CITY OF BALTIMORE

ONE HUNDRED AND THIRTY-SECOND ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH

1946

To the Mayor and City Council of Baltimore for the Year Ended December 31, 1946

Men who are occupied in the restoration of health to other men, by joint exertion of skill and humanity are above all, the great of the earth. They even partake of the divinity, since to preserve and renew is almost as noble as to create.

Voltaire

DEPARTMENT OF HEALTH

Commissioner, HUNTINGTON WILLIAMS, M.D., DR. P.H.
Assistant Commissioner, ROSS DAVIES, M.D., M.P.H.
Secretary, REED GAITHER

ADMINISTRATIVE SECTION

Administration.....HUNTINGTON WILLIAMS, M.D., DR. P.H.
Health Information.....ESTHER S. HORINE
Laboratories.....C. LEROY EWING
Medical Care, *liaison*.....W. ROSS CAMERON, M.D., M.P.H.
Eastern Health District.....C. HOWE ELLER, M.D., DR. P.H.
Western Health District.....ALFRED C. MOORE, M.D.
Druid Health Center.....H. MACEO WILLIAMS, M.D., M.P.H.
Southeastern Health District.....JOHN A. SKLADOWSKY, M.D.

MEDICAL SECTION

Communicable Diseases.....J. WILFRID DAVIS, M.D., M.P.H.
Sydenham Hospital.....MYRON G. TULL, M.D., M.P.H.
HORACE L. HODES, M.D.
Tuberculosis.....MIRIAM BRAILEY, M.D., DR. P.H.
Venereal Diseases.....NELS A. NELSON, M.D., M.P.H.
Occupational Diseases.....JOHN M. MCDONALD, M.D., D.P.H.
Child Hygiene.....M. ALEXANDER NOVEY, M.D.
School Hygiene.....HENRY F. BUETTNER, M.D.
Public Health Nursing.....JANE B. LAIB, R.N.

SANITARY SECTION

WILMER H. SCHULZE, Phar. D., Director

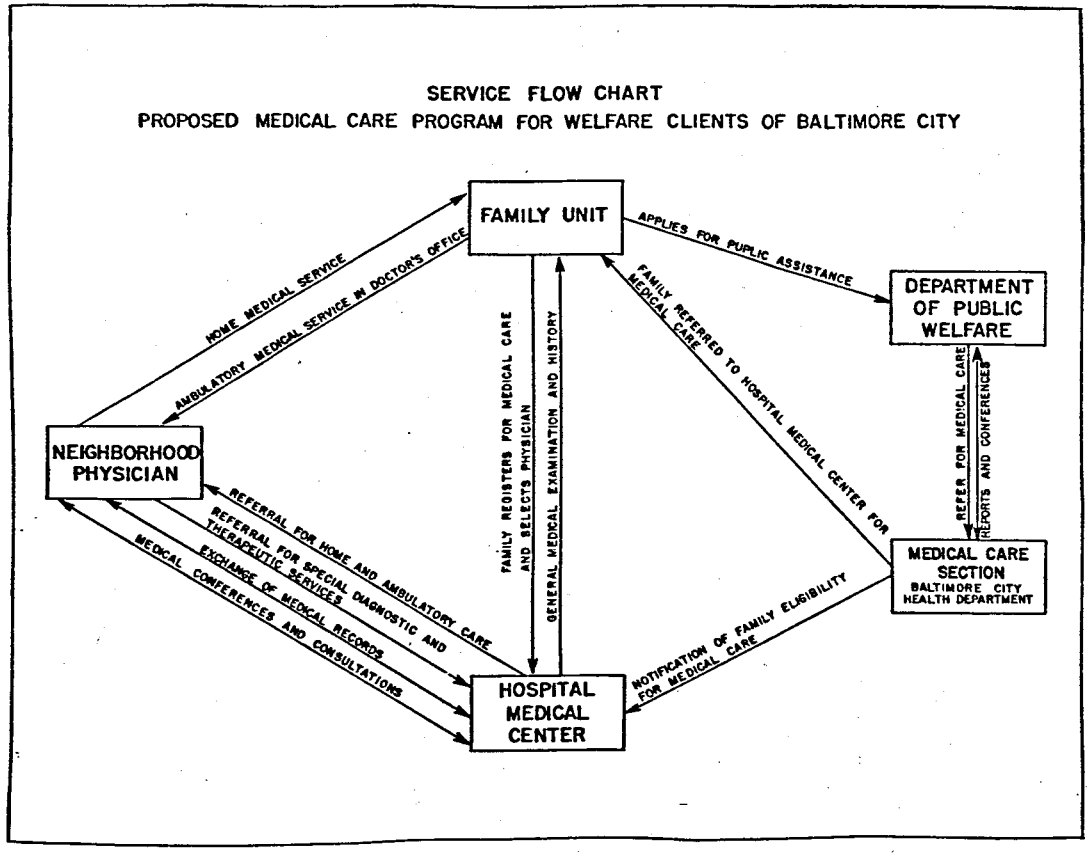
Milk Control.....IVAN M. MARTY
Food Control.....FERDINAND A. KORFF
Meat Inspection.....WILLIAM BRENNER, D.V.S.
Environmental Hygiene.....GEORGE W. SCHUCKER

STATISTICAL SECTION

W. THURBER FALES, Sc.D., Director

Vital Records.....ISADORE SEEMAN
Biostatistics.....

Learn to Do Your Part in the Prevention of Disease



CURATIVE MEDICAL CARE BECOMES
A CITY HEALTH DEPARTMENT RESPONSIBILITY

CONSULTANTS

Dr. Thomas S. Cullen,
Member, Maryland State Board of Health.

Dr. Allen W. Freeman,
Professor of Public Health Administration,
Johns Hopkins School of Hygiene and Public Health.

Dr. Andrew C. Gillis,
Professor of Neurology, School of Medicine, University of Maryland.

Dr. Louis Hamburger,
Associate in Medicine, Johns Hopkins Medical School.

Dr. Arthur J. Lomas,
Administrative Consultant, Catholic Hospitals of Maryland.

Dr. Robert U. Patterson,
Dean, School of Medicine, University of Maryland.

Dr. Maurice C. Pincoffs,
Professor of Medicine, School of Medicine, University of Maryland.

Dr. Robert H. Riley
Director, Maryland State Department of Health.

Dr. James M. H. Rowland,
Dean Emeritus, School of Medicine, University of Maryland.

Dr. Arthur M. Shipley,
Professor of Surgery, School of Medicine, University of Maryland.

Dr. Thomas B. Turner,
Professor of Bacteriology, Johns Hopkins School of Hygiene and Public Health.

Dr. Allen F. Voshell,
Professor of Orthopedic Surgery, School of Medicine, University of Maryland.

Dr. Samuel Wolman,
Assistant Professor of Medicine, Johns Hopkins School of Medicine.

ADVISORY COMMITTEE ON SANITATION

Mr. Clark S. Hobbs, *Chairman*
Vice-President, Goucher College.

Dr. Anna M. Baetjer,
Associate in Physiology, Johns Hopkins School of Hygiene and Public Health.

Dr. M. Flint Haralson,
Medical Director, United States Public Health Service
in charge of the Baltimore Quarantine Station.

Mr. Nathan L. Smith,
Chief Engineer of Baltimore.

Dr. Abel Wolman,
Professor of Sanitary Engineering,
Johns Hopkins School of Hygiene and Public Health.

MEDICAL STAFF

George G. Adams, M.D. t
Maurice L. Adams, M.D. v
McDonald Bando, M.D. c
M. L. Barksdale, M.D. v
Walter P. Block, M.D. v
Harry E. Bloom, M.D. h o
Louis V. Blum, M.D. t
Helen Bowie, M.D. c
M. L. Breitstein, M.D. ea
G. Raynor Browne, M.D. v
William Berkley Butler, M.D. v
Charles R. Campbell, M.D. v
James D. Carr, M.D. v
J. W. V. Clift, M.D. c
Sidney Cobb, M.D. s
John Collinson, M.D. v
Theodore Cooper, M.D. t
Roscoe Z. G. Cross, M.D. h o
W. Allen Deckert, M.D. m
Alfred B. Dixon, M.D. c
Solon A. Dodds, M.D. c
Hania Wislicka Ehlers, M.D. c
Harris Goldman, M.D. v
Harry C. Grant, M.D. h o
Walter E. Grempler, M.D. c
Richard David Hahn, M.D. v
Louis E. Harmon, M.D. v
James B. Hawkins, M.D. h o
Mary L. Hayleck, M.D. c
Bowman J. Hood, M.D. v
Leon S. Horka, M.D. h o
Clewell Howell, M.D. c
Hugh P. Hughes, M.D. h o
Richard Henry Hunt, M.D. v
Louis L. Jacobs, M.D. m i
Meyer W. Jacobson, M.D. t
R. Donald Jandorf, M.D. v
Clarence F. Johnston, Jr., M.D. m i
William Atwell Jones, M.D. v
Albert L. LaForest, M.D. v
Charles D. Lee, M.D. t
Lucille Liberles, M.D. h o
R. B. Lighston, M.D. c
Harry Linden, M.D. v
Jerry C. Luck, M.D. c
William R. Lumpkin, M.D. m i
Charles F. Maloney, M.D. m i
Frank V. Manieri, M.D. m i
Robert McDaniel, M.D. v
Israel P. Meranski, M.D. v
John Huff Morrison, M.D. c
Sigmund R. Nowak, M.D. m i
George C. Page, M.D. v
George H. Pendleton, M.D. v
George F. Phillips, M.D. m i
Francis E. M. Read, M.D. c
A. L. Rettaliata, M.D. m i
Alma S. Rothholz, M.D. c
Cecil Rudner, M.D. t
J. Douglass Shepperd, M.D. v
Ernest W. Shervington, M.D. v
Isadore A. Siegel, M.D. m
Charlotte Silverman, M.D. t
William A. Sinton, M.D. h o
Harry B. Smith, M.D. v
William C. Stifler, M.D. c
Percy H. Sutley, M.D. h o
Howard H. Warner, M.D. h o
Samuel Weinberg, M.D. h o
H. L. Whittle, M.D. c
Mary Cook Willis, M.D. c
Gustav H. Woltereck, M.D. c
Charles T. Woodland, M.D. v
Ralph J. Young, M.D. v

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c = child hygiene, ea = ear clinic, h o = health officer for communicable disease control and school hygiene, m = maternity hygiene, m i = medical investigator, s = Sydenham Hospital, t = tuberculosis clinic, v = venereal disease clinic, **bold type = full time.**

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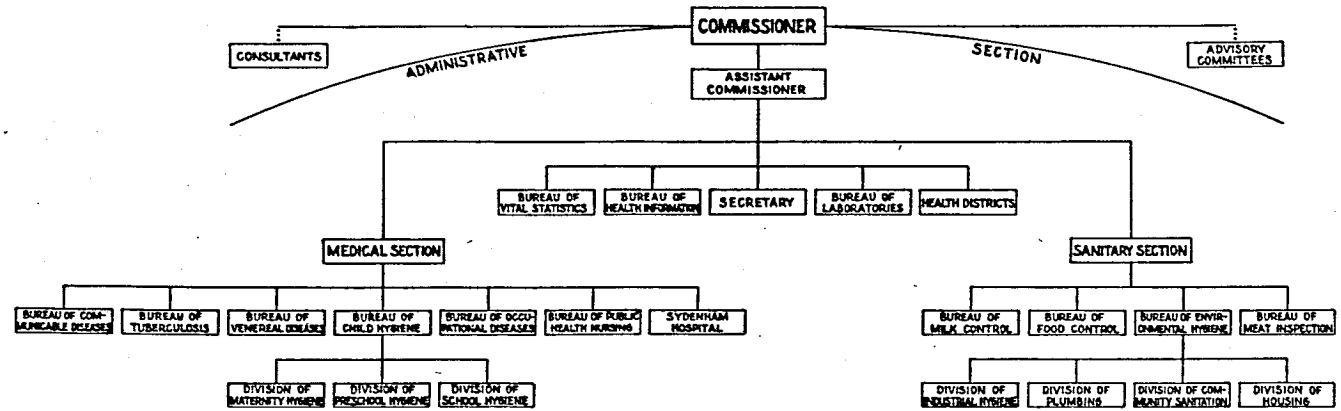
ORGANIZATION CHART

BALTIMORE CITY HEALTH DEPARTMENT



ONE HUNDRED AND THIRTY-SECOND ANNUAL REPORT OF THE BALTIMORE CITY HEALTH DEPARTMENT

1946

REPORT OF THE COMMISSIONER OF HEALTH

The Honorable,

THE MAYOR AND CITY COUNCIL OF BALTIMORE

GENTLEMEN:

Pursuant to the provisions of Section 91 of the City Charter and also in accordance with a resolution adopted by the City Council in the year 1817, I have the honor to transmit to you a summary of the one hundred and thirty-second in a series of consecutive annual reports of the work done by the Baltimore City Health Department, and by the several bureaus thereof, for the year ended December 31, 1946.

Introduction

The outstanding public health event of the year was the adoption on December 20 of the first Interim Report of the Committee to Study the Medical Care Needs of Baltimore City. The report was presented on that date at a special meeting held in Osler Hall by the City Medical Society to which all the practicing physicians in the city had been invited. Dr. Lowell J. Reed, Vice President of the Johns Hopkins University is chairman of the committee and Dr. Maurice C. Pincoffs, Professor of Medicine at the University of Maryland and Chairman of the State Committee on Medical Care discussed the report in some detail at the meeting with the medical profession. After questioning, wholehearted approval was given with only one dissenting vote. The chief recommendations are the establishment in the City Health Department of a Medical Care Section and the adoption of a systematic plan for rendering a new type of Medical Center hospital dispensary service to the public assistance clients of the City Welfare Department in close relation with all neighborhood physicians who desire to participate in the work. Payment from State tax funds, paralleling like monies already being spent in all the counties of Maryland on a fee for service basis through the twenty-three county health departments, is recommended for approved hospitals and physicians in Baltimore on an annual per capita basis. This will make the public tax-supported program State-wide in Maryland.

A completely revised City Charter was adopted by vote of the people

on November 5 to become effective on May 20, 1947 and the sections dealing with the City Health Department were modernized and strengthened. The valuable communicable disease control ordinance approved June 20, 1945 was made permanent by an amendment, Ordinance No. 693, approved on December 2, 1946 by Mayor Theodore R. McKeldin.

For the fifth successive year Baltimore achieved in 1946 a typhoid fever record lower than for the previous year. Only 10 cases were reported, one less than in 1945. Likewise, new low records were made in the city's infant and maternal death rates. The latter is a splendid tribute to the obstetrical profession and the hospitals in Baltimore. On the other hand, diphtheria increased for the fifth consecutive year but during the last half of 1946 began to show a significant decline in prevalence.

The work of the City Health Department was made more effective by the addition during the year of a number of highly qualified professional staff members in several of the bureaus including those dealing with the venereal diseases, tuberculosis, child hygiene and school hygiene, and in the nursing services at Sydenham Hospital and in public health nursing.

On July 1 the Bureau of Laboratories rounded out a half century of worthy service to the medical profession for the people of Baltimore. With Sydenham Hospital the bureau participated in fundamental scientific research of national significance in the field of public health. Other noteworthy contributions were made during the year in industrial hygiene, in housing, and tuberculosis control by the extended use of small film X-ray services; and the architect's plans for the new Southern Health District building were approved. In December the State Board of Health established a Division of Cancer Control in the State Department of Health and the city health authorities will be closely associated with this new unit and with the related nonofficial Maryland Division of the American Cancer Society. Another important advance was made in the extension of hospital facilities in Baltimore for the care of premature infants, and prior to the close of the year plans were laid to include an approach to preventive mental hygiene within the scope of City Health Department activity. In addition, the Commissioner of Health resumed his membership on the Committee on Professional Education of the American Public Health Association.

The Health of the City

The population of the city during 1946 continued in a state of flux. An unknown number of recent inmigrants to the city returned to their homes in other States as war industries reconverted. Thousands of former service men returned home to Baltimore. The marriage rate of 23.1 marriages per 1,000 population was the highest on record. The pres-

sure for housing continued great. In the absence of satisfactory factual data to measure the effect of all these contrasting factors in the population picture of Baltimore in 1946, the Health Department has estimated that the population of Baltimore as of July 1, 1946 and as used for computing the rates in this report was 930,000. The estimated white population on the same date was 748,000 and the nonwhite or colored population was 182,000 or 19.6 per cent.

The number of resident births was the highest on record; 21,111 babies were born to Baltimore mothers. The total resident birth rate was 22.7 per 1,000 population, the white birth rate 21.1 and the nonwhite or colored birth rate 29.1. The total and colored rates exceed the high birth rates during the war of 22.6 for total population and 27.3 for colored population achieved in 1943.

The total number of babies, including births to nonresident mothers, born in Baltimore in 1946 was 27,412. Among them was one set of quadruplets, born in a hospital in the city on December 22, 1946 to the English wife of an ex-service man living in Catonsville. This was the second time that this rare event has been recorded in the vital statistics of the city. The previous set of quadruplets was born in a home on Moyer Street in the east central section of the city on November 26, 1923.

Although there were 3,263 more births to resident mothers in 1946 than in 1945, the number of deaths of mothers from conditions associated with pregnancy and childbirth was only 26 in 1946 or one less than recorded for the previous year. The maternal death rate of 1.2 per 1,000 live births, therefore, set a new low record for the city. The previous low maternal death rate was 1.5 for 1945.

A new low record was also established in 1946 for deaths of infants during the first year of life, an infant mortality rate of 35.5 per 1,000 live births. The infant mortality rate for 1945 was 39.7 and the previous lowest infant mortality rate was 39.5 recorded in 1942. The white infant mortality rate for 1946 was 30.2 as compared with the previous low of 32.8 recorded in 1945 and 1939. The infant mortality rate for colored infants was 51.3 as compared with the previous low of 56.4 in 1942. The number of cases of typhoid fever established the new low record for this disease in Baltimore, already mentioned.

The number of newly reported cases of tuberculosis decreased from 1,925 in 1945 to 1,524 in 1946. This decrease is largely the result of the discontinuance of reported cases resulting from selective service examinations. During the war years the X-ray examination of thousands of inductees from Baltimore City revealed many undiagnosed cases of tuberculosis. On the other hand, case finding by means of mass X-ray surveys of healthy civilians was extended during 1946. The death rate from

all forms of tuberculosis was 80.3 per 100,000 population. The death rate from tuberculosis for the white population was 46.7 and for the colored population 218.7. The corresponding death rates for 1945 had been 83.1 for total population, 46.7 for white population and 233.0 for the nonwhite population.

Although there were 424 cases of diphtheria reported during 1946 as compared with 353 cases in 1945 the diphtheria situation improved materially during the last six months of the year. For this period, there were 121 cases as against 201 cases for the last six months of 1945. The 19 deaths from diphtheria in 1946 was the same number that occurred during the previous year. There was a considerable outbreak of measles with 8,136 cases and 6 deaths recorded during the year. The previous epidemic of measles occurred in 1944 when 10,324 cases and 10 deaths were reported.

There were 34 cases of poliomyelitis reported in 1946 as compared with 21 cases during the previous year. The number of reported cases of meningococcus meningitis was 46, which was a continuing decrease from the high year of 1943. This disease is to some extent an index of overcrowding. For the three-year period 1938–1940 there was an annual average of only 20 reported cases. In 1941 there were 72 cases; in 1942, 202 cases; in 1943, 389 cases; in 1944, 177 cases and in 1945, 61 cases.

Principal Causes of Death

The death rates for the seven leading causes of death in the city are given in the accompanying table. Death rates and related statistics for other diseases and conditions are given at the close of this report.

RESIDENT DEATH RATES PER 100,000 POPULATION FOR THE SEVEN LEADING CAUSES OF DEATH; TOTAL, WHITE AND COLORED POPULATION: BALTIMORE 1945-1946

Total Population			White Population			Colored Population		
Cause	Death Rate per 100,000		Cause	Death Rate per 100,000		Cause	Death Rate per 100,000	
	1946	1945		1946	1945		1946	1945
Diseases of heart	382.8	396.3	Diseases of heart	395.6	412.0	Diseases of heart	330.2	331.9
Cancer, all forms	155.7	150.5	Cancer, all forms	162.0	157.6	Tuberculosis, all forms	218.7	233.0
Nephritis	91.3	98.3	Nephritis	74.1	83.5	Nephritis	162.1	158.8
Tuberculosis, all forms	80.3	83.1	Cerebral hemorrhage	72.6	80.2	Cancer, all forms	129.7	121.4
Cerebral hemorrhage	77.9	87.2	Accidental causes	54.8	62.8	Cerebral hemorrhage	100.0	115.9
Accidental causes	57.6	67.8	Tuberculosis, all forms	46.7	46.7	Pneumonia, all forms	80.8	114.8
Pneumonia, all forms	41.4	60.9	Pneumonia, all forms	31.8	47.7	Accidental causes	69.2	88.5

Administration

There follows a financial statement for the Baltimore City Health Department for the fiscal year ended December 31, 1946.

FINANCIAL STATEMENT

As of December 31, 1946

Total City Appropriations			$1,337,438.58
Total City Expenditures			1,337,438.58
Appropriations by Ordinance of Estimates January 1, 1946	$1,253,717.10		
Appropriations for Transportation	38,139.61		
Supplementary Appropriation for Sydenham Hospital, Health Districts, Clinics and Special Projects	42,831.59		
		$1,337,438.58	

Expenditures of the Baltimore City Health Department

ADMINISTRATIVE SECTION

Administration	$32,348.05	
Vital Statistics	56,915.04	
Health Information	16,625.60	
Laboratories	104,694.80	
Eastern Health District	44,398.12	
Western Health District	41,554.26	
Druid Health Center	58,858.51	
Southeastern Health District	45,802.53	
		$401,196.91

MEDICAL SECTION

Communicable Diseases	$26,999.49	
Tuberculosis	25,058.83	
Venereal Diseases	79,930.23	
Occupational Diseases	7,465.50	
Child Hygiene	54,811.11	
School Hygiene	6,258.39	
Public Health Nursing	149,232.78	
		$349,755.83

SANITARY SECTION

Supervision	$11,559.96	
Milk Control	43,519.63	
Food Control	29,913.35	
Environmental Hygiene	94,525.75	
Meat Inspection	60,710.73	
		$240,229.42
Morgue and Public Cemetery		7,035.48
Sydenham Hospital		339,220.94
Total, Salaries and Expenses		$1,337,438.58

Receipts

Revenue	$296.00
Vital Statistics	20,882.74
Child Hygiene	359.00
Milk Control	13,636.00
Plumbing Permits	18,803.25
Rooming House Licenses	878.00
Meat Inspection	22,675.00
Sydenham Hospital	15,167.80
Total	$92,697.79

Additional Non-Health Department Expenditures

There follow certain tabulations made of expenditures for health work in Baltimore in 1946 which were closely related to the work of the City Health Department:

I OFFICIAL EXPENDITURES	
City Department of Education—high school medical services	$44,420.81
City Department of Welfare—tuberculosis hospital service	255,633.70
City Department of Welfare—venereal disease hospital service	22,000.00†
State Tuberculosis Hospital Service—city cases	635,305.48
State Health Department—city venereal disease control	9,579.16
U. S. Public Health Service Funds	
General	23,860.00
The Johns Hopkins Hospital, venereal disease control	115,214.43
Rapid Treatment Center	68,000.00†
Tuberculosis control	25,665.32
	$1,199,768.90
II NONOFFICIAL EXPENDITURES	
Babies Milk Fund Association	$23,256.66
Instructive Visiting Nurse Association	95,036.62
Food establishments—sanitary control	12,000.00
Johns Hopkins University—Eastern Health District	23,076.20
Laboratory services—hospital or private	75,000.00†
Maryland Chapter—National Foundation, Infantile Paralysis	56,127.57
Maryland Society for the Prevention of Blindness	6,515.00
Maryland Tuberculosis Association	80,000.00
Pasteurization plants—farm and laboratory control	68,340.00
Venereal disease control—hospital dispensaries	90,000.00†
	$525,352.05
Total	$1,727,120.95

This $1,725,120.95 added to the City Health Department expenditures of $1,337,438.58 gives an estimated total of $3,062,559.53 or a trifle over $3.29 per capita. This does not include large expenditures for water purification, sewerage, or medical care.

† Approximate figure.

Personnel

Mr. Clark S. Hobbs, Vice President of Goucher College accepted appointment on June 10, 1946 to serve as Chairman of the City Health Department Advisory Committee on Sanitation. He filled the vacancy created by the death in 1945 of Dr. William H. Howell who had been chairman of the committee since its first meeting on February 13, 1933.

Dr. Arthur G. Barrett, Consultant to the Health Department since 1932 and one of the original members of this advisory group died in Atlantic City on August 21, 1946. On August 13, 1946 Dr. Thomas B. Turner and Dr. Allen F. Voshell became Consultants to the Health Department.

On August 1 Dr. Nels A. Nelson was appointed Director of the Bureau of Venereal Diseases. Dr. Henry F. Buettner became the Director of the Bureau of School Hygiene on July 15 on his return from military service. Dr. Charlotte Silverman joined the staff as Assistant Director of the Bureau of Tuberculosis on April 1. Miss Alice Sundberg became Assistant Director of the Bureau of Public Health Nursing on October 1 to fill the vacancy created by the retirement of Mrs. Ellen H. Brown after twenty-seven years of service in the City Health Department. Miss Mary V. Shearer was appointed Superintendent of Nurses at Sydenham Hospital on January 22, 1946.

Dr. C. Howe Eller, Health Officer of the Eastern Health District since 1937 resigned to become Director of Health of Richmond, Virginia on November 15. Dr. Henry F. Buettner served as Acting Health Officer until December 31 after which Dr. Harry F. Chant became Health Officer.

Staff workers named in order of their return in 1946 from World War II are: Edna J. Faith, *Public Health Nurse;* George O. Motry, *Chief, Division of Community Sanitation;* Jane Kreitz, *Public Health Nurse;* T. Evans Fernandis, Jr., *Junior Case Worker;* and Rose Shenk, Florence Zinz, Margaret Gogel, Vera Craig, *Public Health Nurses;* Israel P. Meranski, M.D., *Clinic Physician;* Meyer Weinblatt, *Junior Chemist;* Anne E. Smith, *Public Health Nurse;* Rebecca L. Schmidt, *Charge Nurse, Sydenham Hospital;* Mildred E. Foster, *Public Health Nurse;* Reginald F. Jefferson, *Senior Social Worker;* Langdon B. Backus, *Statistician;* Richard H. Hunt, M.D., *Clinic Physician;* Edwina C. Ozazewski, *Public Health Nurse;* Henry F. Buettner, M.D., *Administrative Health Officer;* Mary I. Streckfus, *Senior Supervisor of Field Nurses;* Marian Kramer, *Junior Clerk;* Edward C. Sachs, *Sanitarian;* and Clara Mary Alexandrowicz, *Public Health Nurse.*

Health Information

Health education programs for neighborhood chest X-ray surveys were developed in 1946 with the assistance of the Maryland Tuberculosis Association. The Eastern Community Council played a large part in promoting community interest in the first survey held at Public School No. 47 at Fleet Street and Linwood Avenue in the Southeastern Health District. Special fliers were printed for house-to-house distribution and other health information media included posters, exhibits, meetings and talks, newspaper publicity, church announcements and film slides.

In addition, health information activities in 1946 included the following:

1. Publicity for the continuing diphtheria prevention program was supplied and a presentation to the public of the Health Department's policy of two doses of toxoid for infants at six and again at seven months of age and a booster dose for the child entering school for the first time. A new poster, a revised diphtheria leaflet, press releases and radio broadcasts were used in this educational campaign.
2. A "Keeping Well" radio drama was presented each week during 1946 and a new poster was issued to publicize these broadcasts. Spot announcements for rabies and measles control were broadcast by the five radio stations in the city upon request of the Health Department. The Commissioner of Health and several bureau directors were guests on other local radio programs.
3. For the twenty-third consecutive year *Baltimore Health News* was published monthly and sent to a mailing list of about 10,000 persons. The chief of the bureau gave assistance in editing the Department's 131st ANNUAL REPORT and in preparing a number of special public health articles for publication.
4. The "Saturday Letter to the Mayor" and press releases resulted in a total of 340 articles and 2,700 column inches of Health Department news publicity.
5. During 1946 there were 600 health addresses and 1,200 other seminars given by the Health Department staff to more than 45,000 persons. The Commissioner of Health and several bureau directors as in previous years conducted classes for students of the Johns Hopkins School of Hygiene and Public Health and the two medical schools in the city.
6. To assist the Health Department prevent the spread of rabies among dogs the City Department of Education distributed 3,300 leaflets to public school teachers who in turn used them for instructing pupils on the need for the dog quarantines. The Police Department also cooperated by handling the house-to-house dispersement of 150,000 rabies control fliers.
7. Health educational programs by means of radio, press and exhibits were presented in cooperation with other agencies for the special observance of "Know Your Public Health Nurse Week", the "March of Dimes" drive against poliomyelitis, Syphilis Control Day, Cancer Control Month, Negro Health Week and the annual Christmas Seal Sale of the Maryland Tuberculosis Association. Staff public health nurses made an exhibit on "Know Your Public Health Nurse" which was displayed in many places

in the city. A window exhibit was shown by the Enoch Pratt Free Library for the Fiftieth Anniversary of the establishment of the City Health Department Bureau of Laboratories.

8. Moving picture films secured by the bureau were previewed by the Health Department staff and two new films were bought. "Something You Didn't Eat" was also generously loaned to the Department by the U. S. Department of Agriculture and was used frequently by staff members when giving health talks.
9. During Negro Health Week which was observed in Baltimore from March 31–April 7, the Health Officer of the Druid Health Center used the Department's projector and a series of health films for many meetings held for lay groups.
10. Nine racks for the distribution of Health Department literature were given to the dispensaries of the City Department of Public Welfare. These racks placed in 1946 make a total of 48 such racks located throughout the city in public libraries, hospital clinics, health district buildings and elsewhere. There were 72,130 leaflets apportioned to these racks.
11. The bureau handled 560 inquiries for health information, saw 289 Health Department forms through the printing process, dispersed 228,416 publications and maintained the routine library and newspaper clipping services.
12. There were 374,847 pages multigraphed for 358 requisitions and 204,070 pieces of mail sent out by the Health Department multigraph and mailing division.
13. There was a total of 72 exhibits of more than 200 units displayed in 1946.

Laboratories

The Bureau of Laboratories made 254,291 examinations of 171,741 specimens and samples in 1946. In comparison with 1945 these figures represent increases of 23.5 per cent and 11.3 per cent respectively and indicated the continued upward trend in demands for services. The chief increases, which were in part due to the return to private practice of physicians after military service, were 19.3 per cent more in blood-test specimens, 146 per cent more in gonococcus cultures, 5.5 per cent more in food bacteriology samples and 12 per cent more in food and industrial hygiene samples for chemical analysis.

There were 37,452 packages of antitoxins, vaccines, sera and other biologicals dispensed to physicians and hospitals for use in the prevention or treatment of the communicable diseases. Increases occurred in the distribution of diphtheria antitoxin, diphtheria toxoid and pertussis vaccine

combined, immune serum globulin for measles control, Type B Hemophilus influenzae serum and rabbit antipertussis serum.

Two additional biologicals made available to physicians in 1946 were dried blood plasma and murine typhus fever vaccine. The plasma was provided for free distribution by the American Red Cross and represented Army surplus material. The murine typhus vaccine was used on an experimental basis in connection with the occurrence in October of 2 cases of this disease.

New types of laboratory work instituted during the year included complement fixation tests for typhus fever and Rocky Mountain spotted fever, tests for tubercle bacilli in gastric fluid, and ornithosis complement fixation tests. The old procedure of pneumococcus type differentiation by the Neufeld method was discontinued.

Special investigations conducted in the Divisions of Bacteriology and Chemistry during the year were related to: Further testing the efficacy and dependability of present methods used in the bacteriological control of food utensils; research on the refinement of gonococcus culture methods with special reference to a new transport medium; the initiation of a special study of the relation of rats to endemic typhus fever in Baltimore; further biochemic research studies of *Lactobacillus enzymothermophilus* isolated from raw milk; the evaluation of methods for the detection of pasteurization of cheese; the development of a more satisfactory blood serum medium for growing diphtheria bacilli; the use on a practical basis of a new color stain known as clinichrome which is helpful in microscopic bacteriology; the detection of a mineral oil in mayonnaise products; testing for the presence of DDT on sprayed fruit; the detection of ammonium germicide preservatives in food; the microanalytic detection of filth in fluid milk; the quantitative determination of chlorine in milk; the determination of total protein in cerebrospinal fluid and tests for hydrocyanic acid in air.

Copies of the *Bacterial Colony Formations* chart of T. C. Buck, Jr., Assistant Director of the Bureau of Laboratories, reprinted from the October, 1944 issue of *Baltimore Health News* have since first publication been requested for teaching purposes in sixteen universities including the University of Madrid, Spain, and also in a U. S. Army medical laboratory. Additional requests were received for its use in three textbooks relating to bacteriology in preparation in California, in Maryland and in Madrid.

Eastern Health District

Diphtheria continued to be a major problem during 1946 but the disease showed a definite downward trend after June. Seventy-four cases and 3 deaths were reported in the district during the year. Measles was also prevalent and the public health nursing service was utilized extensively for

home visits for the administration of immune globulin to contacts under three years of age where no physician was in attendance.

New admissions to the venereal disease clinic at Somerset Health Center increased 37 per cent over the number admitted during the previous year. The increase for total clinic attendance, however, was only 9 per cent higher than for the previous year. An extensive public health educational program was conducted in the Negro community of the district as a cooperative undertaking of the district office and the Eastside Community Committee, a unit of the City Department of Public Welfare. Over 800 persons attended the meetings arranged for this purpose. The chest X-ray screen clinic, conducted at the district office, admitted 5,072 persons for examination. This program resulted in the discovery of 19 cases of active pulmonary tuberculosis not previously recorded.

The Eastern Health District continued its service as a field research, training and demonstration area for the Baltimore City Health Department, the Johns Hopkins School of Hygiene and Public Health, the Johns Hopkins Medical School, the Johns Hopkins Hospital School of Nursing and the Sinai Hospital School of Nursing. As already mentioned Dr. C. Howe Eller resigned as District Health Officer on November 15.

Western Health District

The most serious communicable disease problem in the Western Health District during the year was likewise diphtheria, with a total of 109 cases and 9 deaths recorded as compared to 98 cases and 6 deaths in 1945. To prevent cases of this serious disease the immunization program for household contacts of cases was extended to include prophylactic antitoxin for males up to twenty-five years of age and females up to thirty-five years of age.

The district staff participated in special tuberculosis control activities. A program of tuberculin patch testing of entering pupils at School No. 34 located at Washington Boulevard and Carey Street, with chest X-rays provided for positive reactors and their families, was carried out during the year. The District Health Officer and the public health nurses assisted in the promotion of the chest X-ray survey conducted in the area by the City Health Department assisted by the Maryland Tuberculosis Association.

The Health Officer presented a course in communicable diseases to the student nurses of the Hospital for the Women of Maryland and with the public health nurses aided the senior medical students of the University of Maryland in making "Home Survey Reports" on selected patients treated in the University Hospital. Public health information activities included lectures to student nurses on communicable diseases, talks to

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Health Care Moves Nearer To The People

By FRANCIS F. BEIRNE

Plans for a new district health building in South Baltimore have been drawn and are being turned over to the Public Improvement Commission for approval. The plan now is for work on the building to be begun this year or early next year.

Construction is to be financed through $125,000 allotted out of the public building loan. But since the estimate did not take into account present building costs, it may be necessary for the Health Department to ask a larger allotment. The department also has applied for $62,000 from the Federal Government through the Hill-Burton Hospital Construction Act. Such a grant must, however, first obtain the approval of several agencies, including the United States Public Health Service.

The approaching realization of this important addition to its facilities is an appropriate time to review some of the outstanding features of the Health Department's growth and activity in recent years.

The establishment of a district health building in South Baltimore is pursuant to the Health Department's policy of decentralization for the purpose of bringing its organization into closer contact with the persons served. The first district to be set up was the Eastern, which was established in East Baltimore in 1932 by the Health Department in co-operation with the Johns Hopkins School of Hygiene and Public Health, largely under the stimulus of the late Dr. William H. Welch and assisted by an annual grant from the Rockefeller Foundation. The Eastern district was chosen as affording health problems typical of a low-income area in a large city. Special studies made there have attracted the attention of public-health authorities the country over.

In 1935 the Western Health District was established through the co-operation of the University Hospital and the Medical School of the University of Maryland, and in 1937 the Southeastern Health District came into being to serve Southeast Baltimore. In 1940 the Druid Hill Health Center was set up as a branch of the Western district, its primary concern being the health problems of the dense Negro population in its vicinity. With the establishment of the proposed district in South Baltimore the Health Department estimates that it will include under the district organization about 95 per cent of the city's low-income areas, where the department's services are most needed.

The Health Department's function is confined to preventive medicine. Cure of sickness is the work of other agencies in the hospital or the home. In the early years the department devoted itself to watching the water and milk supply, to making sanitary inspections and guarding against epidemics. But around the turn of the century it began to broaden its scope. Its prevention program today includes prenatal, well-baby, chest, venereal-disease and dental clinics, the distribution of serums and vaccines to physicians and health instruction by its nurses in homes and schools.

All of these activities are conducted in the districts which are both health centers and administrative units, each headed by a full-time health officer and staffed by a nurse supervisor and from ten to twenty public-health nurses. Because of its proximity to the city's industries the staff of the South Baltimore Center will devote especial attention to the study of occupational diseases.

With the expansion of its program of preventive medicine and salary increases among city employés the cost of the Health Department has gone up. During the 1930's the per capita appropriation for department work fluctuated between 81 and 89 cents. This year it is $1.35. The appropriation requested for 1947 is $232,241.90 greater than that for 1946 and is exclusive of the cost of the South Baltimore building, which comes under the head of capital investment. The increase is sought chiefly for salary increases and additions to personnel.

Offsetting the increased costs have been impressive changes for the better in the saving of lives and the conquest of disease. For example, in 1915 there were 120 deaths of infants under 1 year of age per 1,000 live births; in 1945, there were but 39.7 per 1,000. In 1931, there were 7.7 deaths of mothers per 1,000 live births; in 1945, there were 1.5 per 1,000.

