PUBLIC HEALTH REPORTS

VOL. 36

AUGUST 12, 1921

No. 32

THE WORK OF THE PUBLIC HEALTH SERVICE IN THE CARE OF DISABLED VETERANS OF THE WORLD WAR.

By Hugh S. Cumming, Surgeon General, United States Public Health Service.

In presenting even a brief paper upon the activities of the Public Health Service in its care of sick and disabled ex-service men and women, it is necessary, at least in some measure, to present certain legal aspects of the question. In no other way can one obtain any just and comprehensive view of the work which has been done in this connection and of the position of the Public Health Service in relation to this responsibility.

The legal authority under which this Service has performed these functions is found in an act of Congress, approved March 3, 1919. This act places upon the Public Health Service the responsibility for providing "immediate additional hospital and sanatorium facilities for the care and treatment of discharged sick and disabled soldiers, sailors and marines, Army and Navy nurses (male and female), patients of the War Risk Insurance Bureau."

The broad authority for supplying medical care and treatment to these patients resides by law in the War Risk Insurance Bureau, and the director of that bureau is charged with providing "such reasonable governmental medical, surgical, and hospital services" as he "may determine to be useful and reasonably necessary." It will be seen, therefore, that the Public Health Service, by law, becomes, in effect, an agency through which the Director of the War Risk Insurance Bureau may secure the necessary medical care and treatment for his patients.

It is to be noted in this whole matter that the purpose of Congress in the passage of legislation for the general care of disabled veterans of the World War contemplated something very different from the pension systems which have hitherto obtained in the care of similar persons of other wars in which the United States has been engaged.

¹ Read at twenty-ninth annual meeting of the Association of Military Surgeons of the United States, Boston, Mass., June 2-4, 1921.

This article originally appeared in The Military Surgeon, Vol. XLIX, No. 1, July, 1921, pp. 1-10, and is reprinted here by permission. In some instances the figures have been revised to July 1, 1921.

Congress had in mind a broad constructive program whereby a man discharged from the military forces of the United States, disabled, would, in effect, receive compensation for his disabilities, medical care and treatment to the point where he had received maximum benefit therefrom, and finally, in the case of residual disability, the necessary vocational re-education to fit him for some gainful occupation whereby he might be enabled to earn as good a living as he did before.

It, of course, follows that the compensation paid was to be regulated in accordance with the degree of residual disability and the readjustment to civil life and ability again to follow a gainful occupation.

The plan, therefore, of caring for these disabled veterans included three major phases, namely, the rating of disability and the payment of compensation; medical care and treatment; and vocational reeducation, when necessary.

Under the law the rating of disabilities and the payments of compensation were to be performed by the War Risk Insurance Bureau, the furnishing of vocational re-education by the Federal Board for Vocational Education. The Director of the War Risk Insurance Bureau was left responsible for the medical care and treatment, but by law he could make use of the facilities of the Public Health Service for the discharge of this important function, and it seems to have been the intention of Congress that he should make use of this Service, for a time at least, in discharging this particular responsibility.

The Public Health Service, therefore, at the request of the War Risk Insurance Bureau, assumed, in reality, the responsibility of rendering the necessary medical care and treatment to the beneficiaries of that bureau and, for a time, of supplying also the necessary personnel for the performance of certain intrinsic medical functions of the War Risk Insurance Bureau in the rating of disabilities. It also supplied to the Federal Board for Vocational Education similar personnel for the intrinsic medical functions of that bureau, as well as rendering medical aid in the care and treatment of trainees of that board, acting in this capacity as its chief medical agency.

It will be noted in all of this that the Public Health Service was acting at the request of the two bureaus involved to supply, in what was a real emergency, the medical functions necessary in the performance of this work. Also, it will be noted that this large responsibility was placed very suddenly upon the Public Health Service. It had been made manifest during hearings in Congress that there was decided objection to the designation of either the Army or the Navy as the medical agency to supply medical care and treatment for disabled ex-service men and women. The Public Health Serv-

ice, being a civil medical organization under the Government, was very naturally selected as the temporary agency to discharge this responsibility.

Under such conditions the Public Health Service found itself quite suddenly charged with a large and important responsibility and, immediately upon the passage of the act quoted, proceeded to organize on a commensurate scale to meet a problem the character of which was practically unknown and the magnitude of which could only be surmised.

This increased responsibility of the Public Health Service meant an immediate expansion of its central organization in Washington, the acquirement of additional hospital facilities throughout the United States, and the creation of an administrative field organization through which it might decentralize its activities and come into contact with disabled ex-service men and women everywhere. This latter organization was known as the organization of district supervisors and will be referred to later.

The size and character of the problem faced by the Public Health Service were, of course, matters of great urgency, and every effort was made to determine definitely the medical needs of disabled exservice men, so far as concerned medical facilities and personnel.

In conjunction with the War Risk Insurance Bureau there was compiled, and finally published, Public Document No. 481 of the Sixty-sixth Congress (Dec. 5, 1919). In this document this entire problem was analyzed and certain very definite conclusions were stated as to the need of medical and hospital facilities for the proper care and treatment of discharged disabled veterans.

It is unnecessary at this time to attempt here any analysis of this document, but it is worthy of some comment. It indicated that within two years from its date of publication there would be needed for the patients of the War Risk Insurance Bureau the following hospital beds:

General medical and surgical	. 7, 200
Tuberculosis	. 12,400
Neuro-psychiatric	
Total	. 30,660

Making due allowances for the suitable beds then available, it was estimated that there would be required for necessary construction and equipment a total appropriation of \$85,000,000, and the draft of a bill was offered which would appropriate this sum of money for this purpose. The bill contemplated, however, that this money should be expended in annual installments extending over a period ending June 30, 1923. This document also indicated that the "peak

of the load," at least for neuro-psychiatric and tuberculous disorders, would not be reached for some years.

The Public Health Service was subjected to a great deal of criticism for the presentation of what was then regarded as a pretentious program. Moreover, it was rather generally felt that the facilities which had been provided during the war for the medical care and treatment of soldiers and sailors could be made use of very readily and very satisfactorily in the care of disabled discharged soldiers and sailors at the termination of the war.

It was not clearly appreciated that the war program for the care of sick and disabled could by no means be converted into an adequate and satisfactory system for the care of sick and disabled persons under peace conditions. At all events, no money was appropriated for purposes of constructing hospital facilities.

It is highly significant, however, at the present time to note that the magnitude of this problem, as foreshadowed in the public document quoted above, has, since the date of its publication, been more or less verified by subsequent experience.

Making due allowances for discrepancies, which might have been expected, and for developments, which could not readily have been anticipated, it may be truthfully said that this document very clearly indicated more or less accurately the hospital needs in the care of sick and disabled ex-service men and women, if these patients were to receive the character of medical service which, in the judgment of the best medical minds, was necessary for their restoration to health and which could not be satisfactorily given in other than suitably constructed institutions.

Leaving aside these considerations, it was apparent that plans were immediately necessary to meet the urgent demands suddenly created by the termination of the war and the discharge of sick and disabled soldiers and sailors. The Public Health Service, in addition to the plans for the future which have been mentioned above, felt it necessary at once to secure temporary facilities of the best nature possible, with the idea that the necessary appropriations would be forthcoming for the construction of good ultimate facilities.

Under the law of March 3, 1919, certain limited funds were provided for construction purposes and the purchase of existing plants, and the Public Health Service was given certain temporary hospitals which had been made use of during the war. It was also authorized to take over leases which had been made by the Army for war purposes, and was further granted authority itself to lease any suitable institutions and convert the same to hospital purposes. Moreover, provision was made for transfer from the War and other departments of such facilities as could be released from time to time. Authority

also existed for making contracts at a per diem rate with existing civilian hospitals for the care of disabled ex-service men and women.

By these arrangements it was possible to increase rather rapidly the number of available beds, although the character of the beds used left a good deal to be desired. It was understood, of necessity, that this whole arrangement was of a temporary character to meet emergency conditions, pending the development of governmental institutions for the better housing and the better care and treatment of these patients.

By such methods the Public Health Service, up to May 1, 1921, had been able to secure the control of a considerable number of places and was, at that time, operating some 60-odd hospitals with a total bed capacity of 18,700, and under arrangements now existing it expects to increase this number within the next six months by over 5,000 additional beds. Needless to say, many of the places now operated are by no means satisfactory, but in the emergency they have served a useful purpose and doubtless will continue to be used until recent appropriations by Congress are utilized in building better accommodations.

By the passage of an act approved March 4, 1921, appropriating \$18,600,000 for the purpose of constructing hospitals or extending existing plants for the care of disabled ex-service men and women, Congress has apparently signified its intention of entering upon a construction program which, it is believed, will ultimately furnish for these patients institutions of a suitable character and so located as to serve the needs of the situation.

The sum of money appropriated in this measure is inadequate for the need and, if the indications are to be met, must be supplemented by additional funds. The mere existence of a large number of hospital beds means nothing whatever. It is, of course, apparent that the character of beds and their geographic location are matters of prime importance. Manifestly, hospital beds of a temporary character, suited to emergency needs, can not be satisfactorily used for the care of neuro-psychiatric and tuberculous patients, and these two classes of patients are the ones for which there is most urgent need at the present time. Undoubtedly the need for these two classes of patients will continue for a long period of time.

The use of temporary beds of an unsatisfactory character, as well as the extensive use of contract hospitals, has subjected the Government to a great deal of harsh criticism. Such criticism can not be avoided unless there exist satisfactory governmental facilities for the care of these men who rightly have such a large place in the heart of the American people.

In a brief statement of this kind one can do little more than give a general outline of what has been done. A summary will give some

idea of the volume of work which has been performed during the past two years and the progress which has been made.

In March, 1919, shortly after this work was assumed by the Public Health Service, there were under treatment only about 1,500 inpatients. Two years later, in March, 1921, there were reported nearly 26,000 such patients in the hospitals of the Public Health Service and in civilian hospitals under contract with this Service, making an increase of over 1,600 per cent in two years. In other words, within a period of two years this Service had to provide over 24,000 additional The significance of these figures, however, is still more amplified by the fact that in 1919, before the inception of the War Risk Insurance work, the majority of the patients hospitalized by this Service were general medical and surgical cases, whereas in March 1921, about two-thirds of the patients were suffering from tuberculosis and mental and nervous diseases. By May, 1921, there were reported in hospitals under the care of the Service about 8.600 tuberculous and about 7,000 neuro-psychiatric patients. These figures include not only War Risk patients, but all beneficiaries of the Public Health Service.

The hospitalization problem has been very acute, as the Service has had considerable difficulty in securing sufficient beds for the rapidly increasing number of patients. In March, 1921, on an average 2,000 beneficiaries of the War Risk Insurance Bureau were admitted each week to Service and contract hospitals. Weekly discharges amounted to about 1,700, thus leaving a steady net increase of about 300 patients per week. Formerly a majority of the patients had to be treated in contract hospitals. On March 31, 1921, there were more patients in hospitals operated by the Service than in civilian institutions, and it is expected that in the near future most of the ex-service men and women will be given the benefit of care and treatment in governmental institutions.

The small system of out-patient departments has been gradually expanding and is continuing to expand. It is anticipated that eventually there will be a splendid out-patient department service at all important points of the United States.

In March, 1921, the United States Public Health Service had 58 dispensaries in operation throughout the country, exclusive of those conducted within Marine and Public Health Service hospitals. Nine of these dispensaries, located in the leading cities of the country, are completely equipped and staffed for all forms of out-patient diagnosis and treatment. They contain fully equipped clinics in all the various specialties of medicine and surgery; also clinical laboratories, X-ray plants and pharmacies. The other dispensaries, located in cities averaging 100,000 to 500,000 population, are not as fully equipped as the former, but consist of one or more special clinics and render satis-

factory service. In addition to the regular dispensaries, there are officers of the Public Health Service distributed throughout the country who are authorized to give treatment to ex-service men and women.

The organization of the 14 district supervisors' offices was created; and these offices, with their subagencies, covering the entire United States, reach practically into every county, so that prompt contact may be made with ex-service men and women everywhere. This organization has rendered inestimable service in reaching ex-service men and women, and giving them prompt care and attention. These offices were begun in a small and tentative manner, each with less than 2,000 feet of floor space, one doctor and a small force, a little over a year ago. In March, 1921, most of these offices occupied from 25,000 to 40,000 feet of floor space, with a large medical and clerical personnel in the headquarters and well-organized subagencies throughout the districts.

In carrying out its work for ex-service men and women, the Service has assembled a large personnel. The medical personnel numbers about 2,700 medical officers, exclusive of designated examiners on a fee basis. A dental corps has been created and numbers about 190 dental officers; a corps of female nurses has been created and numbers about 1,500; a reconstruction service has been formed and numbers about 500 reconstruction aids; a dietetic service has been organized and numbers about 150 trainéd dietitians.

From the inception of this work to July 1, 1921, there have been cared for in hospitals by this Service about 200,000 patients of the War Risk Insurance Bureau, who were furnished a total of about 9,500,000 hospital relief days. Also, about 1,300,000 out-patient treatments have been furnished, and a total of over 1,000,000 medical examinations have been made. Special services of various kinds have been arranged. For example, about 75,000 patients have been given dental treatment. On July 1, 1921, over 5,000 patients were being given occupational therapy, and over 5,000 physio-therapy each week. Prosthetic appliances of various kinds have been furnished to thousands of patients.

An inspection service has been formed for general supervision, and a number of officers are kept constantly in the field investigating complaints and making reports. This inspection service covers not only the hospitals of the Public Health Service, but also civilian institutions under contract. It is of interest to note that of the hundreds of complaints made less than 25 per cent were found to have any real basis in fact.

In cooperation with the American Red Cross there has been organized an extensive and efficient medical social service, ministering to the needs of the discharged soldier and sailor in many different ways. The activities of the American Red Cross have been supplemented by many other agencies, including the American Legion, Knights of Columbus, Jewish Welfare Society, and others. All of them have rendered fine assistance in the prosecution of this important phase of the work.

Reference should be made to recent events with regard to the transfer to the War Risk Insurance Bureau of certain functions which have been up to this date discharged by the Public Health Service. As explained, the responsibility of the Public Health Service in a good deal of this work has been of an emergency nature. The administrative arrangements created under the law by the three major agencies involved in this work (War Risk Insurance Bureau. Federal Board for Vocational Education, and Public Health Service) have been the subject of a great deal of unfavorable comment by reason of the alleged lack of cooperation between the agencies involved. It is needless to deny that the administrative organization so formed left much to be desired, but it can be defended on the ground that under the law no administrative organization of a better character could readily have been formed, and much of the criticism which has been leveled at this organization has, I feel, been rather of a political nature than otherwise. However that may be, the organization certainly could have been better in a great many ways.

The entire subject has received a great deal of attention and has been a question for earnest thought and deliberation upon the part of the official agencies concerned.

As a result of all of these activities, the President finally called together a commission to consider the entire matter, and, upon the recommendations of this commission, certain very radical changes have been made in the matter of administering this work. Such changes are likely to go even further, as soon as there is legal authority, in order to complete the desired program.

The report of the President's commission contemplated the creation by law of a new bureau in some existing department of the National Government. Various names have been suggested for this new bureau. The director of this new bureau was to be charged with the responsibility of discharging all the functions pertaining to the care of disabled ex-service men and women, including medical functions as well as functions pertaining to vocational rehabilitation and payments of compensation.

Bills are now pending in Congress which would put into effect the recommendations of this commission and thus consolidate under one director all of the activities pertaining to disabled veterans. In the discharge of these functions, however, both the recommendations of the commission and the bills pending in Congress contemplate the use

by this new bureau of contract facilities with civilian hospitals, official hospital facilities as operated by the Public Health Service, the Army, the Navy, the National Homes for Disabled Volunteer Soldiers, and the Interior Department (St. Elizabeths Hospital).

It will be noted in this program that there occurs a consolidation of all functions pertaining to the care of disabled discharged veterans except the maintenance and operation of hospitals and dispensaries; and there is made available for the use of the director of this new bureau all of the official hospitalization agencies of the Government. This will mean, of course, a development of the Government's hospital facilities by all of the official agencies involved and undoubtedly there will be in this connection important developments, especially in the National Homes for Disabled Volunteer Soldiers.

This would seem entirely logical because this official agency ultimately will be charged with the care of a great many of these patients. It will also be noted that there is placed in the hands of this new director the function of making medical examinations by which disability ratings are made, and in the discharge of this function he necessarily assumes charge of the organization of district supervisors which was created and formerly operated by the Public Health Service.

By the direction of the President, the Secretary of the Treasury, as soon as the President's commission had made its report, proceeded at once to put into execution as much of this report as was possible under existing law. The War Risk Insurance Bureau and the Public Health Service, both being bureaus of the Treasury Department, permitted the Secretary to put into effect the ideas of this commission as far as they involved these two bureaus.

This having been done, the Public Health Service has already assumed the position of a hospitalization agency, furnishing medical care and treatment at the request of the Director of the War Risk Insurance Bureau. Undoubtedly the Public Health Service will continue to discharge this function in connection with this work for some years.

In concluding this rather sketchy outline of the work which has been done, it seems necessary to refer, however briefly, to the criticisms made against the Public Health Service and other official agencies involved. In general, these criticisms have alleged lack of coordination among these official agencies and mismanagement of hospitals, with improper care and treatment of the beneficiaries housed therein.

Criticisms with regard to the hospitals will undoubtedly continue in a greater or less degree. Such a thing is inherent in a situation of this kind and much of it can not well be avoided. Speaking for the

Public Health Service, I know that we have sincerely attempted to render to exservice men and women the best service possible under the circumstances. I realize that we may have fallen short of our ideals in a great many respects, yet I feel under the circumstances that disabled veterans who have come under the care of the Public Health Service have received sympathetic consideration as well as good professional care and treatment.

While the Public Health Service was organized and is maintained by the National Government as the Federal health agency charged with the responsibility of the conservation of the health of the Nation, it has also assumed, under law, the additional responsibility of furnishing to veterans of the World War medical care and treatment. This added responsibility has been accepted with a full comprehension of the privilege conferred and a firm desire to meet it as adequately as circumstances and conditions permit.

SCHOOL HEALTH SUPERVISION IN MINNEAPOLIS, MINN.

By TALIAFERRO CLARK, Surgeon, United States Public Health Service.

A study of the system of health supervision operating in the public schools of Minneapolis, Minn., was undertaken by direction of the Surgeon General of the United States Public Health Service, on request of the director of the department of hygiene of the Minneapolis Board of Education. Owing to a number of unavoidable circumstances, and also because studies are being made of certain phases of the subject by volunteer organizations, the sanitation of the public school buildings was not included in this survey. Also no attempt was made to include the parochial schools.

This survey was not made with the expectation of the immediate establishment of an ideal system of school medical supervision, the principles of which are well known and which at the present time are well-nigh impossible of accomplishment by the average community, but was undertaken more especially for the purpose of studying the actual practice, of making recommendations as to the manner in which the resources of the board of education may be used to the greatest advantage, and of suggesting lines of improvement which could be carried out with the resources which may become available in the near future. The board of education is not as much interested in what may be accomplished by school medical inspection in the distant future as it is in what can and shall be done at the present time properly to safeguard the health of the children attending the public schools.

Organization of the City Government.

In order that the limitations of school health supervision in Minneapolis may be more readily appreciated, a brief outline of the organization of the city government is given.

The city government is administered largely by special boards, a part of whose membership is elected and a part exofficio. The mayor and a specified number of the members of the city council serve as exofficio members on a number of these boards. For the purpose of this report consideration may be given only to the board of education, consisting of seven members, all of whom are elected, and the board of public welfare. This latter board comprises seven members—two members of the city council and the mayor, who serve as exofficio members, and four other members who are appointed by the mayor with the approval of the city council.

The authority to maintain health supervision over the public schools is vested in the board of education and is exercised by the department of hygiene. The public health administration of the city is under the division of public health of the board of public welfare.

Coordination of Functions.

In May, 1920, the board of education, with the approval of the board of public welfare, designated the commissioner of public health to act also as director of the department of hygiene of the board of education and transferred to the account of the board of public welfare funds in the amount of the salary formerly paid the director of hygiene. This action by the board of education was a distinctly progressive step, both from the standpoint of economy and efficiency, and is in accord with the present tendency of governmental agencies to harmonize the work of the various boards and bureaus which have nearly identical functions. The coordination of the health work in the schools with the work of the city department of health extends, at present, only to the employment of a common director, and does not permit of the interchangeable utilization of the services of the personnel of the department of hygiene and the division of public health in school health work and general public health work.

School Buildings and School Population.

The board of education operates 84 public schools, including 6 high schools, 3 junior high schools, a school for crippled children, and a farm school for boys. In respect to the latter, the board of education exercises no other function than that of supplying teachers. As is the case in practically all cities, the school building program has been of gradual evolution, and has not kept pace with increase

in the population, owing to the lack of funds. For this reason some of the lower classes are overcrowded and a few of the school buildings are of rather ancient construction. In the main, however, the newer buildings are in keeping with the requirements of modern school architecture.

The attendance at the public schools at the time of this survey was 60,146. Exclusive of the high schools, the attendance was 50,080.

School Health Supervision.

Minnesota has no State school medical inspection law, but school medical inspection is permitted under regulations of the State board of health which have the force of law.

The following are the requirements of the State board of health relating to school medical inspection, as of November 1, 1919:

Sick school children to be reported.

- 318. Teachers in cities and villages shall refer to the head of the school at once any pupil who—
 - (a) Returns to school after an illness of unknown cause;
 - (b) Appears to be in ill health;
 - (c) Shows signs of a communicable disease (see lists under Regulations 300 and and 301);
 - (d) Or has lice or other vermin.

All such pupils shall be reported to the school physician for medical examination unless in the opinion of the head of the school the pupil's condition requires that he or she be sent home immediately or as soon as a safe and proper conveyance can be found.

In such cases the pupil shall be sent home and the health officer of the sanitary district concerned shall be notified immediately by the head of the school.

(Note.—A school nurse may perform the duties outlined, under the supervision of the health officer, when there is no school physician.)

319. Each school physician shall make a medical examination of all pupils referred to him under Regulation 318, and such other examination of pupils, teachers, and janitors, and of school buildings, as in his opinion the protection of public health, the efficiency of the school, or the welfare of the individual may require, and shall report the results of such examinations to the local and to the State board of health.

The medical inspection of pupils and the school nursing service are under the direction of the director of hygiene, who, as city commissioner of health, holds a dual position by special agreement of the board of education and the board of public welfare. Physical training formerly given under the direction of the director of hygiene is now under separate direction lodged in a special department of physical training of the board of education. No systematic work in health instruction is done in the schools under definite direction other than that provided by the school curriculum. Health talks are given by individual nurses without special supervision. Health instruction is also one of the prescribed duties of the school physician, but it is one seldom observed.

A total of \$89,125 was allotted by the board of education for health work in the schools during the calendar year, based on the following budget:

•	Salaries.
1 director, paid by board of public welfare	\$ 3, 720
2 office assistants	2,400
5 medical inspectors	7,600
42 school nurses	58, 370
3 dentists	4, 500
6 bath attendants	6, 500
Miscellaneous items, including medical, dental, and bath supplies	6, 035
Total	89, 125

MEDICAL INSPECTION.

Medical inspection is made by five school physicians appointed under civil service, four of whom serve part time only. The wholetime school physician devotes the morning hours to physical examinations, and in the afternoon he examines the children applying for employment certificates and the children in special classes.

The number of school physicians is entirely inadequate for effective service, and as quickly as funds become available for this purpose their number should be augmented in the ratio of one physician to not more than 3,000 school children.

