Public Health Reports

Vol. 64 • DECEMBER 23, 1949 • *No. 51*

Denver Rheumatic Fever Diagnostic Service

Purpose and Method of Operation

By WARD DARLEY, M. D.*

Since many communities are giving serious consideration to the establishment of programs for the control of rheumatic fever and rheumatic heart disease,[1] a review of the development, organization, and operative methods of the Denver Rheumatic Fever Diagnostic Service may be of interest. In the 5 years in which this service has been in existence, countless problems have been encountered and solved. A description of the manner in which these difficulties were worked out may assist other communities in initiating and organizing similar services. This report discusses the purposes and policies, the origin, sponsorship, personnel, budget, and operational details of the Denver Rheumatic Fever Diagnostic Service.

As its name implies, the purpose of this activity is to provide a uniform diagnostic service to the physicians and people of the community. The service is not concerned with therapy but with identification of cases of rheumatic fever and rheumatic heart disease that have escaped detection. However, this does not mean that the service activities are of a survey nature as all individuals are referred to the clinic because of abnormal or questionable cardiac findings, neuro-skelato-muscular pain, spontaneous nose bleeds, fever, tachycardia, weight loss, etc.—in other words, because they are suspected, for one reason or another, of having the disease. As would be expected congenital heart disease and other nonrheumatic conditions are frequently encountered. The service also is interested in evaluating previously recognized cases of rheumatic fever and rheumatic heart disease. Every effort is made to see that the children needing care or observation are returned to their physician. Arrangements are made for referral to a physician or clinic if there is no family

*Vice president, University of Colorado, and dean, Department of Medicine. The Denver Rheumatic Fever Diagnostic Service and the University of Colorado School of Medicine, Denver, cooperated in the preparation of this report.

[1] Wedum, Bernice, G.: Development of a community rheumatic fever program. Am. J. Pub. Health 3: 299 (1946).

doctor. In addition to these activities, the service acts as an educational center for undergraduate and graduate medical students and physicians in the community.

Organization

Community Cooperation

From the beginning, the organization, as well as operation, of the Denver Rheumatic Fever Diagnostic Service necessarily required the development and maintenance of community cooperation and local services. In September 1944 the service was initiated by the Denver Public Health Council, largely through the efforts of its president, Dr. Henry F. Hoffman. Arrangements for obtaining $2,500 for preliminary financing were made with the Denver Community Chest; an appropriation of $1,000 a month for support was allocated by the Denver Junior Community Chest. A special committee of the Denver Public Health Council directed the policies.

Through the combined efforts of the Denver Public Health Council, the city and county medical society, the public school system, and the University of Colorado, the Colorado Heart Association was organized in 1946. The association became a member of the Community Chest and assumed responsibility for direction of the diagnostic service in October 1947. Operation of the service and the source of financial support have remained unchanged.

The initial outlay for equipment was taken care of largely by the original grant of $2,500 made by the Denver Community Chest. Contributions of money, time, and services from various organizations [2] in the community have played an important part in equipping and maintaining the service. A fluoroscope was given to the school of medicine and added to the diagnostic facilities; a generous supply of books and toys was donated and a portable toy cart built for the toys by a lumber company; several community groups joined together to provide funds for mid-afternoon milk and sandwiches and for taxi fare for emergency transportation; nurses' aides helped to steer children through the clinic.

An important result of such active community participation in this program has been the value of the diagnostic service as an educational field for undergraduate and graduate students of medicine. Utilizing the clinical material of the service, the school of medicine

[2] The following and other organizations have helped in innumerable ways: Colorado Division of the American Legion Auxiliary, Visiting Nurse Association, the Colorado chapter of the Alpha Phi National Sorority, the American Legion Child Welfare Committee, the Denver Chapter of the American Red Cross, the Women's Auxiliary of the Medical Society of the City and County of Denver, the Denver Junior League, the Faculty Wives of the University of Colorado School of Medicine, the Colorado Society for Crippled Children, the Colorado State Department of Education, the Colorado State Department of Vocational Rehabilitation, the Boettcher School for Crippled Children, the Barr Lumber Company, and the Volunteer Community Service.

has conducted formal postgraduate courses in the diagnosis and management of rheumatic fever and rheumatic heart disease. A postgraduate clinic which deals with the multiple phases of rheumatic fever and heart disease in children is held once a month. The service has provided excellent material for cardiovascular teaching because of the opportunity for appreciation and study of the wide range of normality as well as the great variety of rheumatic and congenital cardiovascular abnormalities that are inevitable in a large group of children selected as this one is.

In constant demand as speakers before the medical and lay groups of the community, staff members of the diagnostic service have a fine opportunity for professional and public education. Community interest in the work of the Denver Rheumatic Fever Diagnostic Service has resulted in generous contributions to the medical school for research in rheumatic fever and heart disease.[3] Personnel of the service have cooperated with the university and lay organizations in a survey of heart disease in the three counties of the State which lie above 9,500 feet in altitude. Another notable activity has been the organization by an energetic group of women [4] of a reprint and microfilm library. This work has been in process for 2 years. Eventually the library will contain either reprints or microfilm copies of all significant articles published since 1900 on the subject of rheumatic fever and rheumatic heart disease in the United States and foreign countries.

Personnel

The school of medicine of the University of Colorado provides the services of a dietitian, space, janitorial service, heat, and light. A member of the faculty acts as director and is responsible to the special committee of the sponsoring agency and not to the medical school. After the first 6 months his services have been on a voluntary basis. The director has no regular or stated duties. His function is one of over-all supervision—he is the liaison between the service and the supervising committee, the referring agencies or individuals, the medical profession, the press, and the general public. The half-time assistant director supervises the examination of new patients, dictates all clinical reports, makes it a point to check the histories, examine the hearts, and discuss the findings with the examining physician and medical students. In addition to the director and assistant director, the personnel includes a full-time secretary, a half-time social worker, a half-time technician, a half-time pediatrician, and a visiting clinician

[3] Delta Delta Delta Alliance, the Stardusters, and the Colorado Division of the American Legion Auxiliary.

[4] Ladies Auxiliary of the Rocky Mountain Screen Club.

and nurse who attend all clinical sessions. Interested faculty members of the medical school always are present at the clinic sessions; residents, interns, and medical students are assigned regularly to the clinic. This personnel and the budget that follows has made it possible for the service to examine approximately 1,000 children a year.

Budget

The working budget for a typical year is as follows:

Assistant director	$3,000
Pediatrician	1,200
Visiting clinician	1,200
Secretary	1,884
Social worker	1,620
Technician	784
Nurse	208
Incidentals	[1] 2,104
Total	12,000

[1] Incidental expenses include stationery, stamps, telephone, X-rays, miscellaneous supplies and a payment to the University of 50 cents for each admission (cost of laundry, electrocardiographic materials, etc.).

