	34
German measles	2
Influenza	1
Measles	3
Ophthalmia neonatorum	1
Pneumonia	6
Poliomyelitis	1
Scarlet fever	11
Smallpox	2
Trachoma	1
Tuberculosis	23
Typhoid fever	2
Whooping cough	25
Scattering:	
Cerebrospinal meningitis	4
Chicken pox	249
Diphtheria	160
Influenza	18

WISCONSIN—continued.

	Cases.
Scattering—Continued.	
Lethargic encephalitis	2
Measles	249
Pneumonia	15
Scarlet fever	231
Smallpox	19
Tuberculosis	25
Typhoid fever	7
Whooping cough	159

WYOMING.

	Cases.
Chicken pox	7
Diphtheria	2
Influenza	1
Measles	38
Pneumonia	4
Scarlet fever	9
Typhoid fever	2

Reports for Week Ended November 17, 1923.

DISTRICT OF COLUMBIA.

	Cases.
Cerebrospinal meningitis	1
Chicken pox	22
Diphtheria	13
Influenza	1
Measles	8
Scarlet fever	24
Smallpox	2
Tuberculosis	19
Typhoid fever	1
Whooping cough	10

NORTH DAKOTA.

	Cases.
Chicken pox	16
Diphtheria	45
German measles	1
Measles	145
Pneumonia	4
Scarlet fever	73
Smallpox	12
Tetanus	1
Trachoma	1
Tuberculosis	9
Typhoid fever	13
Whooping cough	10

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
August, 1923.										
Vermont	.....	9	.....	.....	159	.....	9	25	14	2
September, 1923.										
Vermont	.....	24	.....	.....	126	.....	11	36	7	6
October, 1923.										
Arizona	.....	19	.....	.....	14	.....	1	25	1	16
Arkansas	.....	110	142	841	81	49	3	48	10	121
Idaho	1	32	.....	.....	6	.....	1	49	3	7
Illinois	11	1,114	194	2	363	.....	63	768	28	259
Iowa	1	230	.....	.....	27	.....	7	220	18	13
Maine	3	63	1	.....	94	.....	1	68	.....	13
Maryland	4	278	47	28	77	.....	2	296	4	196
Minnesota	3	447	4	.....	812	.....	14	1,039	132	65
Mississippi	.....	417	565	10,516	285	265	7	67	8	148
New Jersey	5	569	42	4	421	.....	59	242	.....	87
North Dakota	3	56	1	.....	262	.....	3	183	12	12
Pennsylvania	14	1,907	.....	4	1,037	1	45	1,389	27	392
Rhode Island	2	95	.....	.....	77	.....	1	59	.....	9
South Carolina	.....	421	7	30	33	.....	.....	22	36	48
Vermont	.....	36	.....	.....	302	.....	7	36	35	2
Virginia	6	874	546	343	713	15	10	337	8	200
Washington	2	109	.....	.....	388	.....	.....	178	50	75
West Virginia	1	356	32	.....	41	.....	2	340	.....	285
Wisconsin	12	719	47	.....	817	.....	9	736	111	46

RECIPROCAL NOTIFICATION, OCTOBER, 1923.

Cases of communicable diseases referred during October, 1923, to other State health departments, by departments of health of certain States.

Referred by—	Diphtheria.	Poliomyelitis.	Smallpox.	Tuberculosis.	Typhoid fever.	Whooping cough.
Illinois				23		
Massachusetts					4	
Minnesota		1	1	29	5	
New Jersey	1					
New York	3	1	1		3	1
North Dakota	1					

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Nov. 10, 1923.		City.	Median for previous years.	Week ended Nov. 10, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				New Jersey:			
Sacramento	0		1	Newark	0	1	
San Francisco	0	1	1	New York:			
Connecticut:				New York	2	2	1
Waterbury	0	1		Ohio:			
District of Columbia:				Canton	0		1
Washington	0	1	1	Cleveland	0		1
Illinois:				Toledo	0		1
Chicago	1	1		Rhode Island:			
Cicero	0		1	Providence	0		1
Freeport	0	1		South Carolina:			
Massachusetts:				Columbia	0		1
Boston	0	1		Texas:			
Missouri:				Waco	0		1
Kansas City	0	1	1	Virginia:			
St. Louis	0	1		Norfolk	0	1	

DIPHTHERIA.

See p. 2855; also Current State summaries, p. 2843, and Monthly summaries by States, p. 2847.

INFLUENZA.

City.	Cases.		Deaths, week ended Nov. 10, 1923.	City.	Cases.		Deaths, week ended Nov. 10, 1923.
	Week ended Nov. 11, 1922.	Week ended Nov. 10, 1923.			Week ended Nov. 11, 1922.	Week ended Nov. 10, 1923.	
Alabama:				California—Continued.			
Birmingham		5	3	San Bernardino	1		
Dothan	5			San Francisco	4	5	
Mobile			1	Connecticut:			
Montgomery		2		Bridgeport	1	1	1
Arkansas:				Fairfield	1		
Little Rock		4		Hartford	1		
California:				New Haven			2
Los Angeles	13	4		Norwich	1		
Oakland	1	3		Waterbury		1	

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

INFLUENZA—Continued.

City	Cases. Week ended Nov. 11, 1922.	Cases. Week ended Nov. 10, 1923.	Deaths, week ended Nov. 10, 1923.
District of Columbia:			
Washington		1	1
Georgia:			
Atlanta	2		
Augusta		1	
Savannah		1	
Illinois:			
Alton			1
Chicago	14	17	2
Danville	1		
Decatur		2	
Pekin	1		
Kansas:			
Kansas City	2		
Kentucky:			
Louisville	2	2	
Louisiana:			
New Orleans	1	2	2
Maine:			
Lewiston		1	
Sanford		1	
Maryland:			
Baltimore	10	15	
Massachusetts:			
Boston	4		
Cambridge		1	
Chelsea	1	1	
Haverhill	1		
Lawrence		1	1
Pittsfield		1	
Quincy	1		
Minnesota:			
Minneapolis			1
Missouri:			
Kansas City			1
St. Louis		1	
New Jersey:			
Harrison		1	
Newark	10	11	
Trenton	1		
New York:			
Mount Vernon	1		
New York	67	15	6
Olean	1		
Peekskill	1		
Schenectady	1		
Yonkers	2		
Ohio:			
Cincinnati		1	4
Cleveland	2	3	1
Columbus			2
Kenmore	1		
Lancaster			1
Toledo			1
Pennsylvania:			
Philadelphia		2	2
Pittsburgh		2	1
Tennessee:			
Nashville			1
Texas:			
Galveston		1	
Waco			1
Virginia:			
Lynchburg	1		
Roanoke		3	
Wisconsin:			
La Crosse	4		

LEPROSY.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Texas:		
Los Angeles	1		Galveston	1	

LETHARGIC ENCEPHALITIS.

District of Columbia:			Michigan:		
Washington	1		Detroit		1
Massachusetts:			Ohio:		
Springfield		1	Cleveland	1	
			Lima		1

MALARIA.

Alabama:			Louisiana:		
Birmingham	7		New Orleans	4	
California:			Maryland:		
Los Angeles	1		Baltimore	1	
Georgia:			Tennessee:		
Augusta	2		Memphis	4	1
Savannah		1			

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

MEASLES.

See p. 2855; also Current State summaries, p. 2843, and Monthly summaries by States, p. 2847.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			North Carolina:		
Anniston	1		Raleigh		1
Louisiana:			South Carolina:		
New Orleans	1	1	Columbia		3
Shreveport		1	Texas:		
Massachusetts:			Dallas	1	
Boston	1		Houston		1

PNEUMONIA (ALL FORMS).

Alabama:			Indiana—Continued.		
Anniston	4	3	Indianapolis		9
Birmingham	16	11	South Bend		2
Mobile		1	Terre Haute		2
Montgomery		1	Iowa:		
Selma	2		Council Bluffs		1
Arkansas:			Kansas:		
Little Rock	2		Fort Scott		1
California:			Kansas City	2	
Alameda	2		Parsons	1	
Bakersfield		2	Topeka		2
Berkeley		1	Wichita		5
Long Beach		1	Kentucky:		
Los Angeles	40	14	Covington		4
Oakland	7	4	Lexington		2
Pasadena		1	Louisville	13	7
Sacramento	2	1	Louisiana:		
San Diego		2	New Orleans		21
San Francisco		9	Maine:		
Colorado:			Bangor	1	
Denver		6	Lewiston	2	
Pueblo		3	Portland		1
Connecticut:			Sanford		1
Bridgeport	5		Maryland:		
Bristol	1		Baltimore	35	15
Hartford	4	1	Cumberland	3	1
New Haven		3	Massachusetts:		
New London		1	Arlington		1
Waterbury		3	Belmont	1	
Delaware:			Boston	21	4
Wilmington		3	Brockton	1	
District of Columbia:			Cambridge		1
Washington		12	Chelsea	2	
Florida:			Chicopee		1
Tampa	1		Danvers	2	
Georgia:			Everett	1	
Augusta		2	Fall River		2
Brunswick		1	Greenfield		3
Savannah		4	Haverhill	1	
Illinois:			Holyoke		1
Alton	1		Lawrence	2	
Aurora		1	Lowell		3
Champaign	1		Lynn		1
Chicago	129	47	Malden	1	
Cicero	3	2	Meford		1
Danville		2	New Bedford		2
Decatur	3	1	Newburyport		2
East St. Louis		3	Newton		2
Elgin		1	Peabody	1	
Freeport		1	Quincy		1
Galesburg	2		Springfield	4	2
Jacksonville	4	2	Waltham	1	
Kewanee	2	1	Worcester		6
Oak Park	3	1	Michigan:		
Peoria		3	Alpena	1	
Quincy		1	Ann Arbor	2	
Rock Island	1		Battle Creek	2	
Rockford		2	Bay City	1	
Springfield	1		Benton Harbor		1
Indiana:			Detroit	31	25
Bloomington		1	Flint	3	
Fort Wayne		1	Grand Rapids		8
Hammond		2	Highland Park	3	1
Huntington		1			