Qualifications and duties of school physician.—The rules prescribed for the government of the Minneapolis public schools provide, as relating to school physicians, that—

- (a) They shall be graduates of a university or college, with at least two years' academic training and a degree of Doctor of Medicine, be graduated as an interne of one year's service from an accepted hospital, and shall be less than 50 years of age.
- (b) They shall be assigned to a group of schools and their hours shall be from 8.55 a.m. to 12 m. each school day. They shall visit each school in their charge at least twice each week, according to schedule approved by the director, and at other times as required. Upon each visit they shall report immediately to the principal and leave written report of their work.
- (c) They shall examine each child referred to them by the principal for inspection, in a room set apart for this purpose, no other child being present.
- (d) They shall visit frequently the rooms of the schools to which they are assigned for the purpose of detection of cases of contagious diseases previously undiscovered, and to note the sanitary condition of the building, but they shall not make any special examination of pupils in the classroom.
 - (e) They shall make such report as the superintendent or director requires.
- (f) They shall not offer their services or recommend other physicians for the treatment of public-school children.
- (g) They shall not give treatment to a pupil except at the request and in the presence of the pupil's parent or guardian, except in case of accident or emergency.

Under these regulations the school physician is required to visit each school in his charge at least once each week, except the schools having less than 150 pupils, which are visited only for monthly inspections and on special call of the nurse or principal. At such times he

examines cases of suspected contagious diseases, all children who have been absent from illness or for three days from any unexplained cause, children returning after previous exclusion, and all suspected cases of physical or mental defect referred by the principal or nurse. The duties of the medical inspectors as laid down have not been carried out in the school year 1920–21. All suspect cases and all three-day absentees and children returning after exclusion are inspected by the nurses.

Routine inspection.—Each school physician is expected at the beginning of each term, and as often thereafter as the director may require, to make a routine classroom inspection of each child in the schools under his charge. However, he is not permitted to touch the child during such inspection. Owing to such restriction, the time of the school physician could be utilized to greater advantage in other work. Nevertheless, he should be required to visit each classroom from time to time to advise with the teachers in respect to overcrowding, the seating of children, and the observance of sanitary requirements. In fact, the medical inspectors are now required to confer with the teachers and principals, and to visit classrooms when requested.

Physical examination.—No child is given a physical examination except with the consent of its parent or guardian. The following notice to parents is sent previous to beginning such examinations:

Form No. 121.

MINNEAPOLIS PUBLIC SCHOOLS HEALTH SUPERVISION.

Notice to parents:

HEALTH SUPERVISION will be started soon in the school which your child is attending. This supervison is for the purpose of detecting contagious disease, and to see if the children are in such a condition as to be able to do the school work properly and without risk to themselves.

All examinations will be made in the presence of the school nurse by an inspector appointed for that purpose by the board of education.

If you object to such an examination of your child being made, notify the principal of the school, within one week of receipt of this notice, IN WRITING. If such written objection is not made, it will be presumed that you approve of such an examination, and your child will be examined when its turn comes.

By order of

THE BOARD OF EDUCATION.

Physical examinations are required of children entering school for the first time, except those exempted by parental request, and the examinations proceed in regular order from the lowest to the highest grades. However, it is required that classes of the same grade be examined in regular order in each school of the groups under each school physician's charge.

At present, owing to their limited number, the school medical inspectors are principally engaged in the physical examination of the children of the first and eighth grades. These examinations take place in the morning hours, and each inspector is assisted by a special

nurse detailed for this purpose. The regular school nurse takes no part in the physical examinations and, as a consequence, has no first-hand knowledge of the physical defects discovered during these examinations and is, therefore, not in position to evaluate the seriousness of the defect in individual cases, an important factor in securing the cooperation of the parent in follow-up work. The director of hygiene does not underestimate the value of the presence of the regular school nurse during physical examination, but because of the manifold duties of the nurses, the number of buildings each nurse is required to visit, and the importance of the nurse's presence in each of these buildings at some time during the school day, it has been found impossible with so small a force to have the school nurse present at the physical examinations.

The need is very apparent for the employment of an additional number of medical inspectors and the reorganization of their work in a manner to insure the correction of the greatest number of hampering physical defects. A school medical inspection made for the sole purpose of discovering and recording physical defects, without an attempt to secure their correction, is not worth undertaking, and the time, money, and energy expended may be considered to a great extent lost. Furthermore, the regular school nurse should be present at such inspections and should participate in something more than mere clerical work. The school physician who does not explain to the school nurse the nature and seriousness of defects needing immediate attention will not secure the best results from follow-up work.

Extent of examination.—It is required that each child be thoroughly examined for the following conditions:

- 1. Defective vision.
- 2. Defective hearing.
- 3. Defective nasal breathing.
- 4. Hypertrophied tonsils.
- 5. Tuberculous lymph nodes.
- 6. Pulmonary disease.
- 7. Cardiae disease.
- 8. Nervous diseases (chorea, etc.).
- 9. Anemia and malnutrition.
- 10. Orthopedic defects.
- 11. Defective teeth.
- 12. Defective speech (its cause).
- 13. Abdominal defects (in boys only).

Owing to the lack of physicians the medical inspection is too superficial; no absolute diagnosis is made, and suspected cases are referred to the mother with the recommendation that she send the child to the family physician.

The method of medical inspection should be standardized and the personal equation of the individual inspector eliminated as much as possible. Under the existing arrangement the medical inspector visits a particular school in his district from day to day and, assisted by a special nurse, spends his time in making the medical inspection of the children in a given grade. In consequence of this arrangement, weeks may elapse before he even enters some of the schools of his district.

Even with the present inadequate force the work of the school physicians can be reorganized to advantage. The medical examinations should be confined for the present to the children who wish to leave school for employment; to the children of the first grade, in order to discover those who are entering school suffering with a physical handicap; and to the children of the second grade, in order to determine what has been done in the course of a year for the correction or relief of physical defects. Remediable physical defects can be corrected most easily in their incipiency. It is a wise provision, therefore, from both the educational and health standpoint, to detect these handicaps and insure their removal as soon as possible after the child has entered school, and much better than to wait for an inspection which is made at a later age period.

Under the scheme which was outlined in September, 1920, and which was in effect at the time this study was made, reports have been made of approximately 8,000 physical examinations of the first year enrollment and 4,360 children of the eighth grade. It was expected that the physical examination of 5,721 children comprising the fourth grade would be completed during that term. With an increased number of physicians the examination should be extended to include other grades.

The inspector should be required to visit every school in his district in rotation on a particular day. At the time of such visit he should make the desired physical examinations of a number of children in a given grade and a more specific examination of the children discovered by the nurse in classroom inspections, or referred by the teacher, or discovered by himself at the time of his previous visit whose condition warranted the written consent of the parent or guardian to a more detailed examination than is permitted under existing regulations, provided that the written consent of the child's parent or guardian shall have been previously obtained by the school nurse in the interval between the medical inspector's visits.

The object of medical inspection as now practiced is to make a rapid survey, with a limited force, for the purpose of detecting gross defects, in order that data may be available to enable the board of education properly to evaluate the size of the problem and to demonstrate the laxity which has apparently been in evidence in past years.

The work already accomplished under the director of hygiene emphasizes the fact that for the scheme, as outlined above, to be as completely effective as desired, it would be necessary to employ an additional number of school physicians.

Exclusion and readmission.—Rather definite rules have been prescribed for the exclusion of children, namely—

- (1) All children showing signs or symptoms of smallpox, diphtheria, scarlet fever, measles, chicken pox, whooping cough, mumps, infantile paralysis, or tuberculosis in the active stage.
- (2) Cases of pediculosis with live pediculi or with nits, when in the judgment of the physician they are a menace to the other children.
- (3) Children affected with contagious eye and skin diseases whose parents have persistently refused to obtain treatment.
- (4) Children of families in which a member or members have one of the diseases enumerated under (1), except tuberculosis and except, in the case of measles, mumps, chicken pox, and whooping cough, children who have previously had these diseases. Each excluded child is given an official exclusion blank, previously filled out, signed by the principal, and sealed.

Children suffering from acute conjunctivitis, pediculosis, skin diseases, and trachoma are referred to the family for treatment or to the nurse for instruction.

Children quarantined under the rules of the health department are readmitted only on written certificate of that department. Children returning after having had contagious diseases that are not quarantined by the health department are readmitted after examination by the school physician or on written certificate of the health department.

Children excluded for tuberculosis may be readmitted only upon the personal written certificate from the health commissioner.

NURSING SERVICE.

A total of 42 nurses are engaged in school nursing work, as follows: One supervising nurse, 1 assistant, 34 regular school nurses, 5 special nurses who assist the school physicians in the physical examination of children during the forenoon and attend special clinics during the afternoon, and 1 nurse supplied by the Junior Red Cross for duty in the school for crippled children. This latter nurse, although her salary is paid by the Junior Red Cross, is under the direction of the director of hygiene.

The nurses regularly assigned to school districts make class room inspections and examine children referred to them by teachers and principals. Usually this work is limited to the morning hours. They do home visiting and conduct children to clinics in the afternoons. The nurses are required to be on duty until 1 p. m. on Saturdays.

Appointment.—The school nurses are appointed under civil service regulations. They must have a high school education, be registered in the State of Minnesota, and have had at least three months' training in child care. School nurses are paid for only 10 months of the year. However, five nurses were employed during 1920 for duty in the summer schools.

Ratio of nurses to schools.—Ordinarily, each nurse has two schools under her supervision, but in some instances a nurse may have as many as three schools. In addition to the schools that are visited regularly each day by a nurse, 10 of these nurses are required to visit once or twice a week the smaller schools of 100 pupils or less which may be located in their district.

The average number of pupils to each school nurse is 1,769. Exclusive of the high schools, this average is 1,472 school children. The highest number of children to the nurse is 3,938, and the smallest is 759.

Duties and qualifications of school nurse.—The duties and qualifications of school nurses are prescribed by the rules for the government of Minneapolis public schools as follows:

They shall assist the physician in the examination of children, and seek to promote the health and well being of the children in the district.

- (a) They shall be graduates of a general or children's hospital, and at time of appointment be between the ages of 25 and 40 years.
- (b) They shall be assigned severally to a group of districts with hours from 8.30 a.m. to 5 p.m. on school days, and 9 a.m. to 1 p.m. on Saturdays.
 - (c) They shall wear the required uniform while on duty.
- (d) They shall receive all pupils referred by the school physician or principal, in a room assigned for that purpose.
- (e) They shall give bath-room service as directed, care for children who may be taken to a dispensary, and shall visit the homes of the districts as time will permit.

The school nurse is required to make classroom inspection from time to time, with special reference to communicable disease and animal parasites. She also makes notation of obvious and easily detected physical defects. She is very properly cautioned not to make definite diagnosis in referring cases to parents for physical defect corrections; but where such references are made by the medical inspection, as definite diagnosis as is consistent is made. However, under the present temporary arrangement, many children suspected of being in need of medical and surgical attention are referred to the parents without a definite diagnosis. This is a serious defect in the medical inspection service and is not likely to obtain results in the correction of physical defects. Parents, as a rule, seek medical advice only in times of serious sickness and are notoriously lax in providing the necessary attention for the relief of defects which do not obviously incapacitate the child. Any procedure which requires the mother to undergo the extra expense of employing

a physician to make the diagnosis is not likely to meet with active cooperation in the average home. Under the regulations, no child is to be examined in the classroom. Cases of suspected contagious diseases coming within the purview of the quarantine regulations of the department of health are referred to the principal for exclusion, and the health department is notified in each instance by telephone and in writing. Children who are sent home for illness other than suspected communicable diseases are directed to return at a specified time when the nurse will be present, and are given a card filled out by the nurse and signed by the principal, which states the cause of sending the child home and gives the date of his expected return.

Home visits.—The nurse is required to visit the parents at the home and explain the nature of defects and to urge the necessity of treatment, unless parents, within three days after notification, visit the nurse at the school. Subsequent visits are made from time to time until treatment has begun or the parents refuse to secure treatment. If the parent is unable to take the child to the dispensary, the nurse is permitted to do so, but must first obtain a written request signed by the parent or guardian. Nurses are not permitted to visit cases of contagious disease quarantined by the department of health. Nurses are also required to visit all pupils who have been absent three or more days for any unexplained cause, and a report is required to be made to the health department and to the principal of all cases of contagious diseases found.

SPECIAL CLASSES.

The care of handicapped children has long received special attention by the State of Minnesota, and from time to time institutions have been established for their care and training. The State School for the Deaf was opened at Faribault in 1863, and, later, the State School for the Blind, also at Faribault. In 1882 the School for the Feebleminded, located at Faribault, was opened. The School for Dependent Children, located at Owatonna, was opened in 1886. The first building of the Home for Crippled and Deformed was erected at Phalen Park, St. Paul, in 1910.

In 1915 the legislature enacted a law providing for the establishment of special classes in the public schools for the deaf, blind, subnormal children, and children with speech defects. Under the provisions of this law, defective children who are living at home and who are unable to profit by the regular classes in the public schools are given immediate and individualized training.

Under this law, on application, any special, independent, or common-school district complying with its provisions may be permitted to establish or maintain one or more schools for the instruction of deaf, blind, mentally subnormal children, and children with defective speech.

Permission to establish such special classes may be granted to districts that have actual attendance of not less than five deaf children between the ages of 4 and 10 years, who may come under the provisions of this act. Separate classes and separate teachers are required for the deaf, blind, mentally subnormal children, and children with defective speech.

The State grants an allowance of \$100 for each defective child instructed in special classes of at least nine months' duration.

Sight-saving classes.—Operating under the provisions of the State law, the city board of education maintains three classes for children under 16 years of age whose vision is impaired to such a degree that it is difficult or impossible for them to keep pace with their classes without special aid. Furthermore, other children who present unmistakable evidence of positive injury to their eyesight by regular class work are admitted to these classes. The object is to instruct these children with the least eye strain, to create in them a life habit of protecting their own vision, and to provide vocational training.

Standards of admission to sight-saving classes.—The following classes of cases are eligible to admission to special classes:

1. Myopes of 8 dioptrics or more.

2. Myopes whose vision can not be brought up to one-half normal vision (20/40).

3. Progressive myopia.

4. Children having macula or leucoma of the cornea, or optic atrophy with vision less than 6/15.

5. Astigmatism with glasses 20/70 or less.

- 6. Hyperopia of more than eight dioptrics, with symptoms of asthenopia.
- 7. Keratitis: In the interstitial type, if the vision remains low after the eye has been quiet for three months, or in persistent recurrent conditions while under treatment.

8. In congenital cataracts or secondary cataracts where no acute condition is present, with vision 20/50 or less.

9. Congenital malformations where the vision is 20/70 or less.

In all chronic diseases of the fundus where the vision is 20/40
or less.

Pupils are referred by principals, nurses, and school medical examiners.

Special equipment.—The classrooms are arranged with a special view to protecting the children from eye strain, due regard being paid to the location of the classroom, type of blackboard, printing, paper, crayons, and teaching methods. The children receive instruction in the special classes by properly qualified teachers, but are allowed to join their regular classes for recitation.

Medical supervision is maintained by a physician not connected with the school system, whose salary is paid by an outside agency.

Special classes for the deaf.—A class for the deaf was first organized in 1915. At the time of this study five such classes were in operation, each with a special teacher, with an attendance of 44 children. Children are referred to these classes by principals, medical inspectors, and nurses, and are received from clinics. The age limit for attendance is from 4 to 16 years, and the number of children is limited to 10 for each teacher. Owing to the fact that the eyes of the deaf child, in a sense, take the place of hearing, careful supervision should be maintained of the eyesight of the children attending these classes. At present no special effort is being made to conserve the vision of these children.

The provision setting an early age at which children may be admitted to special classes for the deaf is a wise one. It is more reasonable to defer beyond the usual age for school entrance, sending a child whose sense of hearing is normal to school than to pay no educational attention to a deaf child until after he arrives at the average school age. During the earlier years of life he has only the limited sign language, and unless special teaching is commenced at an early age, the years of the most rapid language formation are lost. Regulations promulgated by the British Board of Education provide that no child shall be admitted to classes for the deaf who is not 2 years of age, and further that no child may be retained in such classes who is physically and mentally in condition to profit by the regular courses, or who is incapable of profiting by special class instruction.

Classes for correcting speech defects.—Classes for special instruction in speech are operated in four schools, under the direction of two special teachers. These classes are only indirectly related to the school medical inspection system. However, in addition to the routine inspection for the discovery of communicable diseases and other physical defects, very careful and special examination of each child enrolled in a correctional class should be made to determine the cause of the speech defect—whether functional or due to congenital word deafness, defects of the articulative apparatus, or defects due to imperfect nervous control of the speech-producing mechanism.

Furthermore, imperfect speech is quite common among mental defectives. It is important from the pedagogic standpoint, therefore, that the correct mental status of each child be determined by a careful mental examination previous to his admission to the class, and that the teacher be notified of the results of such examination. Since imitation is an essential factor in the acquirement of perfect speech, the school nurse should be required to visit the homes of children attending speech classes for the purpose of studying the child's environment with special reference to the presence of speech

defects in members of the family not attending school, and the amount of cooperation that may be expected of the parents.

Special classes for subnormal children.—A total of 16 special classes are maintained in 11 schools for the instruction and training of children who are apparently retarded in mental development and unable to profit by the usual classroom instruction. The children attending these classes receive State aid for instruction purposes.

The number of children admitted to each class is restricted to 15, and each child is given a careful examination by a competent psychologist.

The causes of retardation may be due wholly or in part to parental, economic, or environmental influences; to physical, mental, and temperamental characteristics of individual children; to faulty teaching methods; to an unsatisfactory curriculum; or to poorly qualified teachers. Work of this character is of the highest importance, not only from the standpoint of its value in giving such children an opportunity to readjust themselves as far as possible to the demands of modern life, but also from that of the economic loss caused by children unnecessarily repeating grades. It is also of great value in focusing public attention on the need of providing adequate facilities for the care, training, and treatment of this unfortunate class of the population.

As the result of a cooperative teachers' referendum made by the United States Public Health Service in the course of a State-wide survey of dependency, delinquency, and feeble-mindedness, it was reported that of 32,480 children then in school approximately onefifth had failed to advance normally, owing to some handicap falling within the field of mental hygiene. Other studies made by officers of the service have revealed definitely as feeble-minded from 0.3 to 1.3 per cent of the school children who were examined. In addition to the feeble-minded and the border-line feeble-minded, a number of children (0.4 per cent according to one of the author's studies) are observed in school who fail to progress because of unbalance of other functions of the sensorium and not because of defective intelligence. This type can not be classified by formal psychological tests, but requires for this purpose a careful psychiatric examination. Such children are usually more disturbing factors in school life than are the feeble-minded. For this reason all children retarded in school work, including the so-called border-line feeble-minded cases, should also be given a careful examination by a trained psychiatrist.

The rôle of malnutrition and of hampering physical defects, including defective hearing, imperfect vision, diseased tonsils, and adenoids, in causing lack of progress in school work, is well known to educators. It is of prime importance, therefore, that in addition to the psychologic and psychiatric examinations, each candidate for these special

classes should receive a careful physical examination, with a view to securing the correction of the potential physical causes of his lack of advancement.

No system of instruction for the retarded pupil will be effective without competent follow-up work in the home for the purpose of securing parental cooperation and for the discovery and correction, as far as may be possible, of injurious economic and environmental contributing factors.

The special examinations and instruction of retarded children and the follow-up work in the home are very definite factors in mental hygiene. The average parent of a feeble-minded child is either ignorant of the child's potentialities for good or evil or else shirks the responsibility and considers the unfortunate one in the light of a family skeleton which is not to be discussed. As a result many of these children are neglected, fall easy victims of vicious habits, and come in conflict with the social customs and usages established by society for its own protection. Through the instrumentality of child health work in the schools, the general public will be brought to a better appreciation of the subject, and parents, instead of evading the question, will voluntarily seek the advice of and cooperate with the school medical authorities in the case of a potentially feeble-minded child who is retarded in school work, with no more hesitancy than if the child were suffering from one of the ordinary diseases of childhood.

Classes should be organized in all the schools of the city, and steps should be taken to segregate eventually all of the definitely feeble-minded children in a school, pending adequate State provision for the institutional care of those who exhibit marked antisocial tendencies.

The name "special classes for subnormal children" should be changed to "special classes for retarded children," thus relieving the children attending them of the stigma of subnormality. These classes should be open to normal children who do not progress in a satisfactory manner and should be operated as a clearing house, both for those children who profit by individualized instruction and who may eventually be returned to their regular grades, and for the segregation of the definitely feeble-minded who do not profit by such instruction beyond a certain point and who should be sent to a special school or placed in a separate class.

School for crippled children.—A school for crippled children was established by the board of education in 1920, and is organized in a church building acquired by the board in the purchase of additional grounds for a neighboring school.

The director, her assistant, and the teaching staff are supplied by the board of education. The nurse and the orthopedic surgeon are supplied by the Junior Red Cross. Crippled children are referred by school principals, medical examiners, school nurses, clinics, and by other agencies. A child does not necessarily have to be attending school to be eligible for admission to this special school. At present 72 children are enrolled, which is almost the capacity of the building.

The children are brought to the school and returned to their homes in two busses, one provided by the Junior Red Cross and the other by the Elks' Club. The busses are maintained and operated at the expense of the board of education.

The regular class work is supplemented by group and individual exercises, and by massage and corrective treatment in selected cases. Lunch is also provided.

No general health supervision of the children is maintained by the department of hygiene except that by the school nurse. Orthopedic service is given by a specialist, who, very naturally, is more interested in the correction of orthopedic defects than in general health supervision. The children of this school should be included with those of other special classes which come under the special supervision of a whole-time school physician.

SCHOOL CLINICS.

Eye clinic.—Supplementing the work of the sight-saving classes, the board of education has sanctioned the establishment of an eye clinic in one of the schools. This clinic is open from 1 to 4 p. m. on school days. It is in charge of two attending surgeons, paid by the Women's Clubs of Minneapolis, assisted by a nurse, paid by the board of education, which also furnishes the necessary drugs. Glasses are furnished at cost under contract, and the contractor returns to the board of education 5 per cent of the funds received, in the form of free glasses for necessitous children. In addition to refraction work, inflammatory conditions of the eyes are also treated at the clinic. The children are referred to the clinic by nurses, by medical examiners, and by the teachers and principals. In view of the present limited facilities, greater care should be exercised in the selection of children to be referred to the eye clinic than is now being given to this matter.

Considerable complaint is veised by the teachers and principals because of the loss of time in school work that is due to the use of atropin as a mydriatic. While atropin undoubtedly is the most efficient of mydriatics, a number of school medical authorities use homatropine, because it disturbs the vision for a shorter time than does atropin.

¹ According to N. Bishop Harman, homatropine in watery solutions is uncertain, but it is reliable if dissolved in castor oil. He advocates the use of a 2 per cent solution of homatropine and conditie in earlier oil. Unfortunately, this solution causes a smarting sensation when first introduced into the eye and he advises, therefore, that a drop of the solution should be placed in the lower forms of each eye in quick succession before the eyes are allowed to close. The child is then required to sit with the eyes closed est bandaged from one-half to one hour. By this method the child experiences the least discomfort.

The number of visual defects found among school children vary in different communities. Approximately 30 per cent of all school children have some more or less serious visual defect. In one community studied by the writer, 5.3 per cent of the boys and 8.2 per cent of the girls had marked refractive errors, requiring the immediate fitting of glasses. Obviously, one eye clinic operating only a part of each school day can make but little impression even when, as is frequently the case in Minneapolis, children are referred to dispensaries. Furthermore, the work as now conducted is more or less independent of the school medical system, which is not good practice.