Operation

The management of patients, clinic operation, the record system, and diagnostic and referral procedures are described in detail as follows:

Referral Sources of Patients

The public schools of Denver routinely conduct an annual physical examination of all children whose parents have given consent. At any time during the school year, but usually during the yearly examination, the school physician or nurse may observe symptoms or physical findings indicating that the child may have rheumatic fever or heart disease. In all such cases the child's physician is consulted to ascertain whether or not he wishes the child referred to him or to the Denver Rheumatic Fever Diagnostic Service for evaluation. The Visiting Nurses Association provides health coverage for most of the parochial schools in Denver. The visiting nurse makes a referral to the service in the same manner as does the public school doctor or nurse. Practicing physicians frequently refer their patients to the service for evaluation and, while they may make telephone arrangements for such examinations, they are asked to send written consent with the patient at the time of the examination. Any agency (e. g., Public Welfare Department) other than the schools or private physicians may refer a child to the service, in which case the referral procedure is the same.

Procedures and Records

Consent or dissent for the routine school examination and the name of the family physician, if any, previously has been obtained from the parents of each child in the school system (figs. 1 and 2). If this examination, or developments at any other time, suggests the possibility of rheumatic fever or heart disease, machinery is set in motion to refer the child either to his family physician or to the diagnostic

Child's name JOHN DOE Age 8

Address 816 Melrose Ave.

Grade 2 Section A Home room 102

Before we can make definite appointments with the school physician, we must know how many parents desire to avail themselves of this service for their children. Will you please fill out the coupon below and return to us, regardless of your decision. If you indicate that you desire the examination, you will be notified later of the time of your appointment. We should like to have one or both parents present at the examination.

Ellen Jones School Nurse

Franklin North Principal

PLEASE FILL OUT AND RETURN.

I desire the health examination for my child. Yes ✓

I expect to be present at the examination. Yes ✓

Mrs. Henry A. Doe Parent's signature

TIME OF YOUR APPOINTMENT

(To be filled out and sent to parents if they indicate that the health examination is desired.)

Name of child JOHN DOE

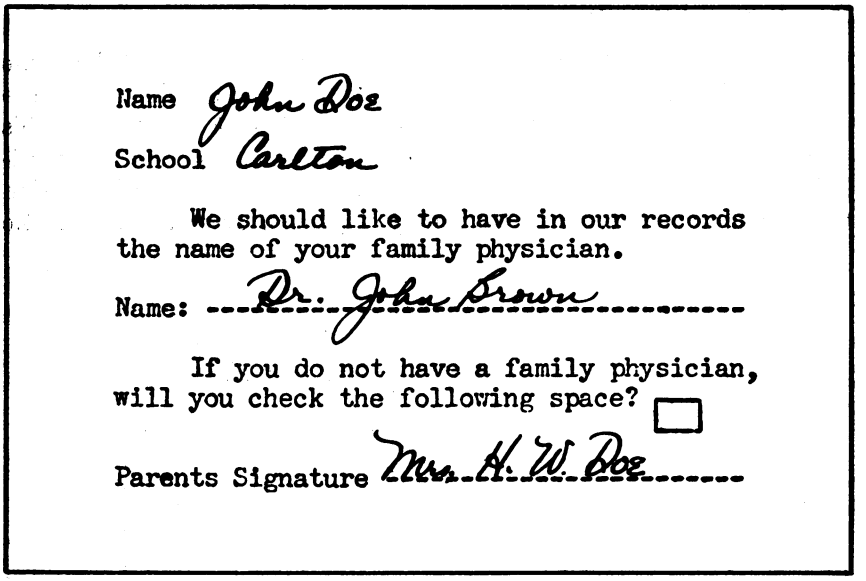
Health examination appointment: Day January 25th

Hour 10:30 A.M.

Ellen Jones School Nurse

Franklin North Principal

Figure 1.


Name John Doe

School Carlton

We should like to have in our records the name of your family physician.

Name: Dr. John Brown

If you do not have a family physician, will you check the following space? ☐

Parents Signature Mrs. H. W. Doe

Figure 2.

service. If the child has a physician, this physician is first contacted in order to ascertain his desires as to referral (figs. 3 and 4). When the family physician has been consulted and his instructions received, the school nurse gets in touch with the parents and makes recommendations which are in line with the physician's wishes. The procedure thus far is one that limits its concern to the school and the child's parents and physician. The completed forms that pertain thereto are kept on file with the school health service. In instances where the parents have indicated that the school child has no physician, the nurse deals directly with the parents and then, if they so desire, makes an appointment with the service. The school nurse (through the central office of the public schools) telephones the diagnostic service for an appointment and sends to the parents the perforated appointment card with time and date of the appointment properly filled in. The right side of this card, when completely filled in at the end of the examination, constitutes the master card for the service files (fig. 5). As part of the arrangements for the examination, the school nurse mails a form letter to the parents, confirming the appointment and giving directions and information concerning the examination procedures. This letter helps materially with the smooth operation of the service and with preparation of the patient and parents for the clinic visit (fig. 6). (In many cases where referral is not arranged by the public schools this form letter is mailed by the Rheumatic Fever Diagnostic Service.)

DENVER PUBLIC SCHOOLS
ADMINISTRATION BUILDING
414 FOURTEENTH STREET
DENVER 2, COLORADO
KENNETH E. OBERHOLTZER, SUPERINTENDENT

A. L. BEAGHLER, M.D.
DIRECTOR OF HEALTH SERVICE

Dear Dr. John Brown

Undoubtedly you are familiar with the purposes of the Rheumatic Fever Diagnostic Service which has been established at Colorado General Hospital. The school health department is cooperating with this clinic in finding children who may have rheumatic fever. However, no child will be sent to the clinic without the approval of the family physician.

At a recent routine school health examination of John Doe the examining physician found what he believes are signs of a cardiac condition and/or evidence of possible rheumatic fever. Will you please indicate on the enclosed card whether you prefer to have this child referred to the Rheumatic Fever Diagnostic Service, or to your office. Please return the card to Dr. A. L. Beaghler, 414 Fourteenth Street, Denver.

Yours sincerely,

Ellen Jones, R.N.
Carleton School Nurse

Figure 3.

Examination

No charge is made to any child—regardless of ability to pay. Clinic sessions are held twice weekly on Monday and Friday afternoons from 12:15 to 5. Each child who reports to the clinic is supposed to be accompanied by one of the parents or some other responsible person. However, this is not always possible in the case of children of high school age. Individuals over 19 years of age are not accepted. All new cases report at 12:15 p. m. and must have had lunch as they are expected to remain all afternoon. Since the examination requires

Rheumatic Fever Diagnostic Service
Permission Slip

I wish my patient John Doe
to be referred to the Rheumatic Fever Diagnostic Service and then referred back to me (✓)
I wish my patient
to be referred directly to me ( )

Date March 3, 1948 Signed: John Brown, M.D.