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.
Michigan—Continued.		
Ironwood		1
Jackson		2
Kalamazoo		2
Muskegon	3	1
Pontiac	3	1
Minnesota:		
Duluth		4
Minneapolis		6
St. Paul		8
Missouri:		
Hannibal	5	
Kansas City	21	14
St. Joseph		3
Nebraska:		
Lincoln		1
Omaha		7
Nevada:		
Reno		1
New Jersey:		
Atlantic City	1	
Bayonne	1	
Bloomfield		1
Camden		3
East Orange	3	
Harrison	2	
Hoboken		1
Jersey City	5	
Montclair	1	
Newark	39	9
Orange	2	1
Passaic		2
Patterson	4	
Summit	1	
Trenton		1
West New York		1
New York:		
Albany	6	
Buffalo	20	9
Cohoes		1
Elmira	4	3
Geneva		1
Hornell	2	1
Hudson		1
New York	213	134
Niagara Falls	2	
Peekskill	1	
Rochester	11	6
Rome		1
Schenectady	4	2
Syracuse	6	4
Troy	7	5
Watertown	4	1
Yonkers		1
North Carolina:		
Durham		1
Greensboro		2
Winston-Salem		2
Ohio:		
Akron	1	
Barberton	3	1
Canton		2
Chillicothe	1	
Ohio—Continued.		
Cincinnati		10
Cleveland	29	14
Columbus		5
East Cleveland	2	1
East Youngstown		1
Findlay		1
Kenmore	1	
Lorain	1	
Newark		1
Springfield		2
Toledo		3
Youngstown		4
Zanesville		1
Oklahoma:		
Oklahoma		3
Pennsylvania:		
Philadelphia	60	48
Pittsburgh	13	51
Rhode Island:		
Pawtucket		2
Providence		3
South Carolina:		
Charleston		2
Columbia		2
Greenville		1
Tennessee:		
Memphis		8
Nashville		3
Texas:		
Amarillo	1	
Corpus Christi		1
Dallas	4	1
El Paso		2
Fort Worth		2
Houston		5
San Antonio		4
Waco		2
Utah:		
Provo	1	
Salt Lake City		1
Vermont:		
Burlington		4
Virginia:		
Alexandria		1
Danville		1
Lynchburg		1
Norfolk		4
Petersburg		1
Portsmouth		2
Richmond		5
Roanoke		3
West Virginia:		
Charleston		1
Huntington	6	2
Wisconsin:		
Beloit		1
Janesville		2
Madison		2
Milwaukee	4	3
Oshkosh		3
Racine		1

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Nov. 10, 1923.	
		Cases.	Deaths.
California:			
San Diego	0	1	.....
District of Columbia:			
Washington	0	2	.....
Maryland:			
Baltimore	1	2	.....
Massachusetts:			
Boston	2	1	.....
Everett	0	1	.....
Fall River	0	1	.....
Lowell	0	3	1
Methuen	0	1	.....
Salem	0	1	1
Michigan:			
Detroit	0	1	.....
New Jersey:			
Jersey City	0	1	.....
Newark	0	2	.....
Trenton	0	1	.....
New York:			
New York	3	11	2
Schenectady	0	2	.....
Pennsylvania:			
Erie	0	1	.....
Rhode Island:			
Providence	0	1	.....
Texas:			
Dallas	0	1	.....
Washington:			
Seattle	0	1	.....

RABIES IN ANIMALS.

City.	Cases.
California:	
Los Angeles	8
Pasadena	2
Georgia:	
Savannah	1
Massachusetts:	
Arlington	1
Missouri:	
Kansas City	1
Tennessee:	
Memphis	1

RABIES IN MAN.

City.	Cases.	Deaths.
California:		
Los Angeles	1	1
Virginia:		
Portsmouth	.....	1

SCARLET FEVER.

See p. 2855; also Current State summaries, p. 2843, and Monthly summaries by States, p. 2847.

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Nov. 10, 1923.	
		Cases.	Deaths.
Alabama:			
Birmingham	0	1	
Selma		2	
California:			
Los Angeles	0	47	
District of Columbia:			
Washington	0	6	
Illinois:			
Mattoon	0	1	
Indiana:			
Gary	0	1	
Muncie	0	16	
Terre Haute	0		1
Iowa:			
Clinton	0	2	
Davenport	0	4	
Michigan:			
Detroit	3	2	
Grand Rapids	0	1	
Highland Park	0	26	
Holland	0	8	
Jackson	0	10	
Minnesota:			
St. Paul	7	13	
Nebraska:			
Omaha	2	2	
Ohio:			
Middletown	0	2	
Youngstown	0	3	
Zanesville	0	3	
Oklahoma:			
Tulsa	0	1	
Pennsylvania:			
Farrell	0	1	
Philadelphia	0	1	
Pittsburgh	0	1	
Tennessee:			
Chattanooga	0	1	
Knoxville	0	6	
Texas:			
Amarillo	0	1	
Beaumont	0	1	
Fort Worth	0	1	
San Antonio	0	4	
Texarkana		3	
Vermont:			
Burlington	0	12	
Virginia:			
Roanoke	0	2	
Washington:			
Seattle	1	4	
Spokane	7	3	
Tacoma	0	1	
Vancouver	0	3	
Wisconsin:			
Milwaukee	2	3	
Superior	0	1	

TETANUS.

City.	Cases.	Deaths.
Louisiana:		
New Orleans		2
Maryland:		
Baltimore	1	
Massachusetts:		
Boston	2	
New York:		
New York		1
Tennessee:		
Memphis		1
West Virginia:		
Charleston		1

TUBERCULOSIS.

See p. 2855; also Current State summaries, p. 2843.

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Nov. 10, 1923.	
		Cases.	Deaths.
Alabama:			
Birmingham	1	3	1
Arkansas:			
Fort Smith	1	1	.....
Little Rock	1	4	.....
California:			
Long Beach	0	1	.....
Los Angeles	2	5	2
Riverside	0	1	.....
Sacramento	0	1	.....
San Diego	0	1	1
San Francisco	1	2	.....
Colorado:			
Denver	1	1	.....
Pueblo	0	2	.....
Connecticut:			
Manchester	0	1	.....
New Haven	1	2	.....
Delaware:			
Wilmington	0	3	.....
District of Columbia:			
Washington	3	2	3
Georgia:			
La Grange	0	1	.....
Macon	0	2	.....
Savannah	0	.....	1
Illinois:			
Alton	0	1	1
Chicago	9	20	1
East St. Louis	0	.....	1
Galesburg	0	1	.....
Jacksonville	1	4	1
Peoria	0	3	.....
Indiana:			
Elwood	0	.....	1
Huntington	0	1	.....
Indianapolis	2	1	.....
Mishawaka	0	1	.....
Muncie	0	.....	1
Kansas:			
Parsons	0	2	.....
Wichita	0	3	.....
Kentucky:			
Covington	0	1	.....
Henderson	0	1	.....
Lexington	1	1	.....
Louisville	1	2	.....
Louisiana:			
Shreveport	.....	2	.....
Maine:			
Bangor	0	1	.....
Portland	0	1	.....
Sanford	0	1	.....
Maryland:			
Baltimore	8	3	1
Massachusetts:			
Boston	3	1	1
Cambridge	0	1	.....
Lowell	0	1	1
Salem	0	1	.....
Springfield	0	1	.....
Waltham	0	1	.....
Michigan:			
Bay City	.....	2	.....
Detroit	3	3	1
Flint	1	1	.....
Grand Rapids	1	1	.....
Muskegon	1	1	.....
Minnesota:			
Duluth	0	1	.....
Minnesota—Continued.			
Minneapolis	0	1	.....
St. Paul	1	1	.....
Missouri:			
Hannibal	.....	1	1
St. Louis	4	6	1
New Jersey:			
Atlantic City	0	1	.....
East Orange	0	1	.....
Harrison	0	1	.....
Jersey City	0	2	.....
Kearney	0	1	.....
Newark	1	3	.....
Perth Amboy	0	1	.....
Rahway	0	1	.....
Trenton	1	2	.....
New York:			
Albany	1	2	.....
Elmira	0	1	.....
New York	26	17	4
North Carolina:			
Greensboro	0	3	.....
Winston-Salem	0	1	.....
Ohio:			
Canton	0	1	.....
Cleveland	4	1	.....
Columbus	2	1	.....
Lima	0	1	.....
Newark	0	.....	1
New Philadelphia	0	1	.....
Toledo	2	1	2
Oklahoma:			
Tulsa	0	3	.....
Pennsylvania:			
Chester	0	1	.....
Erie	0	1	.....
Harrisburg	0	1	.....
Lebanon	0	1	.....
Philadelphia	7	8	1
Pittsburgh	1	2	1
Tamaqua	0	1	.....
Uniontown	0	2	.....
Warren	0	1	.....
Rhode Island:			
Pawtucket	0	1	.....
South Carolina:			
Charleston	1	1	.....
Tennessee:			
Knoxville	1	1	.....
Memphis	1	6	2
Texas:			
Dallas	1	6	.....
El Paso	1	3	.....
Fort Worth	0	3	.....
Houston	0	.....	1
Waco	0	3	.....
Utah:			
Provo	.....	1	.....
Salt Lake City	1	1	1
Virginia:			
Norfolk	0	1	.....
Petersburg	1	.....	1
Washington:			
Seattle	2	2	.....
Spokane	0	1	.....
West Virginia:			
Bluefield	1	.....	1
Fairmont	0	2	.....
Wisconsin:			
Milwaukee	0	1	.....

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

TYPHUS FEVER.

City.	Cases.	Deaths.
Georgia:		
Savannah	3	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston	17,734	5	2							
Birmingham	178,806	65	7	1	1		5		9	2
Mobile	60,777	16	3				1			
Montgomery	43,464	13	2							
Selma	15,589		1		1		1			
Arkansas:										
Fort Smith	28,870		1				1			
Little Rock	65,142		7				4			
California:										
Alameda	28,806	2	2		2		1		1	
Bakersfield	18,638	7	1							
Berkeley	56,036	10	8		11		1		2	
Eureka	12,923	6			11					2
Glendale	13,536	13								1
Long Beach	55,593	25	1		5					3
Los Angeles	576,673	237	73		2		32		96	33
Oakland	216,261	56	13	1	2		10		7	1
Pasadena	45,354	19							3	2
Richmond	16,843	4			8		2		1	1
Riverside	19,341	8			5		1		5	1
Sacramento	65,908	27	4	1	1		1			
San Bernardino	18,721	13	4				2		3	
San Diego	74,683	34	4		2		4			1
San Francisco	506,676	153	41		145	4	10		20	8
Santa Ana	15,485	6					1			
Santa Cruz	10,917	2			2		1			
Vallejo	21,107	1	2				3			
Colorado:										
Boulder	11,006	3			42					2
Denver	256,491	47	42		4		21			8
Pueblo	43,050	11	9		1		1			1
Trinidad	10,906		2		2		2			
Connecticut:										
Bridgeport	143,555	29	13				9		4	3
Bristol	20,620	2	2				2		2	
Fairfield (town)	11,475	6					2			
Hartford	138,036	13	11		1		5		2	
Manchester (town)	18,370	2								
Milford (town)	10,193	2								
New Haven	162,537	47	2				11	2	5	2
New London	25,688	7			1				1	
Waterbury	91,715	21	9	2		1	6		2	
Delaware:										
Wilmington	110,168		9	2			14	1		
District of Columbia:										
Washington	437,571	133	22	3	3		20		28	16
Florida:										
St. Petersburg	14,237	7	2	1	4					1
Tampa	51,608	10					3		1	2
Georgia:										
Augusta	52,548	14	1						1	
Brunswick	14,413	1								
Lagrange	17,038		1				3			
Macon	52,995	2							3	
Rome	13,252				10					
Savannah	83,252	33	6	1	8				2	3
Idaho:										
Boise	21,393	4			1		1			
Pocatello	15,001	2								
Illinois:										
Alton	24,682	8	4	1						
Aurora	36,397	5	7				2		5	
Berwyn	14,150	2	3	1	8				1	
Bloomington	28,725	8			2		3			
Centralia	12,491	7					2			