In 1926, the diphtheria case rate was 107.5 per 100,000 population; in 1945, it was 38, and it has been as low as 5.4. Typhoid fever, which used to take many lives annually, in 1945 took only one. In 1904, the tuberculosis death rate in Baltimore was 250 per 100,000 population; in 1945, it was 83.1. But, while the death rate for whites has declined from 221 to 46.7, the rate for Negroes has declined only from 600 to 233, and for the last ten years it has been practically static due to poverty, bad housing, inadequate hospital beds and inadequate nursing in the homes.

Statistics on venereal diseases, which have been the field of most recent intensive attack, thus far have proved confusing. Studies now being conducted may eventually show what progress, if any, is being made in the fight against them.

PLANS FOR THE SOUTHERN HEALTH DISTRICT

lay groups on health topics, news articles prepared for a neighborhood newspaper, the distribution of Health Department pamphlets and conferences with the nurses of the district.

Druid Health Center

The clinic visits to the Druid Health Center increased to a total of 56,371 in 1946 following a record low attendance of 54,184 in 1945. Twenty-four weekly Health Department clinic sessions were held at the Center as follows: Adult venereal disease 11, congenital syphilis 3, prenatal 4, chest X-ray 5, and infant and preschool 1. Ten additional Health Department well baby clinic sessions for Negroes were held each week at 5 other localities in the area.

The Maryland State Board of Mental Hygiene conducted weekly clinics at the Center as in previous years. The Instructive Visiting Nurse Association was given space for several of its nurses. The Maryland Tuberculosis Association assigned a medical social worker and health educator to assist the work from the Center. The staff of the Druid Health Center cooperated in the Health Department mass chest X-ray surveys held within the boundaries of the district.

Approximately 3,500 packages of biologicals and 23,000 diagnostic outfits were distributed to physicians and hospitals from the Druid Health Center. The Monumental City Medical Society continued for the seventh successive year to conduct regular monthly meetings in the assembly room at the Center, and the Maryland Dental Association also met there frequently. The National Negro Health Week Committee utilized the building as its headquarters while close relationship was maintained with the Clean Block Committee. Health information was disseminated to the general public while specific groups such as student nurses, school children and civic organizations visited the Center to receive health instruction.

Southeastern Health District

Diphtheria continued to be a serious communicable disease problem in 1946 in the Southeastern Health District as in other parts of the city. Seventy-one cases and 2 deaths were reported. An unusual prevalence of cases in the Armistead Gardens and the O'Donnell Heights Housing Projects in May and December prompted the inauguration of special preventive measures to check the spread of the disease in these areas. Public health nurses made house-to-house visits to urge parents to have children given the preventive toxoid and special clinics were held for this purpose.

When 6 rabid dogs were found in the Armistead Gardens Housing Project during June, July and August, a special campaign was inaugurated to enforce the quarantine regulations. The Commissioner of Health

personally spearheaded this drive in the area. The Maryland Society for the Prevention of Cruelty to Animals and the Baltimore Police Department cooperated actively with the City Health Department and the City Housing Authority in this dog quarantine enforcement effort.

The third annual transfer of the Babies Milk Fund Association activities in the district was made on January 1 when two well baby clinics were taken over by the Health Department. A new well baby clinic for Negroes was also opened on April 5 in the Holabird Homes.

Large scale chest X-ray surveys were made during the year in the four housing projects located in the district and a neighborhood survey was made by the Eastern Community Council, also in the Southeastern Health District. A total of 3,011 persons over thirteen years of age was given chest X-rays during these surveys.

A new school hygiene program was instituted in September, 1946 in Public School No. 230 similar to the one begun in 1942 in Public School No. 47. Student nurses from the Johns Hopkins Hospital and the Union Memorial Hospital Schools of Nursing visited these public schools and the district well baby clinics for study and observation. Lectures on nutrition and conferences on tuberculosis control were prominent parts of the nursing staff educational program throughout the year. For the seventh consecutive year the East Baltimore Medical Society continued to hold regular monthly meetings in the district building.

Communicable Diseases

As indicated, diphtheria was the most disturbing communicable disease to be more prevalent in 1946 than in the preceding year. There were 26,323 cases of communicable diseases reported during the year as compared with 25,907 in 1945. For the fifth consecutive year the typhoid fever record of Baltimore was lower than for the previous year, and in each of the past four years it established a new low record for the city.

Diphtheria

There were 424 cases and 19 deaths of diphtheria reported during the year as compared with 353 cases and 19 deaths recorded for 1945. This dark picture was relieved however by indications that the peak of the trouble had been reached at the end of June. Throughout the year the drive was to have children inoculated with diphtheria toxoid at six and seven months of age and again on first entering school. Large numbers of such children were given the protective toxoid. During the year reports were received that 28,396 children had been given diphtheria toxoid inoculations. Of this total 12,663 were given booster doses, and of the children inoculated 10,920 were under one year of age.

CHILDREN RECORDED AS RECEIVING DIPHTHERIA TOXOID INOCULATION
BALTIMORE, 1942-1946

AGENCY	1946	1945	1944	1943	1942
Physician's Practice	8,309	7,887	9,838	9,818	7,026
Preschool Clinics	12,747	9,951	11,854	8,963	7,646
School Clinics	7,340	7,784	15,764	3,070	3,910
Total	28,396	25,622	35,456	21,851	18,582

Rabies, Meningococcus Meningitis and Poliomyelitis

Seventeen rabid dogs were found in the city during the year, one more than the number discovered in 1945. Special educational and restrictive measures were taken in the Armistead Gardens housing project area where this problem was acute. The city-wide quarantine on dogs carried over from September 20, 1945 continued until June 20, 1946. A dog quarantine was also established in the southern section of the city from June 20 to September 20 and in the southeastern section from June 28 to December 21, 1946.

There were 46 cases and 11 deaths of meningococcus meningitis reported during the year. This is the smallest number for any year since 1943. In 1946 there were 34 cases of paralytic poliomyelitis recorded. This was not an especially large number of cases for Baltimore as poliomyelitis was epidemic in several parts of the country.

Tularemia and Rickettsial Diseases

Only 1 case of tularemia occurred which was in a person who caught his infection while handling a wild rabbit given him by a hunter. During the year 2 cases of endemic typhus were recorded. Both occurred in October and were located in the 600 block on the east side of North Calvert Street. As this block of houses is near a railroad freight yard it is believed the infected rats were transported to Baltimore in freight cars from infested out-of-State areas to the south. One case of Rocky Mountain spotted fever was also reported, as compared with 3 cases for the preceding year.

Typhoid Fever and Smallpox

Ten cases and 1 death of typhoid fever were recorded for the year as compared with 11 cases and 1 death for the previous year. There were 68 typhoid carriers known to the City Health Department at the start of the year. Two new carriers were discovered during the year and were added to the list of carriers kept under regular supervision. Six carriers on the list died in 1946 and two moved out of the State, so at the close of the

year 62 typhoid carriers were on the list. For the eighteenth consecutive year no case of smallpox was reported in Baltimore. This is high tribute to the active cooperation of public, parochial and private school authorities and the medical profession.

Sydenham Hospital

There were 1,105 patients admitted to Sydenham Hospital in 1946 which was an increase of 62 patients as compared with 1945. Of the total number of patients 52 died at the hospital. Of these deaths 19 occurred within twenty-four hours after admission. Patient days for the year totaled 22,006 which was 2,054 more than the number for 1945.

The results of the use of streptomycin in the treatment of meningitis due to Type B Hemophilus influenzae were very satisfactory. Laboratory tests showed that certain strains of this organism are more sensitive to penicillin than to streptomycin, and therefore suggest that in these instances penicillin should be used in substitution for streptomycin after laboratory test shows the special strain to be present.

There was a total of 372 cases of diphtheria admitted during the year and 42 of these were patients from the counties brought to the city for hospitalization. The number of diphtheria admissions represents an increase of 79 over the number admitted during 1945. There were 20 deaths due to diphtheria and all of these were attributed to diphtheritic myocarditis. One of these deaths occurred in a patient admitted during 1945. There was no death attributed to laryngeal obstruction.

During the year 54 cases of paralytic poliomyelitis were admitted, 32 from the city and 22 from the counties of Maryland. Twenty-six or 48 per cent of these patients were admitted during the months of October and November. There were 2 deaths, both city patients. One died within twenty-four hours of admission.

Other diseases treated during the year included meningococcus meningitis, whooping cough, staphylococcus septicemia, lobar pneumonia, bronchopneumonia, encephalitis, gonococcal ophthalmia, laryngotracheobronchitis, measles, mumps, septic sore throat, rheumatic fever and scarlet fever.

Research

During the course of routine work in the Sydenham Hospital laboratory it was discovered that a major capsular antigen is shared in common by Hemophilus influenzae and Types A and B Friedlander bacilli. Further investigation revealed the fact that sera prepared against Friedlander bacilli caused capsular "quelling" and destruction of the Hemophilus influenzae. This new knowledge may be of therapeutic value since serum produced by inoculating rabbits against Hemophilus influenzae is very

difficult to prepare and is extremely expensive. The high cost is of grave significance, since the treatment of influenza bacillus meningitis requires the use of this serum as well as streptomycin and sulfadiazine. It is believed that serum made from Friedlander organisms will be much easier to prepare and consequently very much cheaper than Hemophilus influenzae serum because the Friedlander organism contains very much more of the antigen previously referred to than does Hemophilus influenzae. Research along this line was in progress at the close of the year.

It was also discovered that filtrates from autolysates of Friedlander bacilli contain an enzyme or group of enzymes destructive to the capsule of Type B Hemophilus influenzae organisms. Since the virulence of the influenza bacillus depends upon the presence of its capsule the decapsulating enzyme derived from the Friedlander organism may have importance from a therapeutic standpoint.

In conjunction with Commander H. S. Hurlbut of the U. S. Navy, experiments on the mosquito transmission of various virus agents begun at the Naval Laboratory on Guam in 1945 by the Medical Director of Sydenham Hospital were carried forward at the hospital during the year. The observation that Japanese encephalitis may be transmitted by mosquito larvae has been confirmed. That this disease is a potential threat in the Baltimore latitude has been shown by the laboratory transmission of the virus causing the disease by Aedes triseriatus mosquitoes trapped on the grounds of Sydenham Hospital. Another incompleted research carried on at the hospital was related to certain aspects of circulatory failure in diphtheria.

Tuberculosis

During 1946 there were 747 deaths from all forms of tuberculosis among residents of Baltimore, representing 64 per cent of total tuberculosis deaths among residents of the State of Maryland. Of the deaths among city residents, 349 occurred in white residents and 398 among Negroes. Negroes suffered 53 per cent of Baltimore's tuberculosis fatalities, although they constitute as a race less than 20 per cent of the city's population.

The total tuberculosis death rate for Baltimore residents was 80.3 per 100,000 population, for white residents 46.7, for Negro residents 218.7. Comparable figures for 1945 were 83.1 per 100,000 for the total tuberculosis death rate, 46.7 for the white race and 233.0 for Negroes. It is encouraging to note that the tuberculosis death rate among Negroes has fallen for three successive years, but no steadily held decline can be counted on, since wide fluctuations in a death rate well above 200 have been noted for years. Our Negro residents suffer a tuberculosis death rate 4.7 times greater than that for our white residents.

During 1946 there were 1,524 new cases of tuberculosis reported to the Health Department, of which 882 were among white persons and 642 among Negroes. Of the total number 130 or 8.6 per cent came to the attention of the Bureau of Tuberculosis only at the time of death. In most such instances physicians had been called too late to diagnose the disease, often not more than a few hours before death.

Apparently healthy persons were offered chest X-rays in a case-finding program conducted by the Health Department with the assistance of the Maryland Tuberculosis Association. A mobile small-film unit was used for this work. During the year 48,175 persons were given X-rays and of these 68 per cent were white and 32 per cent were Negroes. With stationary small-film units located in the Eastern Health District and at the Druid Health Center chest pictures of 6,904 additional apparently healthy individuals were made. Related routine case-finding efforts by small-film apparatus for hospital populations were also made possible for the first time during the year with equipment supplied by the bureau to the Johns Hopkins Hospital and the Baltimore City Hospitals.

Sanatorium service throughout the State continued to be hampered by a serious shortage of personnel, by failure to provide urgently needed thoracic surgery for more than a very small number of patients and by the continuing inadequacy in the number of beds available for Negroes ill with tuberculosis. Counts made toward the end of 1946 indicated that neither race had access to all the beds in institutions for treatment. The chief reason was that no adequate provision had been made to attract and hold needed hospital personnel. For white persons the ratio of beds in use to deaths was 1.97; for Negroes 0.92. It is quite clear that even after unused beds are put into service for Negroes, construction of additional beds in new sanatoria conveniently near Baltimore City is urgently needed to bring accommodations for Negroes to the numerical level provided for the white race. Until the treatment of tuberculosis in this State can be offered promptly to patients of both races, until they can have the benefit of modern surgical methods to assist their recovery, and until medical social workers and occupational therapists in our tuberculosis sanatoria are available to make convalescence more tolerable, the city will remain remarkable for its high total mortality from tuberculosis in comparison with other like communities.

Venereal Diseases

Cases of newly reported syphilis for the year decreased to 5,558 from a peak of 14,803 in 1943 due largely to the fact that fewer men were examined for Selective Service which had led to the detection of large numbers of infections with this disease during the war years. There were

4,047 cases of gonorrhea reported to the Health Department. Penicillin, which was available only through legitimate medical agencies, was probably a considerable inducement to the infected to seek proper medical care, with the result that more gonococcus infections have been reported in 1946 and 1945 than in any prior year. Nearly 500 million units of this drug were administered to gonorrhea patients in the Health Department clinics in 1946. In addition, large volumes of penicillin were also used for both syphilis and gonorrhea at the Baltimore Rapid Treatment Center at Baltimore City Hospitals, at other hospitals and in private medical practice.

Contact investigations increased greatly in number in spite of the reduction of reports from the Armed Services. The increase was due entirely to the greater volume of work done in the Health Department venereal disease clinics. Approximately 48.3 per cent of the 6,429 contacts investigated were examined and 61 per cent of those examined were found to have a venereal disease.

Those venereal disease clinics in the city, official and nonofficial, from which the Health Department received service reports, admitted 11,400 new patients during the year. The Health Department clinics admitted 8,723 of these. Health Department clinic patients made 119,684 visits to the clinics in 1946.

The Rapid Treatment Center admitted 1,986 patients with infectious syphilis in 1946, of which 1,799 were residents of Baltimore, 174 were residents of the counties of Maryland and 13 were out-of-State veterans referred to the Center from local military establishments by the Armed Services. The city venereal disease clinics referred 1,278 of these patients to the Center.

It was necessary to invoke the provisions of City Ordinance No. 217 in only 15 instances during the year and to summons only 4 of these recalcitrant patients to court. Since the enactment of this ordinance on June 20, 1945 it has been invoked in only 26 cases and 7 recalcitrant patients have required court action to enforce their treatment. On December 2, 1946 Ordinance No. 217 was made permanent by the enactment and approval of Ordinance No. 693.

The Baltimore Venereal Disease Council continued to serve as a forum for the discussion of problems of venereal disease control by representatives of the several city and State agencies and related nonofficial groups which participate, in one way or another, in the control program. One of the best results of the Council's efforts was the success in 1946 of the new Protective Service for promiscuous persons, conducted by the City Welfare Department.

Although the venereal disease control problems related to the war

decreased in volume with the reduction in the military forces they were qualitatively the same as they have always been, and engaged much of the Health Department's attention, especially in the direction of contact investigation and the discouragement of the "facilitation" process. The Health Department and the Armed services continued to collaborate through the meetings of the Joint Army-Navy Disciplinary Control Board and otherwise as the occasion demanded.

It may be stated that so far there is little or no evidence that the apparently miraculous one and eight day cures of gonorrhea and infectious syphilis (respectively) with penicillin have accomplished much toward the control of these diseases. In fact, a relapse rate of around thirty per cent in syphilis, the great possibility of reinfection with either disease and the need for simultaneous treatment of sexual contacts to prevent so-called "ping-pong" infections pose new problems difficult of solution. These problems are clinical, epidemiological and administrative. Certainly this new therapy has done nothing to correct the promiscuous sexual behavior which is the ultimate cause of the spread of venereal disease.

Occupational Diseases

Stabilization of industrial employment was only partially achieved in 1946 and it was, therefore, impossible to set up a planned program in industrial hygiene for the year. The chest X-ray program in industry suffered severe interruptions but contacts were maintained looking to the continuance of this work. The meetings begun in 1944 with the personnel of the Division of Industrial Health of the Maryland State Department of Health were held each month in 1946 and resulted in the formulation of proposals for an industrial sanitary code.

Three seminars each of six hours duration were given to the senior medical students of the Johns Hopkins School of Medicine and a two hour lecture was given to a class from the Johns Hopkins School of Hygiene and Public Health. Training for three hours a week was also provided for eight weeks for one student from the latter school. One lecture was contributed to the course of in-service training sponsored by the Sanitary Section of the City Health Department. The article on dinitrocresol poisoning which was published in the September, 1943 issue of *Baltimore Health News* was given notice in the *Oxford Medical Publication on Industrial Toxicology.*

The total number of reported occupational diseases was 196 as compared with 222 in 1945. As in former years, dermatosis in various forms was the commonest occupational disease and poison ivy was the most frequently reported skin irritant. Tenosynovitis continued to occur in spite of sincere efforts directed toward controlling this industrial disability of the wrist or ankle which results from repetitious over-fatigue.

The director occasionally acted as a substitute for the Medical Examiner of the City Service Commission. Opportunity was also afforded for the examination of several men exposed to lead, one of whom had a lead palsy, an extremely rare disease.

Child Hygiene

It is gratifying to report a new record low infant mortality rate of 35.5 per 1,000 live births for the year 1946. The utilization of the Municipal Ambulance Service for the transportation of premature newborn babies through the cooperation of the City Board of Fire Commissioners and the improvement in the hospital facilities in the city for the care of babies born too early have played some part in the reduced number of deaths in infants under one year of age. A newly built ward for this service was opened at the Johns Hopkins Hospital on January 10, 1946.

The sixth annual transfer of clinics from the Babies Milk Fund Association to the Bureau of Child Hygiene took place on January 1, 1946 when three clinics for white and colored children were taken over in the northeastern and southeastern sections of the city. In addition new well baby clinics were established in the Holabird and Cherry Hill Homes for colored children. During the year well baby clinics were operated at 38 locations with a total of 71 sessions each week. There were 42,892 infant visits made to the well baby clinics during the year.

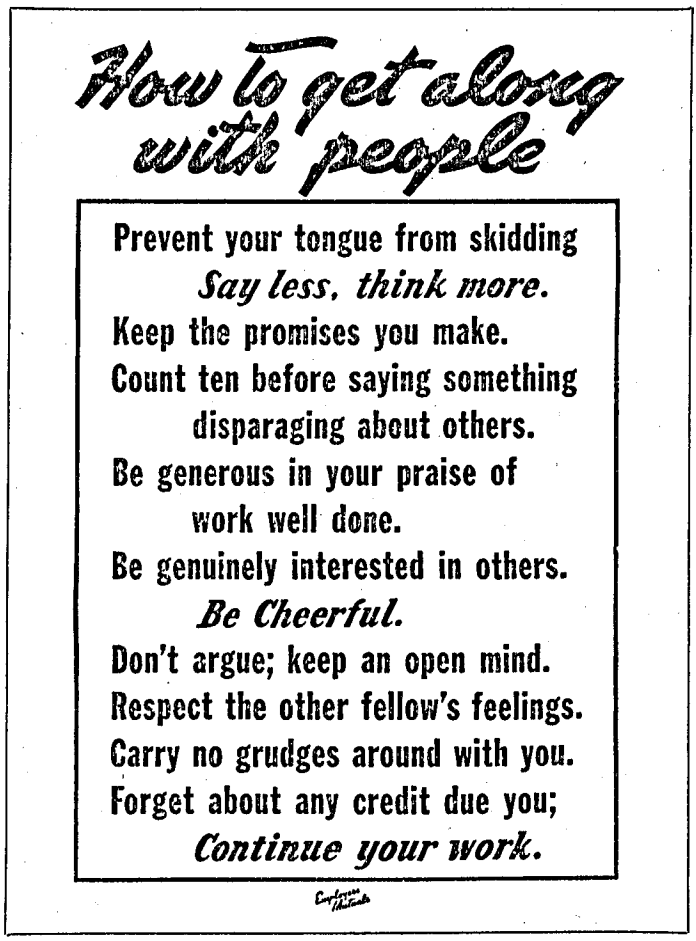
Public health nurses made 19,485 neonatal visits and 17,605 diphtheria prevention follow-up visits to infants eight months of age after the six month greeting card from the Commissioner of Health urging toxoid had been sent to 17,042 resident infants. Preventive toxoid inoculations were given to 9,446 children in the Health Department well baby clinics and to 1,009 in the Babies Milk Fund Association clinics. In the Health Department clinics there were 6,066 children vaccinated against smallpox and 643 such vaccinations were done in the Babies Milk Fund Association clinics. There were 266 cases of ophthalmia neonatorum assigned by the bureau to the public health nurses with a total of 1,725 home visits to these cases.

Preventive Mental Hygiene

Toward the close of the year plans were well established for inaugurating a preventive mental hygiene service as part of the well baby clinic work of the City Health Department. Such plans for an "anticipatory guidance" service were developed with the assistance and advice of Dr. George H. Preston, Maryland State Commissioner of Mental Hygiene, and Dr. Paul V. Lemkau of the Johns Hopkins School of Hygiene and Public Health who during recent years has conducted mental hygiene studies in the Eastern Health District that were inaugurated in 1933.

Child-Placing Institutions

The bureau continued to inspect and license boarding homes, day nurseries and nursery schools as in previous years. During 1946 no child died in a boarding home licensed by the Health Department. There was a considerable increase in the number of foster homes inspected dur-



FIRST RULES FOR MENTAL HYGIENE

ing the year due to a great extent to the city-wide United Foster Homes Campaign. During the year 7 wartime nursery schools financed through Federal Lanham Act funds were closed.

Maternity Hygiene

The number of resident births increased in Baltimore with 21,111 reported in 1946, as compared with 17,848 in 1945. The resident maternal

mortality rate reached a new all-time low figure in falling from 1.5 per 1,000 live births in 1945 to 1.2 for 1946. The continuing community interest in the welfare of expectant mothers and the self-scrutiny of the obstetricians in Baltimore are largely responsible for the remarkably low death rate reported from these causes.

There were 1,441 new patients registered in the Health Department prenatal clinics for care during the year, 218 of these were referred to the clinics for adequate prenatal care by midwives and 72 were given care under the Emergency Maternity and Infant Care Program provided for the wives of service men by the Children's Bureau of the U. S. Department of Labor. There were 2,076 chest X-ray examinations of expectant mothers made at the Druid Health Center and the Eastern Health District.

School Hygiene

Dr. Henry F. Buettner, who had been Administrative Health Officer in the Western Health District before entering military service, was appointed Director of the Bureau of School Hygiene on July 15. The Assistant Commissioner of Health had served as Acting Director of the bureau since the retirement of Dr. H. Warren Buckler in November, 1945.

During the year 31,216 children were examined by Health Department physicians in the public and parochial schools. Of this number, 12,722 were found to have one or more physical defects, mainly defective teeth, or vision, or enlarged tonsils and adenoids. A total of 6,034 pupils had enlarged tonsils and adenoids and of this number 1,736 had their tonsils and adenoids removed. Of the 6,656 children found with defective teeth, 2,472 had them treated; 1,446 pupils were found to have defective vision and 970 of these had their eyes refracted and obtained glasses.

Immunization clinics to prevent diphtheria were held monthly in all the public and parochial schools and parents were urged to have children entering school for the first time given "booster" doses of toxoid. A total of 6,038 school children and 903 preschool children were given the protective dose of toxoid in the school clinics during the year. In addition, 549 preschool and 404 school children were vaccinated against smallpox.

The Eye Clinic which had been closed since May, 1944 because of the lack of medical personnel was reopened on November 4. From November until the end of the year 131 school children made 225 visits to this clinic; 71 children had their eyes refracted and 112 children were given mydriatics.

In the Ear Clinic maintained by the Health Department 1,580 patients were treated. Of this number 1,407 were given the 2A audiometer test, 528 were given treatment and 130 children were given 250 radium treat-

ments for the prevention or control of hearing loss. In many cases after the removal of tonsils and adenoids lymphoid tissue grows around the orifices of the Eustachian tubes, and unless treated interferes with normal hearing. Radium applications shrink this tissue and improve the hearing, especially in children of primary school age.

Children found to be suffering with heart defects, orthopedic deformities or severe eye or ear defects to such a degree as to make it impractical for them to continue in their regular classes were recommended for transfer to the special classes for the physically handicapped maintained by the City Department of Education. Recommendations were also made for home teaching service for those children who were unable to attend school for a protracted period because of illness or physical disability.

Dental Hygiene

The scope of the work of the Division of Dental Clinics for the year 1946 was very limited, due to the lack of adequate salaries to secure professional personnel to operate the clinics. The nine dental clinics which were closed in 1944 were not reopened, and in addition four more clinics were closed in September when Dr. John Hoffman resigned.

The five remaining clinics were operated by a part time supervisor and a part time colored dentist and treatment consisted mainly of relief for toothache. Children found to be in need of more extensive dental work were referred to private dentists or to the Dental School of the University of Maryland.

A summary of the work done during the year follows:

Patients registered at clinics	1,873
Visits to clinics	2,107
Prophylactic treatments given	1,012
Teeth filled	454
Temporary teeth extracted	2,777
Permanent teeth extracted	954
Cases completed and discharged	1,799

During the summer the dental equipment in the sixteen dental clinics was inspected by the supervisor and all necessary repairs were made. At the request of the Department of Education the supervisor gave a course in dental hygiene to a group of teachers and nurses in connection with the special courses inaugurated by them at the beginning of the school session in September. Throughout the year the Committee to Study the Medical Care Needs of Baltimore City gave attention to the lack of an adequate dental hygiene program in the city and secured from the U. S. Public Health Service the assistance of professional personnel to conduct a comprehensive survey.

Public Health Nursing

The end of World War II failed to bring about the stabilization of the City Health Department nursing staff that had been anticipated. During 1946 there were fifty public health nurses appointed to fill forty-four recurring vacancies and at the close of the year there still remained ten unfilled positions for public health nurses.

SPECIALLY DESIGNED PREMATURE INFANT CARRIER

A total of 126 public health nurses assigned to the generalized program conducted the public health nursing work in 136 nursing districts. These nurses also assisted in the various clinics of the Health Department and gave an equivalent of ten nurse-years of service for this purpose. In addition, thirteen public health nurses were assigned on a full time basis to the tuberculosis and venereal disease clinics.

There were 170,665 field visits made by the public health nurses to all services during the year. Educational instructions to interpret the clinician's advice and recommendations were increased in all clinics, because of the need for reducing the number of home visits due to staff shortages. A review of tuberculosis cases was made by the Director and Assistant Director of the Bureau of Tuberculosis and home visits to these cases were made on a selective basis in order to meet the needs of the cases.

The supervisors had to allocate a great deal of their time to the introduction of new personnel and a new position for a supervisor was created and filled by one of the substitute supervisors. Five public health nurses were granted leave of absence without pay in order to take collegiate courses in public health nursing. Two of these nurses were granted stipends through Federal Bolton funds for an academic year, and three others obtained scholarships from U. S. Public Health Service funds for collegiate training in public health nursing.

In April the public health nurses assumed the responsibility of transporting premature babies from homes and hospitals to the new special ward for their care at the Harriet Lane Home of the Johns Hopkins Hospital. This transportation service was accepted by the Board of Fire Commissioners in June and the premature infant carrier apparatus and equipment was kept in condition by the Bureau of Public Health Nursing for the Fire Department's municipal ambulance staff.

Milk Control

An encouraging trend toward a return to the prewar status of city milk control was noticeable throughout the year. A 37 per cent increase in the price of milk to the farmers and a decided improvement in the war-depleted labor situation on dairy farms resulted in greater milk production on the local milkshed and a reduction of 10 per cent from 1945 in the amount of out-of-State emergency milk brought into the city. In 1946 there was a total of 9,000,000 gallons of such emergency milk or 18 per cent of the city's total milk supply of 50,000,000 gallons for the year.

The city milk pasteurization plants willingly undertook corrective measures in order to remove the effects of wartime restrictions on building materials and milk handling equipment.. Out of a total of 4,487 samples of pasteurized milk phosphatase tested by the Bureau of Laboratories 5 instances indicated faulty pasteurization.

Of the average daily sales of 86,951 gallons of milk sold within the city 99.7 per cent was pasteurized. The withdrawal from the market in November of one of the two remaining raw milk farms supplying the city decreased the daily percentage of raw milk sales during the month of December to a new low of .14 per cent.

In one of the few instances in recent years in which a violator of the City Milk Code has been prosecuted in court, the owner of the Chestnut Farms Dairy, Raspeburg, Maryland, whose Health Department Dairy Farm Permit was revoked by the Commissioner of Health in 1939, was charged on February 21 with the sale of unpermitted milk within the city. The owner of the farm had previously been charged with the same offense in 1943 and in both cases was convicted and fined in a magistrate's court.

The fifteenth annual Sanitary Milk Production Contest was won by Emmitsburg High School, Emmitsburg, Frederick County, Maryland, also winner in the 1945 contest. Thurmont High School and Walkersville High School, also of Frederick County, finished in second and third places respectively. Three hundred and five students from ten high schools located on the milkshed participated in the contest and thereby brought the total number of prospective dairy farmers trained during the past fifteen years in which the contest has been held to 5,156.

Food Control

A three-fold program of inspection, education and when necessary prosecution was engaged in during the year. Emphasis was placed on educational procedures to improve the sanitary conditions in food establishments and to assure safety of the city's food supply. Food handler instruction, a city-wide project that has been carried out for several years by the bureau, developed into a major activity. In 1946 more than 2,300 and since 1940 more than 13,000 food handlers have been given instruction in sanitary food handling technique. There were 29 alleged food poisoning outbreaks investigated and 4 of these were found to have been caused by food.

A larger percentage of food establishments were found to be entirely satisfactory at the time of inspection in 1946 than in the previous year. Prosecutions during the year were obtained in 11 cases instigated by the bureau against food dealers and fines totaled over $600.00. Having in possession filthy food and maintaining insanitary conditions and nuisances were the causes for the 11 prosecutions.

Relocation of equipment away from walls and elevating equipment and stocks of food from floors were urged in every instance of insanitary conditions found in each type of food establishment. These were remedial procedures which greatly improved the sanitary condition of the premises and at the same time prevented rat and insect excreta and other filth from getting into food. Food manufacturers endorsed the procedures and adopted them so far as space would permit.

Other activities of the Bureau of Food Control included: Routine inspection of more than 14,000 food establishments; special inspections of about 1,360 taverns; teamwork with five large chain store food corporations; examination of mayonnaise salad dressing manufactured in the city for the presence of an adulterant mineral oil; inspection of food departments in hospitals, schools and other institutions; obtaining field equipment materials for use by inspectors; issuance of approximately 15,000 milk, meat, rooming house and gas appliance dealer permits; investigation of several cases of tularemia, trichinosis and typhoid fever; and class instruction in the public health aspects of food control.

Nutrition

The educational program of the division was continued as a major activity and extended to agencies outside of the City Health Department. A handbook of instruction containing colored illustrated material was printed and distributed to the nurses for use during their home and school visits. Seventy-one talks were given to over 1,700 persons; fifty to the Department staff groups and twenty-one to lay groups. Several exhibits were prepared and displayed during the year. These exhibits were designed to demostrate various types of inexpensive foods that are rich in certain nutritional ingredients. Maintaining contact with other agencies in the city engaging in activities embodying the science of nutrition was carried out in accordance with the original plans for the division work. A study of the feeding facilities of Sydenham Hospital was also made in cooperation with the Superintendent of the hospital.

Meat Inspection

The work of the bureau dealt with the inspection of livestock before slaughter, examination of carcasses at the time of slaughter and condemnation of carcasses and parts of carcasses unfit for human consumption. The most frequent diseases in order of importance which caused condemnation of carcasses were: Pyemia, traumatic pericarditis, hog cholera, immaturity, pneumonia, sarcoma and tuberculosis. Condemnation of parts of carcasses was made because of parasites, abscess, tuberculosis, actinomycosis and cirrhosis. The bureau also handled the supervision of the processing of meats, manufacturing of meat food products and packaging of finished products; inspection of meats at wholesale establishments and of car route shipments at railroad yards of meat from sources outside of the State.

Supervision was given to general constructive improvement of plants and modern equipment and sanitation of the establishments. Adjudication was made of appeal cases filed by meat packers and of complaints concerning odors emanating from packing plants and dirty trucks operated by transfer companies. Four persons offering uninspected meats for sale were prosecuted and all were convicted. Meats shipped interstate without Federal marks of inspection were condemned; meats salvaged from railroad wrecks were reinspected and meat that was spoiled or rat infested was confiscated.

Service was also rendered to: Federal and State agencies in the slaughtering of cattle reacting for Bang's disease, Johne's disease and tuberculosis; Federal agencies in the examination for detection of disease before slaughtering of cattle from St. Elizabeth's Asylum, Washington, D.C., and U. S. Experimental Station, Beltsville, Md.; and to the Bureau

of Communicable Diseases in the examination of domestic animals for suspected rabies.

Environmental Hygiene

Promising new approaches to environmental sanitation in the home, the place of employment and the community during the year included: The success of the Housing Law-Enforcement Committee in slum rehabilitation in South Baltimore by the coordinated enforcement of existing city ordinances; the appointment late in the year of a Rodent Control Coordinating Committee to study and develop a comprehensive and coordinated rodent control program; and the examination and inclusion in all plans for industrial construction of measures for the control of hazardous materials or operations prior to their approval by the City Buildings Engineer.

Industrial Hygiene

Major attention was given to the evaluation of actual health hazards in industry and the engineering development and evaluation of control measures. As a result of these detailed studies management made 220 improvements affecting the health and welfare of 8,518 employees.

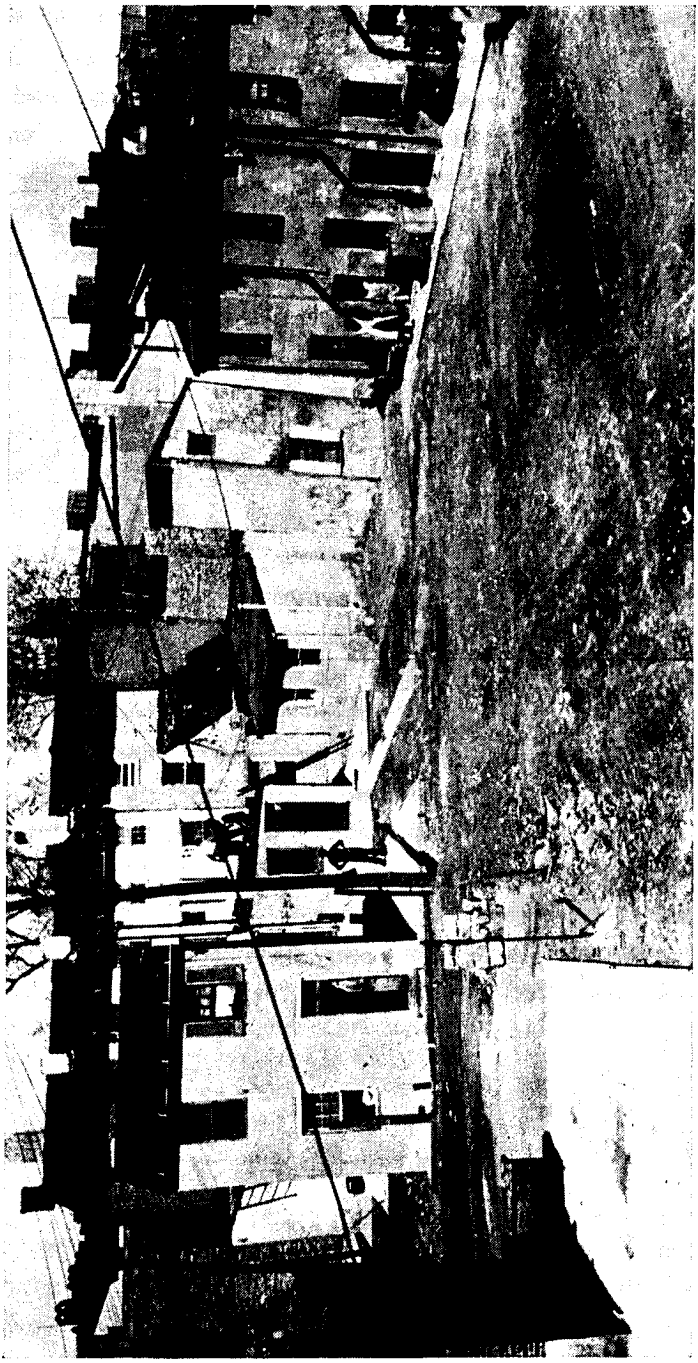
Such technical studies of exposures to toxic materials included those related to: Dust in a chrome manufacturing plant where at one time the majority of employees had perforated nasal septums from exposure to chrome dust; lead dust in two indoor shooting galleries where three attendants were exposed and developed lead poisoning; lead dust in a large insecticide plant where over 20 cases of excessive lead absorption occurred during the past five years.

At the request of industry, systems for the control of hazardous materials were designed for a linotype printing establishment employing gas-fired equipment; a printing establishment engaged in melting lead-containing type metal; a paint company mixing lead pigments; an electroplating plant using a cyanide solution; and for a new fabricating plant where plating, heat treating, grinding, buffing, welding and pickling processes are to be conducted.

Atmospheric pollution arising from varnish cooking, dehydrating sour milk, dehydrating fermented potatoes and from the storage of large piles of cinders was eliminated by the installation of control equipment or the discontinuance of operations.

Housing

Housing studies embracing 255 dwelling structures and 888 applications for housing permits for rooming houses, hotels or lodging houses resulted in the improvement of 1,030 dwelling units and the licensing of 658 es-



The blighted slum area six months after coordinated law enforcement, March 15, 1946. A picture from the same spot taken on September 26, 1945 appears on page 41 in the ANNUAL REPORT for 1945. Interiors have been reconditioned and the defective yard toilets, rat harbors, dilapidated wood fences and accumulations of garbage have been removed.

tablishments. Inspections disclosed 54 instances of overcrowded dwelling units, and 103 dwelling structures housing 882 persons were posted to be vacated because they were found to be unfit for human habitation.