Figure 4.

so much time from patients and parents, the availability of books, toys, and nourishment is important to their comfort. The few patients who may have occasion to pay more than one visit to the service because of unsatisfactory laboratory results or because of a recheck on some physical finding, report at 1:00. This permits service personnel to work to the best advantage, prevents confusion, and allows time for discussion between staff members and for the

Referral John Doe
from Mrs. H. Johnson (nurse)
School Carlton

Appointment
Day Monday
Date March 8, 1948
Time 12 15 P.M.

This card entitles you to admission.

Please Telephone East 7771 Extension 290 if you cannot keep your appointment.

DENVER AREA RHEUMATIC FEVER DIAGNOSTIC SERVICE

Name John Doe Age 8 Date 3/8/48
Address 816 Melrose Avenue Sex M Race W
School Carlton Grade 2 Parents Mr. & Mrs. N.O. Doe Phone Melrose 8244 Birthdate 2/20/40
Referred by (physician / nurse ✓ / agency) Private Physician
Reason for Referral Possible Rheumatic Fever Dr. John Brown

DO NOT WRITE BELOW THIS LINE

Diagnosis Rheumatic heart disease, active Mitral insufficiency
Disposition Private Physician

Figure 5.

March 1, 1948
(Date)

Dear Mrs. H. W. Doe :

This letter will confirm the appointment made for John Doe on March 8th at the Rheumatic Fever Diagnostic Service. The office is located on the second floor of the Outpatient Building of the Colorado General Hospital, 9th Avenue and Colorado Boulevard.

In order to make the child coming for examination as comfortable as possible, please note the following instructions:

1. The child should eat lunch before coming to the Rheumatic Fever Clinic.
2. It is better for the child to miss school than to go without lunch.
3. If the child is a bed patient, take him or her to the Ambulance Entrance at the rear of Colorado General Hospital and ask that the child be brought to the Rheumatic Fever Clinic in a wheel chair.
4. Have the child at the Clinic promptly at 12:15 P.M. There is no advantage in coming earlier.
5. Be prepared to stay the entire afternoon.
6. The correct evaluation of the child's condition necessitates a great many questions. Please be prepared to help us to help you by giving as concise and exact answers as possible.
7. No charge of any kind will be made and within two weeks a complete report will be sent to the referring physician or agency. Your physician will discuss the report with you.
8. If you cannot keep this appointment, please call EAst 7771, Extension 290, or if you live outside Denver, drop us a card so that another appointment can be made.

Thank you for your cooperation.

Very truly,
(Miss) Mary Smith, Sec'y.
Rheumatic Fever Diagnostic Service

Figure 6.

teaching of visiting doctors, residents, interns, and medical students.

When the patient first reports to the Rheumatic Fever Diagnostic Service, the secretary fills in the top half of the detachable right side of the appointment card (fig. 5). The clinical chart is started and the child is taken by the nurse and technician for the following: weight, height, temperature, pulse rate (the unreliability of this under the the conditions of the examination is recognized), urine specimen, and venipuncture for blood, for hematocrit and serology. White and differential counts are obtained later if the examining physician indicates the need. After the patients complete the above procedures

they are taken to the heart station for electrocardiograms (standard limb leads). They are then returned to the service, where each child, together with a parent, is assigned to a medical student, intern, or resident for the clinical history and routine physical examination. The responsible attending staff is sufficiently large to check all student work thoroughly. The medical personnel, except for the assistant director, report to the service at 2 p. m. so that they are on duty at just about the time patients begin to return from the heart station. The assistant director is on hand at 12:30 to answer questions, do difficult venipunctures, take care of irregularities, and see any patients who have been asked to appear at 1 p. m. for some type of recheck. By 2 o'clock the assistant director usually is free to supervise the examination of new patients, who average about 10 per session. The assistant director also dictates clinical reports, checks histories, examines the hearts of all patients, and discusses the findings with the examining physician and students.

The clinical chart follows the patient throughout the examination, and all findings are recorded immediately on one of the seven sheets designed to include history, physical examination, laboratory tests, and follow-up. The dietitian and medical social worker interview parents for dietary and social histories (which are added to the clinical chart as soon as completed) during the frequent periods when the parents do not need to be with their children. After the patients finish with histories and physical examinations they are gathered in the fluoroscopic room. By 4 o'clock the medical staff usually is free so that the entire staff can witness the fluoroscopic examination of each child. The fluoroscopic findings are dictated to the secretary as each examination is done. The children are then allowed to dress and go home. X-ray examinations, if needed, are made the next day.

The recording of conclusions completes the study of each patient. The diagnosis is entered on the lower half of the master card (fig. 5), the report to the referring agency or physician is dictated, the master card is placed in the permanent file, and the clinical chart is sent to the medical school statistician for coding.

Since uniform examination is essential for the performance of satisfactory work, no apology is made for the use of forms or for the recording of history and clinical data.[5]

Reporting Results of Diagnostic Study

The complete report on all findings and conclusions of the diagnostic study, dictated by the assistant director, is returned to the referring agency. Two copies of this report (fig. 7, example of known

[5] A sample completed chart will gladly be sent upon request. Address Denver Rheumatic Fever Diagnostic Service, 4200 East Ninth Avenue, Denver 7, Colo.

THE DENVER RHEUMATIC FEVER DIAGNOSTIC SERVICE
UNIVERSITY OF COLORADO MEDICAL CENTER
4200 EAST NINTH AVENUE · TELEPHONE EA 7771
DENVER 7, COLORADO

March 11, 1948

SPONSORED BY
COLORADO HEART ASSN.
314—14TH ST.

Dr. John Brown
Doctors Building
Denver, Colorado

Re: John Doe, Age 8
816 Melrose Avenue
Carlton Grade School

Dear Doctor Brown:

We have examined John Doe who was referred to us for diagnostic study on March 8, 1948.

In January 1948, the patient had an upper respiratory infection and sore throat followed in two weeks by fever and a measles-like rash, and later by "hives" which were always preceded by patterned, purplish-red blotches. He has also had stiffness and pain in the fingers, ankles, knees, and shoulders at varying times, relieved much by salicylates. At the time of hospitalization in February he had epistaxes, subcutaneous nodules. Later that month cardiac arrhythmia and precardial pain occurred. A cardiac murmur was heard for the first time on February 20, 1948. At present epistaxes, tachycardia, and rash occur. There is no history of rheumatic fever in the family.

On physical examination the patient was of the expected height and weight for his age, his temperature 100.6°, and his pulse 120. Over the back was a circivate, purplish-red, discrete and confluent rash. Blood-tinged crusts were present on the nasal septum. Arterial pulsations were felt in the suprasternal notch and capillary pulsations were seen in the nail-beds. The heart was slightly enlarged to the left on percussion with an apical systolic shock. The aortic second sound was equal to the pulmonic second sound in intensity. There was a high-pitched, blowing systolic murmur heard best in the left lateral position at the apex, transmitted to the axilla. There was a moderately loud diastolic murmur of medium pitch, blowing in quality, heard best at the second left interspace, transmitted into the neck and along the left sternal border. No change was noted with position or exertion. Also heard at the apex was a low-pitched, rough, presystolic murmur. The blood pressure was 140/40/0 and the femoral pulse was bounding.