Dental clinics.—Three school dental clinics are in operation. The dentists are appointed under the civil service. The salary is \$150 a month for 10 months (Sept. 1 to June 30). In addition, \$15 per month is allowed the dentist as a payment for the use of his own instruments in the clinics. The clinics are open five days in the week from 1 to 4 p. m., but they do not open on holidays or Saturdays.

The children are brought to the clinic by the school nurses. They are children referred by the teacher or discovered by the nurse in classroom inspection or by medical inspectors in the course of routine physical examination. Treatment is approved by the principal for those children whose parents are not able to pay. This recommendation must be countersigned by the parent giving permission.

In addition to the three dentists, there has been recently appointed an instructor in oral hygiene at \$150 a month for 10 months in the year, whose duty is to exercise general supervision over the clinics and to standardize the work.

Of the defects observed in school children, decayed teeth and diseased gums constitute easily a large majority. Owing to the great number of children who suffer from decayed teeth, the effect of diseased conditions in the mouth on the physical well-being and school progress of the child, and the promptness with which tangible results of corrective dental work become evident, the establishment of a school dental clinic stands first in the list of measures which should be undertaken for the conservation of the health of school children. Health is an intangible thing from the standpoint of a well man or woman. For this reason it is extremely difficult to secure public support of measures for the protection of public health. The average parent is not greatly interested in school health supervision, because it constitutes a promise of indefinite fulfillment. With emphasis placed on dental work in the schools, the parent is readily brought to see that something definite has been done for the benefit of the child. In fact, the child who has been treated in the clinic will himself serve as a constant reminder to the parent of the work which has been done. For this reason the extension of dental

work in the schools will serve to arouse the interest of the public at large in other forms of school health supervision.

The greatest good will not be accomplished by the correction of dental defects alone; this must be supplemented by instruction in mouth hygiene and in the conduct of toothbrush drills.

The extent to which dental work is practiced in schools varies in different communities. In general, the teeth of all children under 12 years of age should be attended to in the school dental clinics. Restriction of dental care to necessitous children should be avoided. The objection of a few dentists that this is an abuse of dental charity, is not valid, because there are not enough dentists in any one city properly to care for the dental defects which may be found. Moreover, many dentists do not care for clients who can pay only a minimum fee. The dental work in the schools will ultimately bring more work to the practicing dentist. As it becomes more and more general, an increasingly large number of children will grow to adult age who will regularly consult a dentist because of the knowledge of the importance of conserving the teeth which was acquired in school.

The present number of dentists employed is entirely inadequate. On an average, a dentist will require about 20 minutes per child, and working as they do only a part of each day, a number of children will fail to receive the attention that they so badly need.

As funds become available, the number of school dentists should be increased. Furthermore, the great value of any health work in the school is preventive. With the present limited dental force, the work should be largely restricted to children just entering school, and attention should be given to only such other children as require immediate relief from neglected conditions.

The work of the dentist can be made to cover a much larger field if supplemented by the employment of mouth hygienists to do prophylactic work. Dental hygienists should be in the proportion of from two to four to each dentist. Not only may they be secured at less salary than that commanded by the dentist, but in addition they limit the amount of work which the dentist will have to do through the prevention of dental decay.

Even with the present limited dental force, the amount of work done could be more than doubled by employing dentists on a whole-time basis and keeping the clinics open during the whole school day and on Saturdays.

In order to prevent undue loss of time from other duties by the school nurse, certain clinic hours should be set aside for the children of a designated school, and the maximum amount of work done at each sitting should be compatible with the particular child's comfort and endurance. Frequent visits to the clinic without obvious results will prove irksome to mothers who have to get the children ready, and may possibly excite adverse criticism.

NUTRITION WORK.

Nutrition classes.—Nutrition classes have been organized in five schools, under the auspices of the Woman's Community Council of Minneapolis. These classes are in charge of an instructor, who is paid by the Woman's Community Council. Medical supervision is maintained by a physician not connected with the school system.

The children are subjected to periodic height and weight measurements, and advice and instruction are given by the nutrition worker. These classes are not attended by the mothers, and, in fact, it appears that no attempt is made to secure their attendance. This is a very serious handicap to the success of the class work, because, in a large number of instances, individual children are unable to supply the workers with needed information. Also many children are either unable or neglect to inform their parents of what is expected of them at home. The nutrition worker is assisted by the school nurse, who is paid by the board of education.

It has been found impossible for the force of workers employed at the time of this study to undertake follow-up in nutrition cases, therefore no follow-up work in the home is carried on to secure the cooperation of the parents. In consequence, the children attending these classes do not derive the maximum benefit which otherwise might be expected from the instruction and advice given them. The work in the school should be supplemented by periodic visits to the child's home, in order to secure the assistance of the parents in having the child follow a definite regimen in respect to exercise, hours of sleep, periods of rest, the eating of proper food, and ventilation of the bedroom.

Owing to the fact that this work is not definitely connected with the school medical inspection system, due regard, apparently, is not paid to the selection of children for admission to these classes and to the detection and correction of the hampering physical defects which are frequently contributing causes to a state of malnutrition. Special attention should be paid to the correction of dental defects of the children attending these classes. A very high percentage of undernourished children show evidence of mouth sepsis. Of 270 undernourished children which are now under the supervision of the Public Health Service, it was found that 33 per cent had from one to four cavities, 48 per cent had from four to eight cavities, and a number of them showed nine, ten, and eleven cavities.

Milk at reduced cost.—Through the effort of the Parent-Teachers Association, milk is now supplied to the children in 34 schools at 3 cents the one-half pint. A small fund is available for supplying milk to necessitous children. The milk is usually served by volunteer workers at morning recess and is taken by the children through a straw.

This work is not well systematized and is not included in the program of school health administration.

School lunches.—Lunches are provided at minimum cost, under the supervision of a director, to the junior and senior students of the high schools. Free lunches and a noon-day meal are served to the children of the open-air school, at the expense of the board of education. Penny lunches are available in a number of schools of the city. This service is operated by the board of education.

Open-air school.—The board of education maintains one open-air school with capacity for 100 children. Children are referred to this school by principals, medical inspectors, and nurses. The school is designed primarily for children exhibiting predisposition to respiratory diseases, such as anemic children, children with defective nutrition, and children from a tubercular environment. The board of education furnishes free street-car transportation when necessary. A number of the children attending the open-air school come from school districts other than the one in which the school is located.

In addition to classroom instruction due attention is given to the observance of rest periods and the provision of extra clothing, blankets, and food. Each child is given milk on arriving at school, gruel or mush at the morning intermission, and lunch at noon consisting of bread and butter, soup, meat, and vegetables. Finally, just before starting for home the children are given hot or cold milk, depending on the weather and the personal taste of the child.

A nurse is constantly on duty during the hours the school is in session. Supplementing her other duties, she supervises the weekly weighings and periodic baths.

The children are given no physical training other than class calisthenics.

Approximately 10 per cent of the children attending the schools located in certain sections of the city would benefit by attending an open-air school. As funds become available, the board of education will no doubt extend this service, establish additional open-air schools, and organize open-air classes in the regular schools for children who are physically below par but not to such degree as would warrant sending them to open-air schools.

Owing to the limited capacity of the building, greater care than at present seems to be exercised should be given to the selection of children who may be admitted to this school, and more careful medical supervision should be maintained of the children already attending the school, in order that they may return to their regular classes as promptly as possible. A habit of invalidism should not be encouraged by an unnecessarily prolonged attendance. Furthermore, it is only by careful medical supervision that the best results can be obtained and the greatest use made of existing facilities.

The work of this school, which is excellent in so many respects, suffers from the lack of follow-up work in the homes of the attending children. Unless home conditions are satisfactory and the full and intelligent cooperation of the parents is assured, the benefit of the open-air school regimen is largely lost. A child who is injudiciously fed at home, allowed to run the streets, attend moving-picture shows, keep late hours, and required to sleep in a crowded and unventilated bedroom, will not obtain the maximum benefit from the instruction and routine of the open-air school.

Physical training.—Formerly physical training was an essential part of the school health supervision system under a common director. However, in April, 1919, the board of education separated the department of health and physical training and established in its place a department of hygiene and a department of physical training, each under a separate director. In the light of the present-day tendency to unite under centralized administrative control all public agencies engaged in a common line of work, and especially in view of the intimate relationship of physical training to medical inspection and health instruction, the action of the board may be subject to criticism.

In actual practice, physical training in the Minneapolis schools consists in marching, corrective calisthenics, and games. As is the case in many school systems, a comparatively short length of time is allowed for physical training. In the schools having gymnasiums, physical training is given for two 30-minute periods weekly, and in schools without them, 16-minute daily corrective calisthenics are given. In the high schools, two 40-minute periods weekly are given over to physical training. Efficiency tests are made every month, and a physical examination is required of every pupil before he is allowed to take part in athletic contests. This examination is made by physicians not connected with the school system.

This work is carried on by four instructors, two of them being women who are assigned to the high schools. About 60 per cent of all the pupils of the public schools receive instruction upon two or three days each week.

R. O. T. courses are optional and limited to students attending the junior and senior high schools.

SCHOOL RECORDS.

A fairly comprehensive ystem of medical records an l no ification forms of various descriptions is maintained in the Minneapolis public schools, including a monthly sanitary report, a daily report by the physicians and the school nurses, dental and eye clinics, open-air school records, and the ysical record of the pupils. The number and variety of record forms in use in any school system is largely determined by the local requirements and conditions, which of

necessity vary from time to time, and no hard and fast rules relating to them can be laid down. In general, it is important that accurate data be obtained and preserved regarding the physical condition of the children attending school, which should be at all times available for the guidance of teachers, nurses, and medical authorities. Great care should be exercised in recording physical data. It is not sufficient for the school physician to check a disability as an "eye defect," "orthopedic defect," etc., but in each instance the defect should be recorded in specific terms, such as "myopia," "flat foot," etc. At present but little use is made of the statistical material collected during school medical inspections, and in consequence the board of education is without definite information in respect to the number of defective children attending school, the nature and seriousness of these defects, and the extent to which medical inspections and notification to parents have resulted in the correction of remediable However, plans are maturing for the utilization of such data to the greatest advantage.

The child's physical record should accompany the school record from class to class and should show, in addition to the defects with which the child is or has been suffering and what has been done for their correction, a record of the child's absences from school on account of sickness, a monthly record of absences due to communicable diseases, a monthly record of weight, a record of height and weight at the beginning and at the close of the school year, a statement of the child's school progress, and the grades repeated, if any.

Owing to many factors, it is doubtful if any uniform standard of physical development of children can be devised applicable to the Nation as a whole. It is desirable, therefore, that each community determine its own standard. It is very necessary that accurate height and weight measurements be made from time to time, so that standards of physical development may be calculated for children of each sex and at different age periods, to serve as the basis to determine the need of special attention and the effect of attendance at nutrition classes and of other measures on the child's physical well-being.

Health Instruction.

In common with a large number of other school systems, Minneapolis has adopted no comprehensive plan of health instruction in the schools. This is unfortunate, because, when properly organized and operated, health instruction of school children is potentially the foundation of successful public health work. The knowledge of the principles of personal hygiene and public health does not come to one instinctively and is frequently the result of bitter experience. It is a difficult matter to change the habits of thought and action which have crystallized in the adult, and instruction to prevent

faulty health habits and to produce an instinctive appreciation of the principles of health preservation is most effective when imparted in the proper manner at an early period in the child's life.

The control of communicable diseases, the elimination of tuberculosis, the eradication of social diseases, the prevention of hampering physical defects, the lowering of the infant mortality rate, the lessening of the number of deaths from the so-called degenerative diseases and of the number of cases of insanity, can not be effected in fullest degree without active and intelligent cooperation of the individual and of the community. The basis of such cooperation is education. The cultivation of health habits and instruction in the elements of public health should properly begin in the home, but, unfortunately, this is not possible at present, and the school, therefore, offers the most hopeful opportunity for such instruction.

No form of health instruction in the schools will be as completely successful as possible unless the combined wisdom of the teaching staff and that of the school medical staff be utilized for this purpose.

Health instruction should be conducted along the following lines:

- 1. Reorganizing the teaching of hygiene in the regular courses and assigning it a place in the curriculum equal in importance to that of other major subjects.
 - 2. Organizing classes in physical training.
- 3. Supplementing classroom instruction by individual and group instruction by—
 - (a) Instructors in physical training;
 - (b) School nurses in the school and at home; and
 - (c) School physicians.
 - 4. Encouraging addresses by specialists from time to time.
- 5. Utilizing domestic science classes for teaching food values and food preparation.
- 6. Improving sanitary environment of school buildings and school grounds.
 - 7. Improving the medical inspection service.
 - 8. Employing only qualified school nurses.
 - 9. Providing hot school lunches.
- 10. Organizing classes in first aid, nutrition classes, and open-air schools and using them for practical health instruction.
 - 11. Teaching accident prevention.
- 12. Distributing health leaflets and inclosing leaflets dealing with particular diseases and defects with the notification to parents.
- 13. Encouraging the preparation of exhibits, posters, and compositions relating to health conservation.

The advisability of sex instruction in schools is one of the most serious instruction problems confronting educators, and one which must be handled with the greatest circumspection if disastrous results are to be avoided. Not every teacher is qualified to give this instruction, which must vary with and be adapted to the age and sex of the child. Sex instruction should not be undertaken by boards of education until funds become available for the preparation of specially qualified teachers. The work is yet in the experimental stage.

Recommendations.

The board of education has provided the nucleus of a very satisfactory system of school-health supervision. With but little additional cost and some few readjustments, it can be made comparable with any in the country. The following recommendations are based largely on immediate needs and with a view to future improvement.

I. COOPERATION WITH THE HEALTH AUTHORITIES.

The designation of the commissioner of health as director of the department of hygiene of the board of education is the first step toward combining the related functions of the educational and health authorities for the preservation of the health of the school children. This correlation of activities should be extended to include the nursing personnel of both organizations. The city should be redistricted and the nurses should be assigned in sufficient number to each district to furnish the combined school and public health nursing service. Under the present arrangement, homes are visited by school nurses, by the contagious-disease nurses of the division of public health, by the tuberculosis nurses, by the nutrition workers, by the nurses of the visiting nurses' association, and by representatives of a number of social agencies, greatly to the annoyance of those whom they wish to serve. Unification of the duties of the city-school and public-health nurses will permit of the assignment of qualified nurses in sufficient number to carry on these combined activities. Such an arrangement will be more economical and produce more satisfactory results than is possible under the present system.

II. MEDICAL INSPECTION.

Funds should eventually be made available for the employment of additional medical inspectors in the proportion of one physician to 3,000 children. The number of school medical inspectors is entirely inadequate properly to perform the duties prescribed for them. In fact, as now performed, through no fault of the medical-inspection staff, the work of the school medical inspectors is hardly commensurate with the cost.

The work of the medical inspector should be under intensive supervision, medical inspection should be standardized, and the personal equation of individual examiners should be eliminated as far as is possible.

With the employment of a sufficient number of school nurses, routine classroom inspection by the medical inspector should be permanently abandoned. However, inspectors should be required to visit the classrooms from time to time to observe sanitary conditions and advise with the teachers in respect to illumination, the seating of children, and the correction of postural defects. Furthermore, the school medical inspector should lose no opportunity to advise with teachers and principals in respect to the physical and mental condition of individual children requiring special attention.

With the present limited staff, physical examinations should be limited to the routine physical examination of children in the first and second grades, to special examinations of children about to leave school for employment, and children referred by teachers and nurses. As funds become available for the employment of additional inspectors these examinations should be extended to include an annual examination also of children in the fourth and eighth grades.

Medical inspectors should be required to exercise greater care in recording the results of physical examinations, and when parents are notified, notification should be accompanied by a specific statement of the child's physical and mental condition requiring attention.

Every medical inspector should be required to visit each school in his district in daily rotation for the purpose of making routine physical examination of children and for the special examination of referred cases. By this arrangement, even with but slight increase in the present limited staff, each school would be visited at frequent intervals, and the services of a school physician would be available for diagnostic purposes in referred cases. With a larger number of physicians, each school should be visited more frequently.

Although, among the prescribed duties of the school physician, but little attention is given to the sanitary condition of the school buildings and school grounds, owing to the fact that their limited time is fully occupied in making physical examinations, a general sanitary survey of all the schools should be made at the opening of each school year, which should be followed up by monthly inspection of classrooms and sanitary conveniences. A detailed report of such surveys and inspections should be required of each school physician and made available for the information and guidance of the board of education and school principals.

III. THE NURSING SERVICE.

Ultimately the school nursing service and that of the division of public health should be combined; the school system should be redistricted, and the nurses assigned in the proportion of approximately one nurse to every 1,000 children. The nurses should be

required to devote the morning hours to work in the schools and the afternoons to follow-up and public-health work.

The school nurse should be required, as now, to make classroom inspection at frequent intervals for the purpose of detecting contagious diseases. Classroom inspection made at infrequent intervals will do but little toward preventing the spread of the so-called communicable diseases of childhood. Modern educational methods make such demands on the time and energy of the teacher that she should not be required, or expected, to be responsible for the detection of communicable diseases in their incipiency. This should be the responsibility of the nurse who is qualified by training and experience.

The present practice of referring children with suspected defects to their parents on recommendation of the school nurse should be discontinued as promptly as possible. In each instance the notification should be accompanied by a specific statement of the defect or defects based on the physician's examination.

The school nurse should be present at and assist in physical examinations and act in other than mere clerical capacity. A clear understanding of the child's physical needs, gained through the sympathetic cooperation of the examining physician, will be of greatest benefit to her in follow-up work.

The five nurses now engaged in assisting the school medical examiners in physical examinations should be assigned to other duty.

With the enlargement of the nursing staff and redistricting the schools, the supervising nurse should be allowed at least three assistants for the exercise of more intimate supervision of the school and public health nursing work.

Conferences of the nurses should be held weekly, at which time they should receive special instruction in respect to the performance of their duties, and lectures on preventive medicine should be given by the members of the school medical staff and invited specialists, in order to prepare them for giving health instruction to individual children and to parents during home visits.

Greater emphasis than is given to the work at present should be placed on home visits by the nurses. The work of the nurse in the home is probably one of the most important phases of school nursing service, and it should be considered a necessary adjunct to special class work for securing the cooperation of the parent in order that the child may follow a prescribed regimen in the home. Furthermore, during these home visits the nurse can, with advantage, perform the prescribed duties of public health nurse from the standpoint of the control of communicable diseases instruction in personal hygiene, and advice in respect to improvement in home sanitary conditions.

IV. SPECIAL CLASSES AND SCHOOLS.

The children enrolled in special classes should be under intensive medical supervision and included under the school medical inspection service. The need is apparent for more intensive medical supervision and follow-up service for the children attending special classes. This is especially true of the open-air school and the school for crippled children, in order that cases of open tuberculosis may be discovered promptly and that contributing physical handicaps may be corrected in so far as may be possible.

Attention has been directed in the body of this report to the importance of special examinations and of home visits to children attending sight saving, speech correcting, and nutrition classes, and classes for subnormal children.

A careful physical and mental examination should be made of each child prior to admission to special classes, the results of which should be available for the information and guidance of the special teaching staff. In order that the maximum benefit may be derived from these examinations, it will be necessary in the near future to supplement the work of the present whole-time physician by additional assistants.

Additional facilities for health supervision and instruction in openair classes is urgently needed. Classes should be organized in the larger schools as rapidly as funds become available to supplement the work of the open-air school, which is already taxed to capacity. The latter should be reserved for children in more urgent need of special attention.

At the present time over 80 school children with active tuberculosis have been reported to the director of hygiene. Obviously, these children should not be allowed to attend the general classes because of the danger of the spread of infection, and yet they should not be deprived of educational opportunity. However, their exclusion from school exercises a harmful mental effect by inferentially placing them in a class beyond the hope of salvage. It is recommended that prompt steps be taken for the establishment of classes for the instruction of ambulant cases of active tuberculosis under medical and nursing supervision.

V. SCHOOL CLINICS.

The board of education is scarcely justified at the time of this study in providing clinical facilities for the treatment of conditions other than disorders of vision, dental defects, and cardiac cases. These physical handicaps are so directly related to the child's progress in school and occur in such preponderating numbers as to make it extremely doubtful if they could be properly cared for by outside

agencies and, therefore, warrant the provision of facilities for treatment by the board of education.

It is recommended that all existing school clinical facilities be utilized to the fullest capacity and kept open the full school day instead of for one-half day as is now the practice.

The five special nurses who now assist the medical inspectors in physical examinations should be assigned to these clinics for wholetime duty.

Cardiac clinics.—The work in cardiac clinics is largely devoted to determining the exercise toleration, prescribing a regimen of daily living, and giving vocational training and guidance best adapted to individual cases.

Approximately 2 per cent of the children in the Minneapolis schools will be found, on careful examination, to have a more or less damaged heart. Children attending school should be given a more careful examination than is now the practice for the detection of actual and potential cardiac cases.

Special cardiac clinics should be organized under the supervision of the department of hygiene for instruction and advice and treatment appropriate to the degree of cardiac damage.

Children suspected of having heart disease should receive a most careful physical examination, in order that contributing factors, such as nutritional disorders, bad teeth, diseased tonsils, adenoids, and rheumatic conditions, may be detected and corrected. A careful examination should be made of every child returning to school after an absence on account of an attack of tonsillitis, diphtheria, or scarlet fever, for evidences of cardiac damage.

The work of the clinic should be supplemented by intensive followup in the homes and by vocational training adapted to the child's physical needs. Notification of parents should be required, and the cooperation of the parents' family physician should be secured, in order that the work of the clinic may be supplemented by intelligent supervision in the home.

The advisability of opening special cardiac classes in the schools depends very largely on local conditions. In general, the instruction issued by the board of education of New York City to the teachers, if followed, will answer ordinary needs. These instructions are in part as follows:

- (1) To issue special passes to permit pupils with heart disease to use special entrances and exits.
- (2) To permit these children to enter or leave school directly before or after the regular time schedule for normal children.
- (3) To excuse cardiacs from physical training, fire drills, etc.
 (4) To lengthen the lunch hour in order to avoid hurry and haste in eating.

It should be the duty of the school physician, on the advice of the director of cardiac clinics and the family physician, to advise with principals in respect to the proper regimen to be followed by individual children.

Denial clinics.—The number of dentists employed is entirely inadequate properly to attend to the dental needs of the Minneapolis school children.

Preventive dental service should be furnished to all children under 12 years of age, irrespective of their social and economic status, thus eliminating the charitable aspect of such work when restricted to necessitous children. However, until additional dental facilities are provided, preferential service should be given to the children in the primary grades and to neglected children in the other grades who are in urgent need of attention.

When funds become available, mouth hygienists should be employed in the proportion of one hygienist to each school district. This number may be increased to meet the growing demand for such services as rapidly as funds become available.

The dental clinics should be in charge of whole-time dentists and should be kept open during school hours and on Saturdays.

The work of the dentists should be standardized, with the view of eliminating the personal equation of individual dentists and in the interest of economy.

As much work as possible should be done at each sitting as is compatible with the comfort and endurance of individual children, in order to economize in the time of the dentist, the child, and the nurse.

A complete dental record should be kept of each child. This should follow him from class to class. The accompanying form is recommended as well adapted for this purpose.