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois—Continued.										
Chicago	2,701,705	615	174	12	34	.....	84	.....	152	44
Cicero	44,995	9	2	.....	.....	.....	2	.....	.....	.....
Danville	33,776	7	1	.....	.....	.....	2	.....	.....	.....
Decatur	43,818	11	2	.....	.....	.....	6	.....	6	1
East St. Louis	66,767	21	6	.....	.....	.....	1	.....	.....	.....
Elgin	27,454	13	.....	.....	12	.....	2	.....	1	1
Evanston	37,234	10	3	.....	.....	.....	6	.....	2	.....
Forest Park	10,768	1	.....	.....	.....	.....	.....	.....	.....	.....
Freeport	19,669	4	.....	.....	.....	.....	.....	.....	.....	.....
Galesburg	23,834	5	.....	.....	.....	.....	1	.....	.....	.....
Herrin	10,986	1	2	.....	.....	.....	.....	.....	.....	1
Jacksonville	15,713	12	.....	.....	.....	.....	2	.....	.....	.....
Kewanee	16,026	3	.....	.....	2	.....	2	.....	.....	.....
La Salle	13,050	1	.....	.....	.....	.....	1	.....	.....	.....
Mattoon	13,552	.....	3	.....	.....	.....	.....	.....	.....	.....
Oak Park	39,858	15	3	.....	.....	.....	.....	.....	2	1
Peoria	76,121	20	4	.....	.....	.....	1	.....	.....	1
Quincy	35,978	7	.....	.....	.....	.....	.....	.....	.....	.....
Rock Island	35,177	8	3	.....	4	.....	.....	.....	1	.....
Rockford	65,651	10	1	.....	.....	.....	2	.....	.....	1
Springfield	59,183	14	4	.....	.....	.....	3	.....	4	1
Urbana	10,244	.....	2	.....	.....	.....	.....	.....	.....	.....
Indiana:										
Anderson	29,767	8	2	.....	3	.....	3	.....	.....	.....
Bloomington	11,595	4	.....	.....	.....	.....	.....	.....	.....	.....
Crawfordsville	10,139	2	.....	.....	.....	.....	1	.....	.....	.....
East Chicago	35,967	1	2	.....	1	.....	.....	.....	.....	.....
Elwood	10,790	4	.....	.....	43	.....	.....	.....	.....	.....
Fort Wayne	86,549	20	4	.....	.....	.....	4	.....	.....	.....
Frankfort	11,585	4	.....	.....	26	.....	.....	.....	.....	.....
Gary	55,378	19	5	1	.....	.....	7	.....	1	.....
Hammond	36,004	11	1	.....	.....	.....	.....	.....	1	.....
Huntington	14,000	4	.....	.....	.....	.....	3	.....	.....	1
Indianapolis	314,194	94	31	1	4	.....	5	.....	.....	3
Kokomo	30,067	5	3	1	.....	.....	.....	.....	.....	.....
La Fayette	22,486	9	.....	.....	.....	.....	.....	.....	1	.....
Logansport	21,626	6	2	.....	.....	.....	.....	.....	.....	.....
Michigan City	19,457	4	.....	.....	.....	.....	.....	.....	.....	.....
Mishawaka	15,195	8	.....	.....	.....	.....	.....	.....	.....	1
Muncie	36,524	7	.....	.....	.....	.....	2	.....	.....	.....
Newcastle	14,458	2	1	.....	.....	.....	.....	.....	.....	.....
South Bend	70,983	8	10	.....	.....	.....	6	.....	.....	.....
Terre Haute	66,083	14	1	1	.....	.....	4	.....	.....	1
Iowa:										
Burlington	24,057	4	1	.....	.....	.....	3	.....	2	.....
Cedar Rapids	45,566	.....	1	.....	.....	.....	6	.....	.....	.....
Clinton	24,151	.....	3	.....	.....	.....	.....	.....	.....	.....
Council Bluffs	36,162	5	4	.....	.....	.....	.....	.....	.....	.....
Davenport	56,727	.....	2	.....	20	.....	.....	.....	.....	.....
Dubuque	39,141	.....	2	.....	.....	.....	1	.....	.....	.....
Iowa City	11,267	.....	.....	.....	.....	.....	3	.....	.....	.....
Muscatine	16,068	6	2	.....	.....	.....	.....	.....	.....	.....
Ottumwa	23,003	.....	7	1	.....	.....	.....	.....	.....	1
Sioux City	71,227	3	9	3	79	.....	6	.....	.....	.....
Waterloo	36,230	.....	.....	.....	1	.....	5	.....	.....	.....
Kansas:										
Atchison	12,630	.....	.....	.....	45	.....	2	.....	1	.....
Coffeyville	13,452	2	1	.....	1	.....	.....	.....	.....	.....
Fort Scott	10,693	2	.....	.....	.....	.....	.....	.....	.....	.....
Hutchinson	23,298	.....	.....	.....	.....	.....	2	.....	.....	.....
Kansas City	101,177	.....	2	.....	4	.....	3	.....	5	.....
Lawrence	12,456	4	1	.....	.....	.....	.....	.....	.....	.....
Leavenworth	16,912	3	1	.....	1	.....	.....	.....	.....	.....
Parsons	16,028	.....	1	.....	.....	.....	1	.....	1	.....
Topeka	50,022	22	13	.....	.....	.....	3	.....	1	1
Wichita	72,217	44	9	.....	.....	.....	.....	.....	3	.....
Kentucky:										
Covington	57,121	19	1	.....	.....	.....	11	.....	.....	1
Henderson	12,169	4	.....	.....	.....	.....	.....	.....	.....	1
Lexington	41,534	16	3	.....	.....	.....	1	.....	2	2
Louisville	234,891	74	10	.....	.....	.....	3	.....	13	4
Owensboro	17,424	.....	2	.....	.....	.....	.....	.....	2	.....
Louisana:										
New Orleans	387,219	134	25	.....	27	1	2	.....	19	7
Shreveport	43,874	25	6	1	33	.....	4	.....	.....	1

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine:										
Bath	14,731	0	1							
Biddeford	18,008	5			10					1
Lewiston	31,791	13	2						1	2
Portland	69,272	10	5	1	1		2			
Sanford (town)	10,691	10					3		1	
Maryland:										
Baltimore	733,826	192	24	2	7		27		13	13
Cumberland	29,837	15	1				3			
Frederick	11,066	2	5							
Massachusetts:										
Adams (town)	12,967	2								
Amesbury (town)	10,036	3								1
Arlington (town)	18,665	5	2				1			
Attleboro	19,731	2								
Belmont (town)	10,749	3			1					
Beverly	22,561	2	2							
Boston	748,060	173	74	4	39		64		40	14
Braintree (town)	10,580	2								
Brockton	66,254	12	6	1	2		7			
Brookline	37,748	9			3		3		1	1
Cambridge	109,694	35	5	1			5		2	2
Chelsea	43,184	9	2							1
Chicopee	36,214	5	1							
Clinton	12,979	2					2			
Danvers	11,108				3				1	
Dedham	10,792	1								
Easthampton	11,261								2	
Everett	40,120	8	1						2	2
Fall River	120,485	32	8				3		8	5
Framingham	17,033	5					6			
Gardner	16,971	3					2			
Greenfield	15,462	4			1					
Haverhill	53,884	6	3		3		5		1	
Holyoke	60,203	17	11				1		2	1
Lawrence	94,270	23	13		6		1		2	2
Leominster	19,744	1	2		1		1			
Lowell	112,759	29	3				2		3	1
Lynn	99,148	16	1				7		7	
Malden	49,103	9					8			
Medford	39,038	3	6							
Melrose	18,204	4					1			
Methuen	15,189	1	6							
New Bedford	121,217	25	6						8	3
Newburyport	15,618	8					1			
Newton	46,054	12	4				1			
North Adams	22,282	5					1			
Northampton	21,951	9			1		1			
Peabody	19,552	7	3	1			7		1	
Pittsfield	41,763	11	14	2	23		1		1	
Plymouth	13,045	1								
Quincy	47,876	7	4		1				1	2
Salem	42,529	10	3		8		12		4	
Saugus	10,874	0	1				2			
Somerville	93,091	14	2				5		3	
Southbridge	14,245	2	1		5		1			
Springfield	129,614	34	12	1			8		1	1
Taunton	37,137	14	1				1		1	
Wakefield	13,025	3	1		1				1	
Waltham	30,915	5	5	1	1		3		1	
Watertown	21,457	4			6		1			
Webster	13,258	4							4	
West Springfield	13,413	2					1			
Westfield	18,604	7	3							
Winchester	10,485	4					2		1	
Winthrop	15,455						4			
Woburn	16,574	2								
Worcester	179,754	56	13	1			31		4	
Michigan:										
Ann Arbor	19,516	10					1			
Battle Creek	36,164	0	2		1		4			
Bay City	47,554	2	13		1		1		1	
Benton Harbor	12,233	3								1
Detroit	993,678	194	62	5	44		73	1	48	10
Flint	91,599	24	17	1	5		7		4	1
Grand Rapids	137,634	33	5		1		10		4	1

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.										
Hamtramck	48,615	5	4					1		
Highland Park	46,499	8	2				5			
Holland	12,183						1			
Ironwood	15,739	3			1		4			
Jackson	48,374	16	2				3		1	
Kalamazoo	48,487	14	9		2		6			
Marquette	12,718	1			100					
Muskegon	36,570	13	11				18			
Pontiac	34,273	9	5				11			
Port Huron	25,944	8	1				1			1
Sault Ste Marie	12,096	0	3		57		2			
Minnesota:										
Duluth	98,917	17	1				15		1	1
Faribault	11,089	3	2		27		1			
Hibbing	15,089	2					3	1		
Minneapolis	380,582	90	49	2	4		56		14	6
Rochester	13,722	11					1			1
St. Cloud	15,873	6								
St. Paul	234,698	62	26	2	10		23		12	4
Virginia	14,022		5				3			
Winona	19,143	4								
Mississippi:										
Greenville	11,560		2							
Missouri:										
Cape Girardeau	10,252	1					1			
Hannibal	19,306	1	5				12			
Independence	11,686		3							
Kansas City	324,410	94	24	2	4		13		15	7
St. Joseph	77,939	16			15		3			1
St. Louis	772,897	212	34	1	18	1	54	1	38	13
Montana:										
Billings	15,100	5			9					
Great Falls	24,121	7	5	1	1					
Missoula	12,668	8			1		4			
Nebraska:										
Lincoln	54,948	10	10		3					
Omaha	191,601	53	11	3	1		5			3
Nevada:										
Reno	12,016	5								
New Hampshire:										
Berlin	16,104	5								1
Concord	22,167	9			29		3			
Dover	13,029	3			1					2
Keene	11,210	0			14		1			
New Jersey	12,400	2								
Asbury Park	12,400	2								
Atlantic City	50,707	9	1							
Bayonne	76,754		1				2		1	
Belleville	15,660		1						1	
Bloomfield	22,019	3					1			
Camden	116,309	27	8				1			2
Clifton	26,470	1	3							
East Orange	50,710	8							3	
Elizabeth	95,783		23	1	4		1		1	
Garfield	19,381	3	1				1		3	
Harrison	15,721								1	
Hoboken	68,166	18								1
Jersey City	298,103		11		9		5		5	
Kearny	26,724	8	3		2		2		3	1
Long Branch	13,521	6								
Montclair	28,810	2							1	
Morristown	12,548	5	2							
Newark	414,524	84	14	1			11		12	9
Orange	33,268	3					1			
Passaic	63,841	12	3		1					
Paterson	135,875		1		16				11	
Perth Amboy	41,707	5	2			1	1			
Phillipsburg	16,923	1					1			
Plainfield	27,700	3			5		1			
Rahway	11,042	3	8							
Summit	10,174	5							1	
Trenton	119,289	34	9	1	1		1		3	2
Union (town)	20,651		1							
West Hoboken	40,074	3	1						1	
West New York	29,926	3	5	1					1	
West Orange	15,573	2	1						3	