The urine was negative for sugar and albumin but showed occasional red cells, mucus (3), pus cells (1), and epithelial squamous cells (2).

The electrocardiogram showed a rate of 120 with a PR interval of .17 and marked right axis deviation. The P waves were broad and notched and suggested auricular enlargement. The amount of right axis deviation suggested right heart strain. On fluoroscopic examination in the anterior posterior position the heart was hyperactive and moderately enlarged to the left. The waistline was widened. In the left anterior oblique position the heart does not clear the vertebral column on deep inspiration in a true lateral position. In the right anterior oblique position the pulmonary conus was slightly bulging but not remarkably so. There was slight posterior displacement of the barium filled esophagus.

An interview with the dietitian indicated that there were no deficiencies in his intake.

Our conclusion is that this patient has active rheumatic fever with rheumatic heart disease evidenced by aortic insufficiency, mitral insufficiency and mitral stenosis, with cardiac enlargement which is compensated at this time. We feel that the skin rash is an erythema multiforme, associated with his acute rheumatic fever.

Kindly let us know if we may be of further service to you.

Yours very truly,

Charles E. Lambert, M. D.
Director

George Q. Black, M. D.
Assistant Director

L:B:W:

Figure 7.

rheumatic heart disease referred for evaluation) are sent routinely to the chief of the public school health service regardless of the referral source of the patient. One copy is for the school files as a duplicate master file and the other is for the school nurse. If the patient has been referred directly to the diagnostic service by a physician, the report is addressed to him and two carbon copies sent to the central office of the school system. If an agency other than the public school

system or a private physician refers the patient, the referring agency receives the original of the report and the school system receives the usual carbons.

While the Denver Rheumatic Fever Diagnostic Service does not treat patients, it frequently plays a part in directing to the proper place those patients needing treatment or observation. Patients referred by physicians or by schools (with the consent of physicians) always are referred back to their physicians. These physicians report to the parents and discuss with them the findings of the diagnostic study. Patients referred by agencies are referred back to the referring agency for disposition. Patients who do not have family physicians are referred to the office of the County Medical Society for physician referral unless they are indigents, in which case they usually are referred to the pediatric clinic of the University of Colorado School of Medicine.

It is hoped that this description of the Denver Rheumatic Fever Diagnostic Service may serve to ease the organizational work and benefit other communities planning to initiate a similar rheumatic fever program.

PUBLIC HEALTH SERVICE PUBLICATIONS

January–June 1949

The purpose of this list is to provide a complete and continuing record of Public Health Service publications for reference use by librarians, scientists, researchers and others interested in particular fields of public health work, and not to offer the publications for indiscriminate free distribution.

Single sample copies of most of the publications listed are available from the Public Inquiries Branch, Division of Public Health Methods, Public Health Service, Washington 25, D. C. Those marked with an asterisk (*) may be obtained by purchase only.

In general, quantities of each publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., at the prices shown, with a reduction of 25 percent on orders of 100 or more of a single publication. However, the statistical reports of the National Office of Vital Statistics are not available from the Government Printing Office, and copies may be obtained only by writing to the National Office of Vital Statistics, Public Health Service, Washington 25, D. C.

PERIODICALS

*Public Health Reports (weekly), January–June, vol. 64, Nos. 1–25, pages 1 to 815. 10 cents a copy. Subscription price $4 a year.

*Extracts from Public Health Reports (monthly), January–June, Tuberculosis Control Issues Nos. 35 to 40. Average 30 pages each. 10 cents a copy. Subscription price $1 a year.

*The Journal of Venereal Disease Information (monthly), January–June, vol. 30, Nos. 1 to 6, pages 1 to 182. 10 cents a copy. Subscription price 75 cents a year.

*Journal of the National Cancer Institute (bimonthly), February–June, vol. 9, Nos. 4 to 6, pages 261 to 451. 40 cents a copy. Subscription price $2 a year.

Public Health Engineering Abstracts (monthly), January–June, vol. XXIX, Nos. 1 to 6, 32 pages each. No sales stock.

*Industrial Hygiene Newsletter (monthly), January–June, vol. 9, Nos. 1 to 6, 16 pages each. 10 cents a copy. Subscription price $1 a year.

National Negro Health News (quarterly), January–March; April–June, 1949 vol. 17, Nos. 1 and 2 (combined), 28 pages. No sales stock.

REPRINTS FROM PUBLIC HEALTH REPORTS

2911. Q fever studies in southern California. II. An epidemiological study of 300 cases. By M. Dorothy Beck, Joseph A. Bell, Ernest W. Shaw and Robert J. Huebner. January 14, 1949. 16 pages. 10 cents.

2912. Experimental animal colony in tropical West Africa. By Hildrus A. Poindexter. January 14, 1949. 6 pages. 5 cents.

2913. State legislation for minimum standards of hospital maintenance and operation. By Vane M. Hoge and John G. Steinle. January 21, 1949. 18 pages. 10 cents.

2914. Metopon hydrochloride. An experiment in clinical evaluation. By Nathan B. Eddy. January 28, 1949. 12 pages. 5 cents.

2915. Statistical studies of heart disease. III. Heart disease associated with other major causes of death as primary or contributory cause. By Mary Gover. January 28, 1949. 6 pages. 5 cents.

2916. A transparent dextrose serum tellurite plating medium. Its use as an adjunct to microscopic examination of smears made from Loeffler slants in routine diphtheria diagnosis. By Ona R. Whitley and Samuel R. Damon. February 18, 1949. 11 pages. 5 cents.

2917. A flocculation test as a possible method for differentiating immunologic types of the poliomyelitis virus. By E. C. Roberts. February 18, 1949. 4 pages. 5 cents.

2918. Murine typhus fever in Louisville, Kentucky. By Newell E. Good and Emil Kotcher. February 25, 1949. 9 pages. 5 cents.

2919. Twenty-five year survival of a *Pasteurella pestis* culture without transfer. By Edward Francis. February 25, 1949. 4 pages. 5 cents.

2920. How the National Mental Health Act works. By James V. Lowry. March 11, 1949. 10 pages. 5 cents.

2921. Prevalence of antibiotic-producing coliform organisms. By S. P. Halbert and M. Gravatt. March 11, 1949. 6 pages. 5 cents.

2922. Effect of smallpox vaccination on the outcome of pregnancy. By Marjorie T. Bellows, Mary E. Hyman, and Katharine K. Merritt. March 11, 1949. 5 pages. 5 cents.

2923. Relationship between infant mortality and socioeconomic factors in urban areas. By Marion E. Altenderfer and Beatrice Crowther. March 18, 1949. 9 pages. 5 cents.