NAME	SCHOOL					GRADE		
(Family name)		:	•					
COUNTY PARENT OR GUARDIAN	UARDIAN	MA	MAIL ADDRESS	583				
RACE: W. C. Other Sex: M. F. Date of Birth: Year Month , Day	Number of examination	1st 2	. 2d	3d 4th	26h	8	7th	Sth
	Normal occlusion Malocclusion, slight Malocclusion, marked							
	Ability to masticate, good. Ability to masticate, fair. Ability to masticate, poor.							
3 2 2	Tongue, coated							
(F)	Color of gums, pink Color of gums, light red Color of gums, dark red							
	Calculus, slight							
USPHS	Stains, slight Stains, extensive							
	Use of brush, daily Use of brush, occasionally Use of brush, never							
が、変	Has visited dentist	<u>:</u> 						
	No. of cavities and roots. No. of fillings. No. of teeth crowned, or on bridges.							
	CODE: Plot carious areas on chart. Teeth missing-M. Roots remaining-R. Fistulae-F. Caries-C. Draw line from defect and indicate its character and number of examination. Example, C! (carles, first examination). Example, C! (carles, first examination).	er and num	ber of ex	oots rem	alning-R n. Exam	Fistule ple, C' (ca	les, first	aries - C.

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USPHS

RECORD OF OPERATIONS.

Number each operation with serial number 1, 2, 3, 4, etc. Outline areas filled on diagram and draw a line from them and mark with serial number and code letter (Example 1A). Enter sorial number and date of operation in column representing year or grade at time of operation. Example: 1,3320 entered in column 3 would indicate that on March 3, 1920, while in the third grade, pupil had operation performed. Referring to the chart we find (1A) an amalgam filling was inserted. Record for eight grades can be kept on one card.

TREASURY DEPARTMENT, Public Health Service, Child Hygiene, Form 5—Revised July, 1920. U.S.1

C.—Coment.
S.—Synthetic.
G. P.—Gutta-percha.
X.—Extraction.
R. T.—Root treated. A.-Amalgam.

CODE:

Eye clinics.—Additional facilities for special eye work should be provided in the near future, and this service should be made a part of the school health supervision system. The physicians in direct charge should be under the supervision of the director of hygiene and paid by the board of education.

VI. NUTRITION WORK.

Children enrolled in nutrition classes should first receive a careful physical examination, the results of which should be a part of the child's class record. The special instruction given to the children enrolled in these classes should be under the direct supervision of the director of hygiene and be considered a part of the medical school inspection service.

In addition to special advice and instruction given to individual children, mothers should be encouraged to attend these classes for instruction, individually and in groups, in order that the fullest cooperation may be obtained in the homes. Intensive follow-up work by the school nurse is essential to the success of nutrition classes.

Steps should be taken to secure accurate height and weight measurements, periodically, of all the children in the first to eighth grades, inclusive, in order that a local standard of physical development applicable to sex and age periods may be calculated. Such a standard is of highest importance in the selection of candidates for the nutrition classes, and as one of the means of checking the value of the work from the standpoint of individual children.

VII. PHYSICAL TRAINING.

Owing to the intimate relationship of physical training to preventive medicine, it is recommended that the board of education reverse its action and make physical training a subdivision, and make the director of physical training an assistant director of the department of hygiene. The physical training work should be correlated with the school medical inspection service.

VIII. HEALTH EDUCATION.

Greater prominence should be given to health education work in the schools. This should include the preparation of instruction matter adapted to the age of the child, correlation of the work of the teaching staff with that of the school medical, physical training, and nursing personnel, and the organization of the children in practical health work in the schools and in their homes.

Practical health education should be emphasized in the special classes, and the children in all the classes should be encouraged in the

preparation of compositions, posters, and exhibit material relating to health subjects.

The director of hygiene, the school medical inspectors, and the school nurses should stand in closer cooperative relation with teachers and principals, and the subject of health education and health supervision should be discussed in conferences requiring compulsory attendance.

The teaching of health in the schools should be given a place in the curriculum equal in importance to that of major subjects.

IX. SCHOOL RECORDS.

No hard and fast recommendations can be made regarding school medical record forms. In general, the forms should be so devised as to make available at all times accurate information regarding the child's physical and mental condition, the relation of the physical and mental handicaps to school progress, the extent to which these handicaps have been removed, the effect of remediable measures on the child's health and school progress, and the efficiency of follow-up work in bringing about the relief of harmful conditions. The record should accompany the child's scholastic record throughout his school career.

Greater care than seems to be the present practice should be exercised in recording the results of physical examinations in specific terms.

At present no attempt is made to make use of the material collected in the course of physical examinations. All statistical material should be compiled and submitted to the board of education in an annual report showing the prevalence of physical and mental handicaps, the corrections made, and the improvement, if any, in the physical and mental efficiency of the children from year to year. In other words, the public can not be expected to support in a whole-hearted manner this very important work unless its value can be clearly demonstrated.

The accompanying form adopted by the Public Health Service may serve a useful purpose in the preparation of a schedule for recording the results of medical inspections in accordance with the suggestions made in the body of this report.

		-								
(Child's surname.)	(Given name.)		(Name	(Name of school.)	(City, t	(City, town, or district.)		(County.)		(State.)
Sex: M F Color: W.	α	Other	Age	Date	Date of birth: Month	onth		day	year, 19.	19.
		СН	ILD'S SICK	CHILD'S SICKNESS RECORD DURING SESSION	D DURING	SESSION.				
School month of	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.
Number of days school was in session 1.			ve di							
Number of days child was present. Number of days child was absent (all causes) *. Number of days child was absent										
Cause of sickness (name disease) 4.										
Weight (nearest half-pound)										
 Enter number of days school was open during the school month. Do nct count helidays, Saturdays, or Sundays. Enter total number of days alid did NOT attend school during the school month regardless of whether his name was temporarily dropped it the whole amounth. The number of days absent plus the number of days present-should always equal the number of days assent because of days present-should always equal the number of days assent because of sickness. Accurate and careful always should be made, as this is the most important part of Note carefully in the spaces provided under each month the diseases causing absence from school during that month, I. e. cold, measles, etc. please note in this space. 	ool was open during the school month. ye child did NOT attend school during to days, absent plus the number of day d was absent because of sickness. Access provided under each month the disc	ng the school nations the school lus the numbe mae of sickness each month the	nonth. Do nc during the sch r of days prese Accurate a he diseases cau	ool was open during the school month. Do not count helidays, Saturdays, or Sundays. s child did NOT attend school during the school month regardless of whether his name was temporarily dropped from the school roll or carried for of days absent plus the number of days present-should always equal the number of days school was in session. d was absent because of sickness. Accurate and careful entries should be made, as this is the most important part of the record. d was absent because of sickness. Accurate and careful entries should be made, as this is the most important part of the record. ss provided under each month the diseases causing absence from school during that month, i. e., cold, measles, etc. If other remarks are necessary.	rs, Saturdays, rdless of whet ys equal the mes should be me om school dur.	or Sundays. her his name w umber of days ade, as this is t ing that month	as temporarii school was in he most impo i, i. e, cold, ii	ed fr art of stc.	the school rol e record. other remarks	om the school roll or carried for the record. If other remarks are necessary,
			CHILD	CHILD'S SCHOLARSHIP RECORD	HIP RECOF	Ð.				
Age first entered school	What grades this session	grades were ropeated	l by child prior Characters child promo	What grades were ropeated by child prior to this session? ession	t at school duri of THIS sessi	ing present sess on?	: 2	k the proper grading with X): Excellent If child falled this session, what in your opinion	g with X): Ex	cellent
were the causes of failure?	•				Č					
Name of parent or guardian Date this record was begun	192		192	Date this re	ocord was end	Occupation		Date this record was ended		192
	S. PUBLIC HEALTH of School Children.	H SERVICE,	THIS SIDE T	THIS SIDE TO BE FILLED IN BY TEACHER.	BY TEACHER					, Teacher.

TO BE FILLED IN BY NURSF.	TO BE FILL	TO BE FILLED IN BY MEDICAL INSPECTOR.	
Date of first examination, 192 Date of measurements at and of session, 192	Dates of examinations	Primary Ex, 192	Re. Ex, 192
(1	Eye defects.		
1st exam. ins. Fnd sessionins.	Trachoma		
Sitting height (record nearest half-inch)	Nasal defects.		
1st examins. End sersionins.	Throat affections		•••••••••••••••••••••••••••••••••••••••
Weight (no wraps) (record nearest half-pound)	Heart discase		
1st examlbs. End sessionlbs.	Fulmonary diseases		•
Were measurements made in shoes? 1st exam End ses	Montal and hervous disease		•
Chest measure: At rest ins. Expins. Inspins.	Speech defects		
Vital capacity	Enlarged glands.		
Hearing watch—tenths of distance Rt. Lt. Lt.	Blood parasites—malarial 1		
Vision without glasses R. V.	Intestinal parasites 1		
	Skin and scalp conditions		•
	Nutrition 2		
Touth: No decayed: Town	Mental age		
	Other defects or deformities		
Ą	1 Microscopic examination to be made only in suspected cases, but routine in infected localities	only in suspected cases, but rou	ttine in infected localities.
Marked.	Newly as Execution, 1990, 1991, 199	o, or east a cor.	
ီ :	TREATMENT RECORD	RECORD.	Date, 192
	Nature of defect		000000000000000000000000000000000000000
Mouth breathing			0
Skin eruptions	Treatment advised		
Pediculosis		:	•
Spinal curvature	Date parents notified	, 192 Date of parent s consont	
Evidences of defective nutrition.	Case treated by	Н	Date, 192
Other defects or deformities	Nature of treatment		
Any tuberculosis in child's home			
Has child been exposed to tuberculosis in home	Result of treatment		••••••••
Vaccination (smallpox), No. times Yr. last successful		I	Date, 192
Vaccination (typhoid) State year			"Medical Inspector.

X. COOPERATION OF VOLUNTEER AGENCIES.

Reference is made in the body of this report to the work of a number of private agencies in the schools. It is beyond question that such cooperation is and has been of value in paving the way and demonstrating the need of certain forms of health supervision. However, there is a limit to the extent and the length of time these agencies should assume the responsibility of the constituted authority. The health work in the special classes and special schools, including nutrition work, should be administered by the board of education under the supervision of the director of hygiene, and made an integral part of the health supervision system. It is only by such centralized administration and supervision that school health supervision can reach its highest degree of completeness and effectiveness, and that the interruption of class work will be reduced to a desirable minimum.

A BIBLIOGRAPHY OF REFERENCES TO HEALTH LEGISLATION.

Compiled by JAMES A. Tobey, National Health Council, Washington, D.C.

FOREWORD.

The following is a list of references to health legislation and matters of a closely allied nature. Only pamphlets, reprints, and books are listed, no articles being included. For convenience the references are arranged under the following five headings:

- 1. Child Welfare.
- 2. Model Laws.
- 3. Municipal Laws.
- 4. Public Health (General).
- 5. State Laws.

Although an endeavor has been made to have this compilation complete, it is the first of the kind, and references which should have been included may have inadvertently been left out. It will be appreciated if attention is called to omissions

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Mothers' Pensions, Laws Relating to in the United States, Canada, Denmark, and New Zealand.—Bureau Publication No. 63, United States Children's Bureau, Washington, D. C.

Ophthalmia Neonatorum: An Analysis of the Laws and Regulations Relating Thereto in Force in the United States (1911).—Public Health Bulletin No. 49, United States Public Health Service, Washington, D. C.

Probation in Children's Courts (1921).—Bureau Publication No. 80, United States Children's Bureau, Washington, D. C.

. 2. MODEL LAWS.

Births and Deaths: The Model State Law for the Registration of Births and Deaths—Supplement No. 12, United States Public Health Service, Washington, D. C.

Children: Report of the Committee on Health Provisions for State Laws Relating to Children.—National Child Health Council, Washington, D. C.

Health: Model Health Code.—American Public Health Association, 370 Seventh Avenue, New York, N. Y. 15 cents.

Housing: Model Housing Law.—Russell Sage Foundation, 130 East Twenty-second Street, New York, N. Y. \$4.

Milk: Guide for Formulating a Milk Ordinance.—Bulletin No. 585, United States Department of Agriculture, Washington, D. C.

Morbidity: The Model State Law for Morbidity Reports.—Reprint No. 285 from the Public Health Reports, United States Public Health Service, Washington, D. C.

Mosquitoes: Model Mosquito Ordinance.—Reprint No. 563 from the Public Health Reports, United States Public Health Service, Washington, D. C.

Saving Sight: Model Legislation for Saving Sight (an outline).— National Committee for the Prevention of Blindness, 130 East Twentysecond Street, New York, N. Y. Also in Cleveland Hospital and Health Survey, Part 2, page 195. Cleveland Hospital Council, 308 Anisfield Building., Cleveland, Ohio. 50 cents.

Venereal Diseases: Compilation of Suggested and Adjudicated Ordinances Which Have Proved Successful in Combating Venereal Diseases.—V. D. Bulletin No. 39, United States Public Health Service, Washington, D. C.

3. MUNICIPAL LAWS.

A complete list of pamphlets containing municipal laws of individual cities will not be given. Most of the larger cities have compiled their health laws in one volume. Other material is as follows:

Municipal ordinances, rules, and regulations pertaining to public hygiene of cities of the United States, published by the United States Public Health Service, Washington, D. C., as follows:

January 1, 1910-June 30, 1911-Reprint No. 70.

July 1-December 31, 1911-Reprint No. 121.

1912-Reprint No. 199.

1913-Reprint No. 230.

1914—Reprint No. 273.

1915—Reprint No. 364. 1916—Reprint No. 388.

1917-1919-Supplement No. 40.

Smoke Abatement and City Smoke Ordinances.—Bulletin No. 49, United States Bureau of Mines, Washington, D. C.

Suggested Ordinance for Cities. Compiled by Institute of Makers of Explosives, New York, N. Y.

(See also under Model Laws.)

4. PUBLIC HEALTH (GENERAL).

Common Drinking Cups and Roller Towels: An Analysis of the Laws and Regulations Relating Thereto in Force in the United States (1912).—Public Health Bulletin No. 57, Government Printing Office, Washington, D. C. 5 cents.

Communicable Diseases: An Analysis of the Laws and Regulation for the Control Thereof in Force in the United States (1913).—Public Health Bulletin No. 62, Government Printing Office, Washington, D. C. 50 cents.

Court Decisions: Court Decisions Pertaining to Public Health (Previous to 1916).—Reprint No. 342, United States Public Health Service, Washington, D. C.

Court Decisions Pertaining to Public Health (1916).—Reprint No. 410, United States Public Health Service, Washington, D. C.

Court Decisions Relating to Morbidity Reports (1915).—Reprint No. 205, from Public Health Reports, Government Printing Office, Washington, D. C. 5 cents.

Drugs: Digest of Laws and Regulations Relating to Habit-Forming Drugs.—1912, Public Health Bulletin 56; 1912 and 1913, Reprint No. 146; 1913 and 1914, Reprint No. 240; 1915, Reprint No. 267; 1916, Reprint No. 321. All from the United States Public Health Service, Washington; D. C.

Food and Drugs Act: Rules and Regulations for Enforcement of the Food and Drugs Act (1913).—Agriculture Circular No. 21, United States Department of Agriculture, Washington, D. C.

Food and Food Control Laws: 1905, Chemistry Bulletin No. 69; 1906, Chemistry Bulletin No. 104; 1907, Chemistry Bulletin No. 112; 1908, Chemistry Bulletin No. 121. All from the United States Bureau of Chemistry, Washington, D. C.

Lighting, Code of, for Factories, Mills, and other Places (1919).— Reprint No. 499 from Public Health Reports, United States Public Health Service, Washington, D. C.

National Legislation: The National Health Council, 411 Eighteenth Street, Washington, D. C., issues a biweekly statement of national health legislation. The price of this is 20 cents to non-members of the Council.

Night Work Laws in the United States.—Bulletin No. 7, United States Women's Bureau, Washington, D. C.

Organization, Powers, and Duties of Health Authorities: An Analysis of the Laws and Regulations Relating thereto in Force in the United States (1912).—Public Health Bulletin No. 54, United States Public Health Service, Washington, D. C.

Public Health, Legal Principles of. By H. B. Hemenway, M. D. T. H. Flood & Co. Chicago. \$7.50.

Quarantine, Interstate Regulations of the United States (1916).— Miscellaneous Publication No. 1, United States Public Health Service, Washington, D. C.

Quarantine Laws and Regulations of the United States (1910).— Revised edition, June, 1920. United States Public Health Service, Washington, D. C.

Railway Sanitary Code (1920). United States Railroad Administration, Washington, D. C.

Social Hygiene Legislation Manual (1921). American Social Hygiene Association, 370 Seventh Avenue, New York, N. Y.

Stream Pollution: A Digest of Judicial Decisions and a Compilation of Legislation Relating to the Subject (1917).—Public Health Bulletin No. 87, United States Public Health Service, Washington, D. C.

United States Public Health Service, Regulations for the Government of (1920).—United States Public Health Service, Washington, D. C.

Vaccination: An Analysis of the Laws and Regulations Relating Thereto in Force in the United States (1919).—Public Health Bulletin No. 52, United States Public Health Service, Washington, D. C.

Viruses, etc.: Regulations for the Sale of Viruses, Serums, Toxins, and Analogous Products in the District of Columbia and in Interstate Traffic (1919).—Miscellaneous Publication No. 10, United States Public Health Service, Washington, D. C.

Vital and Penal Statistics, Report of Committee on, to National Conference of Commissioners on Uniform State Laws, Madison, Wisconsin. (E. A. Gilmore, Madison, Wis.)

Vital Statistic Laws. American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

Water: Review of Laws Forbidding Pollution of Inland Waters in the United States (1905).—Water Supply Paper No. 152, United States Geological Survey, Washington, D. C.

5. STATE LAWS.

The following publications have been issued by States concerning health laws:

Alabama: Public Health and Medical Laws (1920).

Arizona: Public Health Laws (1919).

Arkansas: Revised Bulletin of the Rules and Regulations of the State Board of Health of Arkansas (1918).

California: General Health Laws (1919).

Colorado: Laws and Regulations, Colorado State Board of Health (1916).

Connecticut: Sanitary Code (1918).

Delaware: Eighteenth Biennial Report of the Board of Health (1912-1915).

District of Columbia: Health Laws.

Georgia: The Ellis Health Law (1919); Health Laws (1914 and 1918); Vital Statistics Law (1919).

Idaho: Hotel Law (1911); Food and Drugs Law (1917); Milk and Dairy Products Law (1917); Slaughter-House and Meat Law (1917); Contagious Diseases (1921).

Illinois: General Information and Laws (1917); Notes on Bill Drafting in Illinois (1920), Legislative Reference Bureau, Springfield, Ill.

Indiana: Manual of Instructions for School Authorities and School Physicians (1911).

Iowa: Rules and Regulations (1917); Law on Venereal Diseases (1919).

Kansas: Laws, Rules, and Regulations Relating to Public Health (1919).

Kentucky: Public Health Manual—Laws, Rules, and Court Decisions (1919).

Maine: Abstract of the Health Laws (1919); Rules and Regulations in Relation to Plumbing Work (1920).

Maryland: The Laws of Maryland Relating to Public Health (1915).

Massachusetts: Laws Relative to Prevention of Disease (1915); Laws Relative to Nuisances, Sources of Filth, and Causes of Sickness (in General) (1915); Laws Relating to Milk and Milk Products (1919); Special Laws Relating to Foods and Drugs (1919); Manual of Health Laws (1915).

Michigan: Laws Relating to Public Health (1917, 1919).

Minnesota: State Health Laws and Regulations (1919).

Mississippi: Rules and Regulations Governing Infectious Diseases and Sanitation (1918); Vital Statistics Law (1912).

Missouri: Health Officers' Manual (1918); Laws Governing Registration of Deaths and Births.

Montana: Public Health Laws and Regulations (1915); Hotel Law, Rules and Regulations (1919); Food and Drug Laws, Rules and Regulations (1919).

Nebraska: Rules and Regulations (1919).

Nevada: Health Laws (1919); Rules and Regulations Governing the Reporting of Certain Diseases and Management of Quarantine (1920).

New Hampshire: The Principal Public Health Laws (1915); Abstract of Laws and Regulations Relating to the Sale of Foods and Medicines (1919).

New Jersey: Public Health Laws (1918); Reprints on specific regulations; The Sanitary Code (1917).

New Mexico: The Public Health Law (1919); Reprints of various regulations.

New York: Public Health Manual (1919); Compilation of Laws, Regulations, and Agencies Relating to Tuberculosis (1918); Model Health Regulations for Communities.

North Carolina: Reprints on specific regulations; Compilation of Public Health Laws (1917); Social Laws and Agencies, American Red Cross Handbook, Southern Division, Atlanta, Ga.

Ohio: Laws Relating to Occupational Diseases and Industrial Hygiene (1913); Public Health Manual (1920).

Oklahoma: Laws, Rules, and Regulations Governing Sanitation (1919); Food and Drug Law (1911).

Oregon: Health Laws (1919).

Pennsylvania: Synopsis of Health Laws (1920).

Rhode Island: Rules Governing Control of Contagious Diseases (1919).

South Carolina: Sanitary Code (1919).

South Dakota: Laws Relative to Public Health and Safety (1919). Texas: Vital Statistics Manual.

Vermont: General Laws Relating to the State Board of Health (1918).

Virginia: Reprints of various laws and regulations.

Washington: Rules and Regulations and Statutes (1917); Rules Relating to Reporting of Venereal Diseases (1919).

West Virginia: Health Laws (1919).

Wisconsin: Rules and Extracts from Laws Pertaining to the Prevention and Control of Communicable Diseases (1919); Powers and Duties of Boards of Health (1918).

Wyoming: Synopsis of Laws (1919).

Other references to State laws:

State Laws and Regulations Pertaining to Public Health, published by the United States Public Health Service, Washington, D. C., as follows:

July 1, 1911-December 31, 1912-Reprint No. 200.

1913—Reprint No. 264.

1914—Reprint No. 279.

1915—Reprint No. 338.

1916-Reprint No. 406.

1917—Supplement No. 37.

1918—Supplement No. 38.

Dependent Classes: Summary of State Laws Relative to the Care of the Dependent Classes (1913). United States Bureau of the Census, Washington, D. C. 60 cents.

Explosives: Suggested State Law Compiled by Institute of Makers of Explosives, New York, N. Y.

Hospitals: State Laws Authorizing County and City Hospitals.—Journal of the American Medical Association, Chicago, April 9, 1921, p. 1034.

Insane: Summaries of State Laws Relating to the Insane (1917). National Committee for Mental Hygiene, 370 Seventh Ave., New York, N. Y.

Physical Education: Recent State Legislation for Physical Education (1918).—Bulletin No. 40, United States Bureau of Education, Washington, D. C.

Public Education: Digest of State Laws Relating to Public Education (1915).—Bulletin No. 47, United States Bureau of Education, Washington, D. C. (Includes School Hygiene Laws.)

(See also under Child Welfare and Model Laws.)

PREVALENCE OF POLIOMYELITIS.

The following table gives the number of cases of poliomyelitis (infantile paralysis) reported to the Public Health Service by State health officers from May 29 to August 6, 1921, inclusive. These reports are preliminary and necessarily incomplete.

Poliomyelitis (infantile paralysis)—Number of cases of poliomyelitis occuring in various States, as reported to the Public Health Service by the State health officers in weekly telegraphic or mail reports.

[States omitted are those from which no reports have been received or which have reported no poliomyelitis during the period covered. Leaders indicate that reports were received but no cases of poliomyelitis were reported.]