The conversion of a rock bottom slum block in South Baltimore to habitable housing meeting the standards of the city housing code by the coordinated efforts of the city agencies represented on the Housing Law-Enforcement Committee met with widespread acclaim by the press, civic organizations, the Real Estate Board and the public in general. In the latter part of the year, the program was expanded to include a second block in South Baltimore.

Community Sanitation

The occurrence of 2 cases of endemic typhus fever in occupants of a group of Federally leased six-family apartment houses late in 1946 reemphasized the need for a comprehensive and coordinated city rodent control program. Action had already been taken in September to bring this about by the appointment of a Rodent Control Coordinating Committee composed of representatives of the School of Hygiene and Public Health of the Johns Hopkins University, the Bureau of Buildings, the the Bureau of Street Cleaning, the Police Department and the Health Department.

In cooperation with the Maryland State Department of Health sanitary inspections were started at hospitals and convalescent homes in Baltimore City in connection with the new State law requiring these institutions to be licensed. Other outstanding activities included: The study of insanitary methods of sewage disposal at Wagners Point and in the vicinity of the 6200-6300 blocks of Reisterstown Road and recommendations to the Chief Engineer that sewers be extended to serve the properties; trapping of rats in order to examine their blood for the presence of endemic typhus fever antibodies; investigation of breaks in a force main of the city sewerage system and an adjoining water main relative to possible contamination of the city water supply; and a closer cooperation with the Department of Public Parks in the supervision of the park swimming pools, resulting in a marked improvement in the quality of the pool water over previous years; abatement of defective drainage conditions in association with the Highways Engineer and Buildings Engineer; continuation of the stream pollution surveys and the posting of large red metal warning signs where needed; the preparation with the Bureau of Water Supply of a tentative draft of an ordinance to control the addition of chemicals to water systems for the prevention of corrosion; a study of municipal piers to determine the possibility of contamination of the city water system by vessel watering practices; and periodic inspections of the sanitary land fills.

Plumbing

Demonstrations of cross connection drinking water pollution hazards in plumbing systems and methods for their prevention or correction were given to several interested groups including representatives of the Maryland State Department of Health. Continued vigilance to protect the city water supply against possible contamination resulted in the prevention or elimination of 2,690 potential cross connections in plumbing sys-

CARROLL H. REYNOLDS
Plumbing Inspector
December 16, 1919–June 24, 1928
Assistant Chief Plumbing and Sanitary Inspector
June 25, 1928–August 10, 1931
Assistant Director of the Bureau of Sanitation
August 11, 1931–June 18, 1934
Chief Inspector of Plumbing
June 19, 1934–December 31, 1945
Chief of the Division of Plumbing
Since January 1, 1946

tems. There were 815 properties connected to the sanitary sewerage system in 1946 making a total of 174,608 connected properties in the city.

Biostatistics

A special study of population trends and health conditions in northwest Baltimore was made at the request of the Associated Jewish Charities in connection with a proposed development of a Jewish Medical Center. A report on "Population Trends in Relation to the Postwar School Construction Program" was completed for the Superintendent of Public Instruction. Statistical information on problems of population, health and social conditions was furnished to municipal agencies, social organizations and commercial companies in increasing variety. These demographic services were rendered to the Postwar Aviation Commission, the Rodent Control Division of the Bureau of Street Cleaning, the Public Service Commission, the Associated Jewish Charities, the Baltimore Transit Company, the *Baltimore Sun* and the *Baltimore News-Post.* The activities of the Juvenile Court of Baltimore City in 1945 were tabulated by the bureau and represented the second year of this cooperative service. As an aid in the use of census tracts for the study of social problems on a

small-area basis the Health Department publication of "Boundary Lines of Census Tracts" was reprinted by the Research Department of the *Baltimore News-Post.*

The tabulation of vital statistics, morbidity reports, records of toxoid inoculation, services of public health nurses and food control personnel, and the activities of the tuberculosis clinics were continued as routine services of the Bureau of Biostatistics. Study of these data and reports for administrative and educational use were prepared for the Commissioner of Health and for the several bureaus.

The organization and services of the Statistical Section were studied by Dr. O. K. Sagen, Chief of the Division of Vital Statistics and Records of the Illinois State Department of Health, and by two students from Puerto Rico. Three consultants to the United States Committee on Joint Causes of Death, Dr. Percy Stocks and Dr. A. H. T. Robb-Smith of England and Miss Winifred O'Brien of Canada, also visited and studied the section office.

The Director of the Statistical Section served on the Subcommittee on Classification of Diseases, Injuries and Causes of Death appointed by the United States Committee on Joint Causes of Death in further development of plans for the Sixth Revision of the International Lists of Diseases and Causes of Death. The director continued to serve very effectively as secretary of the Committee to Study the Medical Care Needs of Baltimore City and the education of senior medical students in the certification of causes of death was also continued by the director during 1946.

On April 29 Mr. Langdon B. Backus returned from military leave to resume his duties as statistician in the section and the appointment of Miss Elaine Cramer to the position of statistician in the Bureau of Tuberculosis on September 17 permitted a closer liaison in the statistical study of the tuberculosis control activities of the Department.

Vital Records

The value of vital records as evidence in establishing personal rights and for social controls is always recognized more clearly in periods of social crisis such as that experienced during the recent war. The uses for these documents have become firmly established, as indicated by the increased demand for copies of death records, and by a larger number of requests for birth records than was customary in prewar years. The issuance of 26,808 transcripts of death certificates in 1946 established an all-time high record exceeding the previous high of 25,897 copies issued in 1945. While 14,757 transcripts of birth certificates were issued in 1946 as compared with 20,361 copies in 1945, the figure for 1946 represents a larger demand than the 11,028 copies issued in 1940, the last prewar year.

The increased need for verification of the fact of birth by governmental and social agencies has been reflected in the larger number of confidential reports made directly to the agency requesting the information. During 1946 the bureau issued 2,650 such reports for births as compared with 2,144 birth verifications in 1945. There were 319 death verifications in 1946 and 371 in 1945.

The opportunity for parents to review all of the important information on the birth certificates for their newborn children was provided during the year under the plan initiated at the close of 1945. Thus for the first time a record signed by the parent indicating the correctness of the birth certificate is returned to the Bureau of Vital Records for nearly every birth in the city. *A Notification of Birth Registration* is furnished to the parents when corrections have been completed. This program will further insure the accuracy of these birth records when they are required as evidence in future years. A paper on "Community Vital Statistics" was presented by the Director of the Bureau of Vital Records at the meeting of the American Association of Registration Executives in Chicago on March 20.

Conclusion

In concluding this sixteenth consecutive Report of the Commissioner of Health which serves as a summary of the more extensive City Health Department's 132nd Annual Report the writer does not wish the reader to get the impression that the Department work goes on smoothly year by year without stress or strain or anxiety. The Department is a living organism with a staff roster of some 550 loyal and hard-working persons who take pride in their careers of public service.

The Department is growing because the people of Baltimore place new responsibilities on it to guard their health and in association with the physicians, hospitals and other agencies in the city to restore to health those who may be so assisted. To do this in a half-hearted or mediocre manner is contrary to the traditional spirit of the Baltimore City Health Department and to the expectations of the people of the city. To do otherwise requires increasing appropriations, particularly for the salaries of the major professional and technical personnel on the Department staff, salaries which should be commensurate with the scope of the work performed. This same plea appears in the conclusion to the Commissioner's report for the year 1931, but it requires repeating under current circumstances.

To the Mayor of the City and to the City Council, to the Board of Estimates and the City Service Commission and to the medical profession and a host of official and nonofficial groups and agencies, both State and municipal, the City Health Department owes unlimited debts of gratitude. Together we will go forward in 1947 in the worth-while task of guarding and restoring the health of the people of our fair city.

Respectfully submitted,

Huntington Williams, M.D.

Commissioner of Health.

Baltimore, Maryland
May 1, 1947

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ORDINANCE AND REGULATIONS GOVERNING MATERNITY HOSPITALS
POLIOMYELITIS. Information for Parents and Patients (Revised)
DIPHTHERIA. Important Information (Revised)

ADMINISTRATIVE SECTION

EXECUTIVE OFFICE

Personnel

Huntington Williams, M.D., Dr.P.H., Commissioner of Health
Ross Davies, M.D., M.P.H., Assistant Commissioner of Health
Reed Gaither, Senior Administrative Officer and Secretary to the Commissioner
Sadie E. Figg, Senior Stenographer
Helen von Wachter, Senior Stenographer
Dorothy I. Payson, Senior Stenographer
Anne P. Madden, Principal Addressograph Operator
Margaret Shaver, Senior Typist

Note: Personnel records as given here and at the close of each bureau report are in accordance with the Department staff roster as of December 31, 1946.

ASSISTANT COMMISSIONER OF HEALTH

ASSISTANT COMMISSIONER OF HEALTH

Ross Davies, M.D., M.P.H.

Administrative activities were conducted by the Assistant Commissioner of Health in the closest cooperation with the Commissioner of Health throughout 1946. Duties of a routine nature were handled as in previous years and included work with the four Health District officers, Sydenham Hospital and the several bureaus and divisions of the Department.

Major activities are given in the following capitulation:

The Assistant Commissioner of Health served as acting head of the Bureau of School Hygiene until July 15 when Dr. Henry F. Buettner returned from active war duty and assumed directorship of the bureau.

More visitors than usual came to observe and study the organization and work of the Health Department. Foreign visitors were from many countries including Chile, China, Czechoslovakia, England, France, Greece, Ireland, Italy, Scotland, Sweden, Switzerland and Uruguay. Visitors spent from one day to several weeks in the Department and their interests varied from the work of one bureau to several who studied the complete Health Department program.

Local groups and classes from high schools, private schools and from the girl and boy scout organizations also came to study the Health Department. Arranging schedules with busy bureau directors for foreign and local visitors as individuals or groups required considerable planning on the part of the Assistant Commissioner of Health and also in the total consumed a lot of time of the bureau directors. However, efforts were made to give each visitor or group the best attention possible so that they would have a better understanding of the work of the Department.

A course of eight lectures for students from the Johns Hopkins School of Hygiene and Public Health was arranged and subsequently given by the Department bureau directors. Each lecture of one hour was followed by a fifty minute seminar on the same topic.

Schedules for students in the Junior and Senior medical classes at the University of Maryland were planned and completion of these lectures was followed by preparing and conducting examinations and grading of the students' papers.

BUREAU OF HEALTH INFORMATION

BUREAU OF HEALTH INFORMATION

Esther S. Horine, A.B.

Chief

An intensive health education program was conducted on a neighborhood basis for a mass chest X-ray survey held at Public School No. 47 located at Fleet Street and Linwood Avenue. This survey served to demonstrate and develop a program which was duplicated in other areas. Meetings to plan the publicity program were held with the health committee of the Eastern Community Council who sponsored the survey. Health Education media used for this program included a four-page flier which was distributed to each house in the area, posters, exhibits in store windows, meetings, talks, news releases, church announcements and film slides in theatres. Similar chest X-ray surveys were conducted at other public schools and at the Armistead Gardens and the Somerset Homes.

Diphtheria Prevention

A city-wide publicity program for the prevention of diphtheria was begun in February. A new poster was issued to present to parents the diphtheria prevention policy of two doses of toxoid for the infant and a booster dose for the older child before first entering school. The public health nurses of the Bureau of Public Health Nursing handled the neighborhood distribution of 1,500 of these diphtheria posters. Others were placed in libraries, transit waiting rooms, schools, clinics, public buildings, housing projects and downtown stores. The diphtheria leaflet was revised and modernized, news releases were sent to the press, three "Keeping Well" radio dramas and one special program were broadcast.

Radio Broadcasts

The "Keeping Well" radio series presented by the Baltimore City Health Department and the Medical and Chirurgical Faculty of Maryland were broadcast each Thursday at 6:45 P.M. over Station WFBR during 1946. Begun in 1932 with a five minute talk the radio program was changed in 1939 to a fifteen minute drama and has been used as a media for health information on the current communicable disease situations as well as for topics of special importance.

Radio spot announcements on the prevention of measles and the spread of rabies were broadcast by the five radio stations in the city upon request of the Health Department. The Commissioner of Health and bureau

directors participated in several radio programs other than those conducted by the Department.

Publications

The *Baltimore Health News* was issued each month for the twenty-third consecutive year and was sent to approximately 10,000 persons on the mailing list among whom are practicing physicians, nurses, teachers, welfare workers and others interested in public health. Professional journals reprinted three articles from the June issue of *Baltimore Health News*. The Chief of the Bureau gave assistance in editing the ANNUAL REPORT and articles written by bureau directors.

On January 4 the new poster "Learn To Keep Well! Listen to Dr. Ashley" was issued to publicize the "Keeping Well" radio drama series. One thousand of the posters were displayed on the vehicles of the Baltimore Transit Company from January 12 to 24 and 600 were distributed by the bureau to 160 public schools, Enoch Pratt branch libraries, health districts and Health Department clinics.

News Releases

The Commissioner of Health issued "The Saturday Letter to the Mayor" which was used invariably by the press each week to apprise the public of the communicable disease situation. Feature articles and monthly news releases were sent to the daily and weekly newspapers and other bulletins with a resultant total of more than 340 articles and 2,700 inches of Health Department news publicity.

Meetings

Several series of meetings were conducted for lay groups, and at each session a talk was given, a motion picture was shown and leaflets were distributed. During the year more than 600 health addresses and 1,200 seminars were given to approximately 45,000 persons. Classes again were conducted by the Commissioner of Health and several bureau directors for the teaching of students of the two medical schools in the city and the Johns Hopkins School of Hygiene and Public Health.

Special Observances

In cooperation with other agencies radio broadcasts and exhibits were presented and news releases were issued for observance of Know Your Public Health Nurse Week, the "March of Dimes" campaign, Syphilis Control Day, Cancer Control Month, Negro Health Week, Child Health Day, National Hearing Week and the annual tuberculosis Christmas Seal Sale. An exhibit was made on "Know Your Public Health Nurse" by staff

nurses and displayed in various locations throughout the city. The Enoch Pratt Free Library held a window exhibit of historical and modern materials supplied by the Department for the Fiftieth Anniversary of the founding of the City Health Department Bureau of Laboratories.

Miscellaneous Activities

The City Department of Education through the cooperation of Dr. Lillian Davis, assisted the Health Department in publicizing the city-wide dog quarantine. The Health Department supplied 3,300 rabies leaflets and these were sent with a statement on the quarantine to public schools teachers who used the information for classroom instruction. To prevent the further spread of rabies among dogs, 150,000 fliers were printed and the Police Department handled the house-to-house distribution.

Moving picture films were secured by the bureau for preview by the staff and two new films were bought. "Something You Didn't Eat" was loaned to the Health Department by the U. S. Department of Agriculture and was used by the staff for meetings with lay groups. Films on file in the Department were loaned to other agencies on twenty-nine occasions.

Negro Health Week was observed in Baltimore from March 31 to April 7. The Health Officer of the Druid Health Center used the moving picture projector and all of the Department's films during the week for meetings and talks to school, church and civic groups.

Nine literature racks were supplied to the City Department of Public Welfare for placement in their dispensaries. The bureau supplied 12,300 Health Department leaflets for distribution from these racks. A total of 48 racks have now been placed throughout the city and 72,130 leaflets were apportioned to these racks in 1946.

The bureau replied to 560 inquiries for health information; saw 289 Health Department forms through the printing process, distributed 228,416 publications of which 72,130 leaflets were apportioned to literature racks; maintained routine library and newspaper clipping services and made interlibrary loans for the staff.

The multigraph and mailing division multigraphed 374,847 pages for 358 requisitions. The division sent out 204,070 pieces of mail including *Baltimore Health News*, *Guarding the Health of Baltimore*, ANNUAL REPORT, reprints, medical staff meeting notices, weekly morbidity reports and letters to physicians.

Exhibits

In connection with tuberculosis case-finding and dental hygiene surveys, clean city campaigns and like activities there was displayed a total of 72 exhibits comprised of more than 200 units as compared with 43 such exhi-

bits of 76 units during the previous year. In many instances displays were studied by pupils in junior high schools where on occasion bulletin notices concerning the exhibits were read to every homeroom class and where hygiene classes were given specific homework assignments based on the topics developed in the exhibits, followed by class discussion and the making of original posters.

Exhibit material completed during the year included one 28″ x 32″ three-dimensional poster "Good News" with additional insets for use in the tuberculosis case-finding survey conducted for the Bureau of Tuberculosis and the Maryland Tuberculosis Association in various local Federal housing projects; one 36″ x 48″ three-dimensional poster "Children Tell Your Parents Toxoid Prevents Diphtheria" designed primarily for use in schools; one 14″ x 32″ poster "Beware of Lead in Paint for Indoor Use" designed and prepared for silk screening; twenty-four posters appropriately mounted and fluotate protected for display in City Clinic No. 1 and the venereal disease clinics at the Druid Health Center and the Somerset Homes, especially in connection with the local observance of National Social Hygiene Day.

Eighteen pieces of exhibit material were loaned out. One three-dimensional poster was designed and built for a local organization interested in public health and 60 pieces of visual education material were renovated.

Distribution of exhibits during the year included six placed in municipal chest clinics, thirty-five in the main corridor of a building where one of the two municipal chest clinics is located and twenty in vocational and junior high schools.

Personnel

Esther S. Horine, A.B., Chief
Dorothy Regina Kalben, B.Sc., R.N., Division of Publications
Bessie Knipp Sothoron, Senior Stenographer

TABLE NO. 1
SUMMARY OF EDUCATIONAL WORK DONE BY THE HEALTH DEPARTMENT IN 1946

Section or Bureau	Publications	Newspaper Publicity		Printed Material Distributed		Articles in Baltimore Health News	Health Addresses and Seminars			Visual Education			Radio Broadcasts	Health Contests	Training of Department Personnel Round Table Talks and Planned Courses			Meetings Attended	Conferences
		Articles	Column Inches	Requests	Pieces		Health Addresses	Seminars	Persons Reached	Exhibits	Films, Slides	Persons Reached			Classes	Persons	Hours		
Entire Department	22	291	2,347	18,141	737,795	70	616	1,229	43,085	72	56	27,239	10	1	292	2,866	408	1,599	2,077
Administrative Section																			
Commissioner of Health	3	30	387	200	8,000	18	150	70	8,000				6		42	60	65	190	300
Asst. Commissioner of Health		2	31				1	16	850									292	
Statistical Section		26	185		300	16				1					7	32	35	25	125
Health Information	2	18	130	560	228,416	11	5		159	58	3	9,905						57	165
Baltimore Health News				140	124,098														
Rack Distribution				114	72,130														
Miscellaneous				306	32,188														
Laboratories		7	73	41	593	1	9	3	477	3		5,150			11	251	14	155	133
Eastern Health District		4	17	1,108			28	75	6,284						97	360	143	45	130
Western Health District		10	95	313	2,132		4		70									31	48
Southeastern Health District				3,433	4,108		11	705			9	9						17	18
Druid Health Center		2	10	1,050	12,556		13	3	792		11	125			8	4	7	14	30
Medical Section																			
Communicable Diseases	2	65	266	535	186,089	6	2	2	227				1		1	90	2	101	117
Sydenham Hospital	4	6	57	40	161	1	76	229	7,091									10	22
Tuberculosis		28	216			3	17	14	1,445		4	80	1						201
Venereal Diseases	1	2	27			2		24	281						2	62	2	91	107
Occupational Diseases	1	2	33	443	2,191		2	3	107									48	46
Child Hygiene	1	9	85	216	16,735	4	7	28	638									79	58
School Hygiene		3	24			1													
Dental Clinics		1	7	1	1,700		3		2,416		2	2,411						26	
Public Health Nursing		5	43	6,126	35,758	1	152	36	5,833	2		453						99	228
Sanitary Section																			
Director	1	29	304	55	423	5	3	3	385		12	99	2		10	230	15	48	93
Milk Control		2	16	103	576	1	10	1	690					1				34	105
Food Control	7	12	102	2,682	6,445		54	9	3,068	5		5,450			56	1,459	59	96	66
Meat Inspection		2	26		70		1		70									16	
Environmental Hygiene		26	213	675	3,126		68	8	4,202	3	15	3,557			58	318	66	125	85

TABLE NO. 2

RADIO DRAMAS BROADCAST UNDER THE JOINT AUSPICES OF THE BALTIMORE CITY HEALTH DEPARTMENT AND THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, 1946

"KEEPING WELL" SERIES

Date		Title	Subject
January	5	Keep It To Yourself	Colds and grippe
	12	He Won't Bite	Rabies
	19	The Uncertain Future	Mental hygiene
	26	Silver Avalanche	March of Dimes
February	2	Beyond Victory	Syphilis Control Day
	9	Building for Youth	Young Men's Christian Association
	16	Protect Your Children	Again booster toxoid
	23	Tell Us	Handling of complaints by the Health Department
March	2	Black Light	Ultra violet light
	9	Under Three	Measles year
	16	An Important Picture	Chest X-ray
	23	Hidden Services	Laboratory services
	30	Health for All	Negro Health Week
April	6	Front Line Ladies	Public Health Nursing
	13	Detect and Correct	Cancer
	20	Bug Bomb	DDT
	27	Here Is A Child	Child Health Day
May	4	Hold Everything	Household accidents
	11	A Good Start	Prenatal care
	18	What's Cookin'	Care of food in hot weather
	25	Handle With Care	Tick-bite fever
June	1	Wet Danger	Polluted streams
	8	Good Breeding	Mosquitoes and malaria
	15	Summer Squalls	Baby care in hot weather
	22	Paying for Fun	Vacation hazards
	29	Cheating Cheaters	Venereal diseases
July	3	Hot Stuff	Sunburn
	10	Weak Rubber	Road accidents
	17	Keep that Balance	Salt in industry
	24	Nature in the Raw	Milk and ice cream
	31	Ring the Bell	Getting ready for school
August	7	Play Safe	Diphtheria prevention
	14	Over Forty	Exercise and weight
	21	Hale and Hearty	Tuberculosis
	28	Slumber Time	Self-medication
September	4	Magnificent Gyp	School lunches
	11	Paint Eaters	Lead poisoning
	18	Information Welcome	Health Information
	25	Invisible Noose	Diphtheria
October	3	Lola's Discovery	Maternity hygiene
	10	His Nose Drops	Common cold
	17	Without Warning	Carbon monoxide
	24	Danger Signal	Sore throats in children—symptom of many diseases
	31	On the Beam	Child care
November	7	That Kind Smile	Public health nursing
	14	Discord of Silence	Prevention of deafness
	21	The Empty Grin	Dental hygiene
	28	The Seal of Hope	Tuberculosis Seal Sale
December	5	The Doting Father	Christmas toys for children
	12	Watch the Broncho	Influenza and pneumonia
	19	Eternal Enemy	Rodent control
	26	A Toast for 1947	New Year's resolutions

BUREAU OF LABORATORIES

BUREAU OF LABORATORIES

C. Leroy Ewing

Director

The upward trend in postwar demands for laboratory services experienced in 1945 was continued in 1946. As physicians returned to private practice from the armed forces, increases in work occurred in many units of the bureau. This was especially emphasized when 784 different physicians submitted specimens for STS in contrast to 526 in 1945. The personnel situation, however, did not improve to any extent over that which existed in the previous year. Regardless of this condition, new services were instituted and some investigative work was carried out.

Following the occurrence of two cases of endemic or murine typhus fever in October, a study of the relation of rats to these cases was begun in collaboration with the Bureau of Communicable Diseases and the Sanitary Section, with assistance from the Johns Hopkins School of Hygiene and Public Health and the National Institute of Health. The bureau assumed responsibility for bleeding all rats submitted and for the shipment of rat-blood specimens to the National Institute of Health laboratories for complement fixation tests. In addition, the bureau obtained a supply of commercially prepared murine typhus antigen and began making complement fixation tests on duplicate specimens. By the end of December, 24 rats had been trapped and tested with results shown in the following tabulation:

Rats trapped	24
Rats positive	12 or 50 per cent
Rats negative	8 or 33.3 per cent
Specimens unsatisfactory	3 or 12.5 per cent
Specimens not tested	1 or 4.2 per cent

The 12 positive rats were part of a total of 19 rats trapped in the area where the 2 cases of typhus fever occurred. This study will be continued in 1947.

On July 1, the Fiftieth Anniversary of the establishment of the Baltimore City Health Department laboratories was celebrated. An exhibit on the history and development of the laboratories was prepared and placed by the Enoch Pratt Free Library in a window where it was displayed for approximately one month. In addition, articles relating to this important event appeared in the local papers and in the *Baltimore Health News*.

The municipal work schedule was changed from a five and one-half day week to a five day week beginning July 1. This necessitated the assignment of limited laboratory personnel to work on Saturdays, as well as on Sundays and holidays. Certain tests such as examinations for diphtheria bacilli, cultures for gonococci, agglutination reactions and others must be made every day.

Diagnostic and Other Services

Routine services involved 254,291 examinations of 171,741 specimens and samples. Of these totals, 217,555 examinations of 158,385 specimens were made for the diagnosis and control of communicable diseases; and 11,017 bacteriologic and 25,719 chemical examinations were made of 13,356 samples of milk and food products and industrial or other materials. The grand totals, as compared with 1945 increased by 23.5 per cent in examinations and by 11.3 per cent in specimens and materials.

Medical Bacteriology and Serology

The percentage of rabid animals when based on the total submitted was greater in 1946 than in 1945. Of 76 animals examined in 1946, there were 17 or 22.4 per cent positive. In the previous year, 16 or 15.4 per cent of the total submitted were positive. Microscopic examinations of the brains of 2 dogs did not reveal Negri bodies but white mice inoculated with emulsions of brain tissue developed rabies and Negri bodies were found in the mouse brains.

For the fourth year increases occurred in the number of specimens submitted for diphtheria examinations. In 1945, a total of 13,620 microscopic tests and 2,448 virulence tests were made of 6,845 cultures and in 1946 the figures were 14,326, 2,462 and 7,056.

With the acquisition on August 1 of a junior bacteriologist on the staff of the Bureau of Tuberculosis, the tuberculosis laboratory work was expanded. In addition to the regular routine examinations of specimens of sputum, samples of gastric fluid were collected. These were tested by culture and animal methods as well as by the usual microscopic examinations.

Pneumococcus type differentiation tests, as determined by the Neufeld method, were discontinued in December. This laboratory service was withdrawn for the following reasons: Requests decreased tremendously; typing sera became unavailable; results of tests were usually unsatisfactory because of the use of penicillin or sulfa drugs prior to the collection of specimens and most therapeutic sera became unavailable.

Marked increases were experienced in STS work in 1946. The 121,939 specimens of blood and spinal fluid submitted represented an increase of 19.3 per cent in comparison with the number submitted in 1945. Of the

total specimens received, 120,045 were blood and 1,894 were spinal fluid. Special tests including titre and check tests also increased. The 13,325 titre tests made represented an increase of 171.6 per cent.

An increase in the number of physicians submitting specimens for STS was experienced. The table presented below lists 784 different physicians who sent in specimens in 1946. In contrast only 526 were recorded in in 1945. This table also lists other sources of STS.

SOURCES OF SPECIMENS FOR STS

Total	121,939
Seven hundred and eighty-four physicians	46,205 or 37.9 per cent
Venereal disease clinics	32,611 or 26.8 per cent
Commercial firms and special groups	23,839 or 19.5 per cent
Hospitals and other institutions	19,194 or 15.8 per cent

Both the routine serologic laboratory and the approval service laboratory participated in a Maryland State-Wide Serologic Survey conducted by Dr. C. A. Perry, Chief of the Bureau of Bacteriology of the State Health Department. The study was begun in November and completed in December and 200 serum specimens were tested in each of the participating laboratories. Results will be tabulated by the State Health Department laboratories and reports sent out early in 1947.

The approval service laboratory maintained its continuous or monthly serologic survey in the city during 1946. No specimens were submitted to the participating hospital and private laboratories in November and December because of the State survey. There were 9,130 examinations made of 1,256 blood specimens and 1,878 spinal fluid specimens in the Health Department laboratory during the year. This was an increase of 53.4 per cent in comparison with 1945. Other special types of work included 262 agglutination tests for infectious mononucleosis, 2 specimens for ornithosis complement fixation tests and 14 complement fixation tests for endemic typhus fever.

In recent years services relating to the laboratory diagnosis of gonorrhea have expanded considerably and it became necessary to set up a special laboratory for this purpose. In 1946 there were 11,360 smears and 7,772 cultures submitted representing increases of 7.0 per cent and 146.0 per cent respectively in comparison with the work performed in 1945.

Since its inception in April, 1945 the gonococcus culture service has presented a number of problems. Some of these were solved in 1946 as a result of special investigations which are described later in this report. Suffice to say that real progress was made when several very practical pro-

cedures were developed which made possible the discontinuance of night work and the culturing of urine specimens.

Sanitary Bacteriology

There were 11,017 examinations made of 7,618 samples of milk and dairy products, water, sea food, canned foods and miscellaneous materials representing increases in comparison with those done in 1945 of 6.6 per cent in examinations and 5.5 per cent in samples.

As in the previous two years assistance was given to the Bureau of Sewers relative to complaints concerning the discharge of sewage effluent into Back River. As part of a study conducted from April through September, 194 samples of river water were tested for coliform bacteria.

A study conducted jointly with the Bureau of Environmental Hygiene to determine the effect of the addition of sodium thiosulphate to water sampling bottles was begun in June. Although the drinking water standards of the American Public Health Association specified that sodium thiosulphate be added to bottles used in sampling disinfected water supplies, this had not been done in the past by the City Health Department. The study involved the testing of 104 duplicate samples of water from swimming pools and results obtained proved that the chemical should be used. By the middle of July all bottles used for the collection of drinking and swimming pool samples were prepared with the addition of sodium thiosulphate.

Chemistry

Despite changes in personnel the Division of Chemistry maintained routine services involving the examination of samples submitted principally by the bureaus of the Sanitary Section. The 25,719 examinations of 9,259 samples represented no change in examinations but a 12 per cent increase in samples when compared with 1945 figures. Activities were devoted almost exclusively to examination of milk and dairy products, food products, industrial hygiene and occupational disease samples.

An increase of 16.8 per cent occurred when 5,548 samples of milk, cream, chocolate milk and ice cream were tested. More than 3 per cent of the samples failed to meet the chemical standards required by regulation particularly in respect to butterfat deficiency. This was a better record, however, than that of 1945 when over 4 per cent of irregularities were reported. Only 5 instances of improper pasteurization of bottled milk were noted in the examination by the phosphatase test of 4,487 samples. This total represents an increase of 26.1 per cent as compared with the number tested in 1945.

Microanalytic determinations for filth were made of 86 per cent of 970 samples of miscellaneous types of food submitted by the Bureau of Food

Control. Such filth as rodent excreta, rodent hairs, insects and insect fragments was found in more than 36 per cent of 837 samples collected from 282 separate food establishments. A sample of flour from a local cookie bakery was found to contain a dead mouse and a number of mouse fecal pellets. In general, samples were collected only where poor sanitary conditions existed. This service which has been given for six consecutive years has been of inestimable value to the Bureau of Food Control in the correction of insanitary conditions in local food manufacturing establishments.

Fourteen hospitals and thirty-seven private physicians submitted 276 specimens of blood from 164 adults and 78 children for lead determination in the diagnosis of lead poisoning. Abnormal amounts of lead were detected in specimens from 28 adults and 19 children. Of the latter 4 died of lead poisoning.

Following the demonstration of abnormal amounts of lead in blood specimens from three shooting gallery attendants who had been diagnosed as having lead poisoning, a collaborative investigation of the lead hazards in shooting galleries was made under the leadership of the Division of Industrial Hygiene. The operation of both commercial amusement galleries and police pistol ranges was studied and a number of samples were submitted for laboratory analysis. The study related principally to the disintegration of different types of bullets upon impact with the target and consequent release of lead dust to the atmosphere.

Quantitative examination for hazardous chemicals such as chromic acid, cyanide, lead, barium and fluoride were made of 118 samples of air and dust submitted by the Division of Industrial Hygiene. Forty-eight air samples were examined for lead as part of investigations which included, in addition to exposures in shooting galleries, such hazardous operations as the manufacture of enamel frit, solder grinding, dedrossing of type metal and the manufacture of lead arsenate.

Biologicals

Unusual demands for antitoxins, vaccines, sera and other biological materials were experienced in 1946. There were 37,452 packages distributed which was a 60 per cent increase above 1945. Requests for diphtheria antitoxin increased from 33,051,000 units in 1945 to 62,058,000 in 1946, an increase of 29,007,000 units. On the other hand the 34,609 c.c. of diphtheria toxoid distributed decreased by 3,007 c.c. as compared with 1945. This was more than offset by the distribution of 24,850 c.c. of diphtheria toxoid combined with pertussis vaccine. The latter when added to the uncombined diphtheria toxoid amount made a total of 59,459 c.c.

Blood Plasma

On February 1, the American Red Cross made available through the

Maryland State Department of Health 313 cases or 3,756 units of Army surplus dried blood plasma. This material was provided by the Red Cross for free distribution and arrangements were made for supplying hospitals and physicians with the serum. All of the plasma was distributed and in December an additional 50 cases or 600 units were obtained. The total amount given out in 1946 was 339 cases or 4,068 units.

Measles Serum

Immune serum globulin, which was first made available by the American Red Cross in March, 1945 for free distribution to physicians for the modification or prevention of measles, was in demand in 1946. A total of 8,995 c.c. was distributed making an increase of 8,521 c.c. over 1945. Although this protein fraction of blood has been used almost exclusively in protecting against measles, studies are being made to determine its value in other diseases such as chickenpox and mumps.

Other Biologicals

A small supply of murine typhus fever vaccine was made available by Dr. John L. Rice of the Lederle Laboratories. This material which was supplied on an experimental basis was used in inoculating City Health Department employees and others engaged in the trapping and bleeding of rats as part of a typhus fever investigation. The inoculations were given in November and December.

Increased demands were made for Type B Hemophilus influenzae serum and rabbit antipertussis serum. Concerning the former, 5,425 mgs. were distributed, or an increase of 3,475 mgs. This material costs $30.00 per 25 mgs. and the average case of influenza bacillus meningitis requires at least 200 mgs. Antipertussis rabbit serum has replaced human hyperimmune serum in the treatment of pertussis and its complications in very young children.

Special Investigations

A study begun in 1945 for the purpose of testing methods used in the bacteriological control of food utensils was conducted by T. C. Buck, Jr., Assistant Director and in 1946 when completed the results were presented to Dr. Henry F. Vaughan, President of the National Sanitation Foundation. Dr. Vaughan had requested this study in which three other public health laboratories also participated. Results obtained in the four collaborating laboratories were compiled by the coordinator, W. D. Tiedeman of the New York State Health Department who assembled and presented a paper at the Seventy-fourth Annual Meeting of the American Public Health Association held in Cleveland, Ohio in November. The title of the paper was

Swab Rinse Technique for Examining Eating and Drinking Utensils by Leon Buchbinder, T. C. Buck, Jr., P. M. Phelps, R. V. D. Stone and W. D. Tiedeman. The purpose of the investigation was to obtain information for the development of bacteriologic procedures for inclusion in standard methods for the control of eating and drinking utensils. The need for further studies was indicated.

Considerable effort was expended in studying the problems relating to gonococcus culturing and under the direction of the Assistant Director a number of studies were made. The most valuable contribution was that which related to the refinement of the transport medium that was first developed in 1945. The following are the principal advantages of the transport medium: Gonoccocci are kept viable for at least 18 hours and in many instances for 24 hours; specimens can be obtained at the night clinic sessions and kept until the next morning before culturing or plating which eliminates the necessity for night laboratory work; urethra specimens from the male are just as suitable as urine specimens for culturing thereby eliminating the need for examining the latter. Mr. Buck submitted on June 27 to the *Journal of Venereal Disease Information* a paper on the preparation and use of the new transport medium.

In the 1945 ANNUAL REPORT there appeared a description of an association known as the State-City-Hospital-Laboratory Conference Committee. Members of this informal group representing the Maryland State Department of Health, the Baltimore City Health Department and the Johns Hopkins Hospital continued their studies on the gonococcus. Included in these studies was that which related to the criticism and evaluation of routine methods for isolating gonococci. This resulted in the preparation of a paper entitled *A Tri-Laboratory Critique of Standard Methods for the Isolation of Neisseria Gonorrhoeae* which was read by Dr. Justina H. Hill at the Cleveland Meeting of the American Public Health Association on November 12.

The 1942 report contains a description of the isolation from milk and study of an organism tentatively classified by Mr. Buck as *Lactobacillus enzymothermophilus*. A paper on this organism was published by him in the *American Journal of Public Health*, 1942, Vol. 32, page 1224. Dr. Robert S. Breed, Chief of the Research Division, New York State Agricultural Experiment Station has also been studying the organism. A number of unsuccessful attempts have been made by Dr. Breed to cultivate the organism and in November he suggested that it was possibly a spore-forming bacillus and not *L. enzymothermophilus*. He recommended further studies which were begun by Mr. Buck in collaboration with other investigators.

The Division of Chemistry participated with fourteen other laboratories

throughout the country in a collaborative study of various techniques of the phosphatase test for the detection of pasteurization of cheese. Mr. F. W. Gilcreas, Associate Referee on Pasteurization Tests for the Association of Official Agricultural Chemists submitted 19 samples of cheddar cheese which were tested by two methods. Results reported by Dr. Kaplan and his staff as announced by the referee compared very favorably with those obtained in the other participating laboratories.

In a study conducted by the Division of Industrial Hygiene of the U. S. Public Health Service it was found that the Chemical Laboratories and one other laboratory shared the distinction of having reported the most accurate results in the examination of check specimens of blood and urine for lead determinations. Twenty-one laboratories in the United States participated.

Other studies included the development of a more satisfactory blood serum medium for growing diphtheria bacilli, the use on a practical basis of a new stain known as Clinichrome, the detection of mineral oil in mayonnaise products, determination of DDT on sprayed fruit, estimation of cationic antiseptics in food, microanalytic detection of filth in fluid milk, quantitative determination of chlorine in milk, determination of total protein in cerebrospinal fluid and tests for hydrocyanic acid in air.