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Mexico:										
Albuquerque	15,157	3	1				1		2	1
New York:										
Albany	113,344		42				20		3	
Amsterdam	33,524	7	6		4		3		1	2
Auburn	36,192	11					1			
Buffalo	506,775	123	19		1		20		17	9
Cohoes	22,987	5	1		18					
Elmira	45,393	16	1		1		2			
Geneva	14,648	3								
Glens Falls	16,638	2								
Hornell	15,025	5								1
Hudson	11,745	5	1						1	1
Ithaca	17,004	11	2		1					1
Lackawanna	17,918	1			4		3		1	
Little Falls	13,029	2								
Middletown	18,420				7				1	
Mount Vernon	42,726	5					1			
New York	5,620,048	1,220	133	14	100	2	84	1	[1] 203	[1] 74
Newburgh	30,366	6					2		4	
Niagara Falls	50,760	11	3				5		1	
North Tonawanda	15,482	1					7			
Olean	20,506	8					4			
Peekskill	15,868	8	2				2		2	1
Rochester	295,750	60	7	1	1		9	1	13	2
Rome	26,341	3			61		8			
Saratoga Springs	13,181	6	11				1		2	
Schenectady	88,723	20	20		21		1		6	1
Syracuse	171,717	36	16		19		16		7	2
Troy	72,013	28	6		54				6	1
Watertown	31,285	5	1							
White Plains	21,031	5			3				1	
Yonkers	100,176	23	4				2			1
North Carolina:										
Durham	21,719	5	2		5		3			
Greensboro	43,525	12	6		1		6			
Raleigh	24,418		3	1			3		1	2
Rocky Mount	12,742	9								
Salisbury	13,884	5								1
Wilmington	33,372	14					1		1	1
Winston-Salem	48,395	11	9		28		4		2	
North Dakota:										
Fargo	21,961	6								
Grand Forks	14,010						10			
Ohio:										
Akron	208,435	34	10		2		7		2	
Ashtabula	22,082	2					3			
Barberton	18,811	5	1							
Bucyrus	10,425	2								
Cambridge	13,104	4	2	1			2			
Canton	87,091	30	27	3	1		4			1
Chillicothe	15,831	4	1				1			
Cincinnati	401,247	111	21	1	8		26	2	13	8
Cleveland	796,841	158	46	3	7		34		35	8
Cleveland Heights	15,236						1		4	
Columbus	237,031	70	17				10		3	6
East Cleveland	27,292	3	1		1				2	1
East Liverpool	21,411		3				2			1
East Youngstown	11,237	3								
Findlay	17,021	4	2							
Fremont	12,468	5					2			
Hamilton	39,675	11	1				2			
Kenmore	12,683		2				1			
Lancaster	14,706	3	1						3	
Lima	41,326	11	2		1		2		1	
Lorain	37,295		5				10			
Mansfield	27,824	4								
Martins Ferry	11,634	2	1		2		2			
Middletown	23,594	6	1				1			
New Philadelphia	10,718		1		2		2			
Newark	26,718	9	1							2
Norwood	24,966	3								
Piqua	15,044	4								
Salem	10,305	4								

[1] Pulmonary only.

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio—Continued.										
Sandusky	22,897	5								
Springfield	60,840	12	2	1			1			
Steubenville	28,508	9	3		1		3			
Tiffin	14,375	1			2		4			
Toledo	243,164	68	21	1			19		5	6
Youngstown	132,358		22	1	3		13	2	3	3
Zanesville	29,569	5	2				6			
Oklahoma:										
Chickasha	10,179		4	1			1			
Muskogee	30,277		1				7			
Oklahoma	91,295	23	10	1	1		3		2	
Shawnee	15,348	7	4	1	7		1			
Tulsa	72,075		5				4		5	
Pennsylvania:										
Ambridge	12,730		1				12			
Beaver Falls	12,802		2							
Berwick	12,181						2			
Bethlehem	50,358		11		3		1			
Braddock	20,879		7				1			
Butler	23,778		1				1			
Carbondale	18,640		1							
Carlisle	10,916						2			
Carnegie	11,516		2		1					
Chambersburg	13,171				2					
Chester	58,030		3		1		2		2	
Coatesville	14,515		1				1			
Connellsville	13,804		1				4			
Dickson	11,049				5					
Erie	93,372		6		1		7		2	
Farrell	15,586		15				3			
Greensburg	15,033		1							
Harrisburg	75,917		6		2		1			
Hazelton	32,277		2		1					
Homestead	20,452						2			
Johnstown	67,327		5				5			
Lancaster	53,150		5		2		2		1	
Lebanon	24,643		14				5			
McKees Rocks	16,713						1			
McKeesport	46,781						1			
Monessen	18,179		7							
New Castle	44,938		2				2			
New Kensington	11,987		2							
Norristown	32,319								1	
North Braddock	14,928		4		2				1	
Oil City	21,274		2				4			
Philadelphia	1,823,779	504	86	5	14		41		53	40
Pittsburgh	588,343	195	53	5	5		31	1	15	5
Pittston	18,497		1							
Plymouth	16,500		1							
Pottstown	17,431				1				1	
Reading	107,784		5						8	
Scranton	137,783		5				2			
Shamokin	21,204		2							
Sharon	21,747		4				1			
Steelton	13,428		3		1		2			
Sunbury	15,721		4				1			
Swissvale	10,908		5				1			
Uniontown	15,692		1		1		2			
Warren	14,272				1		7			
Washington	21,480		3		23		5			
Wilkes-Barre	73,833		6		1		2			
Williamsport	36,198				50		2			
Woodlawn	12,495		5				1			
York	47,512		2							
Rhode Island:										
Cranston	29,407	3					1			
Cumberland (town)	10,077	3	1				1			
East Providence (town)	21,793		4				1			
Newport	30,255	8								1
Pawtucket	64,248		3							
Providence	237,595	64	15	1	1		12		1	5
South Carolina:										
Charleston	67,957	24	2				2			1
Columbia	37,524	20			24				1	1
Greenville	23,127	8	2							1

CITY REPORTS FOR WEEK ENDED NOVEMBER 10, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
South Dakota:										
Sioux Falls	25,202	9	.....	.....	1	.....	1	.....	.....	.....
Tennessee:										
Chattanooga	57,895	.....	.....	.....	.....	.....	1	.....	.....	.....
Knoxville	77,818	.....	4	2	18	.....	9	.....	6	6
Memphis	162,351	56	11	.....	3	.....	7	.....	10	5
Nashville	118,342	31	5	.....	.....	.....	2	.....	4	1
Texas:										
Amarillo	15,494	5	.....	.....	.....	.....	2	1	.....	.....
Beaumont	40,422	10	.....	.....	.....	.....	2	.....	.....	.....
Corpus Christi	10,522	3	.....	.....	.....	.....	.....	.....	.....	.....
Dallas	158,976	46	17	1	77	.....	10	.....	1	5
El Paso	77,560	31	4	.....	1	.....	1	.....	.....	6
Fort Worth	106,482	24	5	.....	1	.....	3	.....	.....	.....
Galveston	44,255	9	.....	.....	.....	.....	2	.....	.....	.....
Houston	138,276	42	8	2	.....	.....	3	.....	.....	1
San Angelo	10,050	14	.....	.....	.....	.....	.....	.....	.....	6
San Antonio	161,379	39	5	.....	1	.....	.....	.....	4	6
Texarkana	11,480	.....	6	.....	15	.....	.....	.....	.....	.....
Waco	38,500	10	3	.....	.....	.....	3	.....	.....	1
Utah:										
Provo	10,303	3	1	.....	.....	.....	1	.....	.....	.....
Salt Lake City	118,110	32	3	.....	.....	.....	1	.....	1	2
Vermont:										
Burlington	22,779	12	.....	.....	.....	.....	1	.....	.....	.....
Virginia:										
Alexandria	18,060	3	1	.....	.....	.....	4	.....	.....	.....
Charlottesville	10,688	5	1	.....	.....	.....	2	.....	.....	.....
Danville	21,539	8	2	.....	.....	.....	1	.....	.....	.....
Lynchburg	30,070	8	8	.....	1	.....	2	.....	1	1
Norfolk	115,777	.....	12	.....	3	.....	3	.....	5	1
Petersburg	31,012	6	3	.....	.....	.....	4	.....	3	.....
Portsmouth	54,387	8	3	1	.....	.....	.....	.....	.....	.....
Richmond	171,667	48	13	.....	11	.....	11	.....	1	4
Roanoke	50,842	11	3	.....	.....	.....	4	.....	2	.....
Washington:										
Bellingham	25,585	.....	2	.....	.....	.....	2	.....	.....	.....
Seattle	315,312	.....	8	.....	15	.....	18	.....	13	.....
Spokane	104,437	.....	3	.....	70	.....	13	.....	.....	.....
Tacoma	96,965	.....	2	.....	4	.....	2	.....	14	.....
Vancouver	12,637	.....	2	.....	.....	.....	1	.....	.....	.....
Yakima	18,539	.....	.....	.....	31	.....	.....	.....	.....	.....
West Virginia:										
Bluefield	15,282	6	1	.....	.....	.....	3	.....	.....	.....
Charleston	39,608	14	3	.....	.....	.....	3	.....	2	.....
Clarksburg	27,869	8	2	.....	1	.....	1	.....	.....	1
Huntington	50,177	16	4	.....	.....	.....	1	.....	.....	.....
Martinsburg	12,515	.....	1	.....	.....	.....	.....	.....	.....	.....
Morgantown	12,127	.....	1	.....	.....	.....	2	.....	.....	.....
Parkersburg	20,050	7	1	.....	.....	.....	1	.....	.....	1
Wheeling	56,208	17	5	.....	.....	.....	8	.....	1	3
Wisconsin:										
Appleton	19,561	4	3	.....	1	.....	.....	.....	1	.....
Beloit	21,284	3	6	.....	.....	.....	3	.....	1	.....
Eau Claire	20,906	.....	.....	.....	.....	.....	1	.....	.....	.....
Fond du Lac	23,427	2	1	.....	2	.....	2	.....	.....	.....
Green Bay	31,017	.....	11	.....	8	.....	16	2	.....	.....
Janesville	18,293	5	1	.....	.....	.....	3	.....	.....	.....
Kenosha	40,472	4	3	.....	2	.....	1	.....	6	1
La Crosse	30,421	.....	.....	.....	.....	.....	1	.....	.....	.....
Madison	38,378	11	14	2	.....	.....	.....	.....	.....	.....
Manitowoc	17,563	0	1	.....	.....	.....	.....	.....	1	.....
Marinette	13,610	.....	.....	.....	.....	.....	1	.....	.....	.....
Milwaukee	457,147	82	42	3	2	.....	28	.....	19	5
Oshkosh	33,162	14	6	.....	.....	.....	1	1	.....	.....
Racine	58,593	10	3	1	.....	.....	28	.....	3	.....
Sheboygan	30,955	2	5	.....	.....	.....	4	.....	.....	.....
Stevens Point	11,371	.....	1	.....	.....	.....	3	.....	.....	.....
Superior	39,671	4	6	.....	.....	.....	3	.....	.....	1
Wausau	18,661	.....	6	.....	1	.....	2	.....	.....	.....
West Allis	13,745	.....	1	.....	.....	.....	.....	.....	.....	.....