		. :			Week	ended	(1921)			
State.		Ju	ne.				July.			Aug.
	4	11	18	25	2	9	16	. 23	90	6
Arkansa California Connecticut District of Columbia Georgia Illinois Indiana Iowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Minnesota Mississippi Missouri Montana Nebraska New Jersey New York 2 North Carolina Ohio South Dakota Texas Vermont Virginia Wissoun Vermont Virginia Wissoun	1 (1)	1. 1 2 1 1 1 1 2 1 1 1 2 (1) (1)	2 1 4 2 2 1 (t) (t) (t)	3 1 2 6 (1)	2 2 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 3 3 3 3 12 1 1 1 2 2 2 2 2 1 1 (1) 2 3 (1) (1) 4 4	3 2 2 4 4 15 3 2 2 2 2 1 4 6 3 3 4 1 1 2 2 9 9	24 6 1 1 1 5 5 10 (t) (t) (t)	100 5 7 7 8 8 1 1 1 1 2 1 1 7 7 100 101 2 6 6 15 27 23 3 3 2 2 12	(1) (1) (2) (3) (4) (2) (1) (1) (2) (1) (2) (1) (1) (2) (1) (2) (1) (1) (2) (1) (1) (2) (1) (1) (2) (1) (1) (2) (1) (1) (2) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1

¹ No report received.

² Exclusive of New York City.

EDUCATIONAL CAMPAIGN AGAINST CANCER.

National "Cancer Week" Planned by the American Society for the Control of Cancer.

The American Society for the Control of Cancer is making arrangements for a National Cancer Week to be held throughout the United States and Canada from October 30 to November 5, 1921. This is the first attempt on the part of the Society to carry out a uniform campaign at one time throughout the country, and it earnestly bespeaks the cooperation of all national, State, and local agencies interested in public health.

The aim of this campaign is entirely educational, and it is desired to reach all sections of the country and as large a part of the population as possible with the message of cancer control. The three principal educational activities will be:

- (1) The giving of lectures by well-known physicians and surgeons, who have volunteered for this service and who compose the lecture bureaus of the State and local committees for cancer control recently organized by the society.
- (2) The distribution of literature at all meetings held during the week.
- (3) Suitable publicity in the lay press, official health bulletins, and articles in professional journals.

For the purpose of this campaign the American Society for the Control of Cancer has organized campaign committees in practically all communities of 5,000 or more population, and has arranged for the appointment of a chairman of each of these local committees, who is to select committees to carry out the program locally. The names of these chairmen can be secured by writing to the Headquarters Office of the Society, 25 West Forty-fifth Street, New York City.

The Society seeks the cooperation and assistance of all State and local boards of health, State and county medical societies, nursing and other organizations. These organizations can assist materially in making arrangements for lectures. All persons interested in this campaign are urged to get in touch with the chairman of the local committee, or with the Headquarters Office of the Society. Suggestions are invited and all possible assistance is solicited.

CINCINNATI HEALTH EXPOSITION.

A health exposition is to be held in Cincinnati October 15-22, 1921, under the auspices of the Cincinnati Public Health Federation and in cooperation with various national, State, and local organizations.

The purpose of the exposition, as stated by the executive committee, is to stimulate a wider interest among health organizations and individuals in the maintenance of high standards of public health, by showing what is now being accomplished in this work and the value of such work to the individual and the community.

The exposition will comprise three main divisions:

- (1) Noncommercial educational exhibits.
- (2) Commercial exhibits; and
- (3) Lectures and motion pictures.

It is in no sense a commercial exposition, and the commercial space is sold because it is believed that many commercial articles and processes employed in health work should be a part of the educational feature of such an exposition, and the sale of space will help meet the expense of the noncommercial exhibits.

The committee engaged in developing the plans realize that success in an exhibit of this kind depends upon attracting large numbers of people and they state that they expect to do this by presenting novel and interesting exhibits of public health activities.

DEATHS DURING WEEK ENDED JULY 30, 1921.

Summary of information received by telegraph from industrial insurance companies for week ended July 30, 1921, and corresponding week, 1920. (From the "Weekly Health Index," Aug. 2, 1931, issued by the Bureau of the Census, Department of Commerce.)

Policies in force		July 30, 1921.	Corresponding week, 1920. 44, 225, 454
Number of death claims			7, 293
Death claims per 1,000 policie	s in force	 8.0	8 6

Deaths from all causes in certain large cities of the United States during the week ended July 30, 1921, infant mortality, annual death rate, and comparison with corresponding week of preceding years. (From the Weekly Health Index, Aug. 2, 1921, issued by the Bureau of the Census, Department of Commerce.)

	P-41	Week July 3	ended 0, 1921.	Average		s under 1 ear.	Infant mor- tality
City.	Estimated population, July 1, 1921.	Total deaths.	Death rate.1	annual death rate per 1,000.2	Week ended July 30, 1921.	Previous year or years.3	rate, week ended July 30 1921.3
Akron, Ohio	229, 195	19 28	4.3 12.7	48.1 C 8.7	4	45	3
Albany, N. 1 Atlanta, Ga	228, 195 115, 071 207, 473 752, 863 186, 133 757, 634 149, 967 519, 008	63	12.7	C 8.7 C 14.9	2 15	C 2 C 14	4
Baltimore, Md	752, 863	195	13.5	A 17.3	37	A 59	10
Birmingham, Ala	186, 133	60	16.8	A 20.8	12	A 9	l
Boston, Mass	757,634	203	14.0	A 13.9	29	A 33	7: 5
Bridgeport, Conn	149,967	24 107	8.3 10.7	A 18.5	4	A 15 C 20	5
Cambridge Mass	110, 444	28	13. 2	C 11.3 A 12.1	27 2	A 5	10
Camden, N. J	119,672	17	7.4		4		3
Birmingham, Ala. Boston, Mass. Bridgeport, Conn. Buffalo, N. Y. Sambridge, Mass. Samden, N. J. Chleago, III. Cincinnati, Ohio. Cleveland, Ohio. Cleveland, Ohio. Dallas, Tex. Dayton, Ohio. Derver, Colo. Detroit, Mich. Eall River, Mass.	2, 780, 655	544	10. 2	A 12.4	92	A 125 C 11 C 25	
Incinnati, Unio	403, 418	98	. 12.7	C 12.2	20 24	C 11	13
Columbus Ohio	831, 138 245, 358	179 55	10.7 11.7	C 9.5 C 13.5	9	C 25 C 7	6- 10-
Dallas, Tex	245, 358 165, 282	39	12.3	A 13.0	4	A 5	10
Dayton, Ohio	158, 119	30	9.9	A 13.9 C 7.8	9	A 5 C 2	14
Denver, Colo	263, 152	54	10.7	A 11.7	7		
Detroit, Mich	1,070,450	194	9.5	C 9.9 C 9.9	51	C 61 C 6	90
Irand Rapids Mich	120,668	33	14.3 10.0	C 11.6	9 5	C 6	13. 8.
Houston, Tex	141, 197 144, 340 325, 215 302, 788	33 27 24	8.7	0 11.0	3		
ndianapolis, Ind	325, 215	65 I	10. 4	C 13.6	7 1	C 15	5-
ersey City, N. J.	302, 788	75 22	12.9	C 11.8	28	C 13	193
Cansas City, Kans	103, 884 336, 157	98 I	11.0	C 9.7 C 13.5	22	C 4 C 11	73
os Angeles Calif	611, 921	125	15. 2 10. 7	A 11 0	18	X ii	8
Detroit, Mich Fall River, Mass Frand Rapids, Mich Houston, Tex ndianapolis, Ind ersey City, N. J Kansas City, Kans Kansas City, Mo. Los Angeles, Calif Louisville, Ky Lowell Mass	236,083	75	16.6	A 11.0 C 12.6	18	C 10	200
owell, Mass. demphis, Tenn dilwaukee, Wis. dinneapolis, Minn. Nashville, Tenn lew Bedford, Mass. New Haven, Conn. lew Orleans, Le. lew York, N. Y. lewark, N. J. orfolk, Va. akland, Calif. maha, Nebr. "aterson, N. J. "hiladelphia, Pa. ittsburgh, Pa. ortland, Oreg.	113, 757	75 34	15.6	A 16.2	11	A 12	177
demphis, Tenn	165, 389	59	18.6	C 16.3	.4	C 6	
finneanolis Minn	468, 386 392, 815	81 76	9. 0 10. 1	A 10.1 C 10.2	17 6.	A 15 C 8	8
ashville, Tenn	122, 036	44	18.8	C 19.3	4	čš	
lew Bedford, Mass	125, 012	26	10.8	A 15.2	6	A 13	9:
lew Haven, Conn	167,007	43	13.4	C 12.7	4	C 9	4
Jaw Vork N V	394,057	105 1,224	13. 9 11. 1	A 16.7 C 9.2	248	A 14 C 208	97
Jewark. N. J.	5,751,867 424,885	92	11.3	C 9.2	25	C 21	111
orfolk, Va	121, 260	26	11.2		5		8
akland, Calif	226, 472	47	10.8	A 10.4	2	A 4	25
maha, Nebr		36 32	9.5		4 .		46
hiladelnhia Pa	1 986 212	32 349	12.1 9.8	4 13. 8	8 62	110	135 75
ittsburgh. Pa	602, 452	141	12. 2	C 12.6	28	C 22	99
ortland, Oreg	197, 066 137, 066 1, 866, 212 602, 452 264, 859 239, 645 175, 686 305, 229	37	7.3	C 12.6 C 12.2	5	C 4	96 50
rovidence, R. I	239, 645	47.	10.2	C 10.3	8	C 4	65
cohector N V	175,686	48 72	14. 2 12. 3	C 14.5 C 9.2	11 16	C 12 C 7	134 124
Louis Mo	796 164	172	11.4	C 9.8	19	C 4 C 12 C 7 C 18 C 5	124
Paul, Minn	786, 164 237, 781	39	8.6	C 10.4	3	Č 5	30
alt Lake City, Utah	121,595	30	12.9	A 8.9	2 .		31
an Francisco, Calif	520, 546	121	12.1	C 12.1	7	C 12	41
nokana Wash	327, 227	41 17	6. 5 8. 5	A 8.0 C 12.0	4	A 6 C 4 C 6 C 4 A 8 A 14 A 20	33 22
pringfield. Mass	104, 442 135, 877 177, 265	26	10.0	C 7.5	3	č š	45
yracuse, N. Y	177, 265	30	8.8	C 9.6	9	Č 4	108
oledo, Ohio	253 MM I	51	10.5	A 13.7	8	A 8	81
renton, N. J	122,760	40	17.0	A 19.6	7	A 14 A 20	106
ilmington Del	454, 026 113, 408	118 38	13.6 17.5	A 15.0 C 10.3	13 2	A 20	76
ittsburgh, Pa ortland, Oreg rovidence, R. I. cichmond, Va cochester, N. Y t. Louis, Mo. t. Paul, Minn alt Lake City, Utah an Francisco, Calif eattle, Wash. pokane, Wash. pokane, Wash. pringfield, Mass yracuse, N. Y oledo, Ohio renton, N. J. /ashington, D. C. //limington, Del //orcester, Mass onkers, N. Y oungstown, Ohio.	184, 972	45	12.7	C 10.3	8	C 7	86
onkers, N. Y	103, 324	16	8.1	A 12.6	3	A 4	68
oungetown Ohio	139, 432	37	13.8	C 4.6	7	C 3	89

¹ Annual rate per 1,000 population.
2"A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1920.

1 Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1920. Cities left blank are not in the registration area for births.
1 Data based on statistics of 1915, 1916, and 1917.

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.

Telegraphic Reports for Week Ended Aug. 6, 1921.

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

the State hearth officers.	•		· · · · · · · · · · · · · · · · · · ·	
ALABAMA.	Case	es.		asas.
Diphtheria		23	Chicken pox	. 5
Dysentery		2	Diphtheria	. 24
Malaria	•••••	12	Dysentery (bacillary)	. 2
Measles		3	Influenza	. 1
Ophthalmia neonatorum		2	Lethargic encephalitis	
Pellagra	•••••	18	Measles	. 13
Pneumonia		24	Mumps	
Scarlet fever		11	Pneumonia (lobar)	
Smallpox		12	Poliomyelitis	
Tuberculosis		12	Scarlet fever	
Typhoid fever		37	Septic sore throat	2
Whooping cough		2	Tetanus	
	1		Trachoma	
ARKANSAS.			Tuberculosis (all forms)	
Chicken pox		16	Typhoid fever:	
Diphtheria		10	Enfield	. 16
Influenza		4	Scattering	
Malaria	2	19	Whooping cough.	
Scarlet fever		8		
Smallpox		3	FLORIDA.	
Trachoma		5	Cerebrospinal meningitis	. 1
Tuberculosis	,	24	Diphtheria	10
Typhoid fever		83	Influenza	110
Whooping cough		6	Lethargic encephalitis	. 1
COLORADO.			Malaria	34
COLORADO.	7		Ophthalmia neonatorum	. 1
(Exclusive of Denver.)			Pneumonia	
Chicken pox		5	Poliomyelitis	. 1
Diphtheria		7	Smallpox	
Measles		6	Typhoid fever	
Mumps		7	•	
Poliomyelitis		1	GEORGIA.	
Scarlet fever		2	Cerebrospinal meningitis	. 1
Smallpox		37	Chicken pox	. 3
Trachoma		1	Conjunctivitis (acute infectious)	
Tuberculosis		4	Diphtheria	
Mumbaid favor	1.0	6	Dysentery (amebic)	
Whooping cough		6	Dysentery (bacillary)	. 1

	ases.		ases.
Hookworm		Typhoid fever:	
Influenza		Macon County—Decatur Township	. 9
Malaria		Scattering	46
Measles			
Mumps		INDIANA.	
Paratyphoid fever		Diphtheria.	75
Pellagra		Poliomyelitis:	
Pneumonia	. 2	Laporte County	2
Scarlet fever		St. Joseph County.	3
Septic sore throat	, 3	Scarlet fever	36
Smallpox		Smallpox	16
Tuberculosis (pulmonary)	27	Typhoid fever	53
Typhoid fever	51	IOWA.	
Whooping cough	3	1 3	
IDAHO.		Cerebrospinal meningitis—Boone	1
•	_	Diphtheria	30
Diphtheria	2	Poliomyelitis:	
Measles	1	Ardon	1
Scarlet fever	1	Burlington	1
Smallpox	1	. Clarion	1
Typhoid fever	5	Cedar Rapids	1
ILLINOIS.		Delmar	1
		Iowa City	1
Cerebrospinal meningitis—Quincy	1	Muscatine	1
Diphtheria:		Scarlet fever	14
Chicago	87	Smallpox	33
Scattering	50		w
Influenza	3	Kansas.	
Lethargic encephalitis—Morrison	1	Cerebrospinal meningitis	2
Pneumonia	78	Chicken pox.	2
Poliomyelitis:		Diphtheria	
Arlington Heights	2		77
Auburn	1	Measles	5
Beardstown	2	Mumps	3
Carlinville	1	Pneumonia.	3
Chicago	7	Scarlet fever	53
Christian County—Buckhart Township	1	Smallpox	19
Clinton	1	Tuberculosis	41
East St. Louis	1	Typhoid fever	69
Evanston	1	Whooping cough	27
Gillespie	1	LOUISIANA.	
Greenfield	1	Diphtheria	ìo
Hamilton	1	Scarlet fever	2
Highland Park	2		
McLean County-Hudson Township	2	Smallpox	4
Macoupin County-	- 1	Typhoid fever	15
Nilwood Township	1	Whooping cough	3
North Ottercreek Township	1	MAINE.	
North Palmyra Township	1	Chicken pox	2
Maywood	1	Diphtheria	9
Morgan County-Franklin Precinct	1	Influenza.	. 3
Oak Park	1	Measles.	1
Ottawa	1	Mumps.	9
Rankin	1	Pneumonia	2
Rockfalls	1		
Sangamon County—	- 1		10 16
Buffalo Hart Township	1		16
New Berlin Township.	î	Typhoid fever	5
Springfield Township	i	Whooping cough	31
Waukegan	i	MARYLAND.1	
Winchester	i	Chicken pox	2
Scarlet fever:	-	Cholera infantum.	2
	26	Diarrhea.	1
	25		26
~ **	8	Dysentery	
www.pvw	- 1	ar years to the formation of the first terms of the	5

MARYLAND—continued. C	ases.	MISSOURI—continued. Ca	ses.
Influenza	. 3	Smallpox	. 1
Malaria		Trachoma	2
Measles		Tuberculosis	40
Mumps		Typhoid fever	21
Paratyphoid fever	. i	Whooping cough	41
Pellagra	. i	· ·	71
Pneumonia (all forms)		MONTANA.	
Poliomyelitis	. 6	Cerebrospinal meningitis—Ekalaka	
Scarlet fever.	. 11	Diphtheria	. 1
Septic sore throat	. 3	Scarlet fever	
Tetanus	. 2	Smallpox	. 1
Tuberculosis	. 56	Typhoid fever.	12
Typhoid fever		Typhod level	9
Whooping cough	190	NEBRASKA.	
•	. 140	Corebrognius I maningitie Omeke	_
MASSACHUSETTS.		Chicken por	
Cerebrospinal meningitis	. 4	Chicken pox	1
Chicken pox	17		_
Conjunctivitis (suppurative)	. 5	Lincoln	2
Diphtheria	104	Omaha	
Dysentery	2	Measles	2
Lethargic encephalitis	2	Mumps	1
Malaria	4	Scarlet fever	10
Measles	92	Smallpox	8
Mumps	20	Tuberculosis	14
Ophthalmia neonatorum	97	Typhoid fever	7
Programania (labor)	. 27	Whooping cough	6
Pneumonia (lobar)		NEW JERSEY.	
Poliomyelitis			
Trachoma		Cerebrospinal meningitis	1
Tubercules (all farms)	3	Chicken pox	13
Tuberculosis (all forms)	150	Diphtheria	90
Typhoid fever	19	Influenza	1
Whooping cough	117	Malaria	2
MINNESOTA.		Measles	47
O		Pneumonia	36
Cerebrospinal meningitis	2	Poliomyelitis	7
Chicken pox	. 2	Scarlet fever	32
Diphtheria	28	Smallpox	1
Measles	1	Trachoma	1
Pneumonia	1	Typhoid fever	25
i onomy onvis.	_	Whooping cough	136
Mahnomen County	5	NEW MEXICO.	
Norman County.	5	NEW MEAICO.	
Ottertail County	8	Cerebrospinal meningitis	1
Wadena County		Diphtheria	13
Scattering		Measles	1
Scarlet fever	35	Mumps	1
Smallpox	25	Pneumonia	1
Tuberculosis	70	Tuberculosis	37
Typhoid fever		Typhoid fever	4
Whooping cough	6	NEW YORK.	
Mississippi.	. 1		
Diphtheria	20	(Exclusive of New York City.)	
Scarlet fever	4	Diphtheria	131
Smallpox	6	Influenza	3
Typhoid fever		Lethargic encephalitis	2
	-20	Measles	
MISSOURI.	- 1		59
Chicken pox	3	Poliomyelitis:	
Diphtheria	26	Utica	5
Measles	1		19
Mumps	2		61
Ophthalmia neonatorum.			
	2		8
Poliomyelitis	2 5	Smallpox	

NORTH CABOLINA.	28585.	WASHINGTON. C	ases.
Cerebrospinal meningitis	. 1	Chicken pox	. 5
Chicken pox		Diphtheria	. 18
Diphtheria		Measles	. 24
Measles			
Poliomyelitis			. 39
Scarlet fever.			. 21
Septic sore throat		Typhoid fever	. 8
Smallpox		Whooping cough	 . 27
Typhoid fever		whoping cough	. 21
Whooping cough	. 103	WEST VIRGINIA.	
SOUTH DAKOTA.		Diphtheria	. 13
Cerebrospinal meningitis	. 1	Measles	. 6
Diphtheria		Poliomyelitis:	
Measles		Charleston	. 1
		Pennsboro	. 1
Poliomyelitis		Scarlet fever	. 8
Scarlet fever		Smallpox	. 3
Smallpox		Typhoid fever	22
Tuberculosis		1 a	
Typhoid fever	. 2	WISCONSIN.	
Whooping cough	. 4	Cerebrospinal meningitis	4
TEXAS.			_
Diphtheria	71	Diphtheria	13
Dysentery		Poliomyelitis	4
Measles.		Scarlet fever.	7
		Smallpox	2
Pellagra		Tuberculosis	
Smallpox		Typhoid fever	- 1
Typhoid fever		Whooping cough	17
Whooping cough	25	Scattering:	
VERMONT.		Chicken pox	2
Chicken pox		Diphtheria	31
Diphtheria	15	Measles	6
Measles	42	Poliomyelitis	17
Mumps	6	Scarlet fever	27
Poliomyelitis	3	Smallpox	9
Scarlet fever	4	Tuberculosis	17
Smallpox	1	Typhoid fever	11
Whooping cough	30	Wheoping cough	83
Kentucky Report for	r W	eek Ended July 30, 1921.	
Ca	ses.	Case	AS.
Chicken pox	1	Smallpox	
Colitis (entero).	1	Tonsillitis	ĭ
Diphtheria	21	Tuberculosis	15
Dysentery	4	Typhoid fever:	10
Malaria	5		15
	5	Christian County	15
Pellagra	-	Lincoln County	8
Pneumonia	3	Scattering.	60
Scarlet fever	14	Whooping cough	18
Septic sore throat	1		

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.	Maleria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
JUNE, 1921. California Delaware Montana New York Pennsylvania South Dakota W yoming	19 8 15 3 2	661 6 22 2, 260 1, 132 25 2	87 1 29	31 3	1, 287 9 16 3, 865 2, 058 138 72	1	11 1 2 7	408 72 18 1,697 1,184 55 13	412 108 89 14 151 11	95 9 12 82 165 4

RECIPROCAL NOTIFICATIONS.

Connecticut-July, 1921.

Cases of communicable diseases referred during July, 1921, to other State health departments by department of health of the State of Connecticut.

Disease and locality of notifi- cation.	Referred to health authority of—	Why referred.
	State Department of Health, Albany, N. Y	by sister from New York City. Onset of disease was 8 days after patient's arrival from New York
	do	ofter leaving Brooklyn N V
	-	Hospital from a summer camp at Carmel, N. Y.
Greenwich, Conn	do	Patient was removed from his home in Port Chester, N. Y., to Greenwich Hospital for treat- ment.
Measles: Madison, Conn	State board of health, Trenton, N. J.	Patient became ill 5 days after leaving South Orange, N. J., where she was exposed to a known case of measles.
	State Department of Health, Albany, N. Y.	Patient arrived in Hartford from Brooklyn, N. Y., on July 2, be- coming ill with poliomyclitis on July 4.
	do	The onset of disease was in South Norwalk, Conn. Child was re- moved to the Babies Hospital, New York City.
Smallpox suspect: New London, Conn	State Board of Health, Burlington, Vt.	A case of possible smallpox left New London, Conn., to go to Brattleboro, Vt.
Tuberculosis: Greenwich, Conn	State Department of Health, Albany, N. Y. do	Patient went from Greenwich, Conn., to Otisville, N. Y.
Cos Cob, Conn	do	Patient went from Cos Cob (Green- wich), Conn., to Monticello, N. Y.
Typhoid fever: Hartford, Conn	State Department of Public Health, Boston, Mass.	Patient visited Rowe, Mass., while in the incubation period of typhoid fever, becoming ill with the disease on her return to Hartford.
New Britain, Conn	State Board of Health, Baltimore, Md.	Patient was taken ill two weeks after arriving in New Britan, Conn., from Baltimore, Md., where he was a student.