Personnel

C. Leroy Ewing, Director
Theodore C. Buck, Jr., Assistant Director
Emanuel Kaplan, Sc.D., Chief of the Division of Chemistry
Harry L. Carman, Principal Clerk
John A. Wheeler, Principal Clerk
Frieda Ernst, Senior Clerk
Laura B. Grim, Senior Clerk
Marie R. Guckert, Senior Clerk
Kathryn H. Hiltner, Senior Stenographer
Leona Dannenberg, Junior Typist
Katharine E. Welsh, Principal Bacteriologist
Elise Dudley, Senior Bacteriologist
Mabel E. Girton, Senior Bacteriologist
Katherine Shea, Senior Bacteriologist
Rudolpha Turner, Senior Bacteriologist
Mayer Weinblatt, Senior Analytical Chemist
Mary McManus, Junior Bacteriologist
Melissa P. Mann, Junior Bacteriologist
Evelyn Medwedeff, Junior Bacteriologist
Byrd G. Wenke, Junior Bacteriologist
Rose E. Boyarsky, Junior Chemist
Marjory R. Lundvall, Laboratory Assistant
Regina McKeldin, Laboratory Assistant
Thomas Rainer, Laboratory Assistant

Katharine Thurlow, Laboratory Assistant
Margaret Yockel, Laboratory Assistant
M. J. Doonan, Senior Storekeeper
Walter C. Wilson, Stockhandler
Thomas H. Hale, Laborer
George H. Johnson, Laborer
Michael Madigan, Laborer
Elijah B. Pate, Laborer
Louis Svatora, Laborer
Warren Barnes, Chauffeur

TABLE NO. 1

SPECIMENS SUBMITTED AND THE NUMBER OF LABORATORY PROCEDURES PERFORMED FOR EACH TYPE OF SPECIMEN

Type of Specimen and Test	Number of Specimens	Number of Tests
Total	158,385	217,555
Animal heads	76	
Animal inoculation	..	60
Microscopic	..	1,459
Bile	3	
Culture	..	21
Blood	121,559	
Agglutination	..	5,627
Culture	..	3,976
Microscopic	..	210
Serologic	..	140,649
Direct culture	14,966	
Agglutination	..	32
Animal inoculation	..	2,462
Culture	..	15,846
Microscopic	..	17,842
Feces	824	
Culture	..	3,666
Microscopic	..	1,239
Fluid (chest, knee, etc.)	105	
Animal inoculation	..	34
Culture	..	13
Microscopic	..	214
Helminths	29	
Microscopic	..	31
Pus	11,478	
Culture	..	6
Microscopic	..	11,515
Serum	12	
Microscopic	..	15
Spinal Fluid	1,905	
Animal inoculation	..	7
Culture	..	24
Microscopic	..	33
Serologic	..	5,511
Sputum	7,347	
Animal inoculation	..	11
Culture	..	115
Microscopic	..	6,574
Urine	81	
Animal inoculation	..	31
Culture	..	130
Microscopic	..	202

TABLE NO. 2

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY TYPE AND RESULT OF EXAMINATION

Type of Examination	Total	Positive	Negative	Doubtful	Unsatisfactory
Total	191,587	55,235	129,467	4,064	2,821
Brucellosis					
Blood, agglutination	961	14	939	5	3
Diphtheria					
Total	9,518	4,244	5,072	40	162
Animal inoculation					
Virulence test	2,462	806	1,654	..	2
Microscopic					
Diagnostic	1,663	544	1,063	8	48
Institution	982	804	164	..	14
Release	4,411	2,090	2,191	32	98
Dysentery, Amebic					
Feces, microscopic	295	..	295	..	..
Enteric Infections					
Total	4,938	476	4,175	281	6
Agglutination					
Blood, H antigen	1,873	360	1,317	193	3
Blood, O antigen	1,038	49	901	88	..
Culture					
Bile	1	1	..	..	..
Blood	59	4	53	..	2
Blood clot	1,064	3	1,061	..	..
Feces	877	52	824	..	1
Pleural fluid	1	..	1	..	..
Urine	25	7	18	..	..
Gonococcus Infections					
Total	19,132	6,630	10,809	1,205	488
Culture					
Exudate	7,772	2,831	4,922	..	19
Microscopic					
Exudate	11,360	3,799	5,887	1,205	469
Infectious Mononucleosis					
Blood, agglutination	262	167	16	79	..
Intestinal Parasites					
Total	453	34	415	..	4
Microscopic					
Feces	424	26	397	..	1
Worms	29	8	18	..	3
Leptospirosis					
Total	4	..	4	..	..
Agglutination					
Blood					
L. canicola	2	..	2	..	..
L. icterohemorrhagiae	2	..	2	..	..
Malaria					
Blood, microscopic	94	26	66	1	1
Meningitis					
Spinal fluid, culture	1	..	1	..	..

TABLE NO. 2—Continued

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY TYPE AND RESULT OF EXAMINATION

Type of Examination	Total	Positive	Negative	Doubtful	Unsatisfactory
Metallic Poisoning					
Total	299	97	135	59	8
Biochemic					
Lead					
Blood	273	82	127	58	6
Paint	9	3	3	1	2
Spinal fluid	2	2	..	..	..
Urine	11	7	4	..	..
Arsenic					
Hair	2	1	1	..	..
Nail	1	1	..	..	..
Plaster	1	1	..	..	..
Pneumonia					
Sputum typing	31	8	23	..	..
Rabies					
Total	143	22	119	1	1
Animal inoculation					
Brain emulsion	67	5	62	..	..
Microscopic					
Animal brain	76	17	57	1	1
Streptococcus Infections					
Total	105	9	95	..	1
Culture					
Blood	31	1	29	..	1
Exudate	1	1	..	..	..
Sputum	3	3	..	..	..
Swab	70	4	66	..	..
Syphilis					
Total	146,160	42,156	100,663	2,218	1,123
Biochemic					
Globulin	1,756	173	1,556	..	27
Gum mastic	1,750	198	1,514	..	38
Complement-fixation					
Kolmer					
Blood	1,217	426	698	65	28
Spinal fluid	1,891	267	1,477	100	47
Flocculation					
Eagle					
Blood	120,174	25,739	92,652	1,012	771
Hinton					
Blood	1,157	297	544	219	97
Kahn standard					
Blood	1,157	287	684	119	67
Kline diagnostic					
Blood	1,247	350	698	182	17
Kline exclusion					
Blood	1,247	644	419	167	17
Mazzini					
Blood	1,227	445	417	354	11
Microscopic					
Dark field	12	5	4	..	3
Titre	13,325	13,325			

TABLE NO. 2—Continued

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY TYPE AND RESULT OF EXAMINATION

Type of Examination	Total	Positive	Negative	Doubtful	Unsatisfactory
Tuberculosis					
Total	7,472	1,194	5,105	151	1,022
Animal inoculation					
Exudate	90	12	77	..	1
Culture					
Ear exudate	1	..	..	1	..
Gastric washings	9	..	9	..	..
Pleural fluid	3	..	3	..	..
Sputum	22	6	15	..	1
Sternal fluid	1	1	..	..	..
Thoracentesis fluid	1	..	1	..	..
Microscopic					
Exudate	76	2	69	1	4
Sputum	7,269	1,173	4,931	149	1,016
Tularemia					
Total	169	6	158	5	..
Agglutination					
Blood	168	6	157	5	..
Rabbit (autopsy)	1	..	1	..	..
Typhus Group					
Total	1,335	19	1,295	19	2
Agglutination					
Blood					
Proteus OX_2	658	5	642	11	..
Proteus OX_{19}	661	8	645	7	1
Complement-fixation (blood)	16	6	8	1	1
Vincent's Infection					
Exudate, microscopic	64	46	18	..	..
Other Examinations					
Total	151	87	64	..	..
Biochemic	3	2	1	..	..
Culture	80	66	14	..	..
Microscopic	66	19	47	..	..
Serologic Ornithosis					
(complement-fixation)	2	..	2	..	..

TABLE NO. 3

CLASSIFICATION OF AGGLUTINATION AND BACTERIOLOGIC TESTS FOR ENTERIC ORGANISMS

AGGLUTINATION TESTS

Organisms	Total	Positive	Negative	Doubtful	Unsatisfactory
Total agglutinations	2,911	409	2,218	281	3
Eberthella typhosa	1,886	263	1,425	195	3
Salmonella choleraesuis	14	1	13	..	..
S. paratyphi and schottmuelleri	919	134	712	73	..
Salmonella enteritidis	4	..	3	1	..
Shigella dysenteriae polyvalent	88	11	65	12	..

BACTERIOLOGIC TESTS

Total tests	2,027
Positive results	67
Abortus equi	2
Bacillus alcaligenes	1
Bacterium coli (type I)*	2
Coliform intermediate (type I)*	1
Coliform intermediate (type II)*	2
*Douglas & Colebrook #6***	9
*Douglas & Colebrook #8***	1
*Douglas & Colebrook #9***	2
Eberthella typhosa	19
Escherichia coli	1
Irregular coliform bacterium (type II)*	1
Proteus morganii	3
Pseudomonas aeruginosa	1
Salmonella abortivoequina	6
Salmonella choleraesuis	2
Salmonella enteritidis	2
Salmonella sp. (Newport type)	2
Salmonella schottmuelleri	1
Salmonella sp. (Stanley type)	1
Salmonella typhimurium	1
Shigella alkalescens	3
Shigella paradysenteriae	3
Unidentified Salmonella	1
Negative results	1,957
Unsatisfactory results	3

* Nomenclature adopted from *The Bacteriological Grading of Milk*, British Medical Research Council, 1935

** Nomenclature adopted from *A System of Bacteriology*, British Medical Research Council, 1931.

All others taken from *Bergey's Manual of Determinative Bacteriology*.

TABLE NO 4
BIOLOGICALS DISTRIBUTED TO PHYSICIANS, HOSPITALS AND INSTITUTIONS

PRODUCT	NUMBER OF PACKAGES	BASIC CONTENT	TOTAL AMOUNT
Total	37,452		
Diphtheria biologicals			
Antitoxin	4,390	Unit	62,058,000 units
Toxin for Schick test	247	Test	2,470 tests
Toxin for Schick test control	247	Test	2,470 tests
Toxoid, alum precipitated	3,501	Cubic centimeter	34,609 c.c.
Toxoid, fluid	8	Cubic centimeter	132 c.c.
Conjunctival tests			
Horse serum	317	Test	2,536 tests
Rabbit serum	54	Test	432 tests
Influenza meningitis serum type B	217	Milligram	5,425 mgm.
Measles			
Immune serum globulin	3,812	Cubic centimeter	8,995 c.c.
Penicillin	5,317	Unit	531,700,000 units
Pneumococcus curative serum	14	Unit	280,000 units
Pertussis biologicals			
Pertussis vaccine and diphtheria toxoid combined	2,485	Cubic centimeter	24,850 c.c.
Immune serum (human)	41	Cubic centimeter	820 c.c.
Antipertussis serum (rabbit)	90	Cubic centimeter	900 c.c.
Plasma, Blood	339	Unit	4,068 units
Rocky Mountain spotted fever products			
Vaccine, prophylactic	207	Cubic centimeter	828 c.c
Scarlet fever biologicals			
Antitoxin	15	Unit	98,000 units
Antitoxin for Schultz-Charlton test	1	Test	1 test
Toxin for Dick test	23	Test	160 tests
Toxin for permanent immunity	4	Skin test dose	1,860,950 s.t.d.
Silver nitrate solution, one per cent	327	Ampule	5,532 ampules
Smallpox vaccine	5,932	Tube	29,660 tubes
Tetanus biologicals			
Antitoxin	8,480	Unit	13,833,000 units
Toxoid, alum precipitated	48	Cubic centimeter	192 c.c.
Tuberculin products			
Koch's old	426	Cubic centimeter	2,130 c.c.
Patch test	343	Test	2,809 tests
Typhoid vaccine	259	Cubic centimeter	2,716 c.c.
Typhoid-paratyphoid vaccine	308	Cubic centimeter	3,520 c.c.

TABLE NO. 5
SUPPLY MATERIALS AND OUTFITS PREPARED AND DISTRIBUTED

Glassware and material cleaned (units)	1,194,525
Sterilized	679,318
Bottles	42,340
Petri dishes	106,796
Pipettes	223,720
Tubes	295,195
Miscellaneous	11,267
Media prepared	
Liters	2,124
Bottles	5,072
Petri dishes	28,352
Tubes	83,395
Outfits	
Prepared	170,131
Distributed	164,548
Culture stations	2,131
Health districts	68,004
Laboratory	94,695
Water distilled (gallons)	1,549

TABLE NO. 6

FOOD AND OTHER SAMPLES SUBMITTED FOR BACTERIOLOGIC ANALYSIS AND EXAMINATIONS PERFORMED

Type of Sample	Number of Samples	Number of Tests
Total	7,618	11,017
Cream, pasteurized (dairy, store, truck)	339	
Plate count	..	339
Cream, raw	7	
Plate count	..	7
Microscopic count	..	1
Equipment for sterility (bottles)	273	
Plate count	..	278
Food products	102	
Plate count	..	102
Microscopic count	..	1
Coliform count	..	16
Special tests	..	79
Food poisoning	22	
Culture tests	..	3
Plate count	..	18
Special tests	..	41
Ice cream	609	
Plate count	..	609
Milk, pasteurized (dairy, store, truck)	1,755	
Plate count	..	27
Microscopic count	..	15
Coliform count	..	2,493
Milk, chocolate, pasteurized	266	
Plate count	..	266
Milk, raw (batch, certified, selected, shippers')	966	
Plate count	..	977
Microscopic count	..	213
Shellfish	1	
Coliform count	..	7
Swabbings from utensils and equipment	505	
Plate count	..	505
Water	2,773	
Plate count	..	1,318
Coliform count	..	2,800
Special tests	..	884

TABLE NO. 7

SAMPLES SUBMITTED FOR CHEMICAL ANALYSIS AND THE NUMBER OF LABORATORY PROCEDURES PERFORMED FOR EACH TYPE OF SAMPLE

Type of Sample	Number of Samples	Number of Tests
Total	9,259*	25,719
Body fluids and excreta	311	
Lead test	..	897
Unclassified biochemic tests	..	236
Dairy products (milk, cream, chocolate milk, ice cream)	6,835	
Butterfat test	..	5,082
Refractive index (added water)	..	350
Phosphatase test	..	9,656
Sediment test	..	825
Unclassified tests	..	663
Food products	970	
Filth test (rodent and insect infestation)	..	2,509
Adulteration test	..	290
Decomposition tests	..	161
Unclassified tests	..	175
Miscellaneous samples (air, dusts, solvents, sterilizing solutions, etc.)	271	
Industrial poison tests	..	664
Unclassified tests	..	1,315
Solutions and Outfits	326	
Unclassified tests	..	2,027
Water samples	546	
pH	..	423
Sanitary analysis	..	386

* Of this number, 5,738 were submitted for chemical analysis only; the other 3,521 samples were submitted for bacteriologic and chemical analysis.

EASTERN HEALTH DISTRICT

EASTERN HEALTH DISTRICT

C. Howe Eller, M.D., Dr. P.H.

Health Officer

Dr. C. Howe Eller, Health Officer of the Eastern Health District since October 1, 1937 resigned on November 15, 1946 to become Director of Health of Richmond, Virginia. Dr. Henry F. Buettner, Director of the Bureau of School Hygiene served as Acting District Health Officer for the remainder of the year.

Diphtheria was a major problem during the first half of 1946. Although the total number of cases reported for the year was but slightly less than for the previous year with 74 cases and 3 deaths for 1946 compared to 79 cases and 3 deaths in 1945, an evident downward trend was apparent in the number of cases reported during the last six months of 1946. Continued efforts were made to secure booster doses of toxoid for children entering school for the first time in September of this year.

Measles was prevalent in the Eastern Health District during the year, 1,103 cases being reported as compared to 12 cases for 1945. The public health nurses provided an intensive service to a number of cases severely ill of the disease and administered immune globulin to contacts under three years of age where no physician was in attendance or when the attending physician requested this service of the nurse. The extern service provided by Sydenham Hospital was of much assistance in a number of cases where hospitalization was indicated by severity of the disease and lack of facilities for care in the home.

The use of penicillin for the treatment of ophthalmia neonatorum was established as a routine nursing procedure in the Eastern Health District, in May of 1946. The service was provided by the nurses for those cases where no physician was in attendance and was available to physicians who requested the service for private patients.

The venereal disease service conducted at the Somerset Health Center continued to be very active. Five physicians assisted in the clinics under the direction of Dr. Richard Hahn, Supervisor. The average monthly number of new admissions to the service was 145, an increase of 37 per cent over the number of new admissions for the previous year. There was an average of 9 new admissions per clinic session during the year. The average clinic attendance increased to 114, or 9 per cent more than that for the year 1945. The reference of new cases of syphilis to the Rapid Treatment Center at Baltimore City Hospitals influenced the rate of increase in aver-

age clinic attendance. Contact investigations by the generalized public health nurses resulted in a good return of persons named for examination and treatment when indicated. The educational value of this service is obviously significant but difficult to estimate.

The chest X-ray screen clinic admitted 5,072 persons for examination during the year. In this group, 19 persons were found to have previously undiscovered active pulmonary tuberculosis.

During the year, the District Health Officer assisted the Eastside Community Committee in the conduct of an extensive health education project. This organization, concerned with improvement of the welfare of citizens of the Negro community, arranged for five public meetings in different parts of the district and talks were given and films were shown on major public health problems. The total attendance at these meetings was more than 800 persons.

A number of candidates for the degree of Master of Public Health at the Johns Hopkins School of Hygiene and Public Health received instruction in district administration at the Eastern Health District and were given opportunities to observe field and clinic activities. Senior medical students from the Johns Hopkins Medical School were assigned to the district for two mornings of observation. The district continued to serve as a teaching center for student nurses and for nurses recently assigned to work in the Baltimore City Health Department.

The Syphilis Study and the Mental Hygiene Study were continued throughout the year. Preliminary plans were made to initiate a study of the use of BCG tuberculosis vaccine for a small group of children registered in the child hygiene clinics held at the district office.

Personnel

C. Howe Eller, M.D., Dr. P.H., Administrative Health Officer
Henry F. Buettner, M.D., Acting Administrative Health Officer
Hugh P. Hughes, M.D., Health Officer
Charles C. MacMinn, M.D., Medical Investigator
Winifred Newberry, Supervisor of Public Health Nursing
Mary I. Streckfus, Assistant Supervisor of Public Health Nursing
Gertrude Boquist, Assistant Supervisor of Public Health Nursing
Marjorie Kvarnes, Assistant Supervisor of Public Health Nursing
Anne Poore, Assistant Supervisor of Public Health Nursing
Dorothy Shaw, Secretary
Vivian Cohen, Junior Stenographer
Emily Leeson, Junior Stenographer
Lorraine Livingston, Junior Typist
Rae Simons, Clerk
William Richardson, Janitor

Public Health Nurses

Josephine Barnett
Janice S. Belt
Ollie Buck
Alice C. Dwyer
Margaret T. Ellis
Freda W. Fletcher
Margaret Galbreath
Mildred L. Gambrill
Elizabeth L. Kephart
Mary Belle Lanahan
Dorothy Mills
Clara C. Plichta
Elizabeth Quinlin
Wilda Snyder
Shirley V. Stockin
Maude C. Suter
Marie T. Taneyhill
Berta H. Taylor
Peggy W. Ward
Pearl L. J. Warde

TABLE NO. 1

RESIDENT BIRTHS, EASTERN HEALTH DISTRICT—1946

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
ALL BIRTHS	2,659	1,487	1,172
Hospital	2,199	1,352	847
Home	460	135	325
Out-patient delivery service	3	..	3
Private physician	300	104	196
Midwife	157	31	126

TABLE NO. 2

RESIDENT DEATHS FOR CERTAIN CAUSES AND GROUPS OF CAUSES CLASSIFIED BY COLOR—EASTERN HEALTH DISTRICT, 1946

CAUSE OF DEATH	TOTAL	WHITE	COLORED
ALL CAUSES	1,342	812	530
Whooping cough	..	..	..
Meningococcus meningitis	2	..	2
Diphtheria	3	3	..
Tuberculosis, all forms	134	42	92
Syphilis	33	6	27
Influenza	6	1	5
Other infectious diseases	4	1	3
Cancer	167	126	41
Acute rheumatic fever	5	3	2
Diabetes	31	24	7
Intracranial lesions of vascular origin	92	65	27
Diseases of the heart	398	296	102
Pneumonia, all forms	49	25	24
Diarrhea and enteritis	6	2	4
Appendicitis	3	1	2
Cirrhosis of the liver	15	10	5
Nephritis	122	67	55
Puerperal causes	3	..	3
Congenital malformations	16	14	2
Diseases of early infancy	45	12	33
Suicides	10	7	3
Homicides	24	1	23
Home accidents	30	16	14
Occupational accidents	5	1	4
Automobile accidents	16	10	6
Other accidental deaths	18	10	8
All other causes	105	69	36

TABLE NO. 3

COMMUNICABLE DISEASES REPORTED IN THE EASTERN HEALTH DISTRICT—1946

DISEASE	TOTAL	WHITE	COLORED
TOTAL	4,933	1,641	3,292
Chickenpox	202	137	65
Diphtheria	74	59	15
German measles	28	19	9
Gonococcus infection	1,041	148	893
Influenza	49	42	7
Measles	1,103	694	409
Meningococcus meningitis	8	3	5
Mumps	21	16	5
Pneumonia, all forms	293	57	236
Poliomyelitis	9	3	6
Rheumatic fever	17	4	13
Scarlet fever	66	54	12
Syphilis	1,462	163	1,299
Tuberculosis, all forms	242	102	140
Typhoid fever	1	..	1
Whooping cough	171	98	73
All others	146	42	104

TABLE NO. 4

DIPHTHERIA TOXOID ADMINISTERED TO RESIDENTS OF THE EASTERN HEALTH DISTRICT—1946

AGE AT DATE OF INOCULATION	DIPHTHERIA INOCULATION		
	TOTAL	WHITE	COLORED
TOTAL	4,540	2,715	1,825
Under 1 year	1,753	1,100	653
1	407	193	214
2	200	84	116
3	271	126	145
4	337	141	196
5	538	272	266
6	367	215	152
7	118	72	46
8	92	82	10
9	115	106	9
10 years and over	325	313	12
Age unspecified	17	11	6

WESTERN HEALTH DISTRICT

WESTERN HEALTH DISTRICT

Alfred C. Moore, M.D.

Health Officer

The most serious problem in communicable diseases in the Western Health District during the year was diphtheria, with a total of 109 cases and 9 deaths recorded as compared to 98 cases and 6 deaths in 1945. However, the incidence of diphtheria during the latter half of the year was 36 per cent less than in the corresponding period of the previous year. There was a total of 1,436 cases of measles with 1 death reported as part of the city-wide outbreak. The respective totals of all other communicable diseases reported were less than the normal expectancy.

Diphtheria Prevention

Because of the high incidence of diphtheria, special measures were taken to bring this disease under control. In addition to the procedures introduced in previous years a publicity campaign was conducted in a neighborhood newspaper and the immunization of contacts with diphtheria antitoxin was extended to include females up to thirty-five years of age and males up to twenty-five years of age. The District Health Officer administered 300 prophylactic doses of diphtheria antitoxin and 195 doses of diphtheria toxoid to household contacts of diphtheria cases. Other improvements in diphtheria prevention introduced during the year were the use of diphtheria toxoid combined with pertussis vaccine to immunize preschool age children in the Department clinics, and in their homes when circumstances prevented visits to a clinic.

Tuberculosis Control

Ninety-two patch tests and 57 chest X-rays were made in a program for tuberculosis control conducted in cooperation with the school principal for new pupils at School No. 34, Washington Boulevard and Carey Street. The pupils who reacted to tuberculin and their families were referred to their physicians or to the municipal chest clinic for chest X-rays. Twenty-four per cent of the pupils reacted to tuberculin and surveys of these reactors and their families resulted in the discovery of 2 cases of active pulmonary tuberculosis and 2 cases of active first infection tuberculosis.

Miscellaneous Activities

There was a total of 7,241 packages of biological products and 38,595 laboratory diagnostic outfits distributed to physicians and hospitals from

the health district office during the year. The district staff assisted in the promotional program for the mass chest X-ray survey sponsored by the West Baltimore Civic Council. Public health educational activities were conducted during the year for persons living in the district and for staff personnel. Health talks were given to lay groups; news articles on health topics were submitted to a neighborhood newspaper; a course of instruction in communicable diseases was given to the undergraduate nurses of the Hospital for the Women of Maryland by the District Health Officer; 1,217 Health Department publications were dispersed; and the facilities of the district were utilized by members of the senior class of the University of Maryland Medical School in preparing their "Home Survey Reports" on selected patients. Conferences and discussions were conducted for the staff nurses of the district.

Personnel

Alfred C. Moore, M.D., Administrative Health Officer
Percy H. Sutley, M.D., Medical Investigator
Anna Persch, Supervisor of Public Health Nursing
Henrietta Gintling, Supervisor of Public Health Nursing
Leah Kushner, Junior Stenographer
Marilyn Vein, Junior Stenographer

Public Health Nurses

Mary Jean Amos
Irene T. Barnhill
Theresa M. Byrne
Ethelyn B. Dever
Dorothy M. Eckenrode
Mary C. Malone
Beulah B. McCausland
Sylvia Miller
Elizabeth Moore
Hilda M. Noone
Cecelia Nossell
Katherine Nutto
Ruth B. Pyle
Dorothy E. Schwartz
Florence Tarr
Elizabeth M. Wilkinson
Dolores H. Zink

TABLE NO. 1

RESIDENT BIRTHS, WESTERN HEALTH DISTRICT*—1946

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
ALL BIRTHS	4,509	1,561	2,948
Hospital	3,058	1,280	1,778
Home	1,451	281	1,170
Out-patient delivery service	596	14	582
Private physician	595	240	355
Midwife	260	27	233

* Including Druid Health Center.

TABLE NO. 2

RESIDENT DEATHS FOR CERTAIN CAUSES AND GROUPS OF CAUSES CLASSIFIED BY COLOR—WESTERN HEALTH DISTRICT*—1946

CAUSE OF DEATH	TOTAL	WHITE	COLORED
ALL CAUSES	2,725	1,001	1,724
Whooping cough	2	1	1
Meningococcus meningitis	3	..	3
Diphtheria	9	8	1
Tuberculosis, all forms	279	58	221
Syphilis	78	14	64
Influenza	13	2	11
Other infectious diseases	73	62	11
Cancer	278	131	147
Acute rheumatic fever	13	3	10
Diabetes	45	23	22
Intracranial lesions of vascular origin	172	45	127
Diseases of the heart	769	358	411
Pneumonia, all forms	135	42	93
Diarrhea and enteritis	31	14	17
Appendicitis	4	1	3
Cirrhosis of the liver	32	19	13
Nephritis	230	44	186
Puerperal causes	5	..	5
Congenital malformations	16	9	7
Diseases of early infancy	141	37	104
Suicides	31	27	4
Homicides	54	11	43
Home accidents	59	30	29
Occupational accidents	12	6	6
Automobile accidents	39	16	23
Other accidental deaths	32	18	14
All other causes	170	22	148

* Including Druid Health Center.

TABLE NO. 3

COMMUNICABLE DISEASES REPORTED IN THE WESTERN HEALTH DISTRICT*—1946

DISEASE	TOTAL	WHITE	COLORED
TOTAL	7,530	1,875	5,655
Chickenpox	215	81	134
Diphtheria	109	91	18
German measles	25	18	7
Gonococcus infection	1,876	343	1,533
Influenza	24	10	14
Measles	1,436	550	886
Meningococcus meningitis	7	3	4
Mumps	26	8	18
Pneumonia, all forms	215	66	149
Poliomyelitis	4	3	1
Rheumatic fever	29	5	24
Scarlet fever	103	52	51
Syphilis	2,612	384	2,228
Tuberculosis, all forms	499	131	368
Typhoid fever	4	3	1
Whooping cough	221	86	135
All others	125	41	84

* Including Druid Health Center.

TABLE NO. 4

DIPHTHERIA TOXOID AND SMALLPOX VACCINE ADMINISTERED TO RESIDENTS OF THE WESTERN HEALTH DISTRICT*—1946

AGE AT DATE OF INOCULATION OR VACCINATION	DIPHTHERIA INOCULATION			SMALLPOX VACCINATION		
	TOTAL	WHITE	COLORED	TOTAL	WHITE	COLORED
TOTAL	6,340	2,129	4,211	1,047	416	631
Under 1 year	2,153	619	1,534	510	118	392
1	542	200	342	136	59	77
2	273	123	150	83	48	35
3	278	118	160	73	46	27
4	342	127	215	53	33	20
5	1,241	289	952	88	49	39
6	780	252	528	63	38	25
7	319	131	188	19	10	9
8	138	81	57	8	4	4
9	91	60	31	1	1	..
10 years and over	164	121	43	13	10	3
Age unspecified	19	8	11			

* Including Druid Health Center.

DRUID HEALTH CENTER

DRUID HEALTH CENTER

H. Maceo Williams, M.D., M.P.H.

Health Officer

During 1946 at the Druid Health Center, twenty-four weekly official clinic sessions were held as follows: Adult venereal diseases 11, congenital syphilis 3, prenatal 4, chest 5, and infant and preschool 1. The total clinic attendance of 56,371 was slightly higher than that of 1945, probably reflecting the effect of the earlier postwar months. The greatest numerical gain in attendance occurred in the chest clinic which had the largest attendance in its history at the Druid Health Center. The attendance at the prenatal clinic was its largest since 1943. The congenital syphilis clinic also had an increase, whereas the well baby clinic maintained the same level as that of 1945. Increased attendance was manifested in the adult venereal disease clinics in spite of the fact that nearly 500 patients were referred to the Baltimore Rapid Treatment Center from the Druid Health Center.

The personnel of the Center cooperated with the Bureau of Tuberculosis, the Maryland Tuberculosis Association, the Baltimore Housing Authority, the Department of Education, and the Baltimore Urban League in conducting mass chest X-ray surveys within or near the boundaries of the district. Over 6,000 X-rays were taken, resulting in the discovery of several hitherto unknown cases of tuberculosis. As has been the custom for several years, women attending the prenatal clinic were routinely X-rayed. It is hoped that such X-ray facilities will soon be extended to the patients attending the adult venereal disease clinics.

The Druid Health Center worked closely with the Maryland Tuberculosis Association and probably one of the most significant steps in this cooperation was the appointment on May 20 of a Medical Social Worker and Health Educator who was assigned to work from the Center. It was noted that more effective control of tuberculosis in this district was gained as a result. The Druid Health Center in 1946 also housed a clinic conducted by the Mental Hygiene Board of Maryland. Since 1944 the Instructive Visiting Nurse Association has assigned several nurses to work from the Center. By working in close cooperation with these agencies the health of the people served by the Center has been favorably affected.

The Monumental City Medical Society continued to conduct regular monthly meetings in the auditorium. The Maryland Dental Association met frequently at the Center during the year. The National Negro Health

Week Committee, as in former years, utilized the building as its headquarters, while close relationship was maintained with the Clean Block Campaign Committee. At various times in 1946 student nurses from several hospitals, civic groups, Boy Scout groups, and school children visited the Center to conduct meetings or to receive health instructions. Student nurses from Provident Hospital spent several weeks at the Center as a part of their affiliation with the City Health Department.

Personnel

H. Maceo Williams, M.D., M.P.H., Administrative Health Officer
James B. Hawkins, M.D., Health Officer
George F. Phillips, M.D., Medical Investigator
Dorothea E. Tag, Supervisor of Public Health Nursing
Lauline B. Ball, Junior Stenographer
Vivian W. Roberts, Junior Stenographer
Bernard A. Smith, Janitor

Public Health Nurses

Lillian W. B. Briscoe
Mary T. Brown
Olga M. Chambers
Minnie Leah Corbin
Dorothy W. Davis
Credella Finney
Katie W. Fernandis
M. Fanida Friend
Margaret S. Harper
Anita D. Keller Henson
Rosa Mae Hill
Ella N. Hughes
Gladys R. Johnson
Leona A. Johnson
Mamie Johnson
Irene S. Kyler
Erdie LeCator
Margaret L. Lockerman
Vivian R. Pendleton
Cornelia Phillips
Agnes C. Pilgrim
Florence Roberts
Lilyan Flacks Slater
Mathilda E. Young

SOUTHEASTERN HEALTH DISTRICT

SOUTHEASTERN HEALTH DISTRICT

John A. Skladowsky, M.D.

Health Officer

The upward trend of diphtheria cases in the Southeastern Health District continued in 1946 with 71 cases and 2 deaths reported as compared with 57 cases and 6 deaths in 1945. In addition to the measures for its prevention inaugurated in 1945 in accordance with the city-wide educational campaign conducted by the Director of the Bureau of Communicable Diseases, the procedure of administering both a prophylactic inoculation of antitoxin and toxoid to household contacts of diphtheria cases was instituted in January; and in September public health nurses began to give toxoid to children in homes where all the usual efforts to have them receive this protection from private physicians or Health Department clinics had failed. An unusual prevalence of diphtheria in the Armistead Gardens and O'Donnell Heights Housing Projects, necessitated special control measures in these areas during the months of May and December. Public health nurses made a house-to-house canvass urging parents to have their children inoculated and weekly toxoid clinics were held in the community building of these projects where more than 500 children were given toxoid inoculations.

Eight rabid dogs were found in the district during the last half of the year and 6 of them were in the Armistead Gardens Housing Project at Pulaski Highway and Horner's Lane. An intensive campaign to enforce the quarantine imposed in this area on June 20, 1946, was conducted jointly during the month of August by the Maryland Society for the Prevention of Cruelty to Animals, the City Police Department and the City Health Department.

Well Baby Clinics

Two more child welfare conferences formerly operated by the Babies Milk Fund Association were taken over on January 1 by the Southeastern Health District. One of the conferences located at Public School No. 230, Highland Avenue and Hudson Street, was combined on the same date with a well baby clinic held in the district building and the other, at 508 S. Oldham Street, was transferred on April 3 to new quarters in the Greek Community Center school building at 520 S. Ponca Street. A new infant and preschool hygiene clinic was opened on April 5 in the community

building of the Holabird Homes for Colored on Bobwhite Avenue near Holabird Avenue.

Miscellaneous Activities

In collaboration with the Eastern Community Council, Inc., the Maryland Tuberculosis Association and the City Health Department conducted a mass chest X-ray survey in Public School No. 47, Fleet Street and Linwood Avenue, on April 15, 16, 17 and 18. The school was made available through the cooperation of the City Department of Education. The survey was the first of its kind undertaken in the city on a neighborhood basis. All persons fourteen years or older who lived within the boundaries of Baltimore Street, Patterson Park Avenue, Fait Avenue and Highland Avenue were eligible for the chest X-rays. During this period 1,323 persons were examined and of these 17 or 1.3 per cent by subsequent examinations were found to have evidence of tuberculosis. Similar large scale case-finding surveys were conducted by the City Health Department in June, September, November and December in the Armistead Gardens Homes, Holabird Homes for Colored, O'Donnell Heights Homes and the Perkins Homes. A total of 1,688 persons were X-rayed in these housing projects and 12 persons or .7 per cent of the total number examined showed lesions of tuberculosis.

The special program in school hygiene, similar to the one in operation for the past three years in Public School No. 47, was established in September in Public School No. 230. An illustrated article by Dr. Mary S. Braun, Principal of Public School No. 215, Clinton and Pratt Streets, on the school hygiene program conducted jointly in this school by the Department of Education and the City Health Department, was published in the September-October, 1946, issue of the *Baltimore Bulletin of Education.*

The monthly conferences on "Know Your Community Resources" begun in October of 1945 by the district nursing staff were completed in May of 1946. A series of lectures on nutrition by the Chief of the Division of Nutrition was conducted each month throughout the year for the nursing staff and in May Dr. Charlotte Silverman, Assistant Director of the Bureau of Tuberculosis, began monthly conferences with the staff nurses. Undergraduate nurses in affiliate instruction in public health nursing from the Union Memorial Hospital School of Nursing and the Dispensary Visiting Nurse Service of the Johns Hopkins Hospital visited the district for study and observation in child and school hygiene.

On February 6, in order to prevent deaths from measles, the district public health nurses resumed the administration of immune globulin to household contacts under three years of age who had no family physician in attendance. Fifty-four expectant mothers registered in the prenatal

clinics were given individual instruction in mothercraft. The East Baltimore Medical Society held monthly meetings in the district building for the fifth consecutive year.