FOREIGN AND INSULAR.

BRAZIL.

Yellow Fever—Pernambuco.

Under date of November 16, 1923, two fatal cases of yellow fever were reported at Pernambuco, Brazil.

CHILE.

Mortality—Concepcion—September, 1923.

During the month of September, 1923, there were reported at Concepcion, Chile, 291 deaths from all causes, of which 152 were of males, 139 of females, 14 were stillbirths, and 121 occurred in children less than 1 year of age. Certain causes of deaths were reported as follows: Cancer, 6; influenza, 14; pneumonia, 61; broncho-pneumonia, 15; smallpox, 3; typhoid fever, 1; typhus fever, 1; and tuberculosis, 36. Population, 64,512.

CUBA.

Communicable Diseases.

Communicable diseases have been notified in Cuba as follows:

Habana.

Disease.	Nov. 1–10, 1923.		Remaining under treatment Nov. 10, 1923.
	New cases.	Deaths.	
Chicken pox	2	.....	2
Diphtheria	3	1	4
Infantile tetanus	1	1	.....
Leprosy	1	.....	[1] 15
Malaria	85	.....	[2] 76
Measles	5	.....	5
Paratyphoid fever	.....	.....	1
Scarlet fever	.....	.....	3
Typhoid fever	13	1	[3] 28

Population, 380,639.
[1] Sent to the leper asylum at Rincon, 1.
[2] From the interior, 42.
[3] From the interior, 20.

Provinces.

Province.	New cases reported Oct. 1–10, 1923.							
	Chicken pox.	Diphtheria.	Malaria.	Measles.	Paratyphoid fever.	Scarlet fever.	Smallpox.	Typhoid fever.
Camaguey	1	.....	6	.....	.....	.....	.....	6
Habana	1	7	18	5	6	.....	.....	11
Matanzas	1	.....	.....	.....	1	.....	.....	4
Oriente	1	.....	14	.....	.....	.....	.....	11
Pinar del Rio	2	2	.....	.....	16	.....	.....	8
Santa Clara	.....	.....	2	.....	1	1	.....	32
Total	6	9	40	5	24	1	.....	72

JAMAICA.

Smallpox (Reported as Alastrim).

During the two weeks ended October 27, 1923, 36 cases of smallpox (reported as alastrim) were reported in the Island of Jamaica. Of these, one case, occurring during the week ended October 27, 1923, was notified in the Parish of Kingston.

Typhoid Fever—Kingston and Vicinity.

During the same period 9 cases of typhoid fever were reported at Kingston and 32 cases in the surrounding country.

MALTA.

Communicable Diseases.

Communicable diseases have been reported in the Island of Malta for August and September, 1923,[1] as follows:

Disease.	Cases reported.		Remarks.
	August, 1923.	September, 1923.	
Chicken pox	5	3	
Influenza	13	25	
Malaria		4	Two imported.
Pneumonia	[1] 3	[2] 2	
Poliomyelitis	2		
Trachoma	100	141	
Undulant fever	184	99	
Whooping cough	133	235	

[1] Broncho-pneumonia, 4. [2] Broncho-pneumonia, 1.

MOROCCO.

Plague—Camp of Dar-Kebdani—Melilla.

Under date of October 24, 1923, the occurrence of two cases of plague in the district of Melilla, Spanish Zone, Morocco, was reported as follows: October 13—one case at the camp of Dar-Kebdani; October 19—one case at Melilla.

PANAMA CANAL.

Communicable Diseases—October, 1923.

Communicable diseases were notified for the Panama Canal during the month of October, 1923, as follows:

Disease.	Canal Zone.	Colon.	Panama.	Nonresident.	Total.
Chicken pox	1	4	10	3	18
Diphtheria	2		1		3
Dysentery	2	1	1	4	8
Hookworm disease	5	5	16	24	50
Malaria	65	4	1	14	84
Measles	4	5	25	4	38
Meningitis			1		1
Pneumonia		1	32		33
Tuberculosis	5	5	15	5	30
Typhoid fever			1		1
Whooping cough	6				6

[1] For communicable diseases in the Island of Malta for July, 1923, and period October 1-15, 1923, see Public Health Reports, September 28, page 2297, and November 16, 1923, page 2749.

PORTUGAL.

Plague—Lisbon.

Under date of October 25, 1923, the occurrence of two cases of plague with one death was reported at Lisbon, Portugal.

VIRGIN ISLANDS.

Disease Prevalence—October, 1923.

Disease prevalence was reported in the Virgin Islands of the United States during the month of October, 1923, as follows:

Disease and island.	Cases.	Remarks.
St. Thomas and St. John:		
Dengue	6	
Gonococcus infection	4	Imported, one.
Tuberculosis	1	
St. Croix:		
Chancroid	1	
Dysentery	2	Entamebic.
Filariasis	13	Bancrofti.
Gonococcus infection	1	
Syphilis	1	Secondary.
Trachoma	36	
Tuberculosis	3	Chronic pulmonary.

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

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

Reports Received During Week Ended November 30, 1923.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Sept. 9–15, 1923: Cases, 1,538; deaths, 904.
Bombay	Sept. 23–29	2	1	
Rangoon	Sept. 30–Oct. 6	1	1	
Iraq (Mesopotamia):				
Basrah	Sept. 25–Oct. 9	28	12	
Siam:				
Bangkok	Sept. 23–29	1	1	

PLAGUE.

Ceylon:				
Colombo	Sept. 30–Oct. 13	5	9	Four plague rodents.
China:				
Amoy	Sept. 30–Oct. 13		3	
Hongkong	Sept. 20–Oct. 6	1	3	
Nanking	Oct. 7–20			Present.
India				Sept. 9–15, 1923: Cases, 4, 783; deaths, 3,556.
Bombay	Sept. 23–29	4	4	
Karachi	Oct. 7–20	5	8	
Madras Presidency	Oct. 7–20	557	335	
Rangoon	Sept. 30–Oct 13	13	12	
Morocco:				
Dar-Kebdani	Oct. 13	1		Camp in Spanish Zone.
Melilla	Oct. 19	1		In Spanish Zone.
Portugal:				
Lisbon	October 25	2	1	
Siam:				
Bangkok	Sept. 16–29	3	2	
Straits Settlements:				
Singapore	Sept. 23–29	2	3	

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

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

Reports Received During Week Ended November 30, 1923 – Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile:				
Concepcion	Sept. 1-30	3		
China:				
Amoy	Sept. 30-Oct. 13			Present.
Chungking	Sept. 30-Oct. 13			Do.
Foochow	Oct. 7-13			Do.
Hongkong	Sept. 23-29	20	12	
Finland				Oct. 1-15, 1923: Cases, 2.
India				Sept. 9-15, 1923: Cases, 774; deaths, 146.
Bombay	Sept. 23-29	3		
Karachi	Oct. 7-13	1		
Madras	Oct. 7-20	5		
Rangoon	Oct. 7-13	1		
Iraq (Mesopotamia):				
Basrah	Sept. 25-Oct. 9	3	1	
Jamaica				Oct. 14-27, 1923: Cases, 36. (Reported as alastrim.)
Kingston	Oct. 21-27	1		
Persia:				
Teheran	July 24-Aug. 24		1	
Portugal:				
Oporto	Oct. 14-27	13	4	
Siam:				
Bangkok	Sept. 23-29	76	48	
Spain:				
Valencia	Oct. 21-27	8	1	
Yugoslavia				July 8-Aug. 25, 1923: Cases, 142; deaths, 21.

TYPHUS FEVER.

Algeria:				
Algiers	Sept. 1-30	1		
Chile:				
Antofagasta	Oct. 21-27	8	1	
Concepcion				Sept. 1-30, 1923: One death.
Iquique	Oct. 7-13		1	
China:				
Antung	Oct. 8-14	4		
Chungking	Sept. 30-Oct. 13			Stated to be endemic.
Egypt:				
Cairo	July 23-Aug. 5	12	12	
Finland				Oct. 1-15, 1923: Paratyphus fever, 71 cases.
Iraq (Mesopotamia):				
Basrah	Sept. 25-Oct. 1	1		
Mexico:				
Guadalajara	Oct. 1-30	1		
Palestine:				
Haifa	Oct. 16-22	1		
Union of South Africa:				
Transvaal—				
Johannesburg	Oct. 6-13	1		
Yugoslavia				July 8-Aug. 25, 1923: Cases, 14.

YELLOW FEVER.

Brazil:				
Pernambuco	Nov. 16		2	

Reports Received from June 30 to November 23, 1923.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Sept. 16-22		2	

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

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

Reports Received from June 30 to November 23, 1923—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Canton	Aug. 26–Sept. 1	1		
Foochow	July 29–Sept. 1			Present.
Shanghai	Aug. 20–Sept. 2	2	28	Cases, foreign; deaths, native.
Do	Aug. 28–Sept. 16		12	Reported moderately prevalent Aug. 28.
India				Apr. 15–June 30, 1923: Cases, 19,470; deaths, 14,608. July 1–Sept. 8, 1923: Cases, 18,611; deaths, 10,527.
Bombay	June 3–30	34	23	
Do	July 1–Sept. 15	129	75	
Calcutta	May 6–June 30	371	300	
Do	July 8–Sept. 29	212	165	
Madras	June 3–30	2		
Do	July 1–Oct. 6	19	10	
Rangoon	May 13–June 30	18	15	
Do	July 1–Sept. 29	35	32	
Indo-China				Oct. 1–31, 1923: Cases, 92; deaths, 53. Preceding month: Cases, 24; deaths, 14. October, 1921: Cases, 100; deaths, 61. Nov. 1–Dec. 31, 1922: Cases, 161; deaths, 59 (native); European, 1 case.
City—				
Saigon	May 20–June 30	12	11	Including 100 square kilometers of surrounding country.
Do	July 1–28	13	12	Do.
Province—				
Annam	Sept. 1–Dec. 31	179	66	
Do	Feb. 1–28			Epidemic.
Cambodge	Sept. 1–Dec. 31	47	27	
Cochin-China	do	51	33	
Do	Jan. 1–Feb. 28	19	8	
Tonkin	Oct. 1–Dec. 31	1		
Iraq (Mesopotamia):				
Bagdad	Sept. 3–17	46	37	
Basrah	Aug. 8–Sept. 17	564	422	Port declared infected since Aug. 6, 1923.
Philippine Islands:				
City—				
Manila	June 10–16	2	1	Death in foreign case from Chingkang, China.
Province—				
Bulacan	May 17–23	1		
Capiz	May 27–June 2	1	1	
Cebu	Apr. 8–21	1	1	
Cotobato	Apr. 8–14	1	1	
Laguna	May 6–June 9	2	1	
Mindoro	Aug. 5–11	2	2	
Mountain	Mar. 25–31	1	1	
Occidental Negros	July 22–28	1	1	
Pangasinan	June 24–30	2	2	
Viscaya	July 7–14	1	1	
Russia (Soviet)				Jan. 1–May 15, 1923: Cases, 10.
Siam:				
Bangkok	May 13–June 30	10	11	
Do	July 1–Sept. 15	6	3	

PLAGUE.