2924. Effect of sodium fluoroacetate (1080) in poisoned rats on plague diagnosis procedures. Preliminary report. By I. Gratch, P. L. Purlia, and M. L. Martin. March 18, 1949. 4 pages. 5 cents.
2925. "Infection unit" and "index of aggregation" suggested epidemiological terms. By Filip C. Forsbeck. March 18, 1949. 5 pages. 5 cents.
2926. Statistical studies of heart disease. IV. Mortality from heart disease (all forms) related to geographic section and size of city. By Mary Gover. April 8, 1949. 18 pages. 10 cents.
2927. Raffinose serum tellurite agar slants as a replacement for Loeffler's medium in diphtheria diagnosis. By Ona R. Whitley and Samuel R. Damon. April 8, 1949. 4 pages. 5 cents.
2928. Cobalt and the dust environment of the cemented tungsten carbide industry. By Lawrence T. Fairhall, Robert G. Keenan, and Hugh P. Brinton. April 15, 1949. 6 pages. 5 cents.
2929. Q fever studies in southern California. III. Effects of pasteurization on survival of *C. burneti* in naturally infected milk. By R. J. Huebner, W. L. Jellison, M. D. Beck, and F. P. Wilcox. April 22, 1949. 13 pages. 5 cents.
2930. Isolation of *Brucella abortus* from hogs. By Norman B. McCullough, Wesley C. Eisele, and Emma Pavelchek. April 29, 1949. 2 pages. 5 cents.
2931. Pertussis and aureomycin. By Joseph A. Bell, Margaret Pittman, and Byron J. Olson. May 13, 1949. 10 pages. 5 cents.
2932. Simple and efficient transport method for gonorrheal specimens. By Lenore R. Peizer, Gustav I. Steffen, and Sarah Klein. May 13, 1949. 5 pages. 5 cents.
2933. Diarrheal disease control studies. II. Conical net for collecting flies. By Paul P. Maier and Richard P. Dow. 4 pages; 3 illustrations. 5 cents.
2934. Public Health Service publications July–December 1948. May 13, 1949. 8 pages. 5 cents.
2935. Current organizational patterns of statistical activities in State health departments. By Daniel D. Swinney. May 20, 1949. 21 pages. 10 cents.
2936. Birth of a community mental health clinic. By Edward Davens and Paul Lemkau. May 27, 1949. 9 pages. 5 cents.
2937. Effects of DDT dusting on domestic rats under colony and field conditions. By Jack E. Dent, Harvey B. Morlan, and Elmer L. Hill. May 27, 1949. 6 pages. 5 cents.
2938. Avirulent isolate of *Salmonella typhosa* 58 (Panama carrier). By H. C. Batson, Maurice Landy, and Arthur Abrams. May 27, 1949. 4 pages. 5 cents.
2939. Summary of antimalarial drugs. By W. Clark Cooper. June 10, 1949. 16 pages. 10 cents.
2940. Professional education for cancer control. By Austin V. Deibert. National Cancer Institute program of postgraduate training for physicians. By R. R. Spencer. Cancer teaching in medical schools. By Raymond F. Kaiser. Cancer teaching in dental schools. By Raymond F. Kaiser. New tools for professional cancer education. By Cancer Reports Section, National Cancer Institute. June 17, 1949. 28 pages. 10 cents.
2941. Rabies problems and control. A nation-wide program. By James H. Steele and Ernest S. Tierkel. June 24, 1949. 12 pages. 5 cents.
2942. Pilot mental health clinic. First annual report of Prince Georges County Clinic. By Mabel Ross. June 24, 1949. 5 pages. 5 cents.
2943. Notifiable diseases, year 1948. June 24, 1949. 6 pages. 5 cents.

SUPPLEMENTS TO PUBLIC HEALTH REPORTS

180. Directory of State and territorial health authorities, 1949. (1949 revision.) 82 pages. 20 cents.
194. Directory of full-time local health officers, 1949. (1949 revision.) 47 pages. 15 cents.

PUBLIC HEALTH BULLETIN

301. Industrial hygiene problems in Bolivia, Peru and Chile. By J. J. Bloomfield. 1948. 139 pages; 15 illustrations. 40 cents.

NATIONAL INSTITUTES OF HEALTH BULLETIN

190. Phenol and its derivatives: The relation between their chemical constitution and their effect on the organism. By W. F. von Oettingen. 1949. 408 pages. 70 cents.

ANNUAL REPORT

Annual Report of the Public Health Service for the fiscal year 1948. 204 pages. 45 cents.

HEALTH INFORMATION SERIES

8. Poliomyelitis. 1949. 6-page folder. 5 cents; $1.50 per 100.
36. Influenza. 1949. 4-page folder. 5 cents; $1 per 100.
38. Chickenpox. 1949. 4-page folder. 5 cents; $1 per 100.

DENTAL POSTERS

1. Curb tooth decay the easy way. 1949. No sales stock.
2. 4×4=healthy teeth. 1949. No sales stock.

UNNUMBERED PUBLICATIONS

Interstate quarantine regulations. Part 72, title 42, code of Federal regulations amendment concerning lather brushes. January 19, 1949. 1 page. No sales stock.

The nurse in the U. S. Public Health Service. 1949. 21 pages, illustrated. 15 cents.

New discovery curbs tooth decay. 1949. 6-page folder, illustrated. 5 cents; $1.00 per 100.

Index to Public Health Reports, vol. 63, part I, January–June 1948. 31 pages. 10 cents.

Principles of sanitation applicable to the construction of new vessels. June 1, 1949. 101 pages. No sales stock.

REPRINTS FROM THE JOURNAL OF VENEREAL DISEASE INFORMATION

341. A macroflocculation spinal fluid test employing cardiolipin-lecithin antigen. By Arthur A. Rosenberg, Ad Harris, and Virginia L. Harding. December 1948. 4 pages. 5 cents.
342. Juvenile delinquency and venereal disease among public school children in Philadelphia. By Norman R. Ingraham, Jr. and Michael J. Burke. December 1948. 10 pages. 5 cents.
343. Results of therapy by race, sex, and stage of syphilis. By Theodore J. Bauer and Eleanor V. Price. January 1949. 8 pages. 5 cents.
344. Asexual syphilis in children. By Henry Eisenberg, Frederick Plotke, and Amelia H. Baker. January 1949. 4 pages. 5 cents.