Personnel

John A. Skladowsky, M.D., Health Officer, Full Time
Frank V. Manieri, M.D., Medical Investigator
Sigmund R. Nowak, M.D., Medical Investigator
Ruth Collier, Senior Supervisor of Nurses
Ethel G. Gluck, Senior Supervisor of Nurses
Ray K. Forrest, Junior Stenographer
Mary Kelmartin, Junior Stenographer
Jerome Johnson, Janitor

Public Health Nurses

Helen Collins
Blanche Craig
Lena Dietzway
Margaret Duddy
Audrey Eichhorn
Mary Fleischmann
Zazel Gonyou
Julia Hagenbuch
Loretto C. Link
Ida Lilly
Elizabeth McGovern
Lyla Pardoe
Virginia Pendleton
Ann Pinkerton
Sarah Rice
Grace Ridgaway
Louisa Schuster
Rose Shenk
Louisa Stann
Mae Stark
Alice Stevenson
Ruth Wheeler
Edith Woodson
Florence Zinz

TABLE NO. 1

RESIDENT BIRTHS, SOUTHEASTERN HEALTH DISTRICT—1946

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
ALL BIRTHS	2,547	2,378	169
Hospital	2,169	2,058	111
Home	378	320	58
Out-patient delivery service	1	1	..
Private physician	245	207	38
Midwife	132	112	20

TABLE NO. 2

RESIDENT DEATHS FOR CERTAIN CAUSES AND GROUPS OF CAUSES CLASSIFIED BY COLOR—SOUTHEASTERN HEALTH DISTRICT, 1946

CAUSE OF DEATH	TOTAL	WHITE	COLORED
ALL CAUSES	1,080	989	91
Whooping cough	..	..	..
Meningococcus meningitis	1	1	..
Diphtheria	2	2	..
Tuberculosis, all forms	95	73	22
Syphilis	17	11	6
Influenza	5	5	..
Other infectious diseases	6	6	..
Cancer	151	145	6
Acute rheumatic fever	5	5	..
Diabetes	32	31	1
Intracranial lesions of vascular origin	53	50	3
Diseases of the heart	350	330	20
Pneumonia, all forms	38	31	7
Diarrhea and enteritis	13	10	3
Appendicitis	4	4	..
Cirrhosis of the liver	23	23	..
Nephritis	61	55	6
Puerperal causes	2	2	..
Congenital malformations	6	6	..
Diseases of early infancy	47	41	6
Suicides	12	12	..
Homicides	11	9	2
Home accidents	18	18	..
Occupational accidents	5	5	..
Automobile accidents	11	9	2
Other accidental deaths	22	18	4
All other causes	90	87	3

TABLE NO. 3

COMMUNICABLE DISEASES REPORTED IN THE SOUTHEASTERN HEALTH DISTRICT—1946

DISEASE	TOTAL	WHITE	COLORED
TOTAL	3,004	2,522	482
Chickenpox	243	238	5
Diphtheria	71	70	1
German measles	14	14	..
Gonococcus infection	329	196	133
Influenza	7	7	..
Measles	1,324	1,251	73
Meningococcus meningitis	7	7	..
Mumps	29	29	..
Pneumonia, all forms	126	92	34
Poliomyelitis	6	5	1
Rheumatic fever	11	10	1
Scarlet fever	71	68	3
Syphilis	411	230	181
Tuberculosis, all forms	178	157	21
Typhoid fever	..	..	..
Whooping cough	121	108	13
All others	56	40	16

TABLE NO. 4

DIPHTHERIA TOXOID ADMINISTERED TO RESIDENTS OF THE SOUTHEASTERN HEALTH DISTRICT—1946

AGE AT DATE OF INOCULATION	DIPHTHERIA INOCULATION		
	TOTAL	WHITE	COLORED
TOTAL	4,307	4,001	306
Under 1 year	1,341	1,248	93
1	483	428	55
2	359	336	23
3	400	373	27
4	302	281	21
5	441	414	27
6	394	365	29
7	167	150	17
8	101	95	6
9	85	80	5
10 years and over	224	221	3
Age unspecified	10	10	..

MEDICAL SECTION

BUREAU OF COMMUNICABLE DISEASES

BUREAU OF COMMUNICABLE DISEASES

J. Wilfred Davis, M.D., M.P.H.

Director

A total of 26,323 cases of communicable diseases was reported during the year. Diphtheria was the most serious communicable disease which showed an increase in reported cases during 1946 over 1945. Again this year for the fifth consecutive year the typhoid fever record of the city was lower than for the previous year.

Diphtheria

There were 424 cases and 19 deaths from diphtheria reported as compared with 353 cases and 19 deaths in 1945. This is the largest number of cases recorded for any year since 1930. However, during the last half of the year with 121 cases reported there was a marked improvement over the corresponding period of 1945 when 201 cases were recorded.

The campaign to have children inoculated with diphtheria toxoid at six and seven months of age and again on first entering school was continued throughout the year. This, together with the persevering efforts of the school teachers and nurses, resulted in having almost all entering school children receive the protective toxoid inoculation.

Rabies and Dog Quarantines

The threat of rabies which existed during 1945 continued throughout 1946. Seventeen rabid dogs were found in the city during the year, one more than the number discovered in the previous year. Six of these dogs were found during the last half of the year in Armistead Gardens, a housing project where, partly because fences are not permitted, dogs are not confined or when tied out of doors are defenseless against the attacks of other dogs. In this area special educational and restrictive measures were taken to prevent further spread of the disease.

At the beginning of the year and from then until June 20, dogs in the entire city were under quarantine because of the danger of rabies. From June 20 to September 20 there was a dog quarantine in the southern section of the city, and from June 28 to December 21 a dog quarantine was in effect in the southeastern section, where Armistead Gardens is located.

Meningococcus Meningitis

The decline in the incidence of meningococcus meningitis since 1943, a record high year with 389 cases and 63 deaths, has continued. There were

46 cases and 11 deaths reported in 1946 as compared with 61 cases and 12 deaths in 1945. The occurrence of cases was not confined entirely to the crowded areas of the city but in many of the homes where cases occurred crowded living conditions prevailed.

The following table shows the meningococcus meningitis cases and deaths classified by race and age:

Age Group	Cases		Deaths	
	White	Colored	White	Colored
Under 1 year	7	..	2	..
1–4 years	4	5	1	4
5–14 years	11	4	1	1
15–44 years	10	1	..	..
45–64 years	3	..	1	..
65 years and over	1	..	1	..
Total	36	10	6	5

Typhoid Fever

For the fifth consecutive year, there were fewer cases of typhoid fever reported than were recorded for the previous year. There were 10 cases and 1 death of typhoid fever recorded as compared with 11 cases and 1 death for 1945.

Two typhoid carriers were discovered during the year. Of the 68 carriers on the Health Department list at the first of the year 6 died and 2 moved to another State. There were 62 carriers on the list at the end of the year.

Poliomyelitis

There were 34 cases of paralytic poliomyelitis reported. Although poliomyelitis was epidemic in many parts of the country, the number of cases of this disease reported in Baltimore did not greatly exceed 21, the number recorded for the previous year. Of the 34 cases reported this year, 32 were cared for at Sydenham Hospital during their acute illness.

Tularemia

One case of tularemia was reported in a man who caught his infection by handling killed wild rabbits given him by a hunter friend.

Smallpox

For the eighteenth consecutive year no case of smallpox was reported in Baltimore. The last case of this disease to occur in the city was reported on March 9, 1928. At least so far as it pertains to school children, the law requiring smallpox vaccination has been enforced.

Whooping Cough

Whooping cough incidence and fatality during the year have been extraordinarily low. There were 1,004 cases and 2 deaths reported. This is the smallest number of cases for any year since 1919 and the smallest number of deaths from this disease ever recorded for any year in Baltimore.

Rickettsial Diseases

During October 2 cases of endemic typhus were reported on the east side of the 600 block of North Calvert Street near railway yards. Apparently infected rats were brought into the city from the South by railway freight cars.

One case of Rocky Mountain spotted fever was reported as compared with 3 cases for the preceding year.

Scarlet Fever

There were 806 cases of scarlet fever reported as contrasted with 2,202 cases for 1945. This is the smallest number of cases for any year since 1940.

Personnel

J. Wilfrid Davis, M.D., M.P.H., Director
Anthony L. Rettaliata, M.D., Medical Investigator
Roscoe Z. G. Cross, M.D., Health Officer
Leon S. Horka, M.D., Health Officer
William A. Sinton, M.D., Health Officer
Howard Warner, M.D., Health Officer
Samuel Weinberg, M.D., Health Officer
Louis Jacobs, M.D., Medical Investigator
Wm. R. Lumpkin, M.D., Medical Investigator
C. Arthur Rossberg, M.D., Medical Investigator
Francis W. Traynor, M.D., Medical Investigator
Alice V. Owings, Principal Clerk
Concetta M. Battaglia, Senior Stenographer
Elaine Parkus, Junior Stenographer

TABLE NO. 1

REPORTED CASES AND RESIDENT DEATHS OF CERTAIN COMMUNICABLE DISEASES—1943-1946

Disease	1946		1945		1944		1943	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chancroid	140	..	90	..	117	..	161	..
Chickenpox	2,268	..	2,494	1	3,576	2	3,182	1
Diarrhea and enteritis								
Under 2 years of age	81	71	114	105	103	90	181	162
Two years and over	14	15	7	9	8	15	23	18
Diphtheria	424	19	353	19	226	13	106	3
Dysentery								
Amebic	7	1	4	1	7	1	2	1
Bacillary	15	1	11	..	10	2	52	5
Unspecified	10	1	23	3	29	..	62	2
Encephalitis lethargica	4	2	..	1	..	1	3	1
Erysipelas	8	2	13	..	18	..	20	2
German measles	498	..	295	..	269	..	3,199	..
Gonococcus infection	4,025	..	4,192	1	2,907	1	3,321	..
Gonococcic ophthalmia	22	..	33	..	23	..	28	..
Infectious hepatitis	8	4	10	..	2	3	4	1
Influenza	136	40	225	37	140	65	435	102
Leprosy	..	..	..	..	1	..	..	..
Malaria	28*	1	14	..	2	..	8	..
Measles	8,136	6	206	..	10,324	10	2,213	1
Meningococcus meningitis	46	11	61	12	177	33	389	63
Mumps	338	1	1,603	..	2,029	..	849	..
Mononucleosis, infectious	16	..	6	..	1	..	..	..
Ornithosis (Psittacosis)	..	..	..	..	1	..	..	..
Paratyphoid fever	..	..	..	..	1	..	1	..
Pellagra	..	..	1	1	..	..	1	1
Pneumonia								
Bronchopneumonia	322	182	400	264	393	260	711	357
Lobar pneumonia	369	192	546	287	680	341	934	455
Unspecified	266	11	308	15	496	16	431	22
Poliomyelitis (paralytic cases)	34	4	21	..	167	12	8	..
Rheumatic fever, acute	45	3	46	9	169	3	..	..
Rheumatic heart disease, acute	43	35	35	11	115	14	..	..
Rocky Mountain spotted fever	1	..	3	1	1	..	1	..
Scarlet fever	806	1	2,202	1	2,297	1	1,432	1
Septic sore throat	83	3	74	6	52	3	66	4
Smallpox	..	..	..	..	..	..	..	..
Salmonella infection	..	..	1	..	1	..	11	..
Syphilis	5,558	169	8,402	202	10,972	183	14,803	181
Tetanus	9	5	3	..	5	1	10	7
Trachoma	..	..	..	..	..	..	1	..
Trichinosis	1	..	3	..	1	..	1	..
Tuberculosis								
Pulmonary	1,468	707	1,872	714	1,870	737	1,901	755
Other forms	56	40	53	59	52	64	37	50
Tularemia	1	..	2	..	..	..	1	..
Typhoid fever	10	1	11	1	15	1	20	1
Typhus fever	2	..	..	..	..	..	1	..
Venereal diseases, other	21	2	39	1	57	2	84	3
Whooping cough	1,004	2	2,172	12	2,349	11	3,400	10

* Contracted outside continental United States.

TABLE NO. 2

CASES AND RESIDENT DEATHS OF CERTAIN DISEASES ACCORDING TO MONTHS—1946

Disease		Total	January	February	March	April	May	June	July	August	September	October	November	December
Typhoid fever	Cases	10	..	..	1	..	1	..	1	1	..	2	2	2
	Deaths	1	..	..	..	1	..	..	..	..	..	..	..	..
Paratyphoid fever	Cases	..	..	..	..	..	..	..	..	..	..	..	..	..
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningococcus meningitis	Cases	46	6	11	6	5	4	5	..	3	2	1	3	..
	Deaths	11	2	2	1	1	1	..	..	2	..	..	2	..
Scarlet fever	Cases	806	86	144	168	134	96	42	12	7	18	23	30	46
	Deaths	1	..	..	..	..	..	..	1	..	..	..	..	..
Whooping cough	Cases	1,004	77	49	50	44	47	72	83	105	106	83	120	168
	Deaths	2	1	..	..	..	..	..	1	..	..	..	..	..
Diphtheria	Cases	424	71	42	54	57	49	30	14	14	18	16	30	29
	Deaths	19	5	2	4	1	3	..	1	1	1	1	..	..
Tuberculosis, pulmonary	Cases	1,468	91	115	136	128	159	110	138	121	106	114	96	154
	Deaths	707	65	60	61	64	53	54	58	59	56	59	57	61
Tuberculosis, other forms	Cases	56	3	5	11	4	7	3	2	6	3	4	3	5
	Deaths	40	3	4	2	4	2	2	5	6	2	3	2	5
Influenza	Cases	136	79	16	4	4	5	1	2	1	7	3	9	5
	Deaths	40	10	7	1	3	3	1	2	1	6	1	4	1
Measles	Cases	8,136	102	442	1,447	1,801	2,108	1,590	542	51	9	7	14	23
	Deaths	6	..	1	..	2	3	..	..	..	..	..	..	..
Poliomyelitis (paralytic cases)	Cases	34	..	1	..	..	..	..	2	4	7	11	8	1
	Deaths	4	..	1	..	..	..	..	1	..	1	..	1	..
Encephalitis lethargica	Cases	4	..	1	1	..	1	..	..	1	..	..	..	..
	Deaths	2	..	..	..	..	1	..	..	1	..	..	..	..
German measles	Cases	498	13	49	153	142	93	22	7	4	3	2	7	3
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Chickenpox	Cases	2,268	189	300	476	475	427	181	29	14	9	28	43	97
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever	Cases	1	..	..	..	..	..	..	..	..	..	..	..	1
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	Cases	322	32	45	24	32	64	25	20	5	20	14	9	32
	Deaths	182	25	19	18	20	18	12	12	8	14	12	7	17
Lobar pneumonia	Cases	369	64	53	54	37	34	17	19	10	12	17	22	30
	Deaths	192	38	20	17	16	21	9	11	8	8	11	16	17
Pneumonia, unspecified	Cases	266	36	19	12	57	50	37	8	1	5	11	13	17
	Deaths	11	1	..	..	1	2	2	..	..	1	2	..	2

TABLE NO. 3
INOCULATION HISTORIES OF DIPHTHERIA CASES—1946

Groups	Cases without History of Previous Inoculation	Cases with Inoculation History					
		Total	Confirmed				Unconfirmed
			Total	Alum-Precipitated Toxoid	Ramon Toxoid	Toxin-Antitoxin	
Total Cases	169	255	151	146	5	..	104
A. Classified by Age							
Age Groups							
0–2 years	15	19	8	8	..	..	11
3–4 years	33	59	40	40	..	..	19
5–9 years	30	99	62	62	..	..	37
10–14 years	15	49	31	26	5	..	18
15 and over	76	29	10	10	..	..	19
B. Classified by Time Since Inoculation							
Time Since Inoculation							
0–3 months		8	3	3	..	..	5
4–11 months		8	3	3	..	..	5
1 year		21	9	9	..	..	12
2 years		41	24	24	..	..	17
3 and over		153	107	104	3	..	46
Unspecified		24	5	3	2	..	19

TABLE NO. 4
CHILDREN CLASSIFIED BY RACE AND AGE RECORDED AS HAVING RECEIVED SPECIFIED DIPHTHERIA TOXOID INOCULATION—1946

Age	Dose and Color											
	First Dose Only			Complete Primary			Booster			Unspecified		
	Total	White	Col.	Total	White	Col.	Total	White	Col.	Total	White	Col.
All Ages	4,092	3,097	995	11,357	8,148	3,209	12,663	8,972	3,691	284	227	57
Under 6 months	69	60	9	41	28	13	7	5	2	6	6	..
6 months	1,145	1,013	132	160	138	22	4	3	1	88	86	2
7 months	607	481	126	2,532	1,843	689	7	7	..	23	22	1
8 months	378	295	83	2,531	1,779	752	16	13	3	23	21	2
9 months	196	124	72	1,547	1,123	424	29	27	2	10	7	3
10 months	133	94	39	779	552	227	39	29	10	10	10	..
11 months	80	54	26	389	260	129	66	46	20	5	5	..
Under 1 year	2,608	2,121	487	7,979	5,723	2,256	168	130	38	165	157	8
1 year	377	223	154	1,372	969	403	714	497	217	15	14	1
2 years	189	101	88	552	385	167	703	569	134	8	8	..
3 years	189	123	66	420	315	105	1,023	771	252	4	3	1
4 years	155	96	59	303	209	94	1,263	865	398	6	6	..
5 years	222	150	72	300	215	85	3,462	2,140	1,322	16	5	11
6 years	69	53	16	198	141	57	2,435	1,603	832	28	5	23
7 years	58	39	19	76	64	12	898	616	282	10	3	7
8 years	34	31	3	30	20	10	594	498	96	8	6	2
9 years	70	61	9	41	36	5	457	403	54	4	3	1
10 years	22	20	2	18	13	5	360	333	27	4	1	3
11 years	17	17	..	6	6	..	346	321	25	2	2	..
12 years	8	4	4	5	4	1	136	129	7	..	..	..
13 years	6	5	1	2	1	1	61	58	3	..	..	..
14 years	3	3	..	2	2	..	15	15	..	..	..	..
15 years and over	15	9	6	14	14	..	11	11	..	3	3	..
Age unspecified	50	41	9	39	31	8	17	13	4	11	11	..

SYDENHAM HOSPITAL

SYDENHAM HOSPITAL

Myron G. Tull, M.D., M.P.H.

Superintendent

Horace L. Hodes, M.D.

Director of Medical Research

The wartime shortage of personnel and supplies continued to be felt at Sydenham Hospital during the year 1946. It was still impossible to obtain the required quota of nurses and domestic help for the full operation of the three floors of the hospital.

On January 1, 1946 Dr. Horace L. Hodes who had been on military leave resumed his duties as Director of Medical Research. Miss Mary V. Shearer was appointed Superintendent of Nurses on January 22, 1946 to succeed Miss Ethel Northam who had resigned and Miss Ina T. Johnson was made Assistant Superintendent of Nurses on March 1.

Poliomyelitis

During 1946 there were 54 patients with paralytic poliomyelitis treated at Sydenham Hospital and of the total 32 were city residents and 22 were from the counties of Maryland. Twenty-six of the cases were admitted during the months of October and November. This represents an unusual occurrence and is in keeping with the general observation that poliomyelitis cases in recent years have been occurring with greater frequency in the late fall.

The treatment of poliomyelitis was not changed radically during 1946. The observation first made in this hospital in 1941, that patients with the bulbar form of this disease were frequently greatly benefited by tracheotomy, was also evident in 1946.

Diphtheria

There were 372 patients with diphtheria admitted to the hospital and nineteen patients died which made a mortality rate of 5 per cent. One additional death occurred in a patient who had been admitted in 1945, making a total of 20 deaths. All of the deaths were attributed to diphtheritic myocarditis and in no instance was death due to obstruction of the respiratory tract.

It was found that the determination of the quantity of diphtheria antitoxin in the blood of patients suspected of having diphtheria was of great

use in making definite diagnoses. Such determinations were carried out in sera obtained from 90 patients. The results indicated that individuals whose sera contained more than one-fiftieth of a unit of antitoxin on admission to the hospital were not suffering from diphtheria, provided illness was not more than of four days' duration. Byuse of this laboratory procedure a considerable increase in the accuracy of the diagnosis was obtained.

Research

The use of streptomycin together with sulfadiazine and anti-influenza bacillus serum has proved to be satisfactory in the treatment of meningitis due to Type B Hemophilus influenzae. Early reports on the sensitivity of this organism to penicillin indicated that it was resistant to this antibiotic. However, recent work done in the Sydenham Hospital laboratory has shown that certain strains of Type B Hemophilus influenzae isolated from the spinal fluid of patients with meningitis are more susceptible to penicillin than to streptomycin. These findings suggest that penicillin might be more valuable in the treatment of influenza bacillus meningitis than streptomycin when laboratory tests show the presence of such strains.

During the course of routine bacteriologic examinations in the laboratory it was discovered that Hemophilus influenzae and Friedlander bacilli have in common a major capsular antigen. Further investigation revealed the fact that sera prepared against Friedlander bacilli caused swelling and destruction of the capsule of Hemophilus influenzae. This new knowledge may prove to be of therapeutic value since serum produced by inoculating rabbits against Hemophilus influenzae is difficult to prepare and is very expensive. The high cost is of grave significance because the treatment of influenza bacillus meningitis requires the use of this serum as well as streptomycin and sulfadiazine. It is believed that serum made from Friedlander organisms will prove to be easier to prepare and much cheaper than Hemophilus influenzae serum. This belief is based upon the fact that the Friedlander organism contains very much greater quantities of the antigen previously referred to than does Hemophilus influenzae. Research along this line was in progress at the end of the year.

It was also found that filtrates prepared from autolyzed Friedlander bacilli contained an enzyme or group of enzymes destructive to the capsule of Type B Hemophilus influenzae organisms. Since the virulence of the influenza bacillus depends upon the presence of its capsule, the decapsulating enzyme derived from the Friedlander organism may have therapeutic importance.

In conjunction with Commander H. S. Hurlbut of the U. S. Navy, experiments on the mosquito transmission of various virus agents begun at the Naval Laboratory on Guam in 1945 by the Medical Director of Syden-

ham Hospital were carried forward at Sydenham Hospital during the year. The observation that Japanese encephalitis may be transmitted by mosquito larvae has been confirmed. This disease has never been found in the United States; in fact search for its presence in Baltimore has failed to reveal any evidence that it exists in this area. However, that this disease is a potential threat in this region has been shown by the laboratory transmission of the virus causing the disease by Aedes triseriatus mosquitoes trapped on the grounds of Sydenham Hospital.

Education

The facilities of Sydenham Hospital for teaching communicable diseases and the nursing of such illnesses continued to be utilized by both the Johns Hopkins Medical School and the University of Maryland Medical School. Students from these two institutions were given bedside clinics. Training schools of Saint Joseph's Hospital, Mercy Hospital, Maryland General Hospital, and Saint Agnes Hospital sent small groups of pupil nurses for four to six weeks training in communicable disease nursing. Clinics were also held for students of the Johns Hopkins School of Hygiene and Public Health.

Patients Admitted

The total number of patients admitted to Sydenham Hospital during 1946 was 1,105 which was an increase of 62 patients as compared with the previous year. Of this total, 177 patients came from the counties of Maryland. The principal diseases and the number of patients with each were as follows:

Diphtheria	372
Meningitis, all types	66
Anterior poliomyelitis	54
Pertussis	48
Scarlet fever	40

Surgical Operations

There were 57 surgical operations performed at Sydenham Hospital, 52 of which were tracheotomies and 31 of the tracheotomies were for laryngeal obstruction due to diphtheria. Other operations included: Tonsillectomy and adenoidectomy 3; dilatation and curettage 1; and bronchoscopy 1.

The total number of deaths of all diseases was 52 and the death rate was 4.7 per cent. Deducting the number of deaths which occurred within twenty-four hours after admission, the death rate was 2.99 per cent as compared with 4.3 per cent in 1945 computed on the same basis. There were 31 autopsies performed which was 59.6 per cent of the total deaths.

Personnel

Myron G. Tull, M.D., M.P.H., Superintendent
Horace L. Hodes, M.D., Director of Medical Research
Sidney Cobb, M.D., Resident Hospital Physician
Richard E. Dormont, M.D., Hospital Intern
Peggy A. Hanson, M.D., Hospital Intern
Mary V. Shearer, Superintendent of Nurses
Ina T. Johnson, Assistant Superintendent of Nurses
Mary T. Cook, Special Supervising Nurse
Agatha M. Cook, Special Supervising Nurse
Edith M. Barnes, Supervising Nurse
Mary V. Gleeson, Supervising Nurse
Rebecca L. Schmidt, Supervising Nurse
Frances H. Shuford, Supervising Nurse
Edwin Whittemore, Pharmacist
Helen D. Zepp, Principal Bacteriologist
Helen E. Brown, Technician, Clinical Laboratory
Edna E. Herget, Senior Clerk
Marie W. Lamley, Senior Clerk
Verna E. Spitzberg, Medical Stenographer
Bertha Flanagan, Municipal Exchange Operator
Esther C. Haas, Municipal Exchange Operator
Lula N. Rocco, Municipal Exchange Operator
E. Miriam Bush, Telephone Branch Operator
Mable M. Hoenig, Telephone Branch Operator
Lilith K. Overbeke, Telephone Branch Operator
Katherine L. Muhly, Educational Director
Dolores E. Bauman, Assistant Educational Director
Alice S. Montell, Housekeeper
Bertha Literski, Seamstress
Stanley W. Imes, Laundry Foreman
Clarence W. Schroeder, Laundry Worker
Georgia R. Adams, Laundress
Myrtle Davis, Laundress
Elizabeth Doyle, Laundress
Mamie Ernest, Laundress
Pauline O. Hanson, Laundress
Helen J. Kerr, Laundress
Emily Mancuso, Laundress
Grace R. McGill, Laundress
Nellie Moses, Laundress
Raymond Seabrease, Head Cook
Bradie P. Cole, Cook
James O. Fitzgerald, Cook
Bruce A. George, Cook
Louis Thomas, Storekeeper
Nathaniel M. Crow, Painter
John W. Diller, Handy Man
Paul L. Franklin, Gardener and Pruner
Adam Helinski, Watchman

Hartman G. Carter, Chauffeur
Melvin Creamer, Chauffeur
George W. Ilgenfritz, Chauffeur
Ferdinand Hammett, Chauffeur
John G. Smith, Chauffeur
Harry E. Straw, Chief Engineer
Joseph Flanagan, Shift Engineer
Luther Simpson, Shift Engineer
Spence Spry, Shift Engineer
William M. Tracey, Shift Engineer
John W. Brass, Oiler
M. L. Harrington, Oiler
Robert F. Marks, Oiler
Robert Thompson, Oiler
F. X. Dorbert, Steam Fireman
Benjamin H. Hubbard, Steam Fireman
George Nagy, Steam Fireman

Charge Nurses

Helen J. Baker
Bertha M. Baltus
Helen Pendergast
Gladys L. Stubsten
Pearl West

Graduate Nurses

Anna I. Caldwell
Margaret M. T. Cook
Margaret J. Costello
Fanny Hackworth
Margaret L. Hofstetter
Hazel A. King
Helen L. Long
Laura Schmitz
Jennie Schneider

Hospital Workers

James O. Aldredge
Mary V. Barnes
Clarence Beall
Virginia Beasley
Fanny A. Bragg
May A. Cathell
Katherine Coligny
Thomas A. Dunn
Flewellyn Estes
J. R. Evans
William Feehley
Virgil K. Goff
Pearl Hamlin
Maxine B. Harris
Aileen Johnson
Waymon Jones
Hollie Laird
Camillo Lombardy
Jeannette Metros
Ignatius McKenna
William H. Mullen
Ralph Nelson
Sally I. Norman
Anthony J. Raab
Charles F. Ridgeway
Paul W. Robinson
Joseph S. Tudor
Philip Warren
Paul Wilson

TABLE NO. 1

HOSPITAL CENSUS

Patients in hospital at beginning of year		63
Patients in hospital at end of year		58
Maximum number of patients in hospital at one time		89
Minimum number of patients in hospital at one time		25
Total number of admissions		1,105
Daily average number of patients		60.2
Average number of days stay of patients:		
Scarlet fever		10.4
Diphtheria		31.9
Whooping cough		20.5
Poliomyelitis		17.6
Meningitis (all kinds)		13.2
Total number of days maintenance given patients	22,006	
Total number of days maintenance given employees	32,149	
Total number of days maintenance given patients and employees		54,155

TABLE NO. 2

ADMISSIONS, DEATHS AND DEATHS WITHIN 24 HOURS BY COLOR AND DIAGNOSIS

Admission Diagnosis	Admissions					Deaths					Deaths Within 24 Hours				
	Total	City		County		Total	City		County		Total	City		County	
		Wh.	Col.	Wh.	Col.		Wh.	Col.	Wh.	Col.		Wh.	Col.	Wh.	Col.
Total	1,105	710	218	158	19	52	29	10	12	1	19	13	2	4	..
Abscess, brain	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Abscess, peritonsillar	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..
Abscess, teeth	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Anemia, nutritional	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Appendicitis, acute	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Arthritis, gonococcus	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..
Asthma	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Bronchitis, acute	6	2	3	1	..	..	..	..	..	..	..	..	..	..	..
Cellulitis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholecystitis	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Conjunctivitis	4	3	1	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Coronary occlusion	1	1	..	..	..	1	1	..	..	..	..	..	..	..	..
Dermatitis medicamentosa	7	5	1	..	1	..	..	..	..	..	..	..	..	..	..
Diagnosis undetermined	3	..	1	2	..	..	..	..	..	..	..	..	..	..	..
Diarrhea	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	372	292	38	40	2	20	13*	1	6	..	4	3	..	1	..
Diphtheria carrier	4	..	1	3	..	..	..	..	..	..	..	..	..	..	..
Dysentery	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Eczema	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Encephalomyelitis	1	..	..	1	..	1	..	..	1	..	1	..	..	1	..
Encephalitis	5	3	..	2	..	..	..	..	..	..	..	..	..	..	..
Endocarditis, bacterial	1	1	..	..	..	1	1	..	..	..	..	..	..	..	..
Enteritis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Erythema, toxic	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, etiology unknown	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Foreign body	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Furunculosis	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastroenteritis	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Hallucinations	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Hematoma	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Heart, congenital malformation	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Heart disease, rheumatic	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Hemorrhage, cerebral	2	2	..	..	..	1	1	..	..	..	1	1	..	..	..
Hemorrhage, subarachnoid	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Hydrocephalus	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Hysteria	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..
Impetigo	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Laryngitis, acute	14	13	..	1	..	..	..	..	..	..	..	..	..	..	..
Laryngitis, streptococcus	4	1	1	2	..	..	..	..	..	..	..	..	..	..	..
Laryngotracheobronchitis	12	7	2	3	..	3	2	..	1	..	3	2	..	1	..
Leukemia	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Lymphangitis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Marasmus	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Mastoiditis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	122	61	44	12	5	..	..	..	..	..	..	..	..	..	..
Measles encephalitis	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..
Meningitis, influenzal	9	7	1	1	..	2	1	..	1	..	2	1	..	1	..
Meningitis, lymphocytic	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Meningitis, meningococcus	25	13	2	6	4	1	..	..	1	..	..	..	..	..	..

TABLE NO. 2—Continued

ADMISSIONS, DEATHS AND DEATHS WITHIN 24 HOURS BY COLOR AND DIAGNOSIS

Admission Diagnosis	Admissions					Deaths					Deaths Within 24 Hours				
	Total	City		County		Total	City		County		Total	City		County	
		Wh.	Col.	Wh.	Col.		Wh.	Col.	Wh.	Col.		Wh.	Col.	Wh.	Col.
Meningococcemia	8	8	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis, mumps	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Meningitis, pneumococcus	4	2	2	..	..	3	2	1	..	..	2	1	1	..	..
Meningitis, streptococcus	2	2	..	..	..	2	2	..	..	..	2	2	..	..	..
Meningitis, tuberculous	9	1	6	1	1	9	1	6	1	1	..	..	..	..	..
Meningitis, type undetermined	5	3	2	..	..	..	..	..	..	..	..	..	..	..	..
Miliaria	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Mononucleosis, infectious	20	11	4	4	1	..	..	..	..	..	..	..	..	..	..
Mumps	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..
Myelitis	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Myocarditis, diphtheritic	2	2	..	..	..	1	1	..	..	..	1	1	..	..	..
Newborn	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Neuronitis, infectious	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Neurosis	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
No disease	3	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Ophthalmia, gonococcus	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Osteomyelitis	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Otitis media	5	3	..	2	..	..	..	..	..	..	..	..	..	..	..
Paralysis, post-diphtheritic	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Pharyngitis, acute	39	32	5	2	..	..	..	..	..	..	..	..	..	..	..
Pharyngitis, streptococcus	20	13	4	3	..	..	..	..	..	..	..	..	..	..	..
Pneumonia, broncho	11	6	4	..	1	..	..	..	..	..	..	..	..	..	..
Pneumonia, lobar	9	5	2	2	..	1	..	1	..	..	1	..	1	..	..
Pneumonia, due to virus	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis, paralytic	54	23	9	21	1	2	2	..	..	..	1	1	..	..	..
Poliomyelitis, nonparalytic	8	2	2	4	..	..	..	..	..	..	..	..	..	..	..
Pyelitis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Rash, etiology unknown	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic fever	13	4	8	1	..	2	1	..	1	..	..	..	..	..	..
Rhinitis, acute	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever	3	1	..	2	..	..	..	..	..	..	..	..	..	..	..
Roseola infantum	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Rubella	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever	40	30	8	2	..	..	..	..	..	..	..	..	..	..	..
Schizophrenia	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Septicemia, staphylococcus	2	2	..	..	..	1	1	..	..	..	1	1	..	..	..
Sinusitis, acute	4	2	2	..	..	..	..	..	..	..	..	..	..	..	..
Stomatitis	6	2	4	..	..	..	..	..	..	..	..	..	..	..	..
Sulfonamide sensitivity	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Thrush	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Tonsillitis, acute	55	35	11	8	1	..	..	..	..	..	..	..	..	..	..
Tonsillitis, streptococcus	24	13	5	5	1	..	..	..	..	..	..	..	..	..	..
Tracheobronchitis, acute	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Trauma of leg	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Trauma of pharynx	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Tumor, spinal cord	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Vaccinia	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Varicella	14	12	1	1	..	..	..	..	..	..	..	..	..	..	..
Varicella encephalitis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Vincent's angina	4	3	1	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	48	23	18	7	..	1	..	1	..	..	..	..	..	..	..

* One admitted in 1945.

TABLE NO. 3
LABORATORY EXAMINATIONS

TOTAL	39,494
CULTURES	
Spinal fluid	379
Urine	75
Blood	561
Nose and throat for K-L	13,476
Nasopharynx	625
Throat for streptococcus	1,004
Stool	45
Miscellaneous	173
SMEARS	
Spinal Fluid	379
Eye for G. C.	18
SEROLOGY	
Agglutination	114
Patient's serum (Quellung)	37
Streptomycin titrations	27
Penicillin titrations	25
Toxin antitoxin titrations	20
D.A.T. levels	12
ANIMAL INOCULATION TESTS FOR DIAGNOSTIC PURPOSE	
Guinea pigs for virulence	254
Guinea pigs for tuberculosis	20
CHEMISTRY	
Sulfanilamide	1
Sulfapyrazine	1
Sulfathiazole	6
Sulfamerazine	8
Sulfadiazine	345
NPN	55
VandenBergh	17
Blood sugar	42
CSF sugar	5
CSF total protein	4
Chloride	4
MISCELLANEOUS	
Routine urine examinations	1,408
Tuberculin tests	715
Blood counts	1,771

TABLE NO. 4
POSTMORTEM EXAMINATIONS

TOTAL	31
Diphtheria	13
Influenzal meningitis	2
Pneumococcus meningitis	1
Tuberculous meningitis	5
Meningococcus meningitis	1
Streptococcus meningitis	2
Myocarditis	1
Laryngotracheobronchitis	1
Bacterial endocarditis	1
Staphylococcus septicemia	1
Poliomyelitis	1
Rheumatic fever	1
Lobar pneumonia	1

BUREAU OF TUBERCULOSIS

BUREAU OF TUBERCULOSIS

Miriam E. Brailey, M.D., Dr.P.H.

Director

The problem of tuberculosis control in the city of Baltimore involves much more than an alert administrative Bureau of Tuberculosis. However promptly reported cases of the disease are evaluated and placed on sanitorium lists if active and infectious, however diligent the search for concealed tuberculosis by X-ray surveys of the general community, however adequate the free diagnostic services may be at the city chest clinics, people will continue to sicken and die of this chronic contagious disease unless residents of both the white and Negro races can be promptly isolated in sanatoria and receive there the best possible treatment for their illness. Even if the evident weakness in the field of treatment is finally overcome, the disease will still flourish if a large proportion of the city's population continues to live in substandard dwellings where enormous households are subjected to exposure from any chronic contagion which may appear among them.

However much the white population outnumbers the colored in Baltimore, the risk of illness and death from tuberculosis in Negroes is so much greater than in white persons that we must recognize as a community the grave responsibility in enlarging treatment facilities for Negroes who at the present time have not more than half the opportunity for hospital treatment for tuberculosis which they require. To offer Negroes adequate hospital care for tuberculosis promptly will be a great advance, but that will not be enough unless decent housing for Negroes makes intense exposure to the disease less likely during the period when the nature of the patient's illness is not recognised.

Baltimore's good name in tuberculosis awaits the day when the community as a whole becomes willing to pay for better health and better living conditions for its Negro residents.

Deaths

Among Baltimore residents during 1946 there took place 747 deaths from all forms of tuberculosis, representing 64 per cent of the total resident deaths from tuberculosis in the entire state of Maryland. Three hundred and forty-nine of the deaths among city residents took place in the white population and 398 among Negroes. Negroes suffered 53 per cent of Baltimore's tuberculosis deaths, although they constitute less than 20 per cent of the city's population. In 1945 the total deaths from tuberculosis

for city residents numbered 773; white persons suffered 349 deaths and Negroes 424.

In Table No. 1 is shown the age distribution of these tuberculosis deaths, according to race and sex. In the white race, deaths among males considerably outnumbered those among females. Of the 349 deaths, 251 were in males and only 98 in females, giving a ratio of males to females of 2.6. This is a common observation in tuberculosis deaths in the white race. Deaths in white children under age 15 of either sex were rare. For later ages females with fatal tuberculosis outnumber males until age 35, then deaths among males begin to be striking and continue greatly to exceed deaths in women in all the later decades.

In Negroes, Table No. 1 indicates that while there were more deaths in males than in females, the ratio of males to females dying of tuberculosis is less striking than in the white race, being only 1.5. Children dying before age 15 represented more than 5 per cent of the total number of tuberculosis deaths in 1946. Deaths among Negro females between ages 15 and 35 greatly outnumbered deaths among males of corresponding age. Thereafter, tuberculosis fatalities in Negro males considerably exceeded those in females until age 55, when they fell off sharply in contrast to the observation of continuing tuberculosis fatalities in elderly men in the white race.

In males of both races and especially in the white race, tuberculosis is an important cause of death in middle life and in old age; for women the chief risk for both races is concentrated in young adult life, mainly before age 35. Tuberculosis is an important cause of death in Negro children.

Death Rates

The total tuberculosis death rate for Baltimore residents for 1946 was 80.3 per 100,000: for white residents 46.7, for Negro residents 218.7. Comparable figures for 1945 were 83.1 per 100,000 for the total tuberculosis death rate, 46.7 for the white race and 233.0 for Negroes. It is encouraging to note that the tuberculosis death rate among Negroes residing in Baltimore has fallen for three successive years, but no steadily held decline can be counted on, since wide fluctuations in a death rate well above 200 have been noted for years. The Negro residents of Baltimore suffer a tuberculosis death rate 4.7 times greater than that of the white residents.