Algeria:				
Algiers	Aug. 11–20	2	1	Actual dates of occurrence; Aug. 16 and 17, 1923.
St. Eugène	Aug. 1–20	2	2	Locality 5 miles north of Algiers.
Australia:				
Sydney	June 30	1	1	
Azores:				
St. Michael Island	May 6–26	12	5	In one locality.
Bolivia:				
La Paz	Sept. 1–30		1	
Brazil:				
Bahia	Sept. 2–15	3	2	
Porto Alegre				Jan. 1–Mar. 31, 1923; Deaths, 19.

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

Reports Received from June 30 to November 23, 1923—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
British East Africa:				
Kenya—				
Kisumu	June 10-16	2	1	
Do	Aug. 5-11		1	
Mombasa	Aug. 19-Sept. 15	17	8	Plague rats, 6.
Kilindini Area	do			Plague rats, 12.
Tanganyika	May 6-June 2	3	3	Territory.
Do	July 5-21	20	12	
Uganda	Apr. 1-30	7	5	
Canary Islands:				
Las Palmas	June 7	1		
Teneriffe	Nov. 6			Present.
Ceylon:				
Colombo	May 6-June 30	18	19	Plague rats, 38.
Do	July 1-Sept. 29	65	57	Plague rats, 26. One plague-infected cat.
China:				
Amoy	May 13-June 25		10	
Do	July 1-Sept. 29		18	
Foochow	May 27-June 23			Present.
Do	July 8-Sept. 1			Reported as endemic.
Hongkong	Apr. 29-June 30	63	40	
Do	July 1-Sept. 22	32	36	
Manchuria—				
Yakoshih	May 31	1	1	Station on Eastern Chinese Railway. Occurring in tarabagan (marmot) hunter. Bubonic.
Nanking	June 17-30			Rodent plague present.
Do	July 1-Aug. 4			Do.
Ecuador:				
Guamote	Aug. 1-15	9	2	Country district.
Guayaquil				May 16-June 30, 1923: Rats examined, 13,800; found infected, 39. July 1-Aug. 15, 1923: Rats examined, 13,450; found infected, 23. Aug. 16-30, 1923: Rats taken, 54,304; found infected, 66. (Number examined not reported.)
Do	July 1-Sept. 30	10	3	
Santa Ana (Manabi)	July 16-Aug. 15	7	3	
Egypt				Jan. 1-June 21, 1923: Cases, 1,051; deaths, 548. May 1-29: Cases, 345. Jan. 1-June 24, 1923: Cases, 1,069. Jan. 1-Oct. 4, 1923: Cases, 1,360; deaths, 661.
City—				
Alexandria	Jan. 7-June 24	35	15	May 1-29, 1923: Cases, 14.
Do	July 1-Sept. 30	17	3	
Port Said	Jan. 7-June 24	24	12	May 1-29, 1923: Cases, 13.
Do	July 1-Sept. 30	30	5	
Suez	Mar. 2-June 15	12	7	May 1-29, 1923: Cases, 3.
Do	July 16-Aug. 30	11	1	
Province—				
Assiout	May 1-29	64		Deaths not reported.
Benisouef	do	7		Do.
Fayoum	do	14		Do.
Garbieh	do	2		Do.
Geizeh	do	3		Do.
Girgeh	do	123		Sept. 26: One case.
Keneh	do	22		Deaths not reported.
Menoufieh	do	34		Sept. 15: Cases, 1; deaths, 1.
Minieh	do	46		Deaths not reported.
France:				
Paris	Aug. 13	1		Published in Public Health Reports, Sept. 14, 1923, pp. 2189 and 2190.
Greece:				
Syra Island	Sept. 10			Present.
Hawaii:				
Hamakua				Plague-infected rats: Pohakea, May 23, 1923, 1 rat; vicinity of Pacific Sugar Co. mill, June 2, 1 rat; Aug. 2, 1 rat at Hamakua Mill Co. plantation. Aug. 16, plague rat found at Kapulena.
Honokaa	Sept. 21	1	1	July 20, 1923: One plague rat; July 30, 2 plague rats; Honokaa Sugar Co. mill and Honokaa village.

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

Reports Received from June 30 to November 23, 1923—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Apr. 29-June 23, 1923: Cases, 5,783; deaths, 4,481. July 1-Sept. 1, 1923: Cases, 13,141; deaths, 8,529.
Bombay	Apr. 29-June 20	503	411	
Do	July 1-Sept. 22	39	31	
Calcutta	May 6-June 9	13	13	
Do	Aug. 12-Sept. 15	2	2	
Karachi	May 13-June 30	110	85	Plague rats, 5.
Do	July 1-Oct. 6	118	103	
Madras Presidency	May 13-June 30	254	141	
Do	July 1-Oct. 6	3,390	2,053	
Rangoon	May 6-June 30	260	229	
Do	July 1-Sept. 29	319	279	
Indo-China				Oct 1-Dec 31, 1922: Cases, 245; deaths, 237. Sept. 1-30, 1922: 70 cases, 68 deaths.
City—				
Saigon	June 24-30	5	5	Including 100 square kilometers of surrounding country.
Do	July 1-7	1	1	Do.
Province—				
Annam	Oct. 1-Dec. 31	40	36	Preceding month, 15 deaths.
Do	Jan. 1-Feb. 28	47	39	
Cambodge	Oct. 1-Dec. 31	145	145	Preceding month, 51 deaths.
Do	Jan. 1-Feb. 28	152	152	
Cochin China	Oct. 1-Dec. 31	4	1	Preceding month, 4 cases, 2 deaths.
Do	Jan. 1-Feb. 28	3	3	
Iraq (Mesopotamia):				
Bagdad	May 1-June 30	335	224	
Basrah	Aug. 8-Sept. 4	4	2	
Java				May 1-June 30, 1923: Deaths, 912. July 1-Aug. 31, 1923: Deaths, 976.
Province—				
Djokjakarta	June 1-30		5	
Do	July 1-Aug. 31		4	
Kedoe	June 1-30		135	
Do	July 1-Aug. 31		231	
Pekalongan	June 1-30		48	
Do	July 1-Aug. 31		105	
Samarang	June 1-30		143	
Do	July 1-Aug. 31		260	
Soerabaya	June 1-30		1	
Do	Aug. 1-31		2	
Soerakarta	....do		109	May 16, 1923: Epidemic in 5 districts.
Do	July 1-Aug. 31		374	
Madagascar				Apr. 1-June 30, 1923: Cases, 84; deaths, 81. July 1-Aug. 15, 1923: Cases, 11; deaths, 9.
Tananarive Province	Apr. 1-June 30	60	57	
Do	July 1-Aug. 15	5	4	
Tananarive town	Apr. 1-June 30	24	24	
Do	July 1-Aug. 15	6	5	
Mauritius Island				May 4-21, 1923: 2 cases.
Port Louis	May 4	1		
Mexico:				
Tampico				Apr. 15-21, 1923: 1 plague rat. Aug. 8, 1923: At Dona Cecelia, a suburb of Tampico, 1 plague-infected rat found. From Jan. 1 to Aug. 8, 1923, plague-infected rats found, 5.
Morocco:				
Larache (El Araish)	Nov. 2			Spanish zone. Present.
Melilla	Oct. 9	2		Aug. 31-Sept. 6, 1923: Cases, 4. In garrison of Dar-Kuebdani. Melilla district.
Palestine:				
Haifa	Sept. 18-Oct. 1	2		
Jaffa	June 19-July 16	10	1	Bubonic and septicemic.
Peru				May 1-June 30, 1923: Cases, 111; deaths, 68. July 1-Sept. 30, 1923: Cases, 43; deaths, 24.
Locality—				
Ayabaca	May 16-June 30	15	13	
Do	July 1-31	4	2	
Callao	May 1-June 30	5	3	
Do	July 1-Sept. 30	4	2	
Canete	May 16-June 30	3	2	
Do	July 1-Sept. 30	7	4	
Cerro Azul	May 1-31	3	1	
Chiclayo	May 1-June 30	9	2	
Do	July 1-Aug. 31	6	4	
Cutervo	May 1-15	2	1	
Guadaloupe	Sept. 1-30			Present.
Huancabamba	May 1-June 30	34	25	
Huacho	July 1-31	1		

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

Reports Received from June 30 to November 23, 1923—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Peru—Continued.				
Locality—Continued.				
Huaral	June 1-30	2	2	
Do	July 1-Sept. 30	3	1	Sept. 1-30, 1923: Present on country estates.
Lima (city)	May 1-31	17	8	
Do	July 1-Sept. 30	14	8	
Lima (country)	May 1-31	7	4	
Do	July 1-Sept. 30	3	2	
Mollendo	June 1-30	1	1	
Reque	Aug. 1-31	1	1	
Salaverry	May 1-June 30	11	3	
Trujillo	do	2	3	
Russia				Jan. 1-May 15, 1923: Few cases in Far East regions.
Senegal:				
Dakar	July 1-31	4	4	Reported to have come from port of Rufisque, Senegal.
Rufisque	Aug. 6			Present.
Siam:				
Bangkok	Apr. 29-June 30	31	30	
Do	July 1-Sept. 16	11	11	
Siberia				Sporadic cases of plague reported yearly in localities vicinity of stations Matsievskaya and Borzia, Transbaikal Railway.
Harambor	May 6	1	1	Village in zone of endemic tarabagan (marmot) plague, Transbaikal region.
Station No. 83				Station on Transbaikal Railway. Marmot plague during recent years.
Soktu				Do.
Straits Settlements:				
Singapore	May 6-June 30	6	8	
Do	July 22-Sept. 22	4	3	
Syria:				
Beirut	May 12-June 20	3		
Do	July 1-Sept. 30	7	1	
Turkey:				
Constantinople	Aug. 19-Sept. 22		2	On Aug. 16, 1923, 2 cases reported.
On vessel:				
S. S. Crewe Hall	Oct. 15	1		At Catania, Italy. Patient embarked at Port Said, Egypt. Vessel left Vizagapatam, India, Aug. 29; at Colombo, Ceylon, Sept. 12; Aden, Sept. 23; Port Sudan, Sept. 25; sailed for New York, Oct. 15, 1923.