345. Comparative studies on mailed spinal fluid specimens. By George R. Cannefax, George E. Parkhurst, and Richard W. Bowman. January 1949. 4 pages. 5 cents.
346. Integration of public health nursing into a Marine Hospital. By J. A. Trautman and Rosalie Giacomo. January 1949. 5 pages. 5 cents.
347. Problems of out-patient management of syphilis in the South. By John A. Lewis, Jr. January 1949. 4 pages. 5 cents.
348. Reports of the North Carolina syphilis studies. I. An evaluation of case-finding measures in syphilis control. By John J. Wright and Cecil G. Sheps. February 1949. 17 pages. 10 cents.
349. Fever-chemotherapy in early syphilis. By Jack Rodriquez, George X. Schwemlein, Theodore J. Bauer, Frederick Plotke, Erwin E. Peters, H. Worley Kendell, and Arthur A. Rodriquez. March 1949. 17 pages. 10 cents.
350. Penicillin in the treatment of syphilis in pregnancy. By H. N. Cole, Frederick Plotke, Evan W. Thomas, and Kenneth H. Jenkins. April 1949. 6 pages. 5 cents.
351. A quantitative turbidimetric method for the determination of spinal fluid protein. By Hilfred N. Bossak, Arthur A. Rosenberg, and Ad Harris. April 1949. 4 pages. 5 cents.
352. Preservation and inoculation studies on *Treponema pallidum*. By Charlotte McLeod and R. C. Arnold. April 1949. 4 pages. 5 cents.
353. Penicillin therapy of early syphilis: IV. By R. C. Arnold, J. F. Mahoney, F. P. Nicholson, and R. D. Wright. May 1949. 4 pages. 5 cents.
354. Venereal disease case-finding in Quitman County, Mississippi. By A. L. Gray, Howard Boone, and Richard S. Hibbets. May 1949. 4 pages. 5 cents.
355. Socioeconomic factors in syphilis prevalence, Savannah, Georgia. By C. D. Bowdoin, Clair A. Henderson, Warren T. Davis, Jr., John W. Morse, and Quentin R. Remein. May 1949. 9 pages. 5 cents.
356. Contact investigation of syphilis. By Joseph S. Spoto and Albert P. Iskrant. May 1949. 5 pages. 5 cents.
357. Sugar fermentations of gram-negative diplococci isolated from the genito-urinary tract of penicillin-treated gonorrhea patients. By Louis Wax. May 1949. 2 pages. 5 cents.
358. Stimulating venereal disease morbidity reporting by private physicians. I. Follow-up of positive serologic test reports. By Benson H. Sklar and Leonard M. Schuman. June 1949. 5 pages. 5 cents.
359. Syphilis contact investigation in a rural county in Mississippi. By A. L. Gray, Albert P. Iskrant and Richard S. Hibbets. June 1949. 4 pages. 5 cents.
360. A stable control serum for standardizing the sensitivity of tests used in the diagnosis and control of syphilis. By George R. Cannefax. June 1949. 6 pages. 5 cents.

VENEREAL DISEASE BULLETIN

100. Venereal disease clinics, 1948 directory. 1949. 112 pages. 25 cents.

REPRINTS FROM JOURNAL OF THE NATIONAL CANCER INSTITUTE

113. Distribution studies in mice following the intravenous injection of diethyl β-iodoethyl amine hydrochloride prepared with radioactive iodine. By Arnold M. Seligman, Alexander M. Rutenburg, and Orrie M. Friedman. February 1949. 10 pages. No sales stock.

114. Fibroids in a guinea pig (family 13) after partial castration. By Eli M. Nadel. February 1949. 5 pages; 4 illustrations. No sales stock.

115. Masculinizing ovarian tumor of adrenal type. By Edward J. Mortell. February 1949. 7 pages; 5 illustrations. No sales stock.

116. Some observations on the normal and pathologic anatomy of the kidney of the mouse. By Thelma B. Dunn. February 1949. 17 pages; 12 illustrations. No sales stock.

117. Aldolase in the serum and tissues of tumor-bearing animals. By John A. Sibley and Albert L. Lehninger. February 1949. 7 pages. No sales stock.

118. Cytological studies on the nature of the cytoplasmic particulates in the cloudman S91 mouse melanoma, the derived algire S91A partially amelanotic melanoma, and the Harding-Passey mouse melanoma. By M. W. Woods, H. G. duBuy, Dean Burk, and Marie L. Hesselbach. February 1949. 13 pages; 10 illustrations. No sales stock.

119. Enzymatic activities of isolated amelanotic and melanotic granules of mouse melanomas and a suggested relationship to mitochondria. By H. G. duBuy, M. W. Woods, Dean Burk, and Mary D. Lackey. February 1949. 12 pages; 4 illustrations. No sales stock.

120. Physicochemical studies of reversible and irreversible complexes of cobalt, histidine, and molecular oxygen. By John Z. Hearon, Dean Burk, and Arthur L. Schade. February 1949. 41 pages. No sales stock.

121. Blood histamine in leukemia and erythremia. By Michael B. Shimkin, Leo Sapirstein, Franz R. Goetzl, Priscilla M. Wheeler, and Nathaniel I. Berlin. April–June 1949. 9 pages. No sales stock.

122. Dehydropeptidase activity in tumors. By Jesse P. Greenstein and Florence M. Leuthardt. April–June 1949. 2 pages. No sales stock.

123. Carbamates in the chemotherapy of leukemia. III. The relationship between chemical structure and anti-leukemic action of a series of urethan derivatives. By Howard E. Skipper and Carl E. Bryan. April–June 1949. 7 pages. No sales stock.

124. A study of the colon of apparently well women. By Marie Ortmayer and Marie Connelly. April–June 1949. 8 pages. No sales stock.

125. The effect of local roentgen irradiation on the biological behavior of a transplantable mouse carcinoma. I. Increased frequency of pulmonary metastasis. By Henry S. Kaplan and Edwin D. Murphy. April–June 1949. 7 pages; 5 illustrations. No sales stock.

126. The histochemical demonstration of esterase. By Marvin M. Nachlas and Arnold M. Seligman. April–June 1949. 11 pages; 6 illustrations; 1 plate. No sales stock.

127. A new method for the histochemical demonstration of acid phosphatase. By Arnold M. Seligman and Leon H. Manheimer. April–June 1949. 8 pages; 4 illustrations; 1 plate. No sales stock.

128. Lipase activity during experimental epidermal carcinogenesis. By S. K. Kung. April–June 1949. 4 pages; 4 illustrations. No sales stock.

129. Some observations on the mitochondria of normal and neoplastic cells with the electron microscope. By A. J. Dalton, H. Kahler, M. G. Kelly, B. J. Lloyd, and M. J. Striebich. April–June 1949. 11 pages; 15 illustrations. No sales stock.

NATIONAL OFFICE OF VITAL STATISTICS PUBLICATIONS*

Current Mortality Analysis (monthly), vol. 6, Nos. 11 and 12, 1948; vol. 7, Nos. 1–3, 1949.

A List of Current Publications of the National Office of Vital Statistics. 5 pages.

Monthly Marriage Report (marriage licenses issued in major cities), vol. 2, Nos. 11–13, 1948; vol. 3, Nos. 1–4, 1949.

Monthly Vital Statistics Bulletin, vol. 11, Nos. 11–13, 1948; vol. 12, Nos. 1–4, 1949.

Quarterly Marriage Report (marriage licenses issued in the United States by State) vol. 3, Nos. 4 and 5, 1949 (discontinued).

Vital Statistics—Special Reports, vol. 29, National Summaries

No. 11. Stillbirths statistics: United States, each division and State, and 92 major cities, 1946. 143 to 154 pages.