Reported Cases

During 1946 from a considerably larger number of preliminary reports sent to the Bureau of Tuberculosis, 1,524 new cases of tuberculosis were verified and considered significant from the point of view of public health follow-up either of the reported case itself or the family involved. This

number included 130 reports made up from death certificates. The corresponding number of new cases in 1945 had been 1,925 including 136 reported after death. If the new tuberculosis cases of 1946 are shown in their relation to the tuberculosis deaths among city residents for the same time span, the following ratios of new cases to deaths result: Total: 2.0, White: 2.5, Colored: 1.8.

In Table No. 2 the racial distribution of the new cases in 1946 is shown. Of the total number of 1,524, there were 882 in white persons and 642 in Negroes. During 1945 from the white race there had been 1,230 reported cases and from Negroes 695. Thus the noted decline of about 400 cases in 1946 was principally encountered in the white race. Table No. 2 also indicates that 1,468 reports were for pulmonary tuberculosis and 56 for persons exhibiting predominantly non-pulmonary forms of the disease. Of these 56, Negroes contributed 41 cases. Corresponding figures for 1945 were 1,875 pulmonary cases and 53 nonpulmonary, 39 of the latter being for Negroes.

The smaller number of verified pulmonary case reports in 1946 is probably explained by two circumstances. First, Selective Service made no reports at all during 1946, in contrast to notifications of abnormal chest findings in 397 selectees in 1945, though tuberculosis could not be substantiated in follow-up studies of many of them. Secondly, the Director of the Bureau of Tuberculosis who is responsible for the critical review of all case reports has tended as time has gone on to file without enumeration a somewhat larger proportion of reports for healthy persons of the white race in whom a routine chest X-ray disclosed only the obsolete scars of inactive minimal pulmonary tuberculosis. Experience has shown that nothing is gained by invariably including in the tuberculosis register as an enumerated new case an individual of this kind. Each such report card is kept however and is available if progressive disease is ever reported later in such an individual. The largest decrease in reports in 1946, compared with 1945, occurred in the classification of minimal inactive pulmonary lesions for the white race. Such new reports numbered 806 in 1945 and 503 in 1946. In all case finding by mass X-ray surveys of the chests of the apparently healthy members of the community the apical pulmonary scar, as a type of relatively innocent pulmonary abnormality due to tuberculosis, is encountered with considerable frequency among instances of less stable minimal disease and a few obviously advanced lesions. It is not surprising that administrative policy should be subject to some change in the direction of paying less attention to harmless lesions.

Out of 1,468 pulmonary cases reported during 1946, there were 1,465 for which the extent of lung involvement was secured by the bureau director at the time of report. An analysis of the number and percentage distribu-

tion of reported cases showing minimal or advanced lung lesions, severe primary involvement of the mediastinal lymph nodes, acute miliary dissemination is presented in Table No. 3.

In the white race minimal lesions accounted for 41 per cent of all reports of pulmonary tuberculosis: nearly 16 per cent were minimal active disease, 24 per cent minimal inactive, and 1 per cent due to pleural effusions. Advanced pulmonary lesions were reported in 56 per cent, severe primary tuberculosis of the mediastinal lymph nodes in 2 per cent, and acute miliary disseminated tuberculosis in 1 per cent of the reported cases of pulmonary tuberculosis.

Negroes showed a different percentage distribution. Minimal lesions accounted for only 25 per cent of reported pulmonary cases, and active cases outnumbered the inactive, in contrast to the white race: minimal active, 11 per cent; minimal inactive, 8 per cent; pleural effusions, 5.5 per cent. Advanced lesions of the reinfection type accounted for 61 per cent of all pulmonary reports. Reports of severe primary tuberculosis involving the mediastinal lymph nodes and often the lung parenchyma greatly outnumbered such reports from the white race, accounting for 10 per cent of new pulmonary tuberculosis as reported among Negroes. Acute disseminated tuberculosis was also more common among Negroes than in the white race and accounted for 4 per cent of pulmonary case reports.

Table No. 3 listing by extent of lesion 865 pulmonary cases for the white race and 600 for Negroes during 1946 makes it possible on theoretical grounds to see how the two races compare in their need for sanatorium beds on the basis of known new cases in a single year. This would of course take into no account the backlog of cases reported in earlier years for many of whom treatment is still incomplete or indicated afresh because of a recent relapse.

In the white race the 209 reported instances of minimal inactive pulmonary tuberculosis can be subtracted from the total of 865 leaving 656. Of these, 135 have only minimal lesions which under some circumstances in the white race with competent medical supervision might be expected to do quite well at home. To the theoretical number of 656 new pulmonary cases for whom sanatorium treatment would be ideal should be added the 15 non-pulmonary cases shown in Table No. 2, though the various state sanatoria have thus far taken very little responsibility for individuals ill with extra-thoracic forms of tuberculosis which are so much less likely to spread tuberculosis to the family or the community at large. For the white race new cases alone for which hospital care would have been ideal number 671 in 1946 or 76 per cent of those individuals reported.

Newly reported pulmonary cases in Negroes for whom extent of lesion was indicated in Table No. 3 numbered 600 with only 49 falling into the

minimal inactive classification. This leaves 551 pulmonary cases for whom hospital care is to be strongly urged. Negro homes and means of livelihood are rarely likely to promote the healing process of active minimal disease and out of the 600 cases reported only 67 fell into such a category.

To these 551 pulmonary cases must be added the 41 non-pulmonary cases indicated in Table No. 2, most of whom offered serious nursing probems no Negro household could adequately meet. This brings the total number of new cases in theoretical need of hospitalization up to 592 for Negroes, or 92 per cent of all those reported.

It is quite clear that both on the basis of annual deaths from tuberculosis and newly reported cases with active progressive disease, the need for tuberculosis beds in Maryland is approximately equal for the two races. However the white population may outnumber the colored, the risk of illness and death from tuberculosis in Negroes is so much greater than in white persons that we must recognize the grave responsibility in enlarging treatment facilities for Negroes who at the present time have not more than half the opportunity for hospital care for tuberculosis which they require.

In Tables Nos. 4 and 5 the reported cases are analyzed to show age-distribution in each race. In general the conclusions to be reached are about the same as a similar analysis of deaths in Table No. 1. Tuberculosis in childhood is much more common in Negroes than in white persons. The maximum frequency of new pulmonary cases for females of both races is reached between ages 15 and 35. Reported pulmonary cases in males outnumber those in females, but are usually discovered in larger numbers after age 35. Non-pulmonary tuberculosis is a much greater problem in Negroes than in white persons and is not limited to childhood.

In Table No. 6 the reported cases are classified by race and by reporting agency. Private physicians reported 308 new cases in 1946, general hospitals 350 and the Health Department chest clinics 453. For 1945, physicians had reported 232, general hospitals 347 and Health Department chest clinics 536. Case-finding surveys, to be dealt with later in this report, turned over a number of suspects to private physicians and to Health Department chest clinics and where the diagnosis was confirmed by later investigation, the resulting definitive report was credited to the private physician, or the clinic, rather than to the survey itself. It is interesting that for the combined races the Health Department clinics continue to lead as the agency making the largest number of reports, but as will be indicated in Table No. 8, these clinics are indebted to private physicians for more than 70 per cent of the ill patients examined because tuberculosis is suspected.

The other sources of report are self-explanatory. As in the past a small

number of patients were first reported by the Tuberculosis Division of the City Hospitals or by the other sanatoria. Tuberculosis in 130 persons was reported from death certificates: 68 of these individuals were white persons, and 62 were Negroes. In nearly every such instance medical assistance had been sought only a few days or hours before death.

Diagnostic Services

The volume of work done by the three chest clinics operated by the Bureau of Tuberculosis is shown in Table No. 7. The clinic at 28 South Broadway continued to serve both white and Negro patients residing in East Baltimore. At 1516 Madison Avenue a clinic was conducted for white patients living in West Baltimore, while Negroes residing in that section were served by a chest clinic held at Druid Health Center, 1313 Druid Hill Avenue. A fourth clinic located at Eastern Health District and a small-film service at Druid Health Center, used exclusively by apparently healthy persons, are described under "Case-Finding Projects".

At the three regular diagnostic chest clinics, there were 8,492 individuals seen in 1946 as compared with 8,058 in 1945. Of the 8,492 persons examined, 4,769 were white and 3,723 were Negroes. New registrants numbered 5,370 and represented about 63 per cent of those examined. The remaining 3,122, or 37 per cent, were registrants prior to 1946 who required continuing follow-up. The distribution of the new registrants as to race, reason for referral, age-groups and referring agency, is shown in Table No. 7 and certain percentages derived from Table no. 7 are shown in Table No. 8.

Of the 5,370 new registrants, 2,963, or 55 per cent, came to the clinics for diagnostic study because pulmonary disease was suspected. The remaining 2,407, or 45 per cent, were apparently well but had been exposed to tuberculosis usually within their own families and in consequence reported for chest X-ray service. This number of contacts does not include 802 tuberculosis contacts among 5,072 well individuals given small-film service at the Eastern Health District during the year. In all the Bureau of Tuberculosis examined by X-ray 3,209 persons as tuberculosis contacts during 1946.

The age-distribution of the 1,830 new white and 1,128 new Negro patients sent to the clinics for diagnosis is shown in broad age-groups in Tables Nos. 7 and 8. The percentage-distributions at different ages as presented in Table No. 8 are roughly the same for each race. For the combined races, children under age 15 accounted for 9 per cent of those examined because of illness, persons from age 15 to age 24 for nearly 24 per cent, those from 25 to 34 for nearly 27 per cent, individuals from age 35 to 44 for 18 per cent, those ranging in age from 45 to 64 for nearly 20

per cent, and those of age 65 or older accounted for less than 3 per cent of ill persons examined.

Where the regular chest clinics were visited by the apparently healthy because exposed to tuberculosis, 1,507 white and 896 Negroes were given examination, usually by X-ray only. Children under age 15 were the most numerous group for both races, accounting for nearly 39 per cent of all Negro contacts examined and for 24 per cent of white contacts. For later age-groups, percentage-distributions for Negroes were lower than those for white persons. For the combined races, about 30 per cent of individuals examined because of exposure were less than 15 years of age, 19 per cent were between ages 15 and 24; 20 per cent were between ages 25 and 34, about 15 per cent between 35 and 44; and nearly 14 per cent fell within the longer period of 45 to 64 years of age. Two per cent of contacts examined were age 65 or more.

In Tables Nos. 7 and 8 are also shown the numbers and percentages of ill patients referred for diagnosis by various agencies. Private physicians referred 72 per cent of all white patients and 75 per cent of Negro patients; public health nurses sent in about 6 per cent of white patients and about 4 per cent of Negro patients; other Health Department clinics referred 3 per cent of white and 1 per cent of Negro patients. Various case-finding projects sent to the clinics 63 white persons and 113 Negroes suspected of tuberculosis, and these represented 3.5 per cent of white suspects and 10 per cent of Negroes sent in for diagnostic examination. Other miscellaneous agencies accounted for the remaining 13 per cent of white patients and 10 per cent of Negroes making up the total group examined because of suspected pulmonary disease.

Those referred to the clinics for contact examination, not because of illness, had a different distribution with relation to source of referral. Private physicians sent in nearly 42 per cent of all white contacts, but less than 10 per cent of Negro contacts. Public health nurses were responsible for sending to the clinics 37 per cent of white exposed persons examined and nearly 71 per cent of all those Negro contacts registered in the clinics. Other less important sources accounted for the remaining 20 per cent of white contacts and 20 per cent of Negro contacts examined at the clinics.

During 1946 two night sessions were held each week at the clinics located at 28 South Broadway and at 1516 Madison Avenue, while at Druid Chest Clinic, 1313 Druid Hill Avenue, there were three night sessions each week. All three clinics were operated with five regular sessions weekly.

The distribution of new diagnostic patients, tuberculosis contacts examined for the first time, and individuals making return visits is shown in Tables Nos. 7 and 8 according to their attendance at a day or night session.

From a total of 13,241 clinic visits, 6,989 or 53 per cent, took place during the day and 6,252 or 47 per cent, at night. Of the 2,963 patients who were sent in for diagnosis, 1,584 or 53.5 per cent reported during the daytime and 1,379, or 46.5 per cent, at night. Of the 2,407 contacts reporting to the clinics for X-ray examination, 1,153, or about 48 per cent, came during the day and 1,254,or 52 per cent, at night. As to return visits 54 per cent were made during daytime sessions and 46 per cent at night.

Collapse Therapy for Ex-sanatorium Patients

All three chest clinics held regular sessions at least twice weekly for artificial pneumothorax therapy. This service was limited to patients whose collapse therapy had been initiated in the sanatorium. During 1946 these treatments were given to 234 patients as shown in Table No. 7. Thirty-four of these were new and 185 were former registrants for whom treatment was continued, while 15 were on temporary leave from sanatoria. In all, 4,322 refills were given at the three clinics during 1946.

Case-Finding Projects

During 1946 the Bureau of Tuberculosis continued to promote the search for pulmonary tuberculosis among apparently healthy members of the community by means of X-ray surveys. These are indicated in Table No. 7 with a total of 55,079 "well" persons X-rayed in this way.

The Eastern Health District with its stationary small-film unit took pictures of 5,072 individuals, of whom 2,870 were white and 2,202 were Negroes. Of the 5,072 persons X-rayed during the year, 802 or about 16 per cent came for pictures because exposed to tuberculosis in their homes. Registrants in prenatal clinics accounted for 596, or nearly 12 per cent of the total. Industrial groups numbered 3,221 and represented 63 per cent, while other scattered sources accounted for 453, or 9 per cent, making up the remainder.

At the Druid Health Center a similar stationary small-film service was available and took care of 1,832 "well" persons coming for X-ray only. The majority of these were prenatal registrants. Tuberculosis contacts usually came at regular clinic hours and although small films were often used, they have been counted in the daily work of the clinic and referred to elsewhere in this report.

Dr. M. S. Shiling of the bureau staff with the assistance of the Maryland Tuberculosis Association, worked with a mobile X-ray unit and was responsible for X-raying 48,175 individuals during the year, of whom 32,676 or 68 per cent, were white persons and 15,499, or 32 per cent, were Negroes. High school students comprised about one-third of the 32,676 white people surveyed, with various community surveys accounting for another 20 per

cent. Employees of U. S. government bureaus with offices in Baltimore, and industrial plants in the city each contributed a little over 13 per cent of the white individuals examined by X-ray. Department store employees made up another 10 per cent, and other scattered unclassified sources accounted for the remaining 11 per cent.

Of the 15,499 Negroes surveyed by mobile unit almost one-half or about 47 per cent were junior and senior high school students. Five Negro housing projects contributed one-fifth of the total, and other community surveys made up another 13 per cent. Only about 9 per cent of the Negroes surveyed were X-rayed in industrial plant surveys. Other scattered small surveys made up the remaining 11 per cent of the total number of Negroes examined by X-ray.

From the entire number of persons X-rayed under the direction of Dr. Shiling, 1,033 had films which showed some evidence of disease and 60 had films which it was technically impossible to read. The remaining 97.7 per cent of persons X-rayed showed small pictures negative for tuberculosis or any other abnormality of the chest. When large films (14″ x 17″) were taken on 755 of the 1,093 persons for whom follow-up was recommended, 348 or 0.7 per cent of the total persons included in surveys were found to have evidence of tuberculosis or suspected tuberculosis. However, only 125 of these showed lesions which were active or probably active. This means that only 0.3 per cent of those X-rayed in the first place were found to have significant tuberculous lesions. The prevalence of unsuspected tuberculous lesions in white and Negro groups surveyed was approximately the same, in spite of the much higher death rate from tuberculosis among Negroes in this city.

The first routine case finding in hospital populations began in the Johns Hopkins Hospital Dispensary in late August, 1946 with the installation of stationary small-film X-ray equipment made available through the Bureau of Tuberculosis. Analysis of the number of individuals X-rayed and the suspects found has not yet been completed, but the hospital and the Health Department have collaborated closely in the follow-up of persons reported to show abnormal chest findings.

Similar equipment was provided somewhat later in the year for use in the Baltimore City Hospitals where its full use has not been possible due to lack of clerical assistance.

Hospital and Sanatorium Facilities

Sanatorium service throughout the State continued to be gravely hampered by a serious shortage of personnel, by failure to provide urgently needed thoracic surgery for more than a very small number of patients, and by a continuing inadequacy in the number of beds available for Negroes

ill with tuberculosis. Counts toward the end of 1946 indicated that neither race had access to all the beds in institutions for treatment, the usual reason being that nurses were scarce and that no adequate provision had been made to attract and hold non-professional personnel. For white persons, the ratio of beds *in use* to deaths was 1.97; for Negroes 0.92. It is quite clear that even after unused beds are put into service for Negroes, construction of additional beds in new sanatoria conveniently near Baltimore City is urgently needed to bring accommodations for Negroes to the numerical level provided for the white race. Until the treatment of tuberculosis in this state can be offered promptly to patients of both races, until they have the benefit of modern surgical methods to assist their recovery, and until medical social workers and occupational therapists in our tuberculosis institutions are available to make convalescence more tolerable, we shall remain a city remarkable for our high total mortality from tuberculosis.

Nursing Service

Field service to the tuberculous and their exposed families was hampered during the year by a shortage of public health nurses and by our inability to fill a new post of supervisor of tuberculosis nursing. Most of the year not more than 135 public health nurses were available for a generalized program of which tuberculosis field service is only a part. Probably at least 300 public health nurses are needed to work effectively in the densely packed slum areas of Baltimore where tuberculosis is most prevalent. At the present time 32 Negro nurses are doing excellent work on the City Health Department staff and many more of them are needed to assist with the tuberculosis problem of the city, fully half of which is confined to the Negro race.

Vocational Rehabilitation

Vocational rehabilitation of tuberculous patients whose lesions have become apparently arrested was continued as a special service from the State Department of Education during 1946. During the year, there were 109 white and 53 Negro patients given this service which was usually begun in the sanatorium and initiated by special aptitude tests. The major portion of the work was done with patients still undergoing treatment at the Baltimore City Hospitals.

Federal Assistance

As of July 1, 1945, a Federal grant-in-aid from the U. S. Public Health Service became available for tuberculosis control in Maryland. For the Federal fiscal year ending June 30, 1947, the sum available for Baltimore City was $66,143.00, of which $56,310.00 was for salary assistance and

$9,833.00 for equipment and supplies. A number of new positions were set up including that of Director of Tuberculosis Surveys in the Bureau of Tuberculosis and that of Assistant Chief Physician, Tuberculosis, at the Baltimore City Hospitals. Both of these were filled. Posts for a medical social worker, an occupational therapist, a Supervisor of Public Health Nursing, Tuberculosis, were set up but could not be filled during the year due to scarcity of applicants. Several new positions for clerks, X-ray technicians, a junior statistician, a junior bacteriologist, were created and filled. New X-ray equipment, mainly of the small-film type, was made available to three large hospitals in the city and for the case-finding program in the Health Department. Two of the older city chest clinics were repainted, to mention a few of the ways this money was used.

The entire case-finding program both as to personnel and equipment was supported in the main by money from the Federal grant-in-aid, but the program continued to be assisted most helpfully by the Maryland Tuberculosis Association which furnished X-ray film, part of the technical service, and organized publicity.

Personnel

Miriam E. Brailey, M.D., Director
Charlotte Silverman, M.D., Assistant Director
Moses S. Shiling, M.D., Director of Tuberculosis Surveys
George G. Adams, M.D., Clinic Physician
Louis V. Blum, M.D., Clinic Physician
Theodore Cooper, M.D., Clinic Physician
Meyer W. Jacobson, M.D., Clinic Physician
C. Dudley Lee, M.D., Clinic Physician
Cecil Rudner, M.D., Clinic Physician
Eugenia W. Kearns, X-ray Technician
Evelyn Conway, Senior Stenographer
Anna S. Mehring, Senior Stenographer
Elaine S. Cramer, Junior Statistician
Gloria James, Key Punch Operator
Frances T. Morris, Senior Clerk
Beverly Spiegelford, Junior Clerk
Bernice Taylor, Junior Clerk
Rita J. Charvat, Junior Typist

TABLE NO. 1

AGE DISTRIBUTION OF RESIDENT DEATHS FROM TUBERCULOSIS—1946

Age Group	White			Colored		
	Total	Male	Female	Total	Male	Female
	Number of Deaths					
All ages	349	251	98	398	237	161
Under 15	9	6	3	22	14	8
15-24	29	12	17	86	22	64
25-34	48	20	28	88	45	43
35-44	51	39	12	106	76	30
45-54	72	57	15	65	52	13
55-64	76	65	11	18	16	2
65 and over	64	52	12	13	12	1
	Percentage Distribution					
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 15	2.6	2.4	3.1	5.5	5.9	5.0
15-24	8.3	4.8	17.4	21.6	9.3	39.8
25-34	13.8	8.0	28.6	22.1	19.0	26.7
35-44	14.6	15.5	12.2	26.7	32.1	18.6
45-54	20.6	22.7	15.3	16.3	21.9	8.1
55-64	21.8	25.9	11.2	4.5	6.7	1.2
65 and over	18.3	20.7	12.2	3.3	5.1	0.6

TABLE NO. 2

REPORTED TUBERCULOSIS CASES, ACCORDING TO LOCATION, EXTENT OF LESION AND RACE—1946

Location and Extent of Lesion	Total	White	Colored
Total Reported Cases	1,524	882	642
Pulmonary lesions (total)	1,468	867	601
Minimal	503	354	149
Moderately advanced	411	264	147
Far advanced	438	218	220
Severe primary lesions	78	18	60
Acute miliary or disseminated	35	11	24
Unspecified	3	2	1
Non-pulmonary lesions (total)	56	15	41
Meningitis	15	5	10
Spinal	13	6	7
Peritonitis	10	0	10
Other forms	18	4	14

TABLE NO. 3

ANALYSIS OF REPORTED CASES OF PULMONARY TUBERCULOSIS ACCORDING TO EXTENT OF PULMONARY LESION—1946

Classification of Lesion	Total	White	Colored
Cases with extent of lesion specified	1,465	865	600
Minimal lesions: All types	503	354	149
Active	202	135	67
Inactive	258	209	49
Pleural effusion	43	10	33
Moderately and Far advanced	849	482	367
Severe primary lesions	78	18	60
Acute miliary or disseminated	35	11	24
	Percentage Distribution		
Total cases with extent of lesion specified	100.0	100.0	100.0
Minimal lesions: All types	34.3	40.9	24.8
Active	13.8	15.6	11.2
Inactive	17.6	24.2	8.1
Pleural effusion	2.9	1.1	5.5
Moderately and far advanced	58.0	55.7	61.2
Severe primary lesions	5.3	2.1	10.0
Acute miliary or disseminated	2.4	1.3	4.0

TABLE NO. 4

PULMONARY AND NON-PULMONARY REPORTED CASES OF TUBERCULOSIS CLASSIFIED BY RACE, SEX, AND BROAD AGE-GROUPS—1946

Classification and Age	White			Colored		
	Total	Male	Female	Total	Male	Female
Pulmonary lesions						
All ages	867	544	323	601	318	283
Under 15	27	15	12	70	29	41
15-24	126	50	76	141	46	95
25-34	174	76	98	124	54	70
35-44	157	103	54	115	74	41
45-54	164	126	38	94	70	24
55-64	134	110	24	38	29	9
65 and over	85	64	21	19	16	3
Non-pulmonary lesions						
All ages	15	8	7	41	21	20
Under 15	10	5	5	10	6	4
Age 15 and over	5	3	2	31	15	16

TABLE NO. 5

PERCENTAGE DISTRIBUTION OF PULMONARY AND NON-PULMONARY REPORTED CASES OF TUBERCULOSIS CLASSIFIED BY RACE, SEX, AND BROAD AGE GROUPS—1946

Classification and Age	White			Colored		
	Total	Male	Female	Total	Male	Female
Pulmonary lesions						
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 15	3.1	2.7	3.8	11.6	9.1	14.5
15–24	14.5	9.2	23.5	23.6	14.5	33.5
25–34	20.1	14.0	30.3	20.6	17.0	24.7
35–44	18.1	18.9	16.7	19.1	23.3	14.5
45–54	18.9	23.2	11.3	15.6	22.0	8.5
55–64	15.5	20.2	7.4	6.3	9.1	3.2
65 and over	9.8	11.8	6.5	3.2	5.0	1.1
Non-pulmonary lesions						
All Ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 15	66.7	62.5	71.4	24.4	28.6	25.0
Age 15 and over	33.3	37.5	28.6	75.6	71.4	75.0

TABLE NO. 6

TUBERCULOSIS CASES CLASSIFIED BY RACE AND REPORTING AGENCY—1946

Reporting Agency	Total		White		Colored	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total Cases	1,524	100.0	882	100.0	642	100.0
Private physicians	308	20.2	232	26.3	76	11.8
General hospitals	350	23.0	140	15.9	210	32.7
Health Department clinics	453	29.7	228	25.8	225	35.1
Case-finding surveys	146	9.6	126	14.3	20	3.1
Baltimore City Hospitals	69	4.5	30	3.4	39	6.1
Other sanatoria	45	3.0	43	4.9	2	0.3
Other agencies	23	1.5	15	1.7	8	1.2
Reported after death	130	8.5	68	7.7	62	9.7

TABLE NO. 7

DISTRIBUTION OF WHITE AND COLORED CLINIC REGISTRANTS CLASSIFIED AS TO AGE, REFERRAL AGENCY, SERVICE RENDERED, AND LOCATION OF CLINIC—1946

	All Clinics			East Baltimore			West Baltimore		
	Total	White	Colored	Total	White	Colored	Total	White	Colored
Diagnostic Service:									
Clinic load (Total)	8,492	4,769	3,723	2,943	2,341	602	5,549	2,428	3,121
New patients for diagnosis	2,963	1,831	1,132	1,148	900	248	1,815	931	884
Tuberculosis contacts	2,407	1,508	899	835	688	147	1,572	820	752
Registered prior to 1946	3,122	1,430	1,692	960	753	207	2,162	677	1,485
Age Distribution—New Registrants									
New patients for diagnosis									
Under 15 years	276	193	83	102	82	20	174	111	63
15–24 years	697	415	282	281	214	67	416	201	215
25–34 years	787	488	299	307	238	69	480	250	230
35–44 years	538	295	243	207	156	51	331	139	192
45–64 years	580	375	205	215	180	35	365	195	170
65 years & over	80	64	16	33	29	4	47	35	12
Age not specified	5	1	4	3	1	2	2	0	2
Tuberculosis contacts									
Under 15 years	713	365	348	191	159	32	522	206	316
15–24 years	463	326	137	181	151	30	282	175	107
25–34 years	487	313	174	198	163	35	289	150	139
35–44 years	359	224	135	126	96	30	233	128	105
45–64 years	332	238	94	123	105	18	209	133	76
65 years & over	49	41	8	14	13	1	35	28	7
Age not specified	4	1	3	2	1	1	2	0	2
Source of Referral-New Registrants									
New patients for diagnosis									
Physicians	2,172	1,322	850	773	622	151	1,399	700	699
Public health nurse	158	115	43	74	51	23	84	64	20
Health Department clinics	67	56	11	6	5	1	61	51	10
Case finding project	176	63	113	61	25	36	115	38	77
Other	390	275	115	234	197	37	156	78	78
Tuberculosis contacts									
Physicians	717	630	87	300	258	42	417	372	45
Public health nurse	1,199	564	635	310	239	71	889	325	564
Health Department clinics	43	42	1	12	11	1	31	31	0
Case finding project	21	14	7	12	5	7	9	9	0
Other	427	258	169	201	175	26	226	83	143
Clinic visits (total)	13,241	7,975	5,266	4,714	3,659	1,055	8,527	4,316	4,211
First visits									
New patients for diagnosis	2,963	1,831	1,132	1,148	900	248	1,815	931	884
Tuberculosis contacts	2,407	1,508	899	835	688	147	1,572	820	752
Repeat visits	7,871	4,636	3,235	2,731	2,071	660	5,140	2,565	2,575
Day sessions (total)	6,989	4,412	2,577	2,674	2,049	625	4,315	2,363	1,952
New patients for diagnosis	1,584	1,052	532	722	549	173	862	503	359
Tuberculosis contacts	1,153	780	373	475	392	83	678	388	290
Repeat visits	4,252	2,580	1,672	1,477	1,108	369	2,775	1,472	1,303
Night sessions (total)	6,252	3,563	2,689	2,040	1,610	430	4,212	1,953	2,259
New patients for diagnosis	1,379	779	600	426	351	75	953	428	525
Tuberculosis contacts	1,254	728	526	360	296	64	894	432	462
Repeat visits	3,619	2,056	1,563	1,254	963	291	2,365	1,093	1,272
Number of X-ray examinations									
Diagnostic clinics	8,130	4,816	3,314	..	..	..	..	..	..
New registrants	2,956	1,849	1,107	..	..	..	..	..	..
Contacts of tuberculosis cases	1,854	1,259	595	..	..	..	..	..	..
Repeat visits	3,320	1,708	1,612	..	..	..	..	..	..
X-ray survey of apparently healthy persons	55,079	35,546	19,533	..	..	..	..	..	..
Eastern Health District	5,072	2,870	2,202	..	..	..	..	..	..
Druid Health Center	1,832	..	1,832	..	..	..	..	..	..
Mobile X-ray unit	48,175	32,676	15,499	..	..	..	..	..	..
Pneumothorax Service:									
Total patients	234	162	72	116	95	21	118	67	51
New patients	34	19	15	13	10	3	21	9	12
Old patients	185	130	55	98	80	18	87	50	37
Special patients	15	13	2	5	5	0	10	8	2
Total visits	4,322	3,018	1,304	2,305	1,936	369	2,017	1,082	935

TABLE NO. 8

PERCENTAGE DISTRIBUTION OF WHITE AND COLORED PERSONS EXAMINED IN TUBERCULOSIS CLINICS CLASSIFIED AS TO REASON FOR REFERRAL, AGE, REFERRING AGENCY AND ATTENDANCE DAY OR NIGHT SESSIONS—1946

	Total		White		Colored	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Clinic registrants						
Total	8,492	100.0	4,769	100.0	3,723	100.0
New in 1946	5,370	63.2	3,339	70.0	2,031	54.6
Registered before 1946	3,122	36.8	1,430	30.0	1,692	45.4
New registrants						
Total	5,370	100.0	3,339	100.0	2,031	100.0
Patients for diagnosis	2,963	55.2	1,831	54.8	1,132	55.7
Tuberculosis contacts	2,407	44.8	1,508	45.2	899	44.3
Registrants: Age distribution						
Patients for diagnosis:						
Total with age given	2,958	100.0	1,830	100.0	1,128	100.0
Under 15 years	276	9.3	193	10.5	83	7.4
15–24 years	697	23.6	415	22.7	282	25.0
25–34 years	787	26.6	488	26.7	299	26.5
35–44 years	538	18.2	295	16.1	243	21.5
45–64 years	580	19.6	375	20.5	205	18.2
65 years & over	80	2.7	64	3.5	16	1.4
Tuberculosis contacts						
Total with age given	2,403	100.0	1,507	100.0	896	100.0
Under 15 years	713	29.7	365	24.2	248	38.8
15–24 years	463	19.3	326	21.6	137	15.3
25–34 years	487	20.3	313	20.8	174	19.4
35–44 years	359	14.9	224	14.9	135	15.1
45–64 years	332	13.8	238	15.8	94	10.5
65 years & over	49	2.0	41	2.7	8	0.9
New registrants:						
Source of referral						
Patients for diagnosis						
Total	2,963	100.0	1,831	100.0	1,132	100.0
Physicians	2,172	73.3	1,322	72.2	850	75.1
Public health nurses	158	5.3	115	6.3	43	3.8
Clinics	67	2.3	56	3.0	11	1.0
All other	566	19.1	338	18.5	228	20.1
Tuberculosis contacts						
Total	2,407	100.0	1,508	100.0	899	100.0
Physicians	717	29.8	630	41.8	87	9.7
Public health nurses	1,199	49.8	564	37.4	635	70.6
Clinics	43	1.8	42	2.8	1	0.1
All other	448	18.6	272	18.0	176	19.6
Clinic visits—1946						
Patients for diagnosis						
Total visits	2,963	100.0	1,831	100.0	1,132	100.0
Day sessions	1,584	53.5	1,052	57.5	532	47.0
Night sessions	1,379	46.5	779	42.5	600	53.0
Tuberculosis contacts						
Total visits	2,407	100.0	1,508	100.0	899	100.0
Day sessions	1,153	47.9	780	51.7	373	41.5
Night sessions	1,254	52.1	728	48.3	526	58.5
Return visits						
Total visits	7,871	100.0	4,636	100.0	3,235	100.0
Day sessions	4,252	54.0	2,580	55.7	1,672	51.7
Night sessions	3,619	46.0	2,056	44.3	1,563	48.3

BUREAU OF VENEREAL DISEASES

BUREAU OF VENEREAL DISEASES

Nels A. Nelson, M.D., M.P.H.

Director

On August 1, 1946 Dr. Nels A. Nelson was appointed Director of the Bureau of Venereal Diseases. Dr. M. Alexander Novey had served as Acting Director since December 1, 1943.

Morbidity and Mortality

During the year, 5,558 cases of syphilis, 4,047 cases of gonorrhea and 140 cases of chancroid were reported. The continuing decline in reported syphilis is at least partly due to the fact that fewer men were examined for Selective Service. The increase in reports of gonorrhea during the past two years is probably due, in large part, to the availability of penicillin therapy in the city venereal disease clinics. As shown in Table No. 1 private physicians reported 18.4 per cent of the syphilis, 18.7 per cent of the gonorrhea and 13.6 per cent of the chancroid.

From Tables No. 2 and 3 it will be seen that there were 2,053 cases of primary and secondary syphilis reported, and 1,336 cases of early latent syphilis; a total of 3,389 cases of infectious or potentially infectious syphilis. Congenital syphilis was reported to the number of 74 cases. As shown in Table No. 4 resident deaths from syphilis numbered 169.

Epidemiology and Case Holding

The Bureau of Venereal Diseases investigated contacts of patients with venereal disease as identified in the city venereal disease clinics and as reported by the Baltimore Rapid Treatment Center and miscellaneous other clinics and medical agencies within and outside the City of Baltimore, including the Armed Services.

As shown in Table No. 5 there were 3,038 contacts identified in the city clinics, of which 1,594 or 52.5 per cent were examined and 1,030 or 64.6 per cent of those examined were found to have a venereal disease.

The Rapid Treatment Center reported 501 contacts not previously identified by the medical agencies which referred the original patients to the Center. Of these 242 or 48.3 per cent were examined and 150 or 62.0 per cent of those examined were found to have a venereal disease.

Of the 1,423 contacts reported to the Health Department by other clinics and medical agencies, 495 or 35.0 per cent were examined and 291 or

58.8 per cent of those examined were found to have a venereal disease. These figures are given in Table No. 6.

The Department of Public Health Nursing of Medicine I of the Johns Hopkins Hospital identifies contacts of patients who attend that clinic and investigates those within the City of Baltimore. During the year, 1,472 patients were interviewed and 1,056 of them named 1,467 contacts. Of these, 776 or 52.9 per cent were examined and 425 or 54.8 per cent of those examined were found to have a venereal disease.

No data are available as to contact investigation by other agencies, but the number investigated must be small since none of those agencies employ field investigators in venereal disease. Thus, so far as data are available, 6,429 contacts in the City of Baltimore were investigated, 3,107 or 48.3 per cent were examined, and 1,896 or 61 per cent of those examined were found to have a venereal disease.

The investigation of contacts identified in the Health Department venereal disease clinics and of those reported to the bureau by other agencies, was carried on by a staff of three full time public health nurses in the Bureau of Public Health Nursing, four full time male social workers in the Bureau of Venereal Diseases and, in the Eastern Health District, by all the public health nurses who do this work as a part of their general nursing service. The entire contact investigation service is under the general direction of a nursing supervisor assigned to the Bureau of Venereal Diseases from the Bureau of Public Health Nursing. The follow-up of delinquent patients, for case holding purposes, is carried on largely by the public health nurses of the Bureau of Public Health Nursing, as a function of the general public health nursing service. During the year, 9,734 visits were made for the investigation of contacts and for the follow-up of delinquent patients. Figures are also given in Table No. 1 in the report of the Bureau of Public Health Nursing.

The Clinics

In 1946 venereal disease clinics were operated in 12 locations in the city with a total of 64 sessions a week or at a rate of 3,328 sessions a year. The Baltimore City Health Department operates clinics at 4 of these locations with a total of 27 sessions a week or at the rate of 1,404 a year. Data as to admissions are available only from the Health Department venereal disease clinics and Medicine I of the Johns Hopkins Hospital, but it is believed that the number of admissions to the remainder is relatively small.

The Health Department clinics reported 8,723 admissions during the year, of which 4,213 were for gonorrhea, 4,429 for syphilis and 81 for other venereal diseases. The number of admissions of persons found not to be

infected, or in whom the diagnosis was not completed, is not known. The Johns Hopkins Hospital clinic reported 2,677 admissions, of which 533 were for gonorrhea, 1,444 for syphilis, 66 for other venereal diseases and 634 of persons found not to have a venereal disease. Thus, at least 11,400 persons were admitted to these clinics. The City Health Department venereal disease clinics reported 119,664 patient visits, and the Johns Hopkins Hospital clinic reported 21,120 patient visits; a total of 140,784 as shown in Table No. 7.

Plans were drawn for a new Health Department clinic at 414 North Calvert Street and construction was begun. Plans also have been completed for the reorganization of the venereal disease clinics at the Druid Health Center.

Penicillin Clinic

The weekly clinic for the treatment of gonorrhea with penicillin admitted 2,950 patients during the year. These were patients whose infections failed of cure with sulfonamide, together with their marital partners or paramours. A total of 477,000,000 units of penicillin was administered. The routine total dose was 150,000 units, given at the rate of 50,000 units every two hours to three doses. Under some conditions, larger doses are prescribed.

Baltimore Rapid Treatment Center

During this second year of its operation, the Baltimore Rapid Treatment Center, a division of the Baltimore City Hospitals, admited 1,986 patients for the treatment of infectious syphilis as shown in Table No. 8. Of these, 174 were residents of the counties of Maryland, 13 were veterans and residents of other States and 1,799 were residents of Baltimore. The Health Department venereal disease clinics referred 1,278 of the patients to the Center, private physicians referred 115 and other clinics and medical agencies referred 593. An additional 37 patients were admitted but not treated because they either did not have syphilis at all or did not have infectious syphilis; and 45 patients who were directed to report to the Center subsequently elected to take treatment in the clinics or elsewhere and did not go to the Center. Relapse and reinfection accounted for 80 of the year's admissions.