PLAGUE.³

HUMAN CASES OF PLAGUE REPORTED.

Place.	Period covered.	Cases.	Deaths.	Remarks.
California: San Benito County	1921. Feb. 7 June 11	i	1	•

¹ A summary of the reports received of the occurrence of plague and the finding of plague-infected rodents in the United States during 1920 was published in Public Health Reports, Jan. 7, 1921, p. 15.

PLAGUE-INFECTED RODENTS.

Place.	Period covered.	Rodents found plague infected.
California: San Benito County	1921. May 22 to June 4	18
Florida: Pensacola	Jan. 1 to Apr. 18. Apr. 19 to Aug. 6.	5
New Orleans Texas:	Jan. 1 to May 26 May 27 to Aug. 6	38
Galveston	Jan. 1 to May 28. May 29 to Aug. 6.	10

¹ Ground squirrels, Citellus beecheyi.

CITY REPORTS FOR WEEK ENDED JULY 23, 1921.

ANTHRAX.

	City.		Cases.	Deaths.
Louisiana: New Orleans			1	1

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median		ended 23, 1921.	City.	Median for pre-		ended 3, 1921.
•	years.	Cases.	Deaths.	13.3 1	years.		Deaths.
California: Los Angeles San Francisco. Connecticut: Bridgeport Indiana: Marion Maryland: Baltimore Massachusetts: Boston Pittsfield Michigan: Detroit Minnesota: Duluth	1 0 0 0 1 1 1 0	3 2 1 1 1 1 1 2 2	1 1	Misseuri: St. Louis New Hampshire: Manchester. New Jorsey: Newark. New York: New York. Ohio: Kenmore. West Virginia: Charieston. Wisconsin: Milwaukee.	1 0 0 6	1 8 1 1	2 1

CITY REPORTS FOR WEEK ENDED JULY 23, 1921—Continued.

DIPHTHERIA.

See p. 1958; also Telegraphic weekly reports from States, p. 1947, and Monthly summaries by States, p. 1951.

INFLUENZA.

(ity.	Cases.	Deaths.	City.	Cases.	eaths.
Ani-ona: Tucson (alifernia: Los Angeles San Francisco Georgia: Atlante	•••••	1	Maryland: Baltimore. New York: New York. Texas: Dallas. El Paso.	4	
		LEPI	ROSY.		
California: Los Angeles		1 1	Minnesota: Minneap. lis	. 2	•••••
	LET	HARGIC E	NCEPHALITIS.		
California: San Francisco	1 1		Nebraska: Omaha New York: Poughkeepsie	1 1	. 1
		MAL	ARIA.		
Alabama: Birmingham Tuscaloosa Arkansas: Little Rock North Little Rock California: Los Angeles Sacramento Connocticut: Greenwich Georgia: Atlanta Brunswick Macon Savannah	2 1 13 4 3 1 1 6	i	Kentucky: Louisville. Louisiana: New Orleans. New Jersey: East Orange. New Brunswick. Trenton. New York: New York: White Plains. Tennessee: Memphis. Texas: Beaumont. Dallas.	1 2 1 1 10 10 10 8 8	1

MEASLES.

Sec. p. 1958; also Telegraphic weekly reports from States, p. 1947, and Monthly summaries by States, p. 1951.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Birmingham	1	1 1 1	Tennessee: Memphis Texas: Dallas Virginia: Norfolk	3	1 1

CITY REPORTS FOR WEEK ENDED JULY 23, 1921—Continued. PNEUMONIA (ALL FORMS).

City.	Cases.	Deaths.	City.	Cases.	Dea
	4.0	,	Nebraska:		
labama: Rirmingham		4	Omaha		
Mobile		ī	Nevada:	1	1
Birmingham	1		Reno	. 1	
Arizona:	1	1	New Hampshire: Berlin	1	-
Tucson		. 2	Berlin	.	ŀ
alifornia:	1	Ι.	New Jersey: Atlantic City Belleville East Orange Elizabeth Gloucester City Hackensack Jersey City Morristown Newark Orange Paterson		l
Alameda		1	Pollerille	5	
Bakersfield Berkeley Long Beach Los Angeles Riverside	1 -	1 1	Fact Orange	•	ļ
Long Reach		i	Elizabeth		1
Tag Angeles	8	7	Gloncester City	2	l
Riverside	l. ĭ		Hackensack		
San Diego	4	3	Jersey City		
San Diego	8		Morristown		i
olorado:	1		Newark	18	
Colorado Springs		1	Orange	1	l
Colorado Springs Denver		2	Paterson	1	
on necticut:	l.	1 '	Plainfield	1	
Hartford	2	1	Summit Trenton	1	
Hartford Meriden	l	Ī	Trenton	1	
New London		3	New York:	1	I
vistrict of Columbia: Washington		l	New York: Cohoes.		l
Washington		8			
leorgia: Savannah			Leckawanna. Mount Vernon. New York. Olean.	2	
		1	Mount vernon	3	
llinois: Alton Aurora Cicero East St. Louis. Jacksonville. Kewanee Peoria. Springfield diana:		1	New York	. 166	
Alton	1 1		Olean		
Aurora	1 1		Rochester Saratoga Springs. Syracuse. Troy. White Plains	• • • • • • • • • • • • • • • • • • • •	
Cicero	1	ļ	Saratoga Springs		•
Tecksonville		i	Trov	3	
Vowanaa	• • • • • • • • • • • • • • • • • • • •	1 2	White Plains		
Doorie		1	White PlainsYonkers	-	• • • • • •
Springfield	•••••	i			
ndiana:		•	North Carolina: Charlotte		
Fort Wayne		1	Ohio:		
Fort Wayne		5	AkronBarberton	2	
Marion		ĭ	Barberton	ī	
South Bend		ī	Bucyrus	i	
ansas:		· .	Canton Cincinnati Cleveland Springfield		
Kansas City	1		Cincinnati		
ansas: Kansas City Topekaentucky:		2	Cleveland	5	 .
			Springfield		
Louisville		3	Pennsylvania:	ايدا	
ouisiana:		اہ	Pennsylvania: Philadelphia		
New Orleans	4	2			
aine:		_	Pawtucket Providence		
Biddeford	[]	1			
aryland: Baltimore	ا مه				
Cumberland	14	11 1	Charleston. Tennessee: Memphis. Nashville.	• • • • • • • • • • • • • • • • • • • •	
assachusetts.	• • • • • • • • • • • • • • • • • • • •	1	Memphis		
Boston		9	Nashville		
Cambridge	1	•			
Cambridge Clinton	i	• • • • • • • • • • • • • • • • • • • •	Beaumont		
Kall Kivor	1 1		Dallas		
Larnn		· · · · · · · · · · · · · · · · · · ·	Beaumont. Dallas El Paso. Galveston.		
Malden		<u>-</u>	Galveston		
Methuen		i	IL/TEALDI I		
Newton	1		", Salt Lake City		
Salem		1			
Taunton		1	Lynchburg		
Worcester		1	Norfolk		
		!	Virginia: Lynchburg Norfolk Richmond		
Detroit	14	10	West Virginia:		
Grand Rapids		1	West Virginia: Wheeling.		
Detroit. Grand Rapids. Muskegon. Pontiac. Saginaw	1		Wisconsin:	L	
Pontiac	1		Fond du Lac	[
Saginaw		. 1	Madison	·····i	
			Milwaukee	1 -	
St. Paul		2		i	
issouri:	I	2	i	1	
Kansas City	• • • • • • • • • • • • • • • • • • • •		1	l	
St. Jusedn		4 1	į į		

CITY REPORTS FOR WEEK ENDED JULY 23, 1921—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of eases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-		k ended 23, 1921.	City.	Median for pre-	Week ended July 23, 1921.	
	vious years.	Cases.	Deaths.		vious years.	Cases.	Deaths.
California: Oakland Sacramento San Francisco Connecticut: Greenwich Meriden District of Columbia: Washington Illinois: East St. Louis Elgin Jacksonville La Salle Springfield Iowa: Masson City Maryland: Baltimore Massachusetts: Belmont Boston Haverhill North Adams Michigan: Detrott Fiint Highland Park Pontiac	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 11 12 3 11 11 12 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Minnesota: Minneapolis. Missouri: St. Louis. Nebraska: Lincoln New Jersey: Jersey City. New York: Lackawanna New York: Schenectady. Troy Ohio: Cleveland Columbus. Oregon: Portland Pennsylvania: Altoona Philadelphia Pittsburgh Texas: El Paso Virginia: Norfolk Richmond Wisconsin: Milwaukee	0 0 0 0 0 3 0 0 0 0 0 0 0 0 0 0	6 2 3 3 1 1 1 1 1 2 2 1 1 2 2 2 3 3 3 2 2 1 3	1 3

RABIES IN ANIMALS.

	City	•	Cases.
Missouri:	; .		4
New Jersey:			1
<u>-</u>			l

SCARLET FEVER.

See p. 1958; also Telegraphic weekly reports from States, p. 1947, and Monthly summaries by States, p. 1951.

CITY REPORTS FOR WEEK ENDED JULY 23, 1921—Continued. SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1820, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

Alabama: Birmingham	City.	Median for pre- vious	for pre-		City.	Median for pre-		ended 23, 1921.
Birmingham			Cases.	Deaths.		years.	Cases.	Deaths
Mobile								
California: Bakersfield					Kansas City	1	3	
Bakersfield	Mobile	U	3	1	Great Falls	ا م	7	l
Berkeley		0	1 1	l	Nebraska:	ا ۱	•	
San Diego	Berkeley	0			Omaha	5	. 1	ļ
San Francisco	Oakland	0			New York:			l .
Colorado:	San Francisco	0			North Carolina		1	•••••
Denver 3	Colorado:	1 1			Charlotte	l ol	1	l
Georgia	Denver	3			Raleigh	01		
Atlanta 2 1 Fargo 0 1 Savannah 0 1 Grand Forks 0 1 Idaho: 4 Circinnati 1 2 Boise 1 2 Circinnati 1 2 Illinois: 1 2 Newark 0 1 0 1 1 2 1 2 1 0 1 1 2 1 2 1 0 1 1 0 1 1 0 1 1 0 0 1 0 0 1 0 <td< td=""><td></td><td>1</td><td>1</td><td></td><td>Winston-Salem</td><td>0</td><td>1</td><td>ļ</td></td<>		1	1		Winston-Salem	0	1	ļ
Savannah	Atlanta	2	,	İ				
Cincinnati	Savannah	0			Grand Forks		i	
Boise	Valdosta		4				_	
Illinois Peoria 0					Clausiand	1		
Peoria	Illinois:	1 1	2		Newerk			
Country Coun	Peoria	ol	1		Toledo			
Biomington	Reck Island	0	ī		ii ()kishoma· i	1		
Indianapolis			_	İ	Oklahoma City	2	1	
Marion	Indianapolia				Oregon:	_		
Towner Council Bluffs. 1 1 3	Marion.			• • • • • • • • • • • • • • • • • • • •	Tennessee	5	8	
Council Bluffs	lowa:		~	• • • • • • • • • • • • • • • • • • • •	Memphie	. 0	. 3	
Salt Lake City 3 4	Council Bluffs	1			Nashville	ő		
Topeks	Sloux City	1	. 3		li litah:			
Topeks		اما					4	• • • • • • •
Washington:	Topeka			• • • • • • • • • • • • • • • • • • • •	Norfolk	0	1	
New Orleans	Wichita	2			i wasnington:		•	••••
Maine: Seattle			_		Aberdeen	0		
Arryland	New Orleans	1	1	• • • • • • • • •	Bellingham	0		• • • • • • •
Maryland:		0	. 3		Snokene	. 0		
Cumberland	darvland:	•	• I	••••••	Walla Walla	i		•••••
Detroit		0	1		Wort Vieninia		_	
Highland Park 0 1 Kenosha 0 1 Kenosha 0 1 Kenosha 0 3	dichigan:			1	Bluefield	(2	•••••
Kalamazoo.	Highland Park				Wisconsin:	ام	,	
Fontiac	Kalamazoo	Ō	2		Milwaukee	8		• • • • • • • •
finnesota: Minneapolis	Pontiac	ĭ l	2		Superior	2	3	••••••
Minnespous 10 3	Linnesota:	1	[]				- 1	
	Minneapolis						.	
St. Paul. 3 8	St. Cloud	0	1	·····				

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Connecticut: New Britain New Haven Maine: Waterville. Maryland: Baltimore. Massachusetts: Cambridge New Bedford Fittsfeld Michigan: Fontiac Minnesota: St. Paul	1 1 1 1 2 1	1 1 1 1 1	Missouri: St. Louis Nebraska: Omaha New Jersey: Jersey City New York: Peekskil Texas: Austin Dallas Virginia: Norfolk		1 1 1 1 1

CITY REPORTS FOR WEEK ENDED JULY 23, 1921—Continued.

TUBERCULOSIS.

See p. 1958; also Telegraphic weekly reports from States, p. 1947.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-		ended 23, 1921.	City.	Median for pre-	Week July 2	ende 1 23, 1921.
 - -	years.	Cases.	Deaths.		vious years.	Cases.	Deaths.
labama:				Minnesota:			
Birmingham	. 14	5		Duluth	1	1	
Montgomery	. 0	2		Minneapolis St. Paul	2	1 19	·····i
Hot Springs		1		Missouri:	•	19	1 . 1
Little Rock	i	4		Cape Girardeau	0	3	l
Little Rock North Little Rock	. 0	2		Joplin	2	1	ļ
alifornia:		l		Kansas City St. Joseph	2	3	1 1
Long Beach Los Angeles	0	i	1	St. Louis	8	7	1 6
Oakland	2	lî		Montana:		•	١ .
Sacramento	2	1		Great Falls,	0	1.	l
San Bernardino	0	2		Nebraska:	_	_	1
San Francisco	4	6		Lincoln	0	9	·····i
olorado:	1	3	1 1	Omaha New Jersey:	0,	1	
Denver	1	•		Atlantic City	0	1	
onnecticut: Hartford	0	2	1	Hoboken	Ŏ		i
menden	Ŏ	1		Jersey City	1	1	
New Britain	0	1		Perth Amboy	0	4	
New Havenistrict of Columbia:	0	7	1.	Plainfield	0	1	·····
Washington	5	6	1 1	New York:	U	•	
eorgia:	9	U		New York: Albany	1	1	
Savannah	0	3		1 AUDULU	Ō	ī	
linois:				Ithaca Newburgh	0	1	
East St. Louis	0	1		Newburgh	0	1	
idiana:		2		New York	33 1	21 1	
Evansville	1	3	·····	Schenectady	ō	i	
Huntington	ŏ	ĭ		Troy. North Carolina:	ĭ	ī	
Indianapolis	4	. 3	1	North Carolina:		_	
Marion	0		1	Durham	3	1	
Wa:			1	Greensboro Raleigh	0	• • • • • • •	1 1
Mason City	0	1	- 1	Ohio:	۰		
msas:	٠,	- 1		Chillicothe	0	1	l
Atchison	0	1		Cincinnati	2	2	
Wichita	. 2	4		Cleveland	$\frac{1}{2}$	6 2	
entucky: Covington	1			Columbus Dayton	í	7	
Louisville	9	10		Fremont	ô	5	
wisiana:	•			Fremont. Hamilton	Ō	4	
New Orleans	5	6	1	Lorain	1	1	
aryland:				Middletown Steubenville	0	1 2	
BaltimoreCumberland	8	17	• • • • • • • • •	Toledo	ř	1	• • • • • • • •
assachusetts:	1			Zanesville.	ō	2	
Beverly	ol	1		Oklahoma:	- 1	_	
Boston	4	2	i	Oklahoma City	4	7	3
Braintree		1	1	Pennsylvania:	0	4	
BrocktonFall River	0	2		Allentown	ől	î	• • • • • • •
Lawrence	0	il		Bradford.	ŏl	î	
Leominster	ŏ	î		Canonsburg		9	
Lowell	1		1	Carlisle	0	1	• • • • • • • •
New Bedford	1		1	Chambersburg	0	3	
Northampton	0	1		Chester Easton	0	4	• • • • • • • •
West Springfield		1		Harrisburg	ŏ	2	
Worcester	١	- 1		Johnstown	ŏ	4	
Detroit	8	7	1	Lancaster	ŏ	ī	•••••
Flint	1	2	ī	Philadelphia	13	10	1
Muskegon	0	3	ll	Pittsburgh	1	4	
Pontiac	٥l			Reading	1	3 !	

CITY REPORTS FOR WEEK ENDED JULY 23, 1921—Centinued.

TYPHOID FEVER-Continued.

City.	Median for pre-		ended 23, 1921.	City.	Median for pre-		ended 3, 1921.
	years.	Cases.	Deaths.		years.	Cases.	Death
Pennsylvania—Contd.				Virginia—Continued.			
Washington	0	3		Lynchburg	3	2	l
Woodlawn		1		Norfolk	5		1
York	1	1		Petersburg	0	3	
Rhode Island:	_	_	1	Richmond	3	4	1
Cranston	0	1		Roanoke	1.	3	
South Carolina:		2	i i	Washington:			l
Charleston	5	. 2		Seattle	1 1		ļ
rennessee: Knoxville	10	4	1 1	Spokane	U	Z	
Nashville	14	Ř	2	Bluefield.	0		1
rasuvine	17	•	l *I	Charleston	3	2	• • • • • • •
Austin	0		1	Huntington	1 2	· · · · · ·	• • • • • • •
Beaumont	ĭ	3	·	Martinsburg.	ĭ	•	
Dallas.	2	6		Parkersburg	ō	î	
El Paso	ī	ĭ		Wheeling	ĭ	î	
Fort Worth	2	ī		Wisconsin:	- 1	-	•••••
/irginia:	_			Sheboygan	0	1	
Alexandria	0	1		Superior	ŏΙ	. 4	
Danville	0	5			· · · I	- 1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

	Popula- tion Janu-	Total deaths	1 -	theria.	Me	sles.		rlet er.		ber- osis.
City.	ary 1, 1920, subject to correction.	from all causes.	Casos.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alahama:				Ī.					1.	
Anniston.	17,734	1	1	1	l	l			١.	l .
Birmingham	178, 270	50	Ιī	i	2			•••••	6	5
Mobile	60, 151	22		1 -	_	i		• • • • • •	١ ,	۱ ،
Montgomery	43, 464		i			1 -	i	•••••		
Arizona:	20, 202						-	•••••		
Tueson	20, 292	17	ı	1	1			İ	1	9
Arkansas:	20,202	1 11					•••••	• • • • • •] 2
Fort Smith.	28, 811		1	1	l	i i				l
Hot Springs	11.695	2	•		•••••		•••••		i	
Little Rock	64,997	-					•••••		i	
North Little Rock	14,048	•••••			• • • • • •				i	
California:	22,020		•••••		•••••		•••••	•••••		• • • • • •
Alameda	28, 806		2	1					_	l
Bakersfield.	18,638	4 5	Z		•••••	•••••	• • • • • •	• • • • • •	2	•••••
Darkelsueld	55, 886	5					• • • • • • •	• • • • • •		1
Berkeley		7	1		• • • • • •	•••••		• • • • • •	3	•••••
Eureka	12,928	1					• • • • • • •		••••	
Long Beach.	55, 593	11	2				2 7		2	
Los Angeles.	576, 673	165	37	2	. 5		7		49	26
Oakland	216, 361	29	6	1					4	3 1
Pasadena	45, 354	13	1				1		2	1
Richmond	16,843	1						!		
Riverside	19,841	5		l			3			1
Sacramento	65, 857	14	4	ll				l	8	1
San Bernardino	18,721	7			3				2	' 4
San Diego	74, 683	20			14		2 5		5	Ĩ
San Francisco	508, 410	124	14	2	2		5		23	6
Santa Barbara	19, 441	5								
Santa Cruz	10,917	4								•••••
Vallejo	21, 107	2	2							
Colorado:	' 1	- 1	i							
Colorado Springs	30, 105	20	2				1 .		16	7
Denver	256,369	59	2 5	1						13
Pueblo	42,908		8	ī			1			ĩ
Connecticut:	,,		- 1	- 1	,		- [-
Bridgeport	143, 538	22	11	1			3 .			1
Derby	11, 238	5								-
Fairfield (town)	11, 475	2								
Greenwich (town)	22, 123				3				1	····i
Hartford	138,036	33	i	1	7 1		2			. 2

•	Popula- tion Janu-	Total deaths	Diph	theria.	Mes	ısles.	Ser	arlet ver.	Tu	her- osis.
City.	ary 1, 1920, subject to correction.	from all causes.	*	ths.	,	ths.	ş;	ths.	g.	ths.
		Laubeen	Cases.	Deaths	Cases.	Deaths	Cases.	Doaths.	Cussa.	Deaths
Connecticut—Continued.				1						
Manchester (town)	18,370 29,812	3	J	 	 	l	 	l		ļ
Meriden (city)	29,812	1								·
Milford (town)	10, 193	18	2 2	····i		j				¦
New Britain New Haven	59, 316 162, 519 25, 688	16 37	6	l	i				ii	·····i
New London	25, 688	8			ļ <u>.</u>				1	l i
Norwalk	27,700	4							1	
Stamford	27,700 35,086 10,236	····· <u>2</u>			1	•••••	1			
Polomore.	10, 230	*					•	ļ		
Wilmington. District of Columbia:	110, 168	26	2		 				4	l
District of Columbia:									l	
Washington	437, 571	105	4	1	21	·····	4		23	14
Georgia: Atlanta	200, 616	42	3				4		1	. 6
Branswick	14, 413	2	l							ĭ
Macon	14, 413 52, 995 83, 252	19	3	ļ					ļ	-
Savarnah	83, 252	33	3	1			;-		1	2
ValdostaIdaho:	10, 783	•				•••••	1	• • • • • •		
Boise	21,393	9	ļ				2			l
Illinois:	20.00	_	١.					1	٠ ا	1
AuroraBloomington	36, 397 28, 725 11, 424	7 7	1	•••••					12 2	
Blue Island	11, 424	í	i		• • • • • • • • • • • • • • • • • • • •		2		_	
Centralia	12 401	2								
Cicero	44, 995 33, 750	8	6		• • • • • •					
Danville East St. Louis	33, 750 66, 740	3	-:	•••••	• • • • • •	• • • • • •	1		····i	
Elgin.	27, 454	15 6	•••••		•••••		• • • • • •		li	l *
Evanston	27, 454 37, 215	6	1		1					
Forest Park	10, 768	6 2 5 7 9 1	1							
Galesburg	23, 834 15, 713	5		1	• • • • • •			• • • • • •		
Jackson ville Kewanee	16,026	ģ								2
La Salle	13, 050	1							1	
Mattoon	13, 552	1 5			:					·····i
Oak Park Pekin	39, 830 12, 086	3			•••••		3		3	
Peoria	76, 121	9					3		ĭ	
Rock Island Springfield	35, 177	7	1				1		. 1	<u>-</u>
SpringfieldIndiana:	59, 183	• • • • • • • •	•••••	•••••	•••••	•••••			2	3
Bloomington	11, 595	3								
Rikhart	24, 277	3	1				, .			1
Evansville	24, 277 85, 264	16	<u>-</u> -				i			
Frankfort	36, 549 11, 585	16 1	6		•••••		···i	•••••	3	
Gary	55, 378 1	1 7	i							
Hammond	36,004	6	3	1			1			
HuntingtonIndianapolis	14,000 314,194	5 82	1 13	····i	• • • • • • •	•••••	3	• • • • • • •	18	8
Kokomo	30.067 1	7								ĭ
La FayetteLogansport	22, 486 21, 626	7 2 7							1	
Logansport	21,626	7	2						1	i
Mishawaka	23, 747 15, 195	8 2 9								
Muncie	36, 624 70, 983						1			3
South Bend	70,983	15	1			•••••	:-		3 2	1
Terre Haute	66,083	17			•••••	•••••	1	•••••	-	
Burlington	24, 057 - 36, 162	10							1	1
	- 36, 162	12]			;.		•••••	•••••
Davenport	56, 727 16, 068	4	• • • • • •	·····			1		•••••	•••••
Kansas:	· · · I	*					•••••		•••••	•••••
Atchison	12,630		1		!	:				
Coffeyville	13,452	5	1 2				•••••		•••••	
Hutchingon	13, 452 10, 693 23, 298	8	2 2		····i		•••••		•••••	2
Kansas City	101, 177		ĩ							2
Lawrence	12, 456	3					ا		•••••	• • • • •
Leavenworth	16, 912	12	1	······································	•••••	•••••	2	'	'	•••••