No. 12. Maternal mortality by cause: United States, 1946. 155 to 160 pages.

No. 13. Deaths and death rates for selected causes by age, race, and sex: United States, 1946. 161 to 198 pages.

No. 14. Infant mortality from selected causes by age, race, and sex: United States, 1946. 199 to 232 pages.

No. 15. Accident fatalities in the United States, 1946. 233 to 252 pages.

No. 16. Motor vehicle accident fatalities: United States, 1946. 253 to 327 pages.

Vital Statistics—Special Reports, vol. 31, National Summaries

No. 1. Summary of mortality statistics: United States, 1947. 1 to 8 pages.

No. 2. Summary of natality statistics: United States, 1947. 9 to 18 pages.

No. 3. Deaths and death rates for each cause: United States, 1945–47. 19 to 38 pages.

Vital Statistics—Special Reports, vol. 28, State Summaries

Nos. 51–54. Hawaii, Puerto Rico, Virgin Islands, and Alaska, 1946. 923 to 992 pages.

Weekly Mortality Index, vol. 19, Nos. 53 and 54, 1948; vol. 20, Nos. 1–25, 1949.

---

*Not available from the Government Printing Office.

INCIDENCE OF DISEASE

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

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED DECEMBER 3, 1949

For the fifteenth consecutive week the incidence of poliomyelitis in the Nation decreased from the preceding week. The total number of cases reported for the week is 434 as compared with 506 last week, and a 5-year (1944–48) median of 176. Twenty-three States and the District of Columbia reported an aggregate decrease of 163 cases, ranging from 1 case in 4 States to 15 and 32 cases in Texas and Iowa, respectively. Twenty States reported an aggregate increase of 91 cases, ranging from 1 in 3 States to 26 in Wisconsin. This State reported 47 cases for the week as compared with 21 for last week. The previous high for Wisconsin was 61 cases reported during the week ended October 8. The total number of poliomyelitis cases in the United States for the year to date is 41,461 as compared with 26,671 for the corresponding period last year.

During the week increases occurred in influenza, measles, meningitis, scarlet fever, tularemia, and whooping cough. However, these diseases remained below the 5-year median, except that of whooping cough which is only slightly above. Decreases from the figures last week may be noted in diphtheria (from 240 to 211) and encephalitis (from 8 to 4).

One case of smallpox was reported in Arizona. Four cases of anthrax were reported, three in New Mexico and one in New Jersey. No cases of Rocky Mountain spotted fever were reported.

Of 34 States reporting on rabies in animals, 15 reported no cases, while the remaining 19 reported a total of 114. The States reporting the largest numbers were New York (28), Kentucky (12), and Texas (12). The total number of rabies in animals reported to date is 5,217.

A total of 9,893 deaths was recorded during the week in 93 large cities in the United States, as compared with 8,798 last week; 9,667 and 10,102, respectively, for the corresponding weeks of 1948 and 1947; and 9,729 for the 3-year (1946–48) median. For the year to date the total is 438,109, as compared with 438,686 for the same period last year. Infant deaths for the current week totaled 685; for last week 608; for the corresponding week last year 703; and for the 3-year median, 723. The cumulative figure is 31,259 as compared with 31,873 for the same period last year.

Telegraphic case reports from State health officers for week ended December 3, 1949

(Leaders indicate that no cases were reported)

Division and State	Diphtheria	Encephalitis, infectious	Influenza	Measles	Meningitis, meningococcal	Pneumonia	Poliomyelitis	Rocky Mt. spotted fever	Scarlet fever	Smallpox	Tularemia	Typhoid and paratyphoid fever [1]	Whooping cough	Rabies in animals
NEW ENGLAND														
Maine	1			33		10	4		14				7	
New Hampshire									6				2	
Vermont									2				15	
Massachusetts	9			28	2		9		50			1	99	
Rhode Island						7	4		2				3	
Connecticut				17		46	3		12				146	
MIDDLE ATLANTIC														
New York	7		[2] 4	82	2	276	45		[2] 82		1	1	277	28
New Jersey	1		5	134	4	77	16		22				209	
Pennsylvania	5			58	3	83	7		61		1	1	205	1
EAST NORTH CENTRAL														
Ohio	13		2	18	5	45	15		144				38	7
Indiana	13		2	29	3	5	12		38		1	1	28	4
Illinois	1		2	23	9	95	15		49		3		92	1
Michigan [4]	5	1	2	234	2	43	34		88				195	1
Wisconsin	1		2	63	1	5	47		45				147	
WEST NORTH CENTRAL														
Minnesota	3			78	1	10	14		26			1	9	1
Iowa	3			79		2	18		18			2	5	4
Missouri				4	2	5	3		7			4	2	
North Dakota	9		1	41			1		4				1	
South Dakota		1		11			4		2					
Nebraska	3			2			11		5				3	
Kansas			19	4	1	27	6		19			1	16	3
SOUTH ATLANTIC														
Delaware	1			3					2				10	
Maryland [4]	5		1	17	1	27	8		24		1		50	
District of Columbia	2			29	1	15			3			1	1	
Virginia	12		238	12	2	68			32				39	1
West Virginia	4		20	102	2	6	3		29			1	19	
North Carolina	12			39	1		2		94			1	38	
South Carolina	6		20	10	1	17	1		15			1	1	4
Georgia	12	1	9	4	1	82	6		24		3	1	25	9
Florida	4		5	7	1	11	16		14		2			10

EAST SOUTH CENTRAL														
Kentucky	9			3	4	10	9		44				8	12
Tennessee	6		25	19	3	50	7		75			1	50	
Alabama	5		31	1	1	75			20			1	7	4
Mississippi [4]	10		3	20	1	19	3		12					
WEST SOUTH CENTRAL														
Arkansas	3		81	1		22	4		4		3	1	15	
Louisiana	7		2	16	2	28	4		4			1	5	
Oklahoma	8		51	3		26	17		10				6	2
Texas	18		1,486	43	10	320	17		26		2	4	78	12
MOUNTAIN														
Montana			1	40		1	1		10				4	
Idaho			6	5		6	4		8			1		
Wyoming						1	3					1		
Colorado	1		10	21	1	7	3		5			2	6	
New Mexico				5		6	4		10				14	
Arizona	2		79	38		16	1		5	1		1	23	9
Utah [4]	2			73	1	2	5		11				10	
Nevada														
PACIFIC														
Washington			22	97	1	3	3		67				37	
Oregon	3		6	22	1	16	8		11			1	12	
California	5	1	7	51	9	29	37		85			11	69	1
Total	211	4	2,142	1,619	79	1,599	434		1,340	1	17	42	2,026	
Median, 1944–48	329	8	2,492	2,277	81		176		1,787	2	30	53	2,022	
Year to date, 48 weeks	[5] 7,388	720	96,493	599,079	3,169	71,467	[5] 41,461	558	69,808	47	1,020	[5] 3,458	61,329	
Median, 1944–48	12,603	597	211,486	578,346	5,387		18,888	519	104,724	326	896	3,832	91,503	
Seasonal low, week ends	(27th) July 9		(30th) July 30	(35th) Sept. 3	(37th) Sept. 17		(11th) Mar. 19		(32d) Aug. 13	(35th) Sept. 3		(11th) Mar. 19	(39th) Oct. 1	
Since seasonal low week	[5] 3,620		20,626	10,561	653		[5] 40,546		11,548	6		[5] 2,998	14,727	
Median, 1944–45 to 1948–49 [6]	6,149		22,196	14,873	721		18,625		18,429	47		3,357	15,628	