Early in the year it became necessary to limit admissions to residents of the City of Baltimore because of the high daily census at the Center. In September, however, it was possible to resume admission of patients from the five counties of Anne Arundel, Baltimore, Carroll, Harford and Howard all immediately adjacent to the City of Baltimore, subject to the condition that the census at the Center on the day of application for ad-

mission was not over 70 patients. The City Health Department continued to serve as the admitting agency for the Center.

City Ordinance No. 217

City Ordinance No. 217 and City Health Department Regulation 1 under this ordinance, were invoked in 15 instances of failure of persons with infectious syphilis to take treatment. Nine of the 15 were colored males, 2 were colored females, 2 were white males and 2 were white females.

In 7 cases the infected person reported voluntarily to the Rapid Treatment Center on receipt of a letter from the Commissioner of Health directing the patient to take treatment or become subject to the provisions of the ordinance. It was necessary to summon the patient to court in 4 instances of 2 white females, 1 colored male and 1 colored female. The police magistrates fined all the offenders but offered to suspend payment if the patient went immediately to the Center. All 4 went to the Center and completed treatment as required. Two of the 15 persons could not be found and 2 returned to clinics for treatment.

To date, since the adoption of Regulation 1 on August 24, 1945, it has been invoked in only 26 cases and it has been necessary to take court action against 7 of these.

On December 2, 1946 City Ordinance No. 217 was amended by City Ordinance No. 693 which made it permanent and on December 3, 1946 Health Department Regulation 1 under this ordinance was readopted.

Staff Training

Seven City Health Department nurses received two weeks' training in intravenous and intramuscular techniques at Medicine I of the Johns Hopkins Hospital. This brings to 33 the total number of nurses trained in these techniques since the program was begun in January, 1944. Nineteen of these nurses are still serving in the Health Department venereal disease clinics. It is hoped that in the near future nurses may be employed as treatment technicians on a part time contract basis so as to relieve public health nurses for duty in the field.

Four additional Negro physicians from the Health Department venereal disease clinics were appointed Assistant Clinic Physicians in Medicine I of the Johns Hopkins Hospital during the year. Two of these physicians completed the basic six months training and accepted invitations to remain an additional six months. The other two had not completed their first six months training at the end of the year. To date, ten Negro physicians from the Health Department venereal disease clinics have received these appointments.

Baltimore Venereal Disease Council

The Baltimore Venereal Disease Council held three meetings during the year and continued to serve as a forum for the discussion of many problems relating to venereal disease control, various aspects of which are the concern of the agencies represented on the Council.

The Armed Services

With the great reduction in the Armed Services which followed the cessation of hostilities, many changes took place in the local military organization. The Third Service Command was disbanded and its functions absorbed by the Second Army with headquarters in Baltimore. The position of Venereal Disease Control Officer was abolished, the Chief of Preventive Medicine, Medical Corps, Second Army, assumed responsibility for venereal disease control. There are no longer any venereal disease control officers in the several military establishments in the area, and the U. S. Public Health Service withdrew the liaison officer. The monthly meetings which were held by the City Health Department with representatives of the Third Service Command and the U. S. Public Health Service were discontinued.

The Director and Assistant Director of the Bureau of Venereal Diseases continued to attend the monthly meetings of the Joint Army-Navy Disciplinary Control Board at which problems relating to the control of venereal disease in the Armed Services were discussed. The bureau continued to investigate contacts reported by the Armed Services, although they were greatly reduced in number and it continued to give follow-up service to men discharged from the Armed Services whose infections were not adequately treated.

Personnel

Nels A. Nelson, M.D., M.P.H., Director
Harry B. Smith, M.D., M.P.H., Assistant Director
Richard D. Hahn, M.D., Medical Supervisor
Louis E. Harmon, M.D., Medical Supervisor
Bowman J. Hood, M.D., Medical Supervisor
Ernest W. Shervington, M.D., Medical Supervisor
G. Raynor Browne, M.D, Health Officer
William Berkley Butler, M.D., Health Officer
Harris Goldman, M.D., Health Officer
George C. Page, M.D., Health Officer
J. Douglas Sheppard, M.D., Health Officer
Charles T. Woodland, M.D., Health Officer
Ralph J. Young, M.D., Health Officer
Maurice L. Adams, M.D., Clinic Physician

Maurice L. Barksdale, M.D., Clinic Physician
Charles R. Campbell, M.D., Clinic Physician
James D. Carr, M.D., Clinic Physician
John Collinson, M.D., Clinic Physician
Richard H. Hunt, M.D., Clinic Physician
R. Donald Jandorf, M.D., Clinic Physician
William Atwell Jones, M.D., Clinic Physician
Albert L. Laforest, M.D., Clinic Physician
Renold B. Lighston, Jr., M.D., Clinic Physician
Harry Linden, M.D., Clinic Physician
Robert McDaniel, M.D., Clinic Physician
Israel P. Meranski, M.D., Clinic Physician
George H. Pendleton, M.D., Clinic Physician
Osborne B. Dixon, Senior Social Worker
William P. Duffy, Senior Social Worker
Reginald Jefferson, Senior Social Worker
T. Evans Fernandis, Jr., Junior Case Worker
Maisie W. Burton, Senior Stenographer
Yetta Glick, Senior Stenographer
Mattie May Gwynn, Senior Stenograher
Beatrice Kravetz, Senior Stenographer
Elinor Sauter, Junior Stenographer
Grace Hawes, Junior Stenographer
Anne S. Elliott, Senior Clerk
Strelsa Johnson, Senior Clerk
James P. Lynch, Senior Clerk
Daisy B. Johnson, Clinic Clerk
Leo M. White, Clinic Clerk
Mary E. Wilson, Clinic Clerk
William B. Lucas, Janitor
Mary Nutter, Janitress

TABLE NO. 1

REPORTED CASES OF VENEREAL DISEASE, ACCORDING TO SOURCE OF REPORT—1942-1946

Source of Report	Syphilis					Gonorrhea					Chancroid				
	1946	1945	1944*	1943*	1942*	1946	1945	1944	1943	1942	1946	1945	1944	1943	1942
Total	5,558	8,402	10,972	14,803	11,293	4,047	4,192	2,930	3,349	3,388	140	90	117	161	162
Private Physicians	1,024	3,520	4,197	5,281	3,271	753	1,313	744	1,202	998	19	14	1	5	2
City Health Department Clinics	2,647	2,334	2,875	1,824	1,939	2,658	1,703	1,082	1,038	1,195	66	54	69	70	128
Other Medical Agencies	1,887	2,548	3,900	7,798	6,083	636	1,176	1,104	1,109	1,195	55	22	47	86	32

* Positive blood test reports from City Health Department Bureau of Laboratories counted as cases.

TABLE NO. 2

REPORTED CASES OF VENEREAL DISEASE, ACCORDING TO COLOR AND SEX OF PATIENT—1946

Color and Sex of Patients	Syphilis						Gonorrhea	Chancroid
	Total	Primary and Secondary	Early Latent	Late and Late-Latent	Congenital	Stage not Stated		
Total	5,558	2,053	1,336	1,568	74	527	4,047	140
White	1,272	587	233	344	18	90	1,126	21
Male	731	377	102	206	3	43	810	18
Female	541	210	131	138	15	47	316	3
Colored	4,286	1,466	1,103	1,224	56	437	2,921	119
Male	2,263	834	502	614	23	290	2,518	98
Female	2,023	632	601	610	33	147	403	21

TABLE NO. 3

REPORTED CASES OF CERTAIN VENEREAL DISEASES ACCORDING TO COLOR, SEX AND AGE OF PATIENT—1946

Age	Total	White			Colored		
		Total	Male	Female	Total	Male	Female
Congenital Syphilis							
All Ages	74	18	3	15	56	23	33
Under 1 year	19	1	..	1	18	8	10
1–9 years	11	..	..	..	11	5	6
10–19 years	22	5	..	5	17	7	10
20 years and over	20	12	3	9	8	3	5
Age unspecified	2	..	..	..	2	..	2
Acquired Syphilis							
All Ages	5,484	1,254	728	526	4,230	2,240	1,990
Under 15 years	51	3	2	1	48	17	31
15–19 years	633	89	25	64	544	177	367
20–24 years	1,490	307	162	145	1,183	558	625
25–29 years	1,212	248	143	105	964	530	434
30–34 years	731	174	97	77	557	321	236
35–39 years	481	121	75	46	360	218	142
40–44 years	313	88	62	26	225	162	63
45–49 years	211	68	47	21	143	101	42
50 years and over	362	156	115	41	206	156	50
Gonorrhea							
All Ages	4,047	1,126	810	316	2,921	2,518	403
Under 15 years	79	9	4	5	70	26	44
15–19 years	613	129	61	68	484	371	113
20–24 years	1,708	422	299	123	1,286	1,142	144
25–29 years	922	277	206	71	645	584	61
30–34 years	375	140	122	18	235	213	22
35–39 years	201	84	62	22	117	99	18
40–44 years	82	34	29	5	48	47	1
45–49 years	39	17	14	3	22	22	..
50 years and over	28	14	13	1	14	14	..

TABLE NO. 4

RESIDENT DEATHS ATTRIBUTABLE TO SYPHILIS, BY COLOR—1942-1946

Certified Cause of Death	1946			1945			1944			1943			1942		
	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored
Total	169	62	107	202	76	126	183	59	124	181	76	105	201	94	107
Syphilis in infants under 1 year of age	10	2	8	11	5	6	13	2	11	9	3	6	8	..	8
General paralysis of the insane	44	15	29	54	15	39	32	5	27	35	12	23	56	26	30
Tabes dorsalis	..	..	..	4	3	1	4	3	1	4	3	1	10	7	3
Aneurysm of the aorta	54	22	32	71	23	48	50	17	33	55	20	35	53	30	23
Other forms of syphilis	61	23	38	62	30	32	84	32	52	78	38	40	74	31	43

TABLE NO. 5

RESULTS OF INVESTIGATION OF CONTACTS OF CITY CLINIC PATIENTS BY COLOR, SEX OF CONTACT AND DISEASE—1946

Color and Sex of Contact, and Disease	Total Contacts Named	Previously Known	Not Found	Found: Not Examined	Examined	Diagnosis in Those Examined*					Infections Discovered
						Primary & Secondary Syphilis	All Other Syphilis	Gonorrhea	Not Infected	Examination Not Complete	
Total	3,038	135	863	446	1,594	413	267	639	461	103	1,319
Total Syphilis	1,421	81	289	146	905	341	186	96	338	80	623
White	315	13	51	21	230	108	31	29	75	11	168
Male	185	10	23	13	139	62	14	18	48	8	94
Female	130	3	28	8	91	46	17	11	27	3	74
Colored	1,106	68	238	125	675	233	155	67	263	69	455
Male	553	45	68	76	364	124	65	39	155	46	228
Female	553	23	170	49	311	109	90	28	108	23	227
Total Gonorrhea	1,617	54	574	300	689	72	81	543	123	23	696
White	320	4	105	23	188	16	8	184	42	5	208
Male	133	4	37	6	86	5	1	79	17	..	85
Female	187	..	68	17	102	11	7	105	25	5	123
Colored	1,297	50	469	277	501	56	73	359	81	18	488
Male	317	23	64	50	180	19	23	127	29	5	169
Female	980	27	405	227	321	37	50	232	52	13	319

* Some contacts were found to have multiple infections, hence the sum of the diagnoses is greater than the number of contacts examined.

TABLE NO. 6

RESULTS OF INVESTIGATION OF CONTACTS REFERRED BY OTHER AGENCIES CLASSIFIED BY COLOR, SEX OF CONTACT AND DISEASE—1946

Color and Sex of Contact, and Disease of Patient	Total Contacts Named	Previously Known	Not Found	Found: Not Examined	Examined	Diagnosis in Those Examined*					Infections Discovered
						Primary & Secondary Syphilis	All Other Syphilis	Gonorrhea	Not Infected	Examination Not Complete	
Total	1,924	41	887	259	737	137	127	209	229	67	473
Total Syphilis	846	32	357	87	370	115	81	43	97	39	239
White	228	11	96	14	107	36	10	17	39	6	63
Male	52	2	25	4	21	8	2	3	7	1	13
Female	176	9	71	10	86	28	8	14	32	5	50
Colored	618	21	261	73	263	79	71	26	58	33	176
Male	275	9	118	47	101	31	19	9	28	16	59
Female	343	12	143	26	162	48	52	17	30	17	117
Total Gonorrhea	1,078	9	530	172	367	22	46	166	132	28	234
White	452	2	239	53	158	7	4	88	63	6	99
Male	29	0	14	1	14	3	0	0	9	2	3
Female	423	2	225	52	144	4	4	88	54	4	96
Colored	626	7	291	119	209	15	42	78	69	22	135
Male	141	2	51	30	58	8	21	7	15	11	36
Female	485	5	240	89	151	7	21	71	54	11	99

* Some contacts were found to have multiple infections, hence the sum of the diagnoses is greater than the number of contacts examined.

TABLE NO. 7

REPORT OF VENEREAL DISEASE CLINICS—1946

Treatment Status on Admission: Visits by All Patients	Total	Syphilis						Gonorrhea	Chancroid	Granuloma Inguinale	Lymphogranuloma Venereum	Not Infected with V.D.	For Diagnosis
		Total Syphilis	Primary and Secondary	Early Latent	Late and Late Latent	Congenital	Stage not Stated						
City Clinics													
Total Admissions	8,723	4,429	1,343	1,080	826	39	1,141	4,213	60	14	7	N.S.	..
No Previous Treatment	6,644	3,083	904	600	442	31	1,106	3,484	58	13	6	N.S.	..
Previous Treatment	2,079	1,346	439	480	384	8	35	729	2	1	1	N.S	..
Visits	119,664	57,975						22,535	13,621				25,533
Other Clinics*													
Total Admissions	2,677	1,444	259	202	908	50	25	533	34	13	19	634	..
No Previous Treatment	1,854	690	241	113	294	17	25	470	34	8	18	634	..
Previous Treatment	823	754	18	89	614	33	0	63	0	5	1	..	..
Visits	21,120	10,149						3,703	222			..	7,046

* The Johns Hopkins Hospital, Medicine I: the only other clinic reporting.

TABLE NO. 8

ADMISSIONS TO BALTIMORE RAPID TREATMENT CENTER FOR INFECTIOUS SYPHILIS—1946

Referring Agency	Residence			
	Total	City of Baltimore	Counties of Maryland	Out of State
Total	1,986*	1,799	174	13
City Clinics	1,278	1,247	31	0
No. 1	406	386	20	0
No. 3	41	39	2	0
Druid Health Center	464	458	6	0
Somerset Health Center	367	364	3	0
Other Agencies	708	552	143	13
Johns Hopkins Hospital	307	275	31	1
University Hospital	96	92	4	0
Other Agencies	111	38	71	2
Armed Services	79	47	22	10
Private Physicians	115	100	15	0

80 readmissions for relapse or reinfection.

BUREAU OF OCCUPATIONAL DISEASES

BUREAU OF OCCUPATIONAL DISEASES

John M. McDonald, M.D., D.P.H.

Director

Many of the problems of industrial reconversion which had arisen during 1945 were carried over into 1946. Scarcity of essential materials and the troubled business conditions that seem to be the inevitable aftermath of global war tended to hinder the progress of reconversion. In such circumstances it was necessary to continue operations on an emergency basis because it was impossible to establish a set program for industrial hygiene.

Special Activities

A complete revision was made of the Health Department bulletin, "Occupational Disease Control, Industrial Health Series—No. 1." The latest additions to the schedule of occupational diseases were included as well as the amended list of concentration limits. The format was improved by the use of a cover and rearrangement of the material. Following the annual custom of many years' standing copies of this bulletin were furnished to the interns of every hospital in the city.

The value of blood lead determinations as practiced in the Bureau of Laboratories of the City Health Department received further recognition when two state health organizations requested information about the procedure.

The director spent three days at the Seventy-fifth Annual Meeting of the American Public Health Association, and a like period of time at the Seventh Annual Congress on Industrial Health sponsored by the American Medical Association. The monthly conferences with the members of the Division of Industrial Health of the Maryland State Department of Health were continued, being devoted in large part to the formulation of a tentative industrial sanitary code. The program for taking chest X-rays of industrial personnel was continued although it was unfavorably affected by wide variations in industrial employment. The regular follow-up of occupational diseases was carried on. Many visits were paid to industrial nurses and the available services in the City Health Department were called to their attention. For the first time it was possible for the bureau to obtain a complete directory of industrial nurses employed in Baltimore and the metropolitan area.

An intensive study was made of BAL (British Anti-Lewisite) to deter-

mine the advisability of its use in an ointment as a preventive measure against arsenical and chrome dermatitis. After consulting several of the foremost authorities in Baltimore and at Edgewood Arsenal, it became apparent that its use could not be recommended because BAL itself is a skin sensitizer and its odor is sufficiently disagreeable to preclude its use.

Education

With the assistance of Dr. Wilmer H. Schulze, Director of the Sanitary Section, three seminars each of six hours' duration were given to the senior medical students of the Johns Hopkins Medical School. A two-hour seminar was held for a class in Public Health Administration from the Johns Hopkins School of Hygiene and Public Health. A student from the same school was given in-service training in the bureau for six hours a week over a period of eight weeks. The director contributed one lecture to the In-service Training Course conducted by the Sanitary Section of the Department and attended most of the other lectures given in that course. Assistance was given in the writing of two radio scripts. The director served as a member of the Industrial Committee of the Baltimore Safety Council.

Miscellaneous Activities

Examinations were made of three employees in connection with the study of lead exposures in shooting galleries. On several occasions the director substituted for Dr. James E. Talbott, Medical Examiner for the City Service Commission, and examined about 50 applicants for employment by the Municipal Government. Another examination was that of a patient suffering from lead palsy, a condition which is now extremely rare.

The article on "Exposure to Dinitrocresol" in the September, 1943 issue of *Baltimore Health News*, was quoted in *Industrial Toxicology*, by Hamilton and Johnstone, Oxford Medical Publications. A description of the work of the bureau was published in *The North Baltimore Times*, for Thursday, December 12, 1946.

After the resignation of Dr. H. Warren Buckler, the director carried on the work of investigating absences of employees of the Health Department which extended for more than 24 working days. In this connection, 25 investigations were made of 21 absentees.

Many inquiries on a wide range of subjects were received during the year. The prevention of absenteeism from respiratory infections prompted several requests for information about air disinfection by ultra-violet light or chemicals, and the use of influenza vaccine. Continued interest in lead poisoning was manifested by two local physicians, one of whom

visited the bureau to discuss a case of this disease; while the other asked for a study of a local printing plant in order to evaluate lead exposures therein. Other inquiries concerned the use of DDT in disinfesting transit vehicles, the sequelae of carbon monoxide poisoning, the occupational hazards involved in working in milk plants, and the establishment of a medical program in an industrial plant. While the answering of inquiries involved the expenditure of considerable amounts of time, it is felt that such time is well spent because it promotes a close relationship between the citizens of the community and the Health Department.

The following summary shows the 196 cases of occupational diseases officially reported to the Health Department in 1946:

OCCUPATIONAL DISEASES REPORTED—1946

Dermatitis	116
Synovitis	35
Blisters	17
Bursitis	10
Lead poisoning	6
Chrome ulceration	4
Carbon tetrachloride poisoning	3
Silicosis	2
Allergy	1
Benzol poisoning	1
Zinc poisoning	1
Total	196

Personnel

John M. McDonald, M.D., D.P.H., Director
Selma Aebli, Senior Stenographer

BUREAU OF CHILD HYGIENE

BUREAU OF CHILD HYGIENE

M. Alexander Novey, M.D.

Director

Adequate medical and public health nursing supervision for all mothers starting early in pregnancy and continuing through labor and the puerperium and for all babies from the moment of their birth through the period of adolescence until they reach maturity are both essential if the children of Baltimore are to develop physically and mentally healthy.

Infant Mortality

The infant mortality rate for 1946 was 35.5 per 1,000 live births, as compared with 39.7 for 1945. The lowering of this rate in recent years is most gratifying but there is still much to be accomplished in this field through the more widespread application of all the measures known to scientific medicine for the prevention and treatment of conditions common to the early years of life.

Premature Infant Care

The reduction in the infant mortality rate for this year reflects the improved facilities for the care of infants born prematurely. In January a specialized nursery for premature infants was opened at the Harriet Lane Home of the Johns Hopkins Hospital and with the assistance of Dr. Francis T. Schwentker and Dr. Janet Hardy of the Johns Hopkins Hospital and the Bureau of Public Health Nursing an emergency transportaton service for these infants was set up. The service was taken over by the City Board of Fire Commissioners on June 17 with the utilization of the municipal ambulances for the emergency transportation of newborn premature infants from hospital to hospital and from the home to the hospital.

Oral and printed instructions were given by the Health Department to the ambulance attendants in connection with the transportation of these infants and premature infant carriers were devised, purchased and equipped by the Health Department. Seventy-one premature infants were transported in the municipal ambulances during the year since the service was transferred to the Fire Department. Prior to the transfer of this service 24 such infants had been transported by the public health nurses. With the development in the facilities for the care of premature infants in the city a further reduction in infant mortality, especially during the first

month of life, can be expected since prematurity is the greatest single cause of death among infants less than one year of age.

Education

There were numerous instances of in-service training for the public health nurses and participation by the Director of the Bureau in community public health education through addresses to parent-teacher associations and other groups and the Health Department radio dramas in which the Director of the Bureau has participated each week since October 2, 1943. The bureau director has been pleased to have visitors from England, France, Italy, Greece, India, Czechoslovakia and several South American Countries. It is felt that the review of the activities of the bureau with such public health persons has been mutually profitable.

On September 30 and October 1 the Director of the Bureau participated in the regional meeting of the American Academy of Pediatrics Study of Child Health Services which was held in Washington, D. C.

Well Baby Clinics

On January 1, 1946 the sixth transfer of clinics of the Babies Milk Fund Association was made effective. The three clinics transferred to the bureau with a total of six sessions each week for white and colored children were located at 508 South Oldham Street; at the Church of the Messiah, Harford Road and White Avenue and at Public School No. 230, Hudson Street and Highland Avenue. The clinic conducted at 518 South Oldham Street was moved on April 3 to the Greek Community School at 520 South Ponca Street, the clinic formerly held in the Church of the Messiah by the Babies Milk Fund Association was discontinued and a clinic opened at Public School No. 236, Old Harford Road and Christopher Avenue in its place and the clinic formerly held at Public School No. 230 was discontinued on January 1 and was replaced by a clinic at the Southeastern Health District Building.

On April 5 a new well baby clinic was established in the Administration Building of the Holabird Homes for colored children, to be held once weekly. On October 16 a new clinic was opened in the Cherry Hill Homes to be held twice weekly for colored children.

Well baby clinics were operated at 38 locations during the year with a total of 71 sessions each week. The total number of visits made to the well baby clinics was 42,892 in 1946, as compared with 35,180 in 1945, including special visits made to the clinics by children who were not officially registered as clinic patients. The Bureau of Child Hygiene continued to cooperate with the Division of Nutrition in the distribution of

the printed wall cards on the feeding of infants and children from birth to six years of age.

Records of Children Under Six Years

There were 19,485 *Records of Children Under Six Years* assigned the Bureau of Public Health Nursing for neonatal visits and delivery of the notifications of birth registration. In addition there were 17,605 visits made by public health nurses for diphtheria prevention follow-up to infants over eight months of age.

Ophthalmia Neonatorum

Cases of ophthalmia neonatorum reported to the Health Department were treated by public health nurses where there was an inability to afford the services of a private physician. The use of penicillin solution for the treatment of ophthalmia neonatorum was begun on a trial basis in the Eastern Health District and continued throughout the major portion of the year.

REPORTED CASES OF OPHTHALMIA NEONATORUM—1946

Cases reported and investigated by Health Department	400
Cases assigned for nursing care	266
Total visits by public health nurses	1725
Cases sent to Sydenham Hospital for treatment	2
Cases sent to other hospitals for treatment	5

Diphtheria Prevention

There were 17,042 six months greeting cards urging diphtheria toxoid inoculation sent by the Commissioner of Health to resident infants. The procedure was continued through which infants who reached eight months of age and had not received the preventive toxoid inoculation were visited by public health nurses and the parents urged to protect the child against this disease. As in the past, those infants who reached ten months of age and had not received the preventive toxoid inoculation were again visited by public health nurses and further attempts made to inoculate the children. Physicians in private practice reported to the Health Department that 8,309 children were given diphtheria toxoid inoculations as compared with 7,887 in 1945. In the well baby clinics, including 1,009 children in the Babies Milk Fund Association clinics, preventive toxoid inoculations were given to 10,455 children as compared to 9,951 in 1945. Vaccinations against smallpox were given to 6,709, including 643 children in the Babies Milk Fund Association clinics, as compared with 5,010 in 1945. The Bureau of Child Hygiene cooperated with the Bureau of Communicable

Diseases in many phases of its diphtheria prevention program, particularly in those aspects of the work involving the public health nurses and the clinic facilities of the Health Department.

Child-Caring Institutions

The Bureau of Child Hygiene inspected 439 boarding homes for children in 1946. Of these homes 281 were licensed by the Commissioner of Health and 124 were inspected by the bureau prior to licensing by the City Department of Public Welfare. Licenses were refused to 22 homes because they did not meet the Health Department requirements. Eleven homes were inspected at the request of various organizations for reasons other than licensing. One home was inspected for the Maryland State Department of Public Welfare. There was no death of a child in any boarding home licensed by the Commissioner of Health during 1946.

In the spring and summer of 1946 the United Foster Homes Campaign obtained new foster homes for children. There were 136 new homes licensed in 1946 as compared to 77 in 1945. The new foster homes of the Department of Public Welfare of Baltimore were inspected by the Bureau of Child Hygiene but not licensed by the Commissioner of Health. One hundred and twenty-four of their homes were inspected in 1946 as compared to 25 in 1945. This increase was probably due to a great extent to the United Foster Homes Campaign.

Day-Care Centers

The two licensed child-care centers conducted under the Department of Recreation and financed from Lanham Act Funds closed in the spring of 1946 when that fund was withdrawn. The five day nurseries renewed their licenses in 1946. The average daily attendance of the day nurseries was slightly lower than in 1945.

Forty-eight nursery schools were licensed during the year and twelve of these were new. There was an average monthly enrollment of 1,368 children in nursery schools, excluding the months of June, July and August. The average daily attendance of children in nursery schools was 1,119 except for the three summer months when the average daily attendance was 596. The nursery schools in all the private and public schools were closed during the summer as were many of the nursery schools conducted by private individuals.

In the spring of 1946 seven of the war nursery schools that were financed from the Lanham Act Funds closed. Seven other war nursery schools that were also financed from the Lanham Act Funds continued to operate and have been financed from fees collected from the parents of the children. Four of these schools were for white children and three for colored children.

In 1946 there were 294 cases of communicable diseases in nursery schools as compared to 358 in 1945.

Maternity Hygiene

With the cessation of hostilities the number of resident births which had shown a decrease in the past two years rose, as was expected, to 21,111 reported in 1946 as compared with 17,848 in 1945. The number of hospital deliveries for the year was 83.8 per cent of the total number of deliveries in the City, as compared to 86.0 per cent in 1945. The percentage of births reported by midwives was 3.2 in 1946, as compared with 3.0 in 1945.

Maternal Mortality

The resident maternal mortality rate was 1.2 per 1,000 live births, as compared with 1.5 in 1945. The Physicians' Conference on Maternal Mortality was held each month throughout the year except August as in previous years as a part of the activities conducted by the City Health Department and the City Medical Society Joint Committee on Maternal Mortality. It is still felt by many that this phase of the community effort to obtain a low maternal mortality rate is in great measure responsible for the all-time low rate which we are able to report for 1946.

Emergency Maternal Program

Because of the extreme shortage of nursing personnel at the Baltimore City Hospitals during the year it was necessary to curtail greatly the number of wives of members of the armed forces receiving prenatal care in the Health Department clinics and delivery at the Baltimore City Hospitals under the emergency Maternity and Infant Care Program. There were, however, 72 expectant mothers who received such care under this program during the year. This shortage of nursing personnel in addition prevented the acceptance of many other expectant mothers who otherwise were eligible for prenatal and delivery care under Health Department and Department of Public Welfare auspices.

X-ray Examinations

There were 1,478 chest x-ray examinations made at the Druid Health Center of patients attending the University of Maryland and the City Health Department prenatal clinics and 598 such examinations made in the Eastern Health District. This type of examination of expectant mothers has become more and more a routine procedure throughout the City in clinics as well as for patients of private physicians and represents another step in the direction of improved maternity care in the community.

Rh Blood Typing

The examination of the blood of patients attending the Health Department prenatal clinics for the Rh blood factor which began late in the preceding year, was continued throughout 1946. The Baltimore Rh Typing Laboratory expanded rapidly and the blood of approximately 2,000 clinic and private patients is examined each month for the Rh factor. The community-wide recognition of the value of this type of examination has undoubtedly saved the lives of a considerable number of infants who otherwise might have died.

Maternity Hygiene Clinics

The Health Department prenatal clinics continued to be held throughout the year at eight locations in the city with a total of twelve clinic sessions each week. There were 1,387 patients delivered in the Baltimore City Hospitals who received prenatal care at these clinics as compared with 692 in 1945.

Midwives

There were 218 prenatal cases referred by midwives to Health Department clinics during the year. Of these, 30 were white and 188 were colored patients, and 48 were primipara and 170 were multipara. This type of patient was given all of the advantages of adequate care in the Health Department clinics and was delivered by the midwife unless some abnormality developed in which event hospital care was made available. No license has been issued to a midwife since December 3, 1936.

On April 29, 1946 the State Board of Health adopted a series of new regulations covering the licensing of midwives which declare all midwife licenses in effect on January 1, 1946 to be valid for a period of two years after which date they shall become null and void. In addition requirements for licenses and regulations governing the examination of midwives and the limitations of their practice are also included in these regulations.

Maternal Mortality

Three patients registered at Health Department clinics died at the Baltimore City Hospitals. Two of these were due to maternal causes and one to a non-maternal cause. The maternal mortality rate for the entire clinic group was 1.4 per 1,000 as compared with a rate of 4.3 recorded in 1945.

The histories of the three fatal cases of patients registered in the Health Department clinics are as follows:

Maternal Deaths

1. Health Department Registration No. 17,027: Anesthesia.

Age 20, colored, multipara (para 1-0-0-1), serologic test for syphilis negative, pelvis normal, estimated date of confinement February 4, 1946. This patient was first admitted to the hospital in July, 1945, for hyperemesis gravidarum. She was kept there for three days and discharged improved; otherwise her prenatal course was uneventful. Following discharge from the hospital the patient was not seen again until December 26 when she registered with the Health Department prenatal clinic. The height of the fundus at this time was 26 cms. The fetal heart was heard in the left lower quadrant and the blood pressure was 110/72. She was seen at the prenatal clinic on three occasions and presented no abnormalities, the chest x-ray examination being negative and the Rh type positive. She was admitted to the hospital for the second time on January 29, 1946 in labor and at term. After a total labor of 15 hours 32 minutes the patient was delivered under gas oxygen and ether anesthesia at 12:53 A.M. on January 30 of a full term living child by a low forceps operation during which she sustained a third degree laceration of the perineum. The third stage was uneventful and the blood loss was normal. It was noted that during the anesthesia there was some vomiting and it was necessary to use suction repeatedly. The patient showed considerable dyspnoea and when the anesthesia was discontinued oxygen was administered for about 15 minutes. The blood pressure at this time was 98/40 and at 2:20 A.M. it had risen to 104/52. At 3:00 A.M. the patient began to react from her anesthesia, the pulse being very rapid, approximately 160 per minute, of good quality and regular, respirations were labored and rapid but there was no cyanosis and the neck veins were not distended. Examination of the chest revealed coarse rales throughout both lung fields. The heart was not enlarged and the heart sounds were of good quality with no murmurs present. The patient appeared extremely restless and a frequent unproductive cough was noted. She was given morphine and on examination an increasing abdominal distension was noted. In spite of stimulation the patient died approximately four hours after delivery. An autopsy was performed and massive bronchopneumonia was found in the right lung, a condition which, in the opinion of the pathologist, had existed prior to admission.

2. Health Department Registration No. 17,362: Myocardial Failure.

Age 21, colored, primipara (para 0-0-0-0), serologic test for syphilis positive, Rh type positive, pelvis normal, estimated date of confinement June 4, 1946. The patient registered at the prenatal clinic on April 16 giving a family history of her mother having died of a cerebral vascular accident. Her own personal history was negative except for pneumonia in childhood. She was treated for her syphilis during pregnancy and her general examination was within normal limits, her blood pressure being normal and her weight gained during pregnancy not excessive. Labor began on July 3 at 1:00 A.M. and she entered the hospital at 4:20 A.M. On admission her pulse rate was 88 and her respirations 20 per minute. The temperature was 98 . She was given Vitamin K by mouth and allowed to continue in labor. This progressed normally without analgesia and at 2:00 A.M. on July 3 she was delivered by a low forceps operation under gas oxygen and ether anesthesia of a full term living child weighing 7 pounds eleven ounces. The third stage of labor was uneventful and the total blood loss was estimated not to exceed 100 cc. Examination of a specimen of urine obtained by catheter at the time of delivery was negative for albumin and sugar. Immediately after the completion of the episiotomy repair it was noted that the patient's pulse and respirations were elevated. Oxygen was administered by means of an anesthetic mask strapped over the patient's face. Shortly after this it was noted that the patient had ceased to breathe and the pulse was unobtainable. Artificial respiration and intravenous ephedrine were given but to no avail and the patient was pronounced dead one hour and twenty five minutes after delivery.

Non Maternal Death

1. Health Department Registration No. 17,438: Tuberculosis.

Age 37, colored, multipara, (para 1-0-0-1), serologic test for syphilis positive, pelvis normal, estimated date of confinement August 19, 1946. The previous obstetrical history revealed a normal full term delivery on December 4, 1942 followed by a normal puerperium. At this time the patient was known to have a tuberculous infection. She gave a history of being in a tuberculosis sanitarium in 1944 and 1945. She was first seen at the Health Department Prenatal clinic on May 7 at which time she was awaiting hospitalization in the Baltimore City Hospitals tuberculosis division. She was approximately 24 weeks pregnant and x-ray examination of the chest revealed very advanced tuberculosis. Following one additional visit to the prenatal clinic on May 10 at which time she reported some vaginal bleeding the patient was admitted to the surgical ward of the hospital as an emergency admission with a diagnosis of a threatened miscarriage. On May 17 she was transferred to the obstetrical service of the hospital and physical examination revealed a poorly developed female with a soft systolic murmur over the apex and chest findings indicative of her tuberculous lesion. Pelvic examination revealed two small bleeding polyps which protruded from the external os which were

removed. She showed a spiking temperature at this time and was transferred back to the tuberculosis division. On June 5 she delivered spontaneously of a premature live child weighing 2 pounds eleven ounces which lived three days. Following this the patient's condition remained critical and she died six days postpartum of her tuberculosis infection.

Maternity Hospitals

The following tabulation gives a summary of the maternity hospitals inspected and licensed in 1946.