• ,	Popula- tion Janu-	Total deaths	Diph	theria.	Mea	sles.		arlet ver.		ber- losis.
City.	ary 1, 1920, subject to correction.	frem all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Kansas—Continued.									1	
Parsons	16,028 59,022	7 22	3				····i		4	
Topeka	50, 022 72, 128	22 29	5	ļ	ļ		ì	ļ	ļ	ļ
Covington	57, 121	.7	1		1			ļ	ļ	1
LexingtonLouisville	41, 534 234, 891	14 67	6		7				14	1
Louisiana: Monroe	12,675	6								,
New Orleaus	387, 219	86	1				1		21	14
Auburn	16,985	•••••					3		1	 .
BangorBlddeford	25, 978 18, 008	12	3		•••••	• • • • • •			4	•••••
LewistonPortland	18,008 31,791 69,272	11 26	3	•••••	i		6	1		i
Sanford	10,691 }	5	3 1 1		1					1
Waterville	13, 351	•••••	1	•••••			•••••		1.	·····
Maryland: Baltimore. Cumberland.	733, 826	153 10	6		10		5		28	14
Massachusetts:	29, 837		8		•••••		1	•••••	•••••	•••••
Adams	12, 967 10, 036	. 3. 1	•••••		•••••		•••••	•••••	• • • • • •	•••••
Arlington	18 665	5	i		ii					• • • • • •
AttleboroBelmont	19,731 10,749 22,561	2. 1	····2	•••••	. 1		•••••		2	1
Beverly	22, 561 748, 960	3	38		1			2		
BostonBraintree	10 590	166 4		4	43	1	14	Z	61	21
Brockton	66, 138 37, 748 109, 694	6	2	•••••		•••••	1		2	•••••
Cambridge	109,694	16.	6		4				7	2
Cambridge	43, 184 36, 214	6	2	•••••	•••••		1	•••••		•••••
Clinton	36, 214 12, 979	7 9			2				i	····i
Dedham	11, 108 10, 792	i			2				1	•••••• •••••
EverettFall River	40.120	24	···i			•••••	1	•••••	···· <u>2</u>	1
Framingham	120, 485 17, 033	3			3 2					•••••
GardnerGroenfield	16, 971 15, 462	3 0 6 7 12 29			2		···i			• • • • •
Haverhill	53, 884 60, 203	7	1		2 1		î į		i	2
Lawrence	04 270 1	29	1		4				3	····· <u>2</u>
LeominsterLowell	19,744 112,479 99,148	30	ii	···i			2	•••••	3 2	٠٠٠٠.
Lynn	99, 148	30 12	1	î i	19		ĩ l		4	2 1
MaldenMedford	49, 103 39, 038	3	2	:::::	3 .				5	1
Melrose	18, 204 15, 189 121, 217	5 3 2 6 20	1							·····i
Methuen New Bedford	121, 217	20	4				i .		2 13	i
Newton	15, 618 46, 054	4 .	2		···i	•••••	···i		1	····i
North Adams Northampton	22, 282 21, 951	5 .							ī.	•••••
Norwood	12,627	3			''i'.					•••••
PeabodyPittsfield	19,552 41,751	6	3	····- -					2 .	•••••
Plymouth. Quincy.	13,045	4 . 8 . 5 . 7 . 3 . 6 . 7 . 2 . 7 . 14 . 23 . 19 .				:			:	•••••
Salem	47, 876 42, 529	7	3 .		11 .		2 .		i	•••••
Somorville	42, 529 93, 091	23	5 .						î	2
Southbridge Springfield Taunton	14, 245 129, 563	19	2		:::: :	::::	····2	:::: -	4	2 1 1
Taunton	129, 563 37, 137 13, 025	9 .		•••••	2	-			1 .	,
Watertown	21,40(9 3 3 1	:				2 .		ir	i
West Springfield	13, 443 18, 604	1	1 .	•••••	4 -		1 .			

	Popula- tion Janu-	Total deaths	1 -	theria.	Mos	sles.	Sea fer	rlet rer.	Tu	ber- osis.
City.	ary 1, 1920, subject to correction.	from all causes.	Свзея.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Massachusetts-Continued.		i					İ			
Winthrop Woburn	15, 455 16, 574	5 5		·			1			1
Worcester	16, 574 179, 754	31			ii		i		2	i
Michigan: Ann Arbor	19, 516	12	. 2	ļ					1	
Battle Creek. Benton Harbor	36, 164		ī						ļ <u>.</u>	
Benton Harbor Detroit	36, 164 12, 233 993, 739 91, 523	0 166	39	·····2	12		27	····i	46	20
Flint.	91, 599	18	5		1		1			1 2
Grand Rapids	137, 634 48, 615	23	5		1		4		4	i
Highland Park	46, 499	3	1				2			1 1 2
Ishpeming	10, 500 48, 858	4 21	1				i		2	2
Kalamazoo. Marquette. Muskegon.	12, 718	3 3	····i	·i		 				·····i
Pontiec	12, 718 36, 570 34, 273	8	l	1			2			2
Port Huron Saginaw Sault Ste. Marie	20.944	3 18	<u>.</u>		ļ				i-	····i
Sault Ste. Marie	61, 903 12, 096	2								
Minnesota: Austin	10 110	3								
Duluth	98, 917 380, 582 13, 722	11					6	i	6	
Minneapolis Rochester	380, 582 13, 722	59 9	13		1	·····	12		23	7
St. Cloud			<u>.</u> .						1 3	
St. Paul	234, 595 19, 143	56	7			¦	2		19 1	3
Missouri:						ļ			1	
Cape Girardeau	10, 252 11, 686	6 5		·····				•••••		
Joplin	11, 696 29, 855		i						<u>.</u> .	<u>.</u>
Kansas CitySt. Joseph		80 26	3	1	····i		2 1	•••••	5	5 1
St. Joseph St. Louis	77, 939 772, 897 39, 631	179	36		3		4	1	57	14
Springfield	39, 631	14			•••••	• • • • • •	• • • • • •	•••••	• • • • • •	2
Billings	15, 100	5								
Billings Great Falls Missoula	24, 121 12, 668	5 2			2	•••••	•••••			
Nebraska: Lincoln		٠,			1					
Omaha	54, 934 191, 601	11 42	4	i i	1		3			2
Nevada: Reno	12, 016	2							1	
New Hampshire:		_	• • • • • • •	·····		•••••		•••••	1	•••••
Berlin	16, 104 22, 167	3				•••••	•••••	•••••	••••	·····i
Dover	22, 167 13, 029	1								
Keene	11, 210 78, 384 28, 379	2 19	;-			•••••	1		····· ₂ ·	·····i
Nashua	28, 379	7	.		3					î
Portsmouth New Jersey:	13, 569	• • • • • • • • • • • • • • • • • • • •			1	•••••	•••••	•••••	•••••	•••••
Asbury Park	12, 400	.0								· · · · · •
	50, 682 76, 754	19	<u>:</u>				2		1 2	
BellevilleBloomfield	15, 660				1					•••••
Clifton	22, 019 26, 470	1	····i		3	:::::	····2*		:::::	. 1
East Orange	26, 470 50, 710	7	2		13 3	1	1		2	•••••
Englewood	95, 682 11, 627	4			3		4	:::::		• • • • • •
Garfield	19, 381 12, 162	1	1 4	1,	•••••				1	•••••
Gloucester City	17. 667 l	8	1		···i		···i	::::::	····i	• • • • • • • • • • • • • • • • • • •
HobokenIrvington	68, 166 25, 480	13	5				····i	•••••	3 2 8	i
Jersey City	207, 864	62	19	2	11		i		8	6
Kearny	26, 724	0 7	1	•••••	1		¦		2	•••••
New Brunswick	32, 779 414, 216		27							· · · · · · •
Newark	414, 216	82	7 '		17		15 '	2	10 '	7

_	Popula- tion Janu-	Total deaths	1 -	theria	Mea	ısles.	Sca	arlet ver.	Tu	ber- losis.
City.	ary 1, 1920, subject to correction.	from all causes.	Cases.	Doaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Jersey—Continued.										
New Jersey—Continued. Orange Passaic	33, 268 63, 824	10	i	•	. 7		4		2	
Paterson	135,800		4		. 7				3	ļ
Perth Amboy Philipsburg Plainfield	41, 707 16, 923	6 2	1				1		3	1
Plainfield	16, 923 27, 700 10, 174	2					2			
Summit	119, 289	16	i		6				1 2	i
West Hoboken	40,068	3	ļ						3	Î
West New York	29, 926 15, 573	1	ļ		3	 		• • • • • •		
New Mexico:	i	1	1	1	1			•••••		
Albuquerque New York: Albany	15, 157	18	2	1		•••••	•••••	•••••	•••••	5
AlbanyAuburn	113, 344 36, 192	7	1 3		1			• • • • • •	11	·····•
Cohoes	36, 192 22, 987	3							• • • • • •	
GenevaGlens Falls	14, 648 16, 638	1	ļ				• • • • • •	•••••	2	
Ithaca	17, 004	3 7					i		· î	····i
JamestownLackawanna	38, 917 17, 918	7 2					····i·		2	•••••
Lockport	21.368	5 7							ī	
Mount Vernon	42, 726	17	2 1	i	i		2		2 2	
Newburgh	36, 366 5, 621, 151	984	136	9	82		40	····i	1241	1 94
Niagara Falls	30,700	11	9	1			3		1	
North Tonawanda Olean	20,506	1 5	•••••		1	•••••	•••••		•••••	• • • • •
Packerill	15,888	5 2			2				2	
Poughkeepsie	35, 000 295, 750	6 54	14	·····	····i	••••••	2	•••••	2 10	<u>2</u>
Saratoga Springs	13, 181	4	1						1	_
SCHENECISIO V	88, 723 171, 717	19 32	3		2 3		1 6	•••••	1 2	i
Syracuse	72, 013 21, 031	18					ĭ			3
White Plains Yonkers	21, 031 100, 226	7	5	•••••		•••••	•••••	•••••	•••••	<u>2</u>
North Carolina:	•		٠	•••••					•••••	
Charlotte	46, 338 21, 719	11	• • • • • •				•••••	•••••	1	•••••
Greensboro	19.861	2 5								····i
Raleigh	24, 418	15	• • • • •			•		•••••	• • • • • •	1
Salisbury	24, 418 12, 742 13, 884	4 2								
Salisbury Winston-Salem	48, 395	9	3				2	•••••	7	•••••
North Dakota: Fargo	21, 961						2			
Grand Forks	14, 010		1							•••••
Ohio: Akron	208, 435	81	3		1		3		24	
Alliance	21, 603	6							···i	• • • • •
BarbertonBucyrus.	18, 811 10, 42 5	4 7	3	•••••	:::::i					· · · · · · ·
Canton	87, 091	13]				1	,		····i
Chillicothe	15, 831 401, 247	117	~~;7	i			i		18	19
Cleveland	401, 247 796, 836 237, 631	1	15	2	4 3		13		3	
Cuyahoga Falis	10.200	60	4	2			4 .		3	
Dayton	152, 559 27, 292	27	· i				4 .		1	
East ClevelandFromont	27, 292 12, 468	27 2 2	2							
Hamilton	39, 675	12					i].			i
Ironton	14, 007	2	1	•••••	····- -				···i·	•••••
Lancaster	12, 683 14, 706	8								
LimaLorain	41, 306 37, 295	17			···io		···i-	-		••••
Mansfield	27, 824	6	i		3 .					i
Marion	27, 891	11,			! .	1-		1 1.	l.	••••

¹ Pulmonary tuberculosis only.

	Popula- tion Janu-	Total deaths	Diph	theria.	Mea	sles.	Set fer	arlet ver.	Tu cul	ber- osis.
City.	tion January 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio—Continued.		l	l				l	1		
Ohio—Continued. Middletown	23, 594 26, 718 10, 718 13, 080	6 8	ļ	.,		ļ	ļ		1	1
Newark New Philadelphia Niles	10,718		i						1	1
Niles	13, 080	1								
NorwoodPiqua.	24, 966 15, 044	2		·					····i	1 1
Salem	10.305	Ö							1	
Salem Springfield Steubenville	60, 840	0 15 7 5	6	1	2		1	ļ	·	
Tiffin	28, 508 14, 375	5		i					2	
Toledo	243, 109 132, 358 29, 569	44 24	10				1		1	2
YoungstownZanesville	132, 358	24 10	1		5	1	ī		ļ	2
Oklahoma:	29, 309	10		i						
Oklahoma City	91, 258	23	1	1	ļ		3		ļ	3
Oregon: Portland	258, 288	51	17	1	2		3		6	2
Pennsylvania:		31	17	1	2		l °			*
Pennsylvania: Allentown Altoons.	73, 502 60, 331 50, 358		13	ļ					2	
AltoonsBethlehem	60, 331		1 3		2 3		1			
Bradford	15,525		3		li		2 1			
Butler	15, 525 23, 778 10, 632				2		1			
CanonsburgCarbondale	10, 632 18, 640		····i				1	•••••		• • • • •
Charleroi	11, 516		·				i			
Chester	11, 516 58, 030 13, 681		1				1			
Dubais Duquesne	13, 681 19, 011		i		3		4			
Easton	33, 813		. .		i		l . .			
Erie	33, 813 93, 372 15, 033		4		3		3		10	
Greensburg	15, 033 75, 917		2	{	·····ż	• • • • • •				
Johnstown	67, 327 53, 150		3		3		2		2	
Lancaster	53, 150		3					••••		
McKeesport. McKee's Rocks	45, 975 16, 713		1 1 1 2			• • • • • • •		• • • • • •	1	
Mahanoy City	15, 599		i							
Mount Carmel Nanticoke	17, 469 22, 614		2							
Nanticoke Norristown	32, 319		1							
NorristownOil City.	32, 319 21, 274 1, 823, 158				<u>i</u>				2	
Philadelphia Pittsburgh	1, 823, 158 588, 193	348	37	1	8 15	1	26 14	2	53 20	36
Plymoutb	16, 500		12						ı	
Pottstown	17, 431 107, 784		2		<u>i</u>					
Reading	107, 784 137, 783		37 12 2 2 2 4 1		7				1 8	•••••
Sunbury	15, 721		î							
Swisevale	10, 908 14, 256							• • • • • •	1	• • • • •
Warren Wilkes-Barre	73, 833 1		1 3		·····2				3	
WilliamsportYork	36, 198 47, 512		2				2			
York Rhode Island:	47, 512		2		• • • • • •	• • • • • •			1	-
Cranston	29, 407	3		1						-
Cumberland (town) Newport	10, 077 30, 255 64, 248	2 5		,						-
NewportPawtucket	30, 255 64 248	5 18	i				3 1		•••••	•••••
Providence	237, 595	54	2		3			i		····· <u>2</u>
South Carolina:	i						Ì		1	7
Charleston Columbia	67, 957 37, 524	18	1 2		····i					
South Dakota:					-					
Sioux Falls Tennessee:	25, 176	2	1		•••••				•••••	•••••
Knoxville	77. 818		1		1					
Memphis	77, 818 162, 351 118, 342	50 38	1						11	3
Nashville Texas:	118, 342	38	1		1	•••••	•••••		6	1
Austin	34, 876	8	3							1
Beaumont	40, 422 10, 522	8				•••••	•••••	•••••	1	•••••
Corpus Christi	10, 522	3								• • • • • •

	Popula- tion Janu-	Tetal deaths	Diph	theria.	Ме	ısles.		arlet ver.		ber- losis.
City.	ary 1, 1920, subject to correction.	all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Texas—Continued.			-			-				
Dallas	158, 976	41	3	1.1	10	l	1	Į.	1	1 :
El Paso	77,543	51			1 -0	1:	2			1 2
Fort Worth	106, 482		6		3	·····		ļ	4	1 '
Galveston	44, 255	15						1	•	
Waco	38, 500	10	2		1				j	
Jtah:	. 00,000		-		j				l	
Salt Lake City	118, 110	41	4	1	i		3		1	1 : :
/ermont:	110, 110	**	-		i		٠		1 -	l ' '
Burlington	22, 779	3		l	1			1.	l	i .
Rutland	14, 954	ĭ			· · · · · ·		• • • • • •			
irginia:	12,002				· · · · · ·					
Alexandria	18,060	1			1			1 ''	1	
Danville	21, 539	5	3	l····i			i			
Lynchburg	29, 956	7	3		4	•••••			•••••	
Norfolk	115,777	•	î	• • • • • •	T = 1		3			,
Petersburg	31, 002	8	2			•••••	. 1	• • • • • •	4	
Richmond	171, 667	41	î		13		1	•••••	•	1 3
		11	13	• • • • • •	19	• • • • • •	1		1	, I
Roanoke	50, 842	11	13	• • • • • •			•••••		1	1 2
ashington:	4" 00"						_			
Aberdeen	15, 337			•••••		******	2		• • • • • •	
Everett	27, 644				2		••••		• • • • • •	
Seattle	315, 652		11	•••••	4	• • • • • •	3			
Spokane	104, 437		•••••		4	•••••	• • • • • • •		• • • • • •	
Tacoma	96, 965		• • • • • •	•••••	3				•••••	
Vancouver	12, 637						1		• • • • •	
Walla Walla	15, 503		3	•••••		• • • • • • •	• • • • • •	• • • • • •	• • • • •	
Yakima	18, 539		2		3				• • • • • •	
Vest Virginia:				, .						
Bluefield	15, 282					•••••	2		• • • • • •	
Charleston	39, 608	10	1				ī			
Fairmont	17, 851		1	• • • • • •			1		• • • • • •	
Huntington	50, 177	12	4				1		•••••	2
Martinsburg	12, 515		1		1				•••••	
Moundsville	10,660	1	•••••	• • • • • •	• • • • • • •		1	•••••	• • • • • •	• • • • •
Parkersburg	20,050	5					:-1		•••••	• • • • • •
Wheeling	54, 322	19	1	•••••	2		1		1	1
Visconsin:		_ 1	- 1	1	1	1	- 1	1		
Beloit	21, 284	5	••••		•••••	• • • • • • • •	1			· · · · · •
Fond du Lac	23, 427	5	3			•••••	• • • • • • •		•••••	• • • • •
Green Bay	31, 017	5	2						•••••	· · · · · •
Janesville	18, 293	. 3	•••••		• • • • • •	•••••	2	•••••		•••••
Kenosha	40, 473	18	1				••••			. 2
Madison	38, 378	7			:-		1		::-1	1
Milwaukee	457, 147		6		1		6		15	,
Oshkosh	33, 162	.6	2			1			1	1
Racine	58, 593	10	3		1		6			-
Superior	39, 624	8	1]			7			
yoming:			I	i	ŀ	- 1	- 1	- 1	i	
Cheyenne	13, 829	4 1					1	!	!	-

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "Tenvo Maru"—At Sea—Between Nagasaki and Kobe.

The steamship. Tenyo Maru from Yokohama, July 15, 1921. arrived at San Francisco, Calif., July 27, with a history of a case of plague occurring on board June 26 and terminating fatally June 28, 1921. The case occurred en route between Nagasaki and Kobe. Japan. The Tenyo Maru had embarked first-class passengers at Hongkong, China, June 21, 1921. No plague rats were found on board. A guinea pig introduced into the infected cabin July 4 died of plague July 9, 1921. CUBA.

Communicable Diseases-Habana.

Communicable diseases have been notified at Habana as follows:

	July 11-	-20 , 192 1.	Remain- ing under		July 11		Remain- ing under
Disease.	New cases.	Deaths.	treatment	Disease.	New cases.	Deaths.	treatment July 20, 1921.
Chicken pox	1 88 3		1 1 11 153	Paratyphoid fever	1 2 19	3	2 3 3 8 8 43

¹ From the interior, 46. From the interior, 2.

MEXICO.

Plague-Human Cases-Rodent Cases-Tampico.

During the period July 18 to 31, 1921, 8 cases of plague with one death were reported at Tampico. During the same period 31 plagueinfected rats were found out of 4,322 rats taken.

POLAND.

Cholera.

Information dated July 25, 1921, shows the presence of cholera in the vicinity of Bialystok and Pinsk, Poland.

PORTO RICO.

Plague.

During the week ended July 23, 1921, a fatal case of plague was reported at Manati, Porto Rico.

³ From the interior, 23; from abroad, 1.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER: Reports Received During Week Ended Aug. 12, 1921.

CHOLERA.