SMALLPOX.

Algeria:				
Algiers	May 1-31	2		
Do	July 1-Aug. 10	3		
Arabia:				
Aden	May 27-June 2		2	
Do	July 8-Sept. 30	8	2	
Austria:				
Vienna	July 29-Aug. 4	1		
Azores:				
St. Michael Island	July 15-21	7		Mild.
Bolivia:				
La Paz	Apr. 1-June 30	2	3	
Do	Aug. 1-Sept. 30	5	6	
Brazil:				
Bahia	Aug. 19-Sept. 22	6		
Manaos				Year 1921: Cases, 2; year 1922: One case.
Pernambuco	May 6-June 16	5		
Do	July 1-Sept. 1	46	4	
Rio de Janeiro	May 13-June 23	25	3	
Do	July 15-Oct. 20	46	10	
Rio Grande do Sul				Jan. 1-Mar. 31, 1923: Present with some mortality.

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

Reports Received from June 30 to November 23, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
British East Africa:				
Kenya—				
Mombasa	May 20-26	1		From vessel from Bombay.
Tanganyika	Apr. 20-June 9	3		Territory.
Do	July 1-28	27	6	Do.
Uganda—				
Entebbe	Apr. 1-30	4		
Zanzibar				July 1-31, 1923: Cases, 7; deaths, 3.
Canada:				
Alberta—				
Calgary	May 27-June 2	1		Infection from Deer Lodge, Mont.
British Columbia—				
Vancouver	May 27-June 30	33	1	
Do	July 1-Sept. 15	15	1	
Victoria	Aug. 5-25	2		
Manitoba—				
Winnipeg	June 3-30	1		
Do	July 1-Oct. 27	6		
New Brunswick—				
Kent County	July 1-7	1		
Ontario				June 1-30, 1923: Cases, 13. July 1-Sept. 30, 1923: Cases, 48.
London	July 15-21	1		
Toronto	June 24-30	3		
Do	July 15-21	1		
Quebec—				
Quebec	June 10-16	1		Varioloid.
Saskatchewan—				
Moose Jaw	July 8-14	1		
Regina	June 24-30	3		
Do	Oct. 7-13	1		
Ceylon:				
Colombo	May 6-June 2	23	1	
Chile:				
Concepcion	May 22-June 11		3	June 1-30, 1923: Cases, 2. July 1-31, 1923: 1 death.
Do	Sept. 1-17		2	
Talcahuano	Aug. 12-18	1		Landed from vessel.
Valparaiso	May 7-June 23	6	121	June 10-16, 1923: 29 cases reported from 2 districts.
Do	July 1-28	12	10	July 30, 1923: 25 cases in lazaretto. Aug. 6: 20 cases. Aug. 14: 60 cases present.
China:				
Amoy	May 13-June 23		3	June 19-25, 1923: Present.
Do	July 1-Sept. 29			Present.
Antung	May 14-20	1		
Canton				June 1-30, 1923: Present. July 1-31, 1923: Present.
Chungking	May 13-June 30			Present and endemic.
Do	July 1-Sept. 29			Do.
Foochow	May 13-Oct. 6			Present.
Hongkong	Apr. 29-June 30	98	82	
Do	July 1-Sept. 15	66	59	
Manchuria—				
Dairen	May 21-27	1		
Harbin	May 7-June 24	5		
Do	July 1-Sept. 30	11		
Mukden	May 13-20	1		
Nanking	May 13-June 23			Do.
Do	June 24-Sept. 22			Do.
Shanghai	May 21-June 3	4		Foreign.
Do	July 2-Aug. 26	1	4	Cases, foreign; deaths, Chinese.
Chosen (Korea):				
Chemulpo	May 1-31	1		
Fusan	May 1-June 30	4		
Do	July 1-31	22	6	
Gensan	May 1-31	1		
Seoul	May 1-June 30	42	13	
Do	July 1-Aug. 31	7	9	
Colombia:				
Barranquilla	Oct. 15-21		1	
Cuba:				
Antilla	July 8-14		2	From Preston.
Czechoslovakia				Jan.-Mar., 1913: Cases, 15. Apr.-June, 1923: Cases, 16; deaths, 4.
Province—				
Bohemia	Jan. 1-Mar. 31	15	4	

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

Reports Received from June 30 to November 23, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Alausi	July 16–31	3		
Bahia	Sept. 1–15	4		
Esmeraldas	Aug. 16–Sept. 15	5		
Guayaquil	May 16–31	1		
Jipijapa	Sept. 1–15	8		
Monte Cristi (Manabi.)	do	20		May 16–30. 1923: Present.
Riobama	May 16–30	1	1	
Rocafuerte	do			Do.
Santa Ana	Sept. 1–15	10		
Vinces	do			Present in district.
Zaruma (El Oro)	May 16–30			Present.
Egypt:				
Cairo	Mar. 12–July 1	24	8	
Esthonia				June 1–30, 1923: Cases, 4. Aug. 1–31, 1923: Cases, 2.
Finland				May 1–15, 1923: 1 case. July 2–31, 1923: 1 case. Aug. 1–31, 1923: 2 cases.
French Guiana				Nov.–Dec., 1923: Present. June 6, 1923: Present.
Cayenne				Year 1922: Present.
Great Britain:				
Birmingham	June 18–30	3		Present.
Bristol	June 28			Present.
Cardiff	June 3–30	6		
Gloucester	June 28			123 cases reported in hospital; present in rural districts. July 15, 1923: Present. Aug. 9, 1923: 33 cases in isolation hospital; two weeks previously about 250 cases present in hospital.
Do	July 12	19		
London	Sept. 9–29	5	1	Sept. 22, 1923: Additional cases in Middlesex County.
Nottingham	June 3–9	1		May 1–31, 1923: Cases, 211.
Do	July 8–Sept. 22	6		
Sheffield	Sept. 16–22	3		
Greece:				
Athens	May 1–31	53		
Patras	Apr. 24–June 15		19	
Saloniki	Apr. 30–May 20	2	2	
Do	June 25–July 8	2	3	
Guadeloupe (West Indies)				July 22–Aug. 4, 1923: Present in epidemic form. (Reported as alastrim.) Aug. 17, 1923: Stated to be officially declared present. Sept. 14–29: Epidemic generally diffused. Oct. 13–24, 1923: Epidemic.
Basse Terre	Aug. 17–Oct. 13			Present.
Pointe à Pitre	Aug. 17			Estimated from 2,000 to 3,000 cases. Sept. 2–8, 1923: 1,500 cases present: 8 deaths reported; Oct. 14–20, 1923: 1,000 cases present.
Hungary				July 15–Aug. 4, 1923: Cases, 28.
India				Apr. 15–June 30, 1923: Cases, 8,112; deaths, 2,933. July 1–Sept. 8, 1923: Cases, 9,329; deaths, 2,279.
Bombay	Apr. 22–June 30	298	141	
Do	July 1–Sept. 22	72	36	
Calcutta	May 13–June 9	12	9	
Do	July 1–Sept. 8	19	14	
Karachi	May 13–June 30	24	8	
Do	July 1–Oct. 6	16	5	
Madras	May 13–June 23	91	16	
Do	July 8–Oct. 6	58	17	
Rangoon	May 6–June 30	125	67	
Do	July 1–Sept. 29	50	19	
Indo-China				Nov. 1–Dec. 31, 1922: Cases, 234; deaths, 68.
City—				
Saigon	May 20–June 30	34	23	Including 100 surrounding square kilometers.
Do	July 1–28	31	18	Do.
Provinces—				
Annam	Nov. 1–30	3	1	
Do	Jan. 1–Feb. 28	10	1	
Cambodge	Nov. 1–Dec. 31	97	41	
Do	Jan. 1–Feb. 28	63	17	

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

Reports Received from June 30 to November 23, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China—Continued.				
Provinces—Continued.				
Cochin-China	Nov. 1–Dec. 31	125	34	
Do	Jan. 1–Feb. 28	231	67	
Laos	Feb. 1–28			A few cases.
Tonkin	Dec. 1–31	9	1	
Do	Jan. 1–Feb. 28	69	13	
Iraq (Mesopotamia):				
Bagdad	Apr. 1–June 30	32	11	
Do	July 31–Sept. 4	13		
Italy:				
Leghorn	Sept. 17–23	6		
Turin	May 28–June 3	1		
Do	July 2–15	2		
Jamaica				May 27–June 30, 1923: Cases, 226. July 1–Oct. 13, 1923: Cases, 414. (Reported as alastrim.)
Kingston	May 27–June 30	39		
Do	July 1–Oct. 13	47		
Japan:				
Kobe	May 28–June 10	2		
Do	July 2–8	1		
Java:				
East Java				Aug. 26–Sept. 1, 1923: Cases, 36; deaths, 3.
Soerabaya	Apr. 22–June 30	187	22	
Do	July 15–Sept. 15	128	21	
Soerakarta				July 31, 1923: Epidemic.
West Java—				
Batavia	May 5–June 8	17	3	Province.
Do	June 30–Sept. 7	3	1	Do.
Latvia				Apr. 1–May 31, 1923: Cases, 8. Aug. 1–31, 1923, 1 case.
Martinique				May 26–Sept. 29, 1923: Present.
Mexico:				
Aguascalientes	July 8–14		1	
Chihuahua	June 11–24	7		
Guadalajara	July 22–Sept. 22		10	June 1–30, 1923: Cases, 15; deaths, 2.
Mexico City	May 19–June 30	164		Including municipalities in Federal district.
Do	July 1–Oct. 6	204		Do.
Palestine:				
Jaffa	June 5–11	1		
Persia:				
Tabriz	Apr. 1–June 30		2	District.
Teheran	Feb. 22–June 14		30	Mar. 22–June 22, 1923: Deaths, 12. June 23–July 22, 1923: Deaths, 9.
Poland				Apr. 29–June 30, 1923: Cases, 1,861; deaths, 43. July 1–Aug. 12, 1923: Cases, 20; deaths, 6.
Portugal:				
Lisbon	May 20–June 30	35	3	
Do	July 1–Sept. 29	46	12	
Oporto	June 10–30	6	3	
Do	July 9–Oct. 27	73	56	
Portuguese West Africa:				
Angola—				
Loanda	Apr. 1–21	2		
Do	July 29–Aug. 18		2	
Rhodesia (British Africa):				
Northern Rhodesia	May 8–14	21	8	
Southern Rhodesia	May 3–16	4	2	
Siam:				
Bangkok	Apr. 29–June 30	90	53	
Do	July 1–Sept. 15	303	174	Apr. 22–Aug. 25, 1923: Cases, 329; deaths, 184. Sept. 8, 1923: Reported prevalent.
Sierra Leone:				
Freetown	July 16–31	1		Landed from S. S. Tsad, from Southampton via Las Palmas.
Kaballa	May 1–15	1		In Sembehun district.
Pujehun	May 16–31	1		
Sambuya	Aug. 1–15	1		
Spain:				
Barcelona	May 31–June 6		1	
Do	June 28–Oct. 17		9	
Seville	July 19–25		1	
Valencia	May 15–June 30	44	2	
Do	July 1–Oct. 20	15	10	