[1] Including paratyphoid fever, currently reported separately, as follows: Alabama, 1; Texas, 1; Arizona, 1; California, 8. Cases reported as salmonella infection, not included in the table, were as follows: Massachusetts, 1; New York, 2; Pennsylvania, 1.
[2] New York City only.
[3] Including cases reported as streptococcal sore throat.
[4] Period ended earlier than Saturday.
[5] Deductions: Diphtheria—North Carolina, 1 case, week ended Nov. 26; poliomyelitis—Michigan, 1 case, week ended Nov. 5; Typhoid fever—North Carolina, 1 case, week ended Oct. 22.
[6] The median of the 5 preceding corresponding periods (1944–45 to 1948–49).

Anthrax: New Jersey, 1; Arizona, 3.
Alaska: Measles, 101.
Hawaii: Influenza, 323; whooping cough, 1.

TERRITORIES AND POSSESSIONS

Hawaii Territory

Plague (rodent).—Under date of November 25, 1949, plague infection was reported proved, on November 3, in two rats found dead in Kukuihaele area, Honakaa, Hamakua District, Island of Hawaii, T. H., and under date of November 28, proved on November 7, in one rat found dead in the same area.

Puerto Rico

Notifiable diseases—4 weeks ended October 29, 1949.—Cases of certain notifiable diseases were reported in Puerto Rico as follows:

Disease	Cases	Disease	Cases
Chickenpox	1	Syphilis	42
Diphtheria	42	Tetanus	15
Dysentery	2	Tetanus, infantile	4
Gonorrhea	53	Tuberculosis (all forms)	342
Influenza	1,619	Typhoid fever	8
Malaria	12	Typhus fever (murine)	6
Measles	6	Whooping cough	82
Poliomyelitis	11		

FOREIGN REPORTS

CANADA

Provinces—Notifiable diseases—Week ended November 19, 1949.—Cases of certain notifiable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox	1		28	10	232	303	120	72	106	112	984
Diphtheria					10			1			11
Dysentery, bacillary					6	1	4				11
Encephalitis, infectious							1	1			2
German measles			1		5	12		1	27	21	67
Influenza			54			9	5				68
Measles			56		189	89	107	163	58	253	915
Meningitis, meningococcal					1	2	2		1		6
Mumps			61		142	193	2	16	32	117	563
Poliomyelitis				1		1	5	11	2	1	21
Scarlet fever	10			3	81	40	38	11	25	23	231
Tuberculosis (all forms)	20		1	19	113	36	21	14		25	249
Typhoid and paratyphoid fever			2		2	1	1			2	8
Undulant fever			1		1	1	2			4	9
Venereal diseases:											
Gonorrhea	4		12	10	62	81	25	14	48	87	343
Syphilis	3		6	4	62	32	5	8	4	23	147
Whooping cough	1		1		158	46	4	6	3	11	230

CUBA

Habana—Notifiable diseases—4 weeks ended October 29, 1949.—Certain notifiable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Chickenpox	2		Scarlet fever	1	
Diphtheria	24		Tuberculosis	11	2
Measles	2		Typhoid fever	8	1

Provinces—Notifiable diseases—4 weeks ended October 29, 1949.—Notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana [1]	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer	5	8	11	35	2	28	89
Chickenpox		2					2
Diphtheria	1	25	2				28
Leprosy		4					4
Malaria	1	1	1		6	25	34
Measles		5				21	26
Scarlet fever		1					1
Tuberculosis	8	18	8	8	28	21	91
Typhoid fever	1	12	9	10	5	23	60
Whooping cough					1		1

[1] Includes the city of Habana.

JAMAICA

Notifiable diseases—4 weeks ended October 29, 1949.—Cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Cerebrospinal meningitis		1	Leprosy		2
Chickenpox	1	7	Tuberculosis (pulmonary)	22	49
Diphtheria		3	Typhoid fever	2	49
Erysipelas	1		Typhus fever (murine)		1

NEW ZEALAND

Notifiable diseases—4 weeks ended October 29, 1949.—Certain notifiable diseases were reported in New Zealand as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis	19	1	Ophthalmia neonatorum	2	
Diphtheria	9		Poliomyelitis	15	
Dysentery:			Puerperal fever	4	
Amebic	1		Scarlet fever	97	
Bacillary	22		Tetanus	2	1
Erysipelas	12		Tuberculosis (all forms)	186	50
Food poisoning	1		Typhoid fever	15	
Malaria	1		Undulant fever	8	

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

Note.—The following reports include only items of unusual incidence or of special interest and the occurrence of these diseases, except yellow fever, in localities which had not recently reported cases. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

Plague

Belgian Congo—Costermansville Province.—On November 21, 1949, one fatal case of plague was reported in Vatondi, a village near Butembo, Costermansville Province, Belgian Congo.

Indochina (French)—Annam—Phanthiet.—During the week ended November 19, 1949, one fatal case of plague was reported in the port of Phanthiet, Annam, French Indochina.

Netherlands Indies—Java—Jogjakarta.—During the week ended November 19, 1949, 13 cases of plague were reported in the city of Jogjakarta, Java.

Smallpox

Arabia—Jedda and Mecca.—On November 14, 1949, two cases of smallpox were reported in Jedda, Arabia, and on November 20, six cases were reported in that port; on November 15, two cases were reported in Mecca. These cases were stated to have occurred in pilgrims.

Typhus Fever

Iraq—Mosul City.—During the week ended November 12, 1949, five cases of typhus fever were reported in Mosul City, Iraq.

DEATHS DURING WEEK ENDED DEC. 3, 1949

[From the Weekly Mortality Index, issued by the National Office of Vital Statistics]

	Week ended Dec. 3, 1949	Corresponding week, 1948
Data for 93 large cities of the United States:		
Total deaths	9,893	9,667
Median for 3 prior years	9,729	
Total deaths, first 48 weeks of year	438,109	438,686
Deaths under 1 year of age	685	703
Median for 3 prior years	723	
Deaths under 1 year of age, first 48 weeks of year	31,259	31,873
Data from industrial insurance companies:		
Policies in force	70,006,436	70,788,933
Number of death claims	14,066	12,692
Death claims per 1,000 policies in force, annual rate	10.5	9.4
Death claims per 1,000 policies, first 48 weeks of year, annual rate	9.1	9.2