			 	1
Place.	Date.	Cases.	Deaths.	Remarks.
India			1	May 1-7, 1921: Deaths, 3,716.
Bombay	May 29-June 4	3	3	
Calcutta	June 5-18	157	138	
Madras	. June 19-25	1	1	
Philippine Islands: Manila		١.		
Manila	. June 12-18	1		
Province—	1 -	١.	1 .	
Batangas	do	2	1	
Poland:	July 25			Decrees in minimize
Bialystok				Present in vicinity, Do.
iam:				До.
Bangkok	. May 15-June 4	8	1	
	PLA	GUE.	1	******
				
China:	Towns 7 Of	7	ł	
Amoy	June 5-25 Apr. 24-June 25	81	59	Mary 1 7 1001. Thomas and form
Hongkong	. Apr. 24-June 25	or	39	May 1-7, 1921: Plague rat found May 29-June 11, 1921: Cases, 33 deaths, 234.
Bombay	May 29-June 4	25	16	deethe 224
Calcutta	Inne 12-18	2	10	Goatals, 202.
Karachi.	June 12-18 June 19-25	ī	l ī	
Madras Presidency	đo	25	15	•
lexico:			_	
Tampico	. July 18-31	8	1	31 plague-infected rats found.
orto Rico:	1 1			
Manati	. July 17-23	1	1	· 4
enegal: Dakar	1			
Dakar	. June 26-July 2	49	42	
iam:	1		l .	
Bangkoktraits Settlements:	. May 29-June 4	1		
Singaporen vessel:	May 28-June 11	3	2	•
S. S. Tenyo Maru		•••••		En route between Nagasaki and Kobe, Japan, June 28, 1921, on
				fatal case.
	<u> </u>		<u> </u>	
	SMAL	LPOX.		
Algeria:	:			
Algiers	June 1-30	1		
ustralia:		_		
Victoria—	1			
Geelong	May 5	1		Mild.
anada:	1 1			,
New Brunswick—				• .
Charlotte County	July 10-16	7		
Ontario— Montreal	July 17-23			
Ottawa	July 3-16.	17		
hina:	July 3-10		•••••	•
Amoy	June 12-25			Present.
Chungking	do	••••••		Do.
Foochow	June 12-18			Do.
Hongkong	Apr. 24-June 25	99	84	
Manchuria—	1 - 1		- "	
Mukden	July 3–9 June 20–26			Do.
Shanghai	June 20-26	1		
Tsingtau	do	1		. The second second second second second second second second second second second second second second second
olombia:	1 -1 - 0 15	1	l	D -
Santa Marta	July 9-15	• • • • • • • • • • • • • • • • • • • •		Do.
uba:	Tules 10.10		1	Stated to be increasing the arts
Antilla	July 10-16	15 18	••••••;•	Stated to be increasing steadily.
Santiago Do	June 20-30	18	- 1	
gypt:	July 1–10	•	- 1	
Alexandria	Jnne 25-July 1	1	15	·
Port Said	June 25-July 1 Jan. 15-May 20	8		
aiti:				•
Cape Haitien	June 26-July 16	49 أ	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 During Week Ended Aug. 12, 1921—Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India				May 1-7, 1921: Deaths, 520.
Bombay	. May 29-June 4		9	, ,
Calcutta	. June 5-11	1	1	
Karachi	. June 19-25	7		
Madras	. do	4	2	
Italy:	June 20-26	1	1	
Messina	. Apr. 1-30	2		
Milan	. Apr. 1-30	2		
Java: West Java—	1		}	
Batavia	June 3-9	2	3	
Buitenzorg		i	•	
Pandeglang	do	i		
Mexico:		•		
Tampico	. July 11-20	1		
Mexico City				
San Luis Potosi	July 17-23		1	
Funis:		1	-	
Tunis	. July 2-8	1	2	
furkey:		l	l i	A CONTRACTOR OF THE CONTRACTOR
Constantinople	. June 26-July 2	1		.* .
	TYPHUS	FEVE	·	
			•••	
	1		i 1	
Algeria:	Towns 1 20		 	
Algiers	June 1-30	53	17	
AlgiersOran	June 1–30 July 1–10		 	
AlgiersOranzechoslovakia:	July 1–10	53 6	17	
AlgiersOranzechoslovakia: Prague		53	17	
AlgiersOranzechoslovakia: Prague	July 1-10	53 6	17 2	
Algiers. Oran. zechoslovakia: Prague. gypt: Alexandria.	July 1-10	53 6 1	17 2	
Algiers. Oran	July 1-10	53 6	17 2	
Algiers. Oran zechoslovaktia: Prague gypt: Alexandria. Port Said	July 1-10	53 6 1	17 2	
Algiers. Oran. Zechoslovakia: Prague. Sypt: Alexandria. Port Said. Ireece: Saloniki.	July 1-10	53 6 1 8	17 2 3 2	
Algiers. Oran. Zzechoslovakia: Prague Szypt: Alexandria. Port Said Irecce: Saloniki. Do.	July 1-10	53 6 1 8 8	17 2 3 2	
Algiers. Oran Oran Zechoslovakia: Prague Sgypt: Alexandria. Port Said Ireece: Saloniki. Do. ugoslavia:	July 1-10	53 6 1 8 8	17 2 3 2	
Algiers. Oran. Oran. Szechoslovakia: Prague Szypt: Alexandria Port Said Precec: Saloniki. Do ugoslavia: Zagreb (exico:	July 1-10. June 20-26. June 25-July 1. Apr. 2-May 13. June 20-26. June 27-July 3. June 19-25.	53 6 1 8 8 1 1	17 2 3 2	
Algiers Oran zechoslovakia: Prague gypt: Alexandria. Port Said reece: Saloniki. Do. ugoslavia: Zagreb.	July 1-10. June 20-26. June 25-July 1. Apr. 2-May 13. June 20-26. June 27-July 3.	53 6 1 8 8	17 2 3 2	
Algiers. Oran. zechoslovakia: Prague sypt: Alexandria. Port Said reece: Salonki. Do. ugoslavia: Zagreb	July 1-10. June 20-26. June 25-July 1. Apr. 2-May 13. June 20-26. June 27-July 3. June 19-25.	53 6 1 8 8 1 1	17 2 3 2	

Reports Received From July 2 to Aug. 5, 1921.

CHOLERA.

CHUMBA.						
Place.	Date.	Cases.	Deaths.	Remarks.		
India	May 1-28. May 8-June 4. May 15-June 4. Apr. 24-June 4.	2 355 2 15	307 1 1 14	Mar. 6-Apr. 30, 1921: Deaths, 20,974. Jan. 1-31, 1921: Cases, 80; deaths,		
Indo-China City— Cholon Saigon Provinces— Anam.	June 6-12	5 65 42	4 44	15. Máy 29-June 12, 1921: Cases, 251; deaths, 202. In January, 1920: No cases.		
Cambodia	do	8 18	2 9	January, 1920: Cases, 27; deaths, 14. January, 1920: Cases, 13; deaths, 10.		
TonkinPhilippine Islands:	dq	12	. 4	January, 1920 No cases.		
Manila Province—	May 22-28	1				
Pampanga Siam: Bangkok	June 5-11	10	3			

CHOLERA, PLAGUE, SMALLPOK, TYPHUS: FEVER, AND YELLOW FEVER.—Continued.

Reports Received from July 2 to Aug. 5, 1921—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Asia Minor:				
_ Smyrna	June 19-25	1		In suburb.
Brazil:	35	١ .)
Bahia	May 15–28 June 28	2	1	
MaranhaoBritish East Africa:	Julie 28	•		
Kenya Colony—	1	1	1	
Kisumu	Apr. 24-May 21	l	1	Present.
Ce ylon:		ł	1	
Colombo	May 8-June 11	2	2	
China:				
Amoy	May 15-21		2	
Foochow	do			Do.
Manchuria— Harbin	May 3-22	46		
Ecuador:	may 3-22	. 20		
Gusyaquil	May 1-June 15	10	1	
Egypt		20	l	Jan. 1-June 30, 1921: Cases, 176
Cities—				deaths, 78.
Alexandria	May 21-June 24	10	3	
Port Said	June 16-27	4	2	1
Suez	May 20-June 30	9	5	One case pneumonic.
Provinces—			1 _	
Assiout	May 24-June 16	9	7	One case septicemic.
Gharbieh	June 2-25	7 2	·····i	
minien Hawaii:	May 28-June 10	2		
Pasuhau	May 21	1	i i	
ndia	21	•		May 1-28 1021 Cases 1 404
Bombay	May 1-28	235	166	May 1-28, 1921: Cases, 1,405 deaths, 1,109.
Calcutta	May 8-June 4 May 8-June 18	-09	9	
Karachi	May 8-June 18	17	13	
Madras Presidency	May 22-June 18 Apr. 24-June 4	87	57	
Rangoon	Apr. 24-June 4	71	66	W 4 44 444
ndo-China	• • • • • • • • • • • • • • • • • • • •	• • • • • • •		Jan. 1-31, 1921: Cases, 57; deaths
Saigon	May 23-June 12	4	1	31. Wow 9 15 1001, 1 -1
fadagascar:	may 20-June 12	-	•	May 8-15, 1921: 1 plague rat.
Tananarive	July 11			Present.
(esopotamia:				
Bagdad	Apr. 1-30	5	2	•
dexico:	-			
Tampico	June 11-30	36		Infected rodents found, July 1-
Do	July 1-17	11	2	
eru	••••••	••••••	• • • • • • • • • • • • • • • • • • • •	Mar. 1-31, 1921: Cases, 76; deaths 44. Apr. 1-30, 1921: Cases, 43 deaths, 20. June 1-15, 1921 Cases, 10; deaths, 20
İ				deathe 20 June 1 15 1001
		-	,	Cases, 10; deaths, 9.
Department—	-			
Arequipa	Mar. 1-31	2		At Mollendo.
Callao	do	7	1	At Callao.
Lambayeque Libertad	do	2	1	At Chiclayo.
Libertad	<u>do</u>	12	7	In 5 localities.
Lima	do	32 21	16	At Lima city, 20 cases, 13 deaths At Payta, Piura, and Sullana. At Huarmey.
PiuraAncachs	do	4	19 1	At Payta, Plura, and Sullana.
AncachsArequipa	Apr. 1-30	3	3	At Mollendo
Callao	do	8		At Mollendo. At Callao.
Lambayeque	do	·ĭ	· · · · i	At Chiclayo.
LambayequeLibertad	do	16	· 5	In 5 localities.
Lima	do	6	3	In Lima city, 3 cases, 1 death. At Payta, Sullana, and Talara.
Piura	do	5	7	At Payta, Sullana, and Talara.
Libertad—		_ 1	- 1	
Salaverry	June 1-15	1		
_ Trujillo	do	2	3	
		اہ		
Lima—		2	3	
Lima	ao			
Lima Piura—		٠,۱	ı	•
Lima Piura— Piura	do	1	ا ج	•
Lima Piura—		1 4	3	Total plague-infected rate found
Lima Piura— Piura Talara	do		3	Total plague infected rats found from beginning of outbreak to
Lima Piura— Piura Talara	do		3	Total plague-infected rats found from beginning of outbreak to July 9, 1921, 90. Suburb coextensive with San-

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

Reports Received from July 2 to Aug. 5, 1921-Continued.

PLAGUE-Continued.

	,			
Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Siberia— Vladivostok Senegal:	May 1-31	f	· 145	
DakarSiam:	do	5	5	
BangkokStraits Settlements:	Apr. 24-May 14	3	3	
Singapore	May 8-21	2	2	
Beirut On vessels:	May 31-June 10	1		
8. S. Kishenev	May 2	1		At Chefoo, China. Plague death en route. Vessel sent to quar- antine, Kentucky Island, where to May 6 a total of 16 deaths was reported. (Public Health Reports, July 1, 1921, p. 1534.)
S. S. Oreland				At Genca, Italy, June 12, 1921, from La Plata, Argentina. Two fatal cases plague in crew en route.
S. S. Raiph Moller	June 8	4	1	At Cheso, China, from Vladivostok, Siberia, Three satal cases en route. One case with satal termination removed at Vladivostok.
•	SMAL	LPOX.		
	· · · · · · · · · · · · · · · · · · ·		1	
Algeria: Algiers Asia Minor:	May 1-31	2	•••••••	•
Smyrna	May 22-28	1		On the s. s. Nicholas.
Australia: Melbourne	Apr. 9-23	4	1	Mild epidemic.
Bolivia: La Paz	Apr. 1-30	5	4	•
Brazil: Pernambuco	Mar. 28-May 22 May 8-June 18	28 11	4 2	
British East Africa: Kenya Colony—			_	
Zanzibar Bulgaria:	May 8-14	12	4	Origin India,
Sofia	May 15-31	6	••••••	
Calgary British Columbia—	May 26-June 18	3		
Vancouver Manitoba	May 28-June 11	5		
Winnipeg New Brunswick—	May 28-June 18 June 19-25	1	5	
Restigouche County Westmoreland County. Nova Scotia—	June 26-July 2	2		
Sydney Do	June 5-18 June 26-July 2	2 4		
Ontario— Hamilton Do	June 12–18 July 3–9	3		
Kingston	June 5-11	1 2		At two localities in vicinity, 2
London Montreal	June 5-25	ī		cases.
North Bay Do	June 26-July 9	3 2		
Ottawa Do	June 12-25 June 26-July 2	21 11		
Toronto	June 12-25	5		
Do	June 26-July 2	3		

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

Reports Received from July 2 to Aug. 5, 1921-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	. Remarks.
Canada—Continued.				:
Saskatchewan—	İ	ı		
Regina	June 5-25	3		•
Do	July 10-16	3		1.61
Saskatoon	June 7-27	3		***
Antolagasta	May 16-June 19	228	106	
Arica	May 16-June 19 May 31	2	l	
Mejillones	May 30-June 5			Present. Also at interior nitrate
China:		İ	1	plants.
Amoy	May 8-June 4		4	June 5-11: Present.
Antung	May 16-June 26	12	. Ž.	The state of the s
Canton	Apr. 1-30			Present.
Chungking	May 16-June 26 Apr. 1-39 May 1-June 11 May 8-June 11			Do. Do.
Foochow	May 15-21	4	· · · · · · i	10.
Manchuria-	may 10-21	· •	•	·
Dairen	May 9-June 19	39	4	
Harbin	May 16-June 13 May 22-June 11	5		_
Mukden	May 22-June 11			Do.
Nanking	May 8-June 18 May 8-June 11	26		Do. Mission hospital.
Tientsin Tsingtau	May 9-June 12	4	i	masion nospical.
Chosen (Korea):			··· -	•
Chemulpo	May 1-31	7	2	
Fusan	do	11	3	• 10 10 10
Gensan	do	5	2	
Seoul	ao			
Santa Marta	June 5-25			Present.
Do	June 26-July 9			Do.
Cuba:		_ :		=
Antilla	July 5-25	.7		
DoCierifuegos	June 26-July 9 do	14 1		- *
Matanzas	June 12-18.	î	1	* *
Do	July 3-9	ī		*
Nuevitas	July 4-10	6		
Santiago	June 1-20	10	1	
Ecuador: Guayaquil	May 1-June 15	30		. •
Egypt:		•	• • • • • • • • • • • • • • • • • • • •	
Cairo	Mar. 19-Apr. 29 Apr. 2-29	2	1	
Port Said	Apr. 2-29	2		£*
FinlandFrance:	May 1-15	1		
Brest	May 22-June 4	18		
Rouen	May 1-29	2		
Germany				Apr. 24-May 28, 1921: Cases, 12. Additional, Apr. 17-May 7, 1921: Cases, 57; deaths, 7.
				Additional, Apr. 17-May 7,
Great Britain:				1921: Cases, 57; deaths, 7.
Nottingham	May 29-June 4	1		;
Southampton	June 26-July 2	î		
Greece:	•			
Saloniki	June 6–12		1	
Haiti: Cape Haitien	June 19-25	24	2	•
India.	Julie 19-20	27		Mar. 20-Apr. 9, 1921: Deaths,
Bombay	May 1-7	32	20	1,944.
Calcutta	May 8-28	6	6	
Karachi	May 29-June 11	18	17	i a se
MadrasRangoon.	May 8-June 4 Apr. 24-June 4	· 20	9 3	•
Indo-China	Apr. 22-June 1	- 20		Jan. 1-31, 1921: Cases, 102; deaths,
City—				15.
Saigon	May 9-15	2	. 1	
Provinces—	T 1 01			T 1000: C 10: 3
Anam	Jan. 1-31	35	•••••	January, 1920: Cases, 16; deaths,
Cambodia	do	21	3	January, 1920: Cases, 139; deaths,
				54.
Cochin-China		19	12	January, 1920: Cases, 8: deaths, 1.
	do	27		January, 1930: Cases, 224; deauns,
				43.

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

Reports Received from July 2 to Aug. 5, 1921-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	. Deaths.	Remarks.
Italy:				
Catania				. Province: June 6-20, 1921: Cases
Genoa	Apr. 1-May 31	. 11		. 5.
Messina	May 23-June 5	1		· i
Palermo	May 18-June 14	6	1	. [
Japan:	Mariot Trans 00	_		
Kobe	May 24-June 26 May 23-June 26	3		·I
Nagasaki	may 25-June 26	6	1	1
Java:	1.	l	1	i e
West Java—	May 27-June 3	١.	1	1
BandoengBatavia	May 6-June 3	1 8		-[
Buitenzorg	Ang 20 May 5			1
Garoet	Apr. 29-May 5 May 6-12 Apr. 29-June 3 Apr. 29-May 26	10		-[
Vroweng	Apr 20 June 2	1 20		-[
Krawang Lebak	Apr 20 May 26	28 12	2 2	1
Jugoslavia	Apr. 25-may 20	12	2	Man 7 10 1001 - Come 00 1 - 11 -
ugosia via			•	. May 7-13, 1921: Cases, 83; deaths,
Mesopotamia:		1	ı	20.
Bagdad	Apr. 1-30	3	1	: 1
Mexico:	44 pr. 1-00	1 3	1 1	1
Mexico: Chihuahua	May 22 Juna 27	ł	1	1
Morios City	May 23-June 27 M. J 15-June 25	246	. 3	1
Mexico City	Tune 12 10	240		·[
Vera Cruz Do	June 13-19	• • • • • • • •	1	1
	July 11-17	•••••	. 1	
Panama			• • • • • • • • • • •	Jan. 1-June 10, 1921: Cases, 192; of which 32 were in nonresi-
Canal Zone	Jan. 1-June 10	. 2		of which 32 were in nonresi-
Colon	do	111		dents.
Panama	do	47		
Poland				Mar. 1-Apr. 30, 1921: Cases, 1,117;
District—	354 400	_	1	deaths, 142.
Bialystok	Mar. 1-Apr. 30	.3	<u>-</u> -	
Cracovia	do	56	6	1
Kielce	do	180	26	1
Leopol	do	52	16	
Lodz	do	72	9	
Lublin	do	397	30	
Leopol. Lodz. Lublin Posen Silesia. Stanisławow Tarnopol. Warsaw	do	26	2	i
Silesia	do	10	[In Teschen.
Stanislawow	do	30	5	
Tarnopol	do	156	31	
11 at 50 W	uv	36	4	
Warsaw City	do	90	13	
ortugal:	35			La contraction of the contractio
Lisbon	May 15-June 18	••••••••••••	32	
Oporto. ortuguese East Africa:	June 19-25	1	•••••	
ortuguese East Airica:	35		l i	
Lourenço Marques	May 8-28	8	• • • • • • • • • • • • • • • • • • • •	
tumania:	1		l	
District— Hotin	4 1 00	40	_	
	Apr. 1-30	40	9	1
Orhei	BLBF. 1-31	2	• • • • • • • • • • • •	l .
ussia:	I			
Province— Esthonia	4 1 20			
Latvia-	Apr. 1-30	. 6		
Riga	do	26	• • • • • • • • • • • • • • • • • • • •	14.
enegal: Dakar	Ma-1 21	1		
	May 1-31	- 1	1	
pain:	May 12-June 22		13	
Barcelona	May 1-31			
Malaga	May 1-31	••••••	34	
Tarragona	May 9-15	····i	1	
Valencia	July 2-9.		•••••	· · · · · · · · · · · · · · · · · · ·
Dowitzerland:	July 4-9	5	• • • • • • • • • • • • • • • • • • • •	
	Mo- 90 Tune 11	,,	1	•
Zurich	May 28-June 11	10		
yria:	4 0.10	į	1	Descent
Aleppo	Apr. 9-16	•••••	•••••••	Present.
Beirut	May 10-30	1	1	
unis:	Mars 20 Turns 17	اما		
Tunis	May 30-June 17	2	3	
Tunisurkey:	May 30-June 17	2	3	

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

Reports Received from July 2 to Aug. 5, 1921-Continued.

SMALLPOX-Continued.

SMALLPOX—Continued,						
Place.	Date.	Cases.	Deaths.	Remarks.		
Union of South Africa: Cape Province	Apr. 24-May 7			. Outbreaks.		
NatalOrange Free State	dodo			Do. Do.		
Transvaal.	. May 22-28			Do.		
•	TYPHUS	FEVE	R.	1		
	i	<u> </u>	T	T		
Algeria: AlgiersOran.	May 1-31 May 22-June 30	56 35	8 28			
Asia Minor: Smyrna	June 12-18	1		In district.		
Bolivia: La Paz	. Apr. 1-39	32	39			
Brazil: Porto Alegre	June 19–25		3			
Chile: Concepcion	Apr. 12-June 20		8	·····		
Valparaiso	Mar. 27-May 28	••••••	4			
Antung	May 30-June 5 May 22-June 11	1 3		••		
Manchuris— Harbin	May 23-29.	1				
Chosen (Korea): Fusan	May 1-31	1				
Gensan	do	2				
Seoul	do	1				
Prague	June 5-11	4	2			
Egypt: Alexandria Cairo	May 21-June 23 Mar. 19-May 6	21 94	8 30			
Port Said	Apr. 2-15	8	1	••		
FinlandGermany	May 1-15	5		Apr. 24-June 4, 1921: Cases, 7.		
HamburgGreat Britain:	May 27-June 4	1		ripri ar vano 1, 10ar. Oases, 1.		
Dublin	May 29-June 4	1				
Saloniki	May 23–June 12	20	3			
Nagasaki	May 23-June 5	7	2	Jan. 30-Mar. 13, 1921: Cases, 109:		
Belgrade	May 1-14	6		deaths, 15.		
Mexico City	May 15-June 25	102		Including municipalities in Federal district.		
Poland				Mar. 1-Apr. 30, 1921: Cases, 11,489; deaths, 1,131.		
Bialvstok	Mar. 1-Apr. 30	853 603	45			
Cracovia	do	848	90 62	• • •		
Leopol	do	2, 508	277	•		
LeopolLodz.	do	521	53			
Lublin.	do	1,446	83			
Posen. Silesia. Stanislawow.	do	77 26	9	In Teschen.		
Stanislawow	do	1,557	232	THE TOTAL CONTRACTOR		
Tarnonol	- 40	1,855	194			
Warsaw Warsaw city	do	972 223	61 20			
Rumania:		223	20	* **		
District—		1		••		
Hotin	Apr. 1-30.	107	10			
Orhei	Mar. 1-31	80 .				
Province	•	1		•		
Esthonia	Apr. 1-May 31	98 .		4 - 44 *		
Latvia	Apr. 1-30	209 .				
Siberia— Vladivostok	Mar. 1-May 31	أء		•		
	nawy va	-1	-1			

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

Reports Received from July 2 to Aug. 5, 1921—Continued.

TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain: Madrid Syria: Beirut Tunis: Turkey: Constantinople Union of South Africa: Cape Province Capetown East London Orange Free Stato	May 1-31		1 1 3 3	Apr. 24-May 28, 1921: Outbreaks. At native cantonment in vicinity. 24-May 28, 1921: Outbreaks.
	, ,			

YELLOW FEVER.

The state of the s	1	[1	1
Mexico:		i		1
Alamo	June 1-30	10		State of Vera Cruz.
Vera Cruz	June 13-27	7		
Peru				Mar. 1-31, 1921: Cases, 66; deaths,
Department-		l	i	25. Apr. 1-30, 1921; Cases, 106
Lambayeque—		1	1	deaths, 32. In 13 localities.
Lambayeque— Chiclayo	Mar. 1-31	20	10	
Chongollape	do	. 2	2	1
Ferrenale	do		ī	
Lambayeque	do	15	5	
Monsefu	do	18	1 4	
Motupe	do	ĭ	l î	İ
Pomalca		5	l ;	
Villa Eten	do	5	1 7	İ
Callao-				
	Apr. 1-30	1		At quarantine station. From
Lambayeque—	Apr. 1-00			Chiclayo.
.Lambayeque—	4.	. 23		1
Chiclaye	dg,	10	5	with the state
Chongonape	go			
Jayanca	dq.::11	5	- 2	
Lambayeque Monsefu	do.,,,,,,,,,	5	2	
Monsem	de	. 8	5.	
Motupe		45	11	of the state of th
Olmos		2	4	
Villa Eten		2		
	do	1		, ,
Libertad—				
Guadalupe	do	2		
	do	1	1	
Truiillo	do	1	1	Country.
Lambayeque—				•
Chiclayo	June 1-15	4	3	
Monsefu	.do	3		
Pacora	do	ĭ		
Libertad-		-		
Casa Grande	do	1		Farm.
Pacanga	do	7	i	T. Of 1874
Paijan	do	3	1	
Truillo	do	1	7	
11umiv	#[555]) \	• • •	- 1	
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