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

Reports Received from June 30 to November 23, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Switzerland:				
Basel	May 27-June 30	4		
Do	July 8-Aug. 25	8		
Berne	May 20-June 30	11		
Do	July 1-Sept. 29	14		
Luzerne	May 1-June 7	36		
Do	July 1-Sept. 30	18		
Zurich	May 20-June 23	10		
Do	July 15-Sept. 15	9		
Syria:				
Aleppo	July 15-31	6		
Damascus	May 15-June 11	7		
Do	Aug. 16-Oct. 2	11	1	
Tunis:				
Bizerta	June 10-20	1		
Tunis	June 11-17	1		
Do	June 26-July 1	1		
Turkey:				
Constantinople	May 13-June 26		45	
Do	June 27-Sept. 22	1	18	
Union of South Africa				May 1-June 30, 1923: Cases, 66; deaths, 1 (colored). July 1-31, 1923: Cases, 17 (colored).
Cape Province				May 1-31, 1923: Cases, 32 (colored). July 1-31, 1923: Cases, 10 (colored).
Do	May 6-June 30			Outbreaks.
Do	July 1-Sept. 15			Do.
East London	July 8-14	1		
Natal	do			July 1-31, 1923: 1 case (colored).
Orange Free State	Apr. 29-June 30			Outbreaks.
Do				July 1-31, 1923: Cases, 4 (colored)
Do	Sept. 9-15			Outbreaks.
Transvaal				May 1-31, 1923: 1 case. July 1-31, 1923: Cases, 2 (colored).
Do	July 1-Aug. 31			Outbreaks.
Yugoslavia				July 1-7, 1923: Cases, 8; deaths, 1.
Province—				
Bosnia-Herzegovina	July 1-7	1		
Croatia-Slavonia	do	4	1	
Zagreb	June 24-30	1		
Serbia	July 1-7	2	1	
Belgrade	June 10-16	1	1	
Do	July 8-14		1	
Woivodina	July 1-7	1		
On vessels:				
S. S. Kargola	May 20-26	1		At Mombasa, British East Africa. Vessel arrived from Bombay, Mar. 25, 1923.
S. S. Makura	May 26	2		Two cases in quarantine (reported as alastrim). Vessel left Victoria, B. C., Apr. 28, 1923. Touched at Honolulu.
S. S. Tsad	July 16-31	1		At Freetown, Sierra Leone, Africa, from European and West African ports.
S. S. —	Aug. 12-18	1		Landed at Talcahuano, Chile.

TYPHUS FEVER.

Algeria:				
Algiers	May 1-June 30	66	19	
Do				July 1-Sept. 30, 1923: Cases, 6; deaths, 6.
Argentina:				
Rosario	May 25-31		3	
Bolivia:				
La Paz	June 1-30	4		
Do	July 1-Sept. 30	18	3	
Bulgaria:				
Sofia	Apr. 22-June 23	11	2	Paratyphus, 2 cases; 2 deaths.
Do	July 15-Sept. 1	17	1	Paratyphus, 5 cases. Sept. 2-29, 1923: Paratyphus, cases 6.

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

Reports Received from June 30 to November 23, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canary Islands:				
Teneriffe	Nov. 6			Present.
Chile:				
Concepcion	May 22–June 18		3	
Do	Aug. 7–13		1	
Iquique	Sept. 2–8		1	
Talcahuano	May 13–19	1		
Valparaiso	May 7–June 23		26	June 11, 1923: 34 cases in Salvador Hospital. July 30, 1923: 45 cases in hospital. Aug. 6: 58 cases. Aug. 12–18: 82 cases stated to be present. Aug. 25–88 cases in lazaretto.
Do	July 1–Aug. 24		48	
China:				
Antung	May 28–June 24	12		
Do	July 16–Oct. 1	2		
Chungking	Aug. 26–Sept. 8			Endemic.
Hankow	May 19–25	1		
Manchuria—				
Harbin	May 6–13	1		
Do	Aug. 27–Sept. 2	2		
Mukden	May 14–20	2		
Czechoslovakia				Jan.–Mar., 1923: Cases, 191; deaths, 6. Apr. 1–June 30; Cases, 132; deaths, 4. Para: typhoid A, 1; paratyphoid B, 20.
Province—				
Bohemia	Apr. 1–June 30	8		
Moravia	do	2		
Russinia	do	98	1	
Silesia	do	1	1	
Slovakia	do	23	2	
Egypt:				
Alexandria	May 14–June 24	7	5	
Do	June 25–Sept. 16	11	6	Paratyphoid fever, 2 cases.
Cairo	Apr. 12–June 24	44	29	
Do	June 25–July 22	12	9	
Port Said	Aug. 3–19	1		
Esthonia				June 1–30, 1923: Recurrent typhus, 1 case; paratyphus, 2 cases.
Finland	Sept. 16–30	1		Aug. 1–Sept. 30, 1923: Paratyphus, 38 cases. Sept. 1–15, 1923: One case recurrent typhus.
France:				
Marseille	Mar. 1–May 31		3	
Germany:				
Coblenz	May 27–June 2		1	
Do	July 29–Sept. 22	10		
Hamburg	May 20–26	3		
Do	July 29–Aug. 4	1		Case developed July 28, 1923, at Emigration Hall, Hamburg.
Königsberg	May 13–June 2	2		
Do	Aug. 12–18	1		
Stettin	May 27–June 9	1	1	
Stuttgart	Sept. 2–22	4		
Great Britain:				
Ireland—				
Cork	Aug. 19–25	1	1	
Greece				May 1–31, 1923: Cases, 876.
Athens	May 1–31	150	5	
Do	July 22–31		1	
Patras	Apr. 24–June 15		30	
Do	Aug. 16–31		2	
Piræus	May 1–June 30	356	11	
Do	July 1–10	3		
Saloniki	Apr. 30–June 24	56	16	Apr. 30–May 27, 1923: Recurrent typhus: Cases, 3; deaths, 3.
Do	July 9–15	1		
Guatemala:				
Guatemala City	Apr. 1–June 30		5	
Hungary				Jan. 1–May 19, 1923: Cases, 318; deaths, 36. In 11 counties.
Budapest	Jan. 1–June 2	48	12	
Do	Sept. 2–8	1		
Iraq (Mesopotamia):				
Bagdad	Apr. 1–June 30	3		
Do	Aug. 8–15	1	1	
Japan:				
Nagasaki	July 2–8	1		
Java:				
East Java—				
Soerabaya	July 29–Aug. 18	16	3	

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

Reports Received from June 30 to November 23, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Latvia				Apr. 1-June 30, 1923: Cases, 231; paratyphus, 5 cases. June 1-Aug. 31, 1923: Cases, 86; paratyphus, 11 cases; recurrent typhus, 1 case.
Mexico:				
Guadalajara	June 1-30	1		
Do	July 1-Aug. 31	2	1	
Mexico City	May 20-June 30	75		Including municipalities in Federal District.
Do	July 1-Sept. 29	142		Do.
San Luis Potosi	July 29-Aug. 4		1	
Palestine				Aug. 14-20, 1923; One case, in northern district.
Jaffa	May 22-28	2		Relapsing fever, 1 case
Do	June 26-Oct. 1	7		
Jerusalem	May 22-28	1		
Persia:				
Tabriz	Apr. 1-14	2		
Teheran	Feb. 22-June 14		4	
Do	July 1-22		1	
Poland				Mar. 4-Apr. 7, 1923: Cases, 2,253; deaths, 172. Recurrent typhus: Cases, 338; deaths, 6. Apr. 29-June 30, 1923: Cases, 2,203; deaths, 177. July 1-Aug. 18, 1923: Cases, 544; deaths, 46. Recurrent typhus: Apr. 29-June 23, 1923: Cases, 337; deaths, 3. July 1-Aug. 18, 1923: Cases, 102; deaths, 4.
Portugal:				
Oporto	June 10-16	1		
Do	July 1-21	3		
Rumania:				
Kishineff	May 1-June 30	41		
Do	Aug. 1-31	10		District.
Russia				Jan. 1-Apr. 30, 1923: Cases, 106,854. (Corresponding period 1922: Cases, 847,516.) Feb. 1-28, 1923: Cases, 17,577. Recurrent, Jan. 1-Feb. 28, 1923: Cases, 43,510.
European Russia and autonomous republics.	Jan. 1-Apr. 30	93,999		
Siberia, Caucasus, and Central Asia.	do	9,921		
Waterways and railways	do	2,934		
Spain:				
Barcelona	June 21-27		1	
Do	Aug. 23-Oct. 3		13	
Madrid	May 1-31		1	
Do	July 1-31		2	
Sumatra:				
Medan	May 1-June 30	34		
Switzerland:				
Zurich				Sept. 16-22, 1923: Paratyphus fever, cases, 5.
Syria:				
Aleppo	May 20-June 16	4	2	
Do	July 15-21	3	1	
Beirut	May 1-10	1		
Tunis:				
Tunis	May 28-June 24	3	2	
Do	July 9-Oct. 7	1	2	
Turkey:				
Constantinople	May 13-June 26		19	
Do	June 27-Sept. 22	5	11	
Union of South Africa				May 1-June 30, 1923: Cases, 230; deaths, 47 (colored). White—Cases, 15; deaths, 1. Total, 245 cases, 48 deaths. July 1-31, 1923: Cases, 133 (colored, 132 cases; white, 1 case); deaths, 24.
Cape Province				May 1-31, 1923: Cases, 49 (colored); white, 5. July 1-31, 1923: Cases, 94; deaths, 21 (colored).
Do	Aug. 12-Sept. 22			Outbreaks.
Natal				May 1-31, 1923: One case (colored).

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

Reports Received from June 30 to November 23, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa—Contd.				
Orange Free State				May 1-31, 1923: Cases, 45 (colored). July 1-31, 1923: Cases, 36; deaths, 3 (colored). One case in white population.
Do	May 6-June 16			Outbreaks.
Do	Aug. 12-Sept. 29			Do.
Transvaal				May 1-31, 1923: Cases, 7. July 1-31, 1923: Cases, 2 (colored).
Johannesburg	May 1-June 30	4	4	
Yugoslavia				July 1-7, 1923: Cases 4.
Province—				
Bosnia-Herzegovina	July 1-7	4		
Croatia-Slavonia—				
Zagreb	May 27-June 2	1		
Serbia—				
Belgrade	Aug. 12-18	1		

YELLOW FEVER.

Brazil:				
Bahia	May 13-June 30	25	6	
Do	July 1-Sept. 8	13	6	
Colombia:				
Bucaramanga	June 25-Aug. 26			Present.

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