Licensed as of December 31, 1946		16
New licenses issued	0	
Relicensed	16	
Inspected		18
Licenses held in abeyance		2

Personnel

M. Alexander Novey, M.D., Director
Mary Cook Willis, M.D., Assistant Director
J. W. V. Clift, M.D., Health Officer
W. Allen Deckert, M.D., Health Officer
Walter E. Grempler, M.D., Health Officer and Clinic Physician
Lucille Liberles, M.D., Health Officer
I. A. Siegel, M.D., Health Officer
McDonald M. Bando, M.D., Clinic Physician
Walter P. Block, M.D., Clinic Physician
Helen Bowie, M.D., Clinic Physician
Alfred B. Dixon, M.D., Clinic Physician
Solon A. Dodds, M.D., Clinic Physician
Hania Wislicka Ehlers, M.D., Clinic Physician
Mary L. Hayleck, M.D., Clinic Physician
Clewell Howell, M.D., Clinic Physician
Renold B. Lighston, Jr., M.D., Clinic Physician
Jerry C. Luck, M.D., Clinic Physician
C. F. Maloney, M.D., Clinic Physician
John Huff Morrison, M.D., Clinic Physician
Frances E. M. Read, M.D., Clinic Physician
Alma S. Rothholz, M.D., Clinic Physician
William C. Stifler, M.D., Clinic Physician
Henry Lyman Whittle, M.D., Clinic Physician
Gustav H. Woltereck, M.D., Clinic Physician
Mary E. Kiehne, Senior Clerk
Lillian H. Marley, Senior Clerk
Golda Hyman, Junior Clerk
Janie MacLeod, Junior Stenographer
Margaret Kaiser, Addressograph Operator
Josephine Roemer, Graphotype Operator

TABLE NO. 1
REPORT OF WELL BABY CLINICS

	Children on Register Jan. 1, 1946		New Children Registered During 1946		Total Children Registered during 1946		Children on Register Dec. 31, 1946		Clinic Visits			
									Return		Total	
	Under 1 yr.	1–5 yrs.	Under 1 yr.	1–5 yrs.	Under 1 yr.	1–5 yrs.	Under 1 yr.	1–5 yrs.	Under 1 yr.	1–5 yrs.	Under 1 yr.	1–5 yrs.
All Clinics	3,523	7,789	4,800	573	8,323	8,362	4,550	7,374	24,207	13,312	29,007	13,885
White												
Total White Clinics	1,193	2,519	1,753	397	2,946	2,916	1,759	2,246	9,883	6,996	11,636	7,393
Clinic #11	11	92	38	9	49	101	39	90	227	133	265	142
Clinic #12	43	99	21	1	64	100	21	100	234	153	255	154
Clinic #13	3	1	9	2	12	3	7	2	49	51	58	53
Clinic #14	73	162	74	6	147	168	43	167	671	433	745	439
Clinic #15	25	146	36	0	61	146	22	164	471	329	507	329
Clinic #16	21	161	33	0	54	161	1	82	459	371	492	371
Clinic #22	68	90	78	4	146	94	81	94	389	449	467	453
Clinic #23	40	50	68	3	108	53	66	48	233	104	301	107
Clinic #41	61	73	110	66	171	139	146	134	559	190	609	256
Clinic #42	91	230	143	12	234	242	141	206	637	503	780	515
Clinic #43	73	46	90	9	163	55	93	9	438	231	528	240
Clinic #44	27	49	58	3	85	52	74	39	269	244	327	247
Clinic #45	63	85	89	11	152	96	105	70	447	516	536	527
Clinic #47*	..	..	97	94	97	94	87	90	390	208	487	302
Clinic #53	27	50	36	4	63	54	36	51	141	146	177	150
Clinic #55	38	53	46	7	84	60	62	50	375	372	421	379
Clinic #56	22	49	40	6	62	55	46	29	85	106	125	112
Clinic #57	79	250	114	17	193	267	139	107	299	312	413	329
Clinic #58	15	35	42	1	57	36	30	32	172	57	214	58
Clinic #62	53	183	84	2	137	185	73	78	489	242	573	244
Clinic #63	103	166	51	77	154	243	94	232	797	483	848	560
Clinic #64	66	96	86	2	152	98	106	63	484	178	570	180
Clinic #65	31	118	40	4	71	122	31	117	176	232	216	236
Clinic #72	43	85	73	1	116	86	64	4	545	257	618	258
Clinic #82	57	92	89	3	146	95	33	99	319	234	408	237
Clinic #92	60	58	53	4	113	62	86	41	312	258	365	262
Clinic #93**	..	..	55	49	55	49	33	48	216	204	271	253
Colored												
Total Colored Clinics	2,330	5,270	3,047	176	5,377	5,446	2,791	5,128	14,324	6,316	17,371	6,492
Clinic #11	128	350	108	3	236	353	244	402	513	284	621	287
Clinic #12	96	298	68	5	164	303	100	301	647	316	715	321
Clinic #13	78	287	66	2	144	289	41	276	494	358	560	360
Clinic #15	71	369	33	9	104	378	57	316	560	411	593	420
Clinic #16	118	439	47	1	165	440	17	435	829	546	876	547
Clinic #17	115	677	141	13	256	690	8	474	1,192	913	1,333	926
Clinic #23	197	288	280	5	477	293	222	261	889	367	1,169	372
Clinic #24	158	230	169	1	327	231	180	181	656	312	825	313
Clinic #25	53	127	75	1	128	128	94	120	333	150	408	151
Clinic #26	101	120	150	1	251	121	123	129	547	170	697	171
Clinic #31	120	181	181	3	301	184	140	248	668	123	849	126
Clinic #32	119	213	209	4	328	217	174	220	878	329	1,087	333
Clinic #33	308	322	371	2	679	324	363	334	1,519	394	1,890	396
Clinic #34	90	173	95	1	185	174	108	201	373	108	468	109
Clinic #35	190	440	281	9	471	449	243	496	1,289	348	1,570	357
Clinic #36	227	577	383	11	610	588	292	529	1,848	608	2,231	619
Clinic #46	44	50	65	5	109	55	77	13	299	202	364	207
Clinic #48†	..	..	74	53	74	53	70	45	148	122	222	175
Clinic #52	60	71	52	3	112	74	74	79	296	107	348	110
Clinic #54	57	58	89	2	146	60	65	38	267	106	356	108
Clinic #59‡	..	..	110	42	110	42	99	30	79	42	189	84

* Clinic opened January 1946.
** Clinic opened January 1946.
† Clinic opened April 1946.
‡ Clinic opened October 1946.

TABLE NO. 2

SUMMARY OF THE ACTIVITIES OF SUPERVISION OF BOARDING HOMES, DAY NURSERIES, NURSERY SCHOOLS AND CHILDREN'S INSTITUTIONS—1946

Licenses and Visits	Boarding Homes	Day Nurseries and Nursery Schools	Children's Institutions
Total licensed	281	53	..
White	245	46	..
Colored	36	7	..
New licenses issued	136	12	..
White	121	11	..
Colored	15	1	..
Homes reopened	13	..	..
White	12	..	..
Colored	1	..	..
Homes inspected for Department of Public Welfare	124	..	..
Visits	1,248	140	70
By assistant director	479	75	3
By nurse	769	65	67

SUMMARY OF CHILDREN IN LICENSED BOARDING HOMES—1946

Age	Total During Year			Remaining December 1946		
	Total	White	Colored	Total	White	Colored
All ages	598	505	93	363	301	62
Birth to 6 months	37	31	6	7	6	1
6 months to 1 year	45	42	3	36	33	3
1 to 2 years	61	55	6	40	35	5
2 to 3 years	47	42	5	19	15	4
3 to 6 years	111	90	21	71	59	12
6 years and over	297	245	52	190	153	37

TABLE NO. 2—Continued

SUMMARY OF CASES OF COMMUNICABLE DISEASE IN LICENSED DAY NURSERIES AND NURSERY SCHOOLS TOGETHER WITH AVERAGE MONTHLY ENROLLMENT AND AVERAGE DAILY ATTENDANCE IN 1946

Enrollment and Disease	Day Nurseries			Nursery Schools		
	Total	White	Colored	Total	White	Colored
Average montly enrollment						
September 1–May 31	280	190	90	1,368	1,178	190
June 1–August 31	286	199	87	759	607	152
Average daily attendance						
September 1–May 31	207	137	70	1,119	974	145
June 1–August 31	211	147	64	596	488	108
Communicable diseases	100	92	8	294	251	43
Chickenpox	38	35	3	90	84	6
Conjunctivitis	..	..	..	1	1	..
Diphtheria	..	..	..	1	1	..
German measles	..	..	..	9	8	1
Measles	62	57	5	142	109	33
Mumps	..	..	..	17	15	2
Poliomyelitis	..	..	..	1	1	..
Scarlet fever	..	..	..	20	20	..
Whooping cough	..	..	..	13	12	1

BOARDING HOMES, DAY NURSERIES, NURSERY SCHOOLS AND INSTITUTIONS REFERRED TO BUREAU FOR SUPERVISION AND NEW CHILDREN PLACED IN BOARDING HOMES IN 1946

Organizations	Homes Referred	Nurseries Referred	Institutions Referred	New Children Placed
All Organizations	306	18	1	222
Anne Arundel County Welfare Board	1	..	..	..
Baltimore County Welfare Board	4	..	..	6
Baptist Children's Aid Society	2	..	..	..
Board of Child Care	9	..	..	8
Boys' Home Society of Baltimore	..	..	1	..
Bureau of Catholic Charities	64	..	..	74
Children's Aid Society of Baltimore County	3	..	..	5
Children's Home of Baltimore	9	..	..	4
Church Mission of Help	14	..	..	18
Department of Public Welfare	133	..	..	..
Druid Health Center	1	..	..	..
Eastern Health District	1	..	..	..
Family and Children's Society	32	..	..	64
Jewish Family and Children's Bureau	6	..	..	9
Junior League of Baltimore	..	1	..	..
Maryland Children's Aid Society	1	..	..	1
Police Department	2	..	..	..
Private Individuals	17	17	..	33
The Sun	6	..	..	..
Western Health District	1	..	..	..

TABLE NO. 3
REPORT OF PRENATAL CLINICS

Cases and Visits	Grand Total	All Clinics		Druid Health Center	914 W. 36th Street	South Balto. General Hospital		Public School No. 99	South-eastern Health District	Somerset Health Dist.	Women's Hospital	Eastern Health District	
		White	Colored	Colored	White	White	Colored	White	White	Colored	White	White	Colored
Cases carried over from 1945	504	72	432	244	5	15	37	2	27	70	5	18	81
New Cases admitted	1,223	214	1,009	532	26	44	130	16	77	105	26	25	242
Transferred from other clinics	66	12	54	3	..	..	1	5	3	44	3	1	6
Total case load	1,793	298	1,495	779	31	59	168	23	107	219	34	44	329
Discharged Cases													
Total	1,519	232	1,287	664	26	43	141	21	84	182	26	32	300
Not pregnant	11	..	11	7	..	..	1	..	..	2	..	..	1
Delivered in hospitals*	1,387	201	1,186	637	17	38	137	17	76	171	23	30	241
Delivered at home	10	2	8	4	..	1	1	..	..	1	..	1	11
Transferred	53	21	32	15	8	4	2	2	5	4	2	..	11
Transferred to other clinics	58	8	50	1	1	..	..	2	3	4	1	1	45
Cases carried over to January 1947	274	66	208	115	5	16	27	2	23	37	8	12	29
Clinic Visits													
Total	7,551	1,217	6,334	3,480	143	207	712	71	513	774	134	149	1,326
Antepartum													
First visits	1,223	214	1,009	532	26	44	130	16	77	105	26	25	242
Revisits	5,132	895	4,237	2,421	110	151	500	54	377	488	95	108	797
Unregistered	52	4	48	18	2	..	1	1	1	12	1	..	17
Postpartum													
Registered	583	54	529	250	3	6	43	..	30	85	6	8	146
Unregistered	35	1	34	16	..	..	..	..	0	10	1	..	8
Infants, neonatal	526	49	477	243	2	6	38	..	28	74	5	8	116
Analysis of New Cases													
Duration of pregnancy													
Not pregnant	5	..	5	3	..	..	1	..	..	..	..	..	1
Under 12 weeks	10	2	8	4	1	..	2	..	1	..	..	..	2
12-23 weeks	189	39	150	78	6	5	18	3	17	19	4	4	35
24-27 weeks	302	67	235	114	11	17	49	4	24	16	4	7	56
28-31 weeks	244	35	209	117	1	9	18	3	19	18	1	2	56
32-35 weeks	316	41	275	153	6	7	31	6	7	40	11	4	51
36 weeks and over	155	30	125	62	1	6	11	..	9	12	6	8	40
Undetermined	2	..	2	1	..	..	..	..	..	..	..	..	1

* Baltimore City Hospitals.

TABLE NO. 4
REPORT OF MIDWIFE CASES SEEN IN PRENATAL CLINICS

Cases and Visits	Grand Total	All Clinics		Druid Health Center	914 W. 36th Street	South Balto. General Hospital		Public School No. 99	South-eastern Health District	Somerset Health Center	Women's Hospital	Eastern Health District	
		White	Colored	Colored	White	White	Colored	White	White	Colored	White	White	Colored
Cases carried over from 1945	59	4	55	6	2	2	5	..	..	14	..	..	30
New Cases Admitted	218	30	188	36	9	..	..	..	12	41	6	3	106
Transferred from other clinics	23	1	22	..	..	..	..	..	..	22	1	..	..
Total case load	300	35	265	42	11	2	5	..	12	82	7	3	136
Discharged Cases													
Total	192	22	170	24	9	1	3	..	5	62	6	1	81
Not pregnant	..	..	..	..	..	..	..	..	..	..	..	..	..
Delivered by midwife	140	13	127	19	5	1	3	..	3	53	3	1	52
Transferred	33	9	24	5	4	..	..	..	2	9	3	..	10
Transferred to other clinics	19	..	19	..	..	..	..	..	..	..	..	..	19
Cases carried over to January 1947	108	13	95	18	2	1	2	..	7	20	1	2	55
Clinic Visits													
Total	947	116	831	162	41	..	..	..	35	256	33	7	413
Antepartum													
First visits	218	30	188	36	9	..	..	..	12	46	6	3	106
Revisits	591	79	512	98	31	..	..	..	21	147	23	4	267
Postpartum													
Registered	71	4	67	13	1	..	..	..	1	33	2	..	21
Unregistered	1	..	1	1	..	..	..	..	..	..	..	..	..
Infants, neonatal	65	3	62	13	..	..	..	..	1	30	2	..	19
Unreg. Infants	1	..	1	1	..	..	..	..	..	..	..	..	..
Analysis of New Cases													
Duration of pregnancy													
Not pregnant	1	..	1	..	..	..	..	..	..	..	..	..	1
Under 12 weeks	7	3	4	..	2	..	..	..	..	..	1	..	4
12–23 weeks	16	5	11	3	2	..	..	..	2	3	1	..	5
24–27 weeks	41	7	34	7	3	..	..	..	1	7	2	1	20
28–31 weeks	37	6	31	4	1	..	..	..	4	6	1	..	21
32–35 weeks	57	4	53	11	1	..	..	..	1	17	1	1	25
36 weeks and over	58	5	53	11	..	..	..	..	4	12	..	1	30
Undetermined	1	..	1	..	..	..	..	..	..	1	..	..	..

TABLE NO. 5

ANALYSIS OF PHYSICAL EXAMINATIONS ON REGISTRATION AT PRENATAL CLINICS

Findings	Number			Percentage Distribution		
	Total	White	Colored	Total	White	Colored
REGISTERED FOR DELIVERY AT HOSPITAL*						
Primipara	356	33	323	29.2	15.4	32.2
Multipara	862	181	681	70.8	84.6	67.8
Pelvis						
Normal	1,044	194	850	85.7	90.7	84.7
Borderline	144	15	129	11.8	7.0	12.8
Contracted	26	2	24	2.2	0.9	2.4
Funnel	4	3	1	0.3	1.4	0.1
Serologic Test for Syphilis						
Negative	1,074	208	866	88.2	97.2	86.3
Positive	141	6	135	11.6	2.8	13.4
Not taken	3	..	3	0.2	0.0	0.3
Other Findings						
Toxemia	124	21	103	10.2	9.8	10.2
Heart Murmur	121	5	116	9.9	2.3	11.6
Rh Factor						
Negative	104	28	76	8.6	13.1	7.6
Positive	1,105	186	919	90.7	86.9	91.5
Not taken	9	0	9	0.7	0.0	0.9
REGISTERED FOR DELIVERY BY MIDWIFE						
Primipara	48	9	39	22.1	30.0	20.9
Multipara	169	21	148	77.9	70.0	79.1
Pelvis						
Normal	200	26	174	92.2	86.7	93.0
Borderline	17	4	13	7.8	13.3	7.0
Contracted	..	..	..	0.0	0.0	0.0
Funnel	..	..	..	0.0	0.0	0.0
Serologic Test for Syphilis						
Negative	178	29	149	82.0	96.7	79.7
Positive	38	1	37	17.5	3.3	19.8
Not taken	1	..	1	0.5	0.0	0.5
Other Findings						
Toxemia	22	6	16	10.1	20.0	8.6
Heart Murmur	20	3	17	9.2	10.0	9.1
Rh Factor						
Negative	10	5	5	4.6	16.7	2.7
Positive	203	25	178	93.6	83.3	95.2
Not taken	4	..	4	1.8	0.0	2.1

* Baltimore City Hospitals.

BUREAU OF SCHOOL HYGIENE

BUREAU OF SCHOOL HYGIENE

Henry F. Buettner, M.D.

Director

The Assistant Commissioner of Health served as Acting Director of the Bureau of School Hygiene from November 3, 1945 until July 15, 1946 at which time Dr. Henry F. Buettner was appointed as director. Dr. Buettner was Administrative Health Officer in the Western Health District before entering military service in February, 1941.

As in previous years, the bureau maintained the school health service in the public and parochial schools, with an enrollment of approximately 100,000 pupils. The program of health examinations with closer co-ordination between the classroom teacher, school nurse, physician and parents, which was put into effect several years ago in many of the public and parochial schools, was extended to several additional schools during 1946. In this program, the family physician is brought into the picture and parents are urged to have the child examined by the family doctor.

The use of D.D.T. powder, consisting of 10 per cent D.D.T and 90 per cent inert ingredients, for the treatment of pediculus capitis, was begun on a trial basis in several schools in November. The results were effective and so highly satisfactory that it was planned to use this treatment in all the schools. It is significant to note that pediculus capitis accounts for approximately 69 per cent of the exclusions from schools.

Communicable Diseases

The year 1946 was a "measles" year and 3,463 cases of measles were reported among children of school age as compared with only 79 cases during 1945. There was a decided decrease in the number of cases of scarlet fever among school children, with only 429 cases reported in 1946 as compared with 1,339 cases the previous year. There were 3 cases of poliomyelitis reported in children of school age, the same number as in the previous year and 11 cases of meningococcus meningitis as compared with 14 cases for 1945. There was a slight increase in the incidence of diphtheria, with 128 cases as against 119 cases in 1945. This rise occurred in the early months of the year.

Toxoid and vaccination clinics for preschool and school age children were held monthly by the health officers in all the public and parochial schools, and parents were urged to have the children entering school for the first time given "booster" doses of toxoid. There were 903 preschool and

6,038 school children inoculated against diphtheria in the school clinics during the year. There were 953 children vaccinated against smallpox in the school clinics, of which 404 were children of school age.

Eye and Ear Clinics

With the return of Dr. Harry E. Bloom from military service, it was possible to reopen the Department's Eye Clinic which had been closed since May, 1944. From November until the end of the year, 225 visits were made to the clinic by 131 patients. A total of 71 children had their eyes refracted and 112 children were given mydriatics.

In the Ear Clinic 1,580 patients were treated during the year. Of this number 1,407 children were given audiometer tests, 528 received treatment and 130 patients were given 250 radium treatments. Radium shrinks the lymphoid tissue at the orifices of the eustachian tubes, which improves hearing, especially among younger children.

The bureau continued to cooperate with the Department of Education in the placing of children with physical handicaps in the various special classes maintained by them.

The tables that follow show the number of physical defects found by the health officers in their examinations of school children and the corrections made.

Personnel

Henry F. Buettner, M.D., Director
M. L. Breitstein, M.D., Health Officer
Harry C. Grant, M.D., Health Officer
Harry E. Bloom, M.D., Clinic Physician

TABLE NO. 1

REPORT OF PUPILS EXAMINED AND DEFECTS FOUND

	Total	Public Elementary Schools		Parochial Schools	
		White	Colored	White	Colored
Number of pupils examined	31,216	14,640	8,991	7,136	449
Number of pupils defective	12,722	5,665	4,123	2,692	242
Throat—Tonsils	6,034	3,149	1,514	1,273	98
Nose—Adenoids	4,470	2,425	1,256	706	83
Mouth—Teeth	6,656	3,004	1,827	1,718	107
Eyes	1,446	576	511	339	20
Heart	368	209	67	90	2
Vaccination in school clinics	953	667	226	55	5
Cases of malnutrition	770	275	368	122	5

TABLE NO. 2

REPORT OF CORRECTIONS OF PHYSICAL DEFECTS OF SCHOOL CHILDREN

	Total	Public Elementary Schools		Parochial Schools	
		White	Colored	White	Colored
Tonsils and adenoids	1,736	1,340	64	329	3
Other operations	141	110	11	20	..
Teeth	2,472	1,045	815	555	57
Eyes refracted and glasses obtained	970	678	128	157	7
Eyes refracted and glasses not necessary	57	28	9	20	..
Skin eruption	153	42	74	24	13
Pediculosis	211	100	5	106	..
Children treated for minor ailments, accidents and emergencies	466	229	231	..	6
Children sent to dispensaries	165	83	42	22	18

DIVISION OF DENTAL CLINICS

DIVISION OF DENTAL CLINICS

Morris Cramer, D.D.S.

Supervisor

At the close of 1946 there were only five dental clinics in operation. The seven clinics which were closed in 1944 were not reopened because dentists were not obtainable. In September, with the resignation of Dr John Hoffman, it was necessary to close four additional clinics, three in the southern and one in the southwestern sections of the city. The five remaining clinics were operated by a part time colored dentist and a part time supervisor.

During the year 1,873 children were examined and given dental treatments, consisting mainly of extractions, with some sedative fillings and prophylaxis. Because of the very limited staff, the clinicians could only give treatments for the relief of toothaches, and parents were urged to take those children needing considerable dental care to their private dentists or to the dental clinic at the University of Maryland.

A brief summary of the work accomplished during the year is as follows:

Patients registered at clinics	1,873
Visits to clinics	2,107
Prophylactic treatments given	1,012
Teeth filled	454
Temporary teeth extracted	2,777
Permanent teeth extracted	954
Cases completed and discharged	1,799

In order that the equipment in the clinics could be put in workable condition, inspections of all the dental clinics were made by the supervisor and a representative of a dental supply house during the summer and necessary repairs made.

At the beginning of the school semester in September, the Department of Education inaugurated a number of special courses for teachers and nurses, including a course in dental hygiene. The supervisor was invited to participate and present scientific facts in oral hygiene.

Recommendations

It is strongly recommended that the eleven dental clinics be reopened and that the dentists be placed on a contract basis. It is felt that if additional remuneration is offered, sufficient dentists can be secured to operate the clinics.

Personnel

Morris Cramer, D.D.S., Supervisor
Lucius A. Butler, D.D.S., Dentist

TABLE NO. 1

REPORT OF THE WORK DONE IN THE DENTAL CLINICS—YEAR 1946

	New Patients	Visits	Prophylaxis	Amalgam	Cement Filling	Gutta Percha	Treatments	Carbo-Eugonil	Emergency	Extraction of Permanent Teeth	Extraction of Temporary Teeth	Completed and Discharged
Total	1,873	2,107	1,012	366	138	4	65	10	65	954	2,777	1,799
January	307	332	179	77	16	..	11	3	10	133	451	284
February	237	269	144	48	25	3	6	2	8	100	362	227
March	283	312	149	58	19	1	8	3	8	152	424	264
April	300	335	177	50	21	..	10	..	8	139	425	299
May	272	304	165	49	28	..	6	..	3	134	420	270
October	174	209	80	38	8	..	9	..	9	102	243	172
November	166	193	73	21	16	..	10	..	7	106	245	159
December	134	153	45	25	5	..	5	2	12	88	207	124

BUREAU OF PUBLIC HEALTH NURSING

BUREAU OF PUBLIC HEALTH NURSING

Jane B. Laib, R.N.

Director

The numerous personnel changes in the bureau during 1946 again presented an administrative problem. A total of forty-four vacancies occurred during the year and fifty appointments were made to the public health nursing staff. One supervisor and ten public health nurses returned from military leave and of this number, five resigned to accept more remunerative positions. At the close of the year there were still ten positions of public health nurses unfilled. Many nurses with experience were interviewed; some were reluctant to accept the salary offered and many refused positions.

Because of vacancies, the 136 nursing districts were carried by 126 public health nurses assigned to the generalized field nursing program. These nurses also assisted in the various clinics of the Health Department, giving the equivalent of ten nurse-years of service for this purpose. In addition, thirteen public health nurses were assigned to tuberculosis and venereal disease clinics on a full time basis. If there were a full complement of 136 field nurses, each nursing district would serve a population of 6,900.

A total of 170,665 field visits were made by the public health nurses to all services. Visits to homes of babies increased and the nurses participated in securing parents' certification of information on the birth certificates. Fewer visits were made to cases of communicable diseases because of the decrease in the prevalance of such diseases. Visits to tuberculosis cases were made on a more selective basis and the review of case loads by the Director and Assistant Director of the Bureau of Tuberculosis aided greatly in meeting the needs of the cases. The supervisor in venereal diseases carried on a very active program throughout the year. Her chief duties were with the special public health nurses assigned to that service; in addition, she helped to reorganize the follow-up system of delinquent patients.

Premature Baby Care

In April, following lectures given by Dr. Francis Schwentker and Dr. Janet Hardy of the Johns Hopkins Hospital, the public health nurses assumed responsibility for the transporting of premature infants from hospitals and homes to the special premature nursery in the Harriet Lane

Home. A twenty-four hour schedule was maintained by the nurses. In June this service was taken over by the City Board of Fire Commissioners, with the understanding that the equipment be kept in condition by the Bureau of Public Health Nursing. In preparation for this transfer, group instructions and demonstrations were given by two supervisors in the handling of the premature infants to all the firemen in the engine houses where ambulances are stationed.

Miss Alice Sundberg, who had been Assistant Supervisor of public health nurses in the Eastern Health District, was appointed on October 1 Assistant Director of the Bureau of Public Health Nursing to fill the vacancy created by the retirement of Mrs. Ellen H. Brown. Mrs. Brown held this position with credit for more than twenty-five years. Appropriation was made in the 1946 budget for three new public health nursing positions. In August, the supervisory staff was strengthened by the appointment of a new supervisor for generalized public health nursing; this appointment was made possible through the abolishment of a public health nursing position. Provision was also made in the late summer for the appointment of a colored public health nurse for assignment to the Cherry Hill Housing area.

Staff Education

Orientation courses were given in the Eastern Health District to many new nurses; others were introduced to the generalized public health nursing program by their respective supervisors. In-service training was continued in each group in order to meet the needs of the nursing activities.

Mrs. Florence Neely, Chief of the Division of Nutrition, continued to conduct nutrition classes for public health nurses, inaugurated the previous year, and also gave an introductory course in nutrition for the newly appointed nurses. In addition, she was available at all times for individual conferences and also provided posters for use in the schools and clinics.

Four general meetings of the entire staff were held during the year at the War Memorial Building. Among the speakers who addressed these meetings were Dr. Huntington Williams, Commissioner of Health, Dr. Francis Schwentker and Dr. Janet Hardy of the Johns Hopkins Hospital, Dr. Milton Sacks of the University Hospital and Dr. M. Alexander Novey, Director of the Bureau of Child Hygiene. Regular monthly meetings were held by the supervisors with the director and assistant director and special conferences were held from time to time. Bureau directors and division chiefs met with this group to discuss new policies and procedures.

Five public health nurses who were granted leave of absence without pay in order to pursue collegiate courses in public health nursing, enrolled at the University of Pennsylvania. Two of these nurses were granted

stipends from Federal funds and the other three nurses were granted scholarships through other sources.

The director attended the Third Regional Meeting of the American Academy of Pediatrics, Study of Child Health Service, at Washington, D. C. on September 30 and October 1.

Personnel

Jane B. Laib, Director
Alice M. Sundberg, Assistant Director
M. Alice Caron, Supervisor of Public Health Nursing
Marie Dandridge, Supervisor of Public Health Nursing
Ola C. Early, Supervisor of Public Health Nursing
Ethel G. Gluck, Supervisor of Public Health Nursing
Adelaide G. Smith, Supervisor of Public Health Nursing
Virginia R. Struve, Supervisor of Public Health Nursing
Grace Volmar, Supervisor of Public Health Nursing
Grace S. Eyler, Senior Stenographer
Sara H. Ford, Senior Stenographer

Public Health Nurses

Marianna P. Aiau
Mary Bacon
Pauline Benfer
Grace Berger
Katherine M. Brady
Marie V. Buckless
Elevian R. Carter
Sarah V. Case
Gettie Conner
Laura J. Cook
E. Murray Cox
Grace C. Crawford
Alice E. Diver
Mercedes B. DuVall
Ruth Eckman
Edna Faith
Rose M. Fields
Ethel V. Finneyfrock
Virgie M. Finneyfrock
Helen H. Galloway
Geneva Gartside
Mary A. Goldberg
Doris McLean Gowans
Ruth N. Guyton
Marian Hagan
Mary D. Herman
Rose M. Hoffman
Constance Jacobs
Mary F. S. Jenkins
Ruth K. Jones
Eudora M. Kefauver
Lillian A. Kemp
Edna Kenney
Margaret S. King
Elsa C. Kittel
Jane Kreitz
Bess C. Lang
Doris C. McDonald
Rose B. McDonnell
Margaret D. Miller
Frieda W. Moore
Winifred Moore
Roberta S. Pinckard
Marie D. Reinert
Elizabeth Rutter
Carolyn M. Shaffer
Helen B. Sharpe
Ruth Stoneham
Marion E. Stromberg
Marianne A. Sullivan
Mary B. Tewell
Birdie M. Thearle
Bernette O. Vaughan
Violet B. Weber
Helen L. Wells
Margaret E. White
Alva M. Williams
Edna V. Yates

TABLE NO. 1

SUMMARY OF FIELD VISITS OF PUBLIC HEALTH NURSES—1946

Service and Type of Visit	Entire City*			Eastern Health District		South-eastern Health District		Western Health District		Druid Health Center	Southern Health District		South-western Health District		North-western Health District		North-eastern Health District		Northern Health District	
	Total	White	Colored	White	Colored	White	Colored	White	Colored	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
All Field Visits	170,665	110,725	59,940	12,855	23,865	14,890	1,500	10,865	9,645	13,200	12,890	4,525	17,800	1,685	16,145	465	13,340	1,060	10,750	2,420
Maternity Hygiene	14,155	3,805	10,350	2,705	6,590	695	205	115	375	2,375	100	455	30	120	10	25	30	90	120	110
Infant Health Supervision	58,540	42,630	15,910	3,660	4,785	5,805	480	4,685	2,880	4,530	4,770	1,620	5,320	480	6,755	165	6,280	190	5,355	780
Preschool Health Supervision	23,235	14,045	9,190	1,390	3,135	1,970	180	2,020	2,940	860	1,745	820	3,915	690	1,430	65	815	95	760	405
School Health Supervision	13,760	13,025	735	740	95	760	5	205	40	80	1,820	300	3,495	..	3,495	90	1,255	..	1,255	125
Tuberculosis	17,810	8,910	8,900	1,065	2,595	1,555	225	1,370	1,675	2,655	1,145	585	1,530	320	815	80	745	160	685	600
Venereal Disease	6,460	1,790	4,670	130	2,140	130	110	250	200	420	160	170	15	10	5	..	50	95	25	50
Acute Communicable Disease	27,670	21,620	6,050	2,385	2,340	3,195	220	1,790	1,050	1,665	2,120	230	3,350	40	3,120	20	3,625	205	2,030	280
Other Morbidity	7,810	4,045	3,765	765	2,150	735	70	405	475	565	350	115	130	15	510	15	515	215	510	60
Boarding Homes	785**	630	155																	
All Others	440	225	215	15	35	45	5	25	10	50	50	75	15	10	5	5	25	10	10	10
Effective Visits	143,805	94,535	49,270	10,425	19,220	12,480	1,190	8,615	8,170	10,730	10,950	3,905	16,285	1,465	14,640	390	11,405	875	8,980	2,005
Maternity Hygiene	11,370	2,910	8,460	1,940	5,295	635	180	95	280	2,130	85	355	30	85	10	25	15	55	100	55
Infant Health Supervision	46,915	33,610	13,305	2,900	4,210	4,445	400	3,485	2,380	3,680	3,655	1,375	4,535	395	5,695	125	4,920	145	3,975	595
Preschool Health Supervision	19,645	11,935	7,710	1,045	2,475	1,595	125	1,675	2,600	615	1,440	770	3,545	650	1,305	55	660	85	670	335
School Health Supervision	13,030	12,385	645	620	60	675	5	185	30	60	1,745	280	3,410	..	3,350	85	1,190	..	1,210	125
Tuberculosis	13,895	7,280	6,615	830	1,935	1,275	165	1,030	1,300	1,760	990	495	1,375	265	695	60	560	115	525	520
Venereal Disease	4,060	970	3,090	55	1,100	95	40	55	100	350	85	135	10	10	5	..	40	75	15	40
Acute Communicable Disease	26,695	20,900	5,795	2,305	2,235	3,040	220	1,715	1,015	1,600	2,025	225	3,240	35	3,080	20	3,510	180	1,980	265
Other Morbidity	7,165	3,810	3,355	715	1,890	675	50	355	460	495	350	85	130	15	495	15	490	210	495	60
Boarding Homes	655**	535	120																	
All Others	375	200	175	15	20	45	5	20	5	40	40	65	10	10	5	5	20	10	10	10
Maternity Hygiene Service																				
All visits	14,155	3,805	10,350	2,705	6,590	695	205	115	375	2,375	100	455	30	120	10	25	30	90	120	110
Health Department clinic case																				
Antepartum	2,940	570	2,370	90	1,165	210	115	55	175	445	70	280	25	75	10	20	10	40	100	55
Postpartum	2,080	225	1,855	75	1,170	105	40	35	90	460	5	65	..	10	..	5	5	15	..	..
Other clinic case																				
Antepartum	3,115	1,175	1,940	1,150	1,900	10	..	5	10	25	10	5	..	..	..	..	..	..	..	..
Postpartum	3,235	940	2,295	625	1,060	310	25	..	5	1,200	..	5	5	..	..	..	..	..	..	..
Home visit, not seen	2,230	720	1,510	610	1,015	60	25	20	85	215	10	80	..	20	..	..	10	25	10	45
Visit in behalf of case	555	175	380	155	280	..	..	..	10	30	5	20	..	15	..	..	5	10	10	10

Infant Health Supervision Service																				
All visits	58,540	42,630	15,910	3,660	4,785	5,805	480	4,685	2,880	4,530	4,770	1,620	5,320	480	6,755	165	6,280	190	5,355	780
Home visit, neonatal	19,485	14,385	5,100	1,400	1,580	2,125	130	1,345	655	1,[illegible]5	1,630	430	1,525	95	2,195	25	2,245	65	1,920	205
Home visit, clinic infant	9,640	3,380	6,260	495	2,150	295	95	1,005	1,580	1,495	285	590	770	200	395	55	105	..	30	95
Home visit, other case	185	95	90	40	75	10	..	5	..	10	15	5	10	..	10	..	5	..	..	..
Home visit, diphtheria prevention	17,605	15,750	1,855	965	405	2,015	175	1,130	145	260	1,725	350	2,230	100	3,095	45	2,565	80	2,025	295
Home visit, not seen	10,505	8,195	2,310	640	430	1,345	80	1,170	485	780	870	200	690	75	1,005	40	1,295	45	1,180	175
Visit in behalf of case	1,120	825	295	120	145	15	..	30	15	70	245	45	95	10	55	..	65	..	200	10
Preschool Health Supervision Service																				
All visits	23,235	14,045	9,190	1,390	3,135	1,970	180	2,020	2,940	860	1,745	820	3,915	690	1,430	65	815	95	760	405
Health Department clinic case	11,505	5,165	6,340	620	2,220	210	45	815	2,415	570	390	395	2,320	500	660	25	95	..	55	170
Other case	195	140	55	..	15	15	15	35	10	..	20	5	..	5	50	..	5	..	15	5
Home visit, diphtheria prevention	7,945	6,630	1,315	425	240	1,370	65	825	175	45	1,030	370	1,225	145	595	30	560	85	600	160
Home visit, not seen	3,060	1,865	1,195	290	460	365	50	330	305	220	215	45	345	35	110	10	135	10	75	60
Visit in behalf of case	530	245	285	55	200	10	5	15	35	25	90	5	25	5	15	..	20	..	15	10
School Health Supervision Service																				
All visits	13,760	13,025	735	740	95	760	5	205	40	80	1,820	300	3,495	..	3,495	90	1,255	..	1,255	125
Home visit, correction of physical defect	10,115	9,635	480	575	45	615	5	155	10	35	1,310	210	2,915	..	2,270	60	1,105	..	690	115
Home visit, other	2,915	2,750	165	45	15	60	..	30	20	25	435	70	495	..	1,080	25	85	..	520	10
Home visit, not seen	660	595	65	115	20	85	..	15	10	15	65	15	85	..	125	5	60	..	45	..
Visit in behalf of case	70	45	25	5	15	..	..	5	..	5	10	5	..	..	20	..	5	..	..	..
Tuberculosis Service																				
All visits	17,810	8,910	8,900	1,065	2,595	1,555	225	1,370	1,675	2,655	1,145	585	1,530	320	815	80	745	160	685	600
Pulmonary case																				
Presanatorium	5,180	2,240	2,940	180	775	485	50	360	555	1,090	270	185	295	70	215	25	295	40	140	150
Postsanatorium	4,650	3,200	1,450	320	385	470	45	430	350	235	455	50	685	160	390	15	200	35	250	175
Childhood type																				
Presanatorium	570	115	455	..	70	..	5	30	115	95	30	100	30	10	5	5	10	5	10	50
Postsanatorium	110	25	85	..	25	5	20	..	..	15	5	15	15	..	..	5	..	..	..	5
Suspect	795	360	435	65	110	40	25	115	100	90	35	45	40	15	10	5	15	10	40	35
Contact, living case	1,500	925	575	165	295	200	15	50	80	70	125	50	260	5	55	5	30	10	40	45
Contact, dead case	975	380	595	95	255	65	5	40	95	120	65	45	50	5	20	..	10	15	35	55
Home visit, other	115	35	80	5	20	10	..	5	5	45	5	5	..	..	..	..	..	..	10	5
Home visit, not seen	3,025	1,300	1,725	140	410	240	55	320	355	700	140	70	130	30	115	20	110	30	105	55
Visit in behalf of case	890	330	560	95	250	40	5	20	20	195	15	20	25	25	5	..	75	15	55	25

* Totals include 1,190 visits to white and 1,575 visits to colored families, not classified by district, made by specialized public health nurses for the most part in connection with venereal disease control.

** Not classified by district.

TABLE NO. 1—Continued
SUMMARY OF FIELD VISITS OF PUBLIC HEALTH NURSES—1946

Service and Type of Visit	Entire City			Eastern Health District		South-eastern Health District		Western Health District		Druid Health Center	Southern Health District		South-western Health District		North-western Health District		North-eastern Health District		Northern Health District	
	Total	White	Colored	White	Colored	White	Colored	White	Colored	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
Venereal Disease Service																				
All visits	6,460	1,790	4,670	130	2,140	130	110	250	200	420	160	170	15	10	5	..	50	95	25	50
Syphilis																				
Congenital syphilis	25	5	20	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Delinquent patient																				
Clinic	1,680	275	1,405	40	565	85	25	50	90	245	25	105	10	10	5	..	20	40	10	25
Private physician	110	5	105	5	10	..	..	..	..	5	..	5	..	..	..	..	..	..	..	5
Contact	1,230	240	990	..	210	..	..	..	..	60	30	15	..	..	..	..	10	15	5	..
Gonococcus infection																				
Delinquent patient, clinic	270	35	235	10	185	10	15	5	10	5	5	10	..	..	..	..	5	..	..	10
Contact	735	410	325	..	110	..	..	..	..	35	25	..	..	..	..	..	5	20	..	..
Home visit, other	10	..	10	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Home visit, not seen	1,970	795	1,175	60	670	35	70	185	95	65	75	15	5	..	..	..	10	20	10	5
Visit in behalf of case	430	25	405	15	370	..	..	10	5	5	..	20	..	..	..	..	..	..	..	5
Acute Communicable Disease Service																				
All visits	27,670	21,620	6,050	2,385	2,340	3,195	220	1,790	1,050	1,665	2,120	230	3,350	40	3,120	20	3,625	205	2,030	280
Home visit, reported case																				
Chickenpox	505	455	50	45	10	10	..	..	..	20	25	15	65	..	275	..	20	..	15	5
Measles	16,780	13,010	3,770	1,615	1,560	2,345	95	1,140	570	1,180	1,035	125	1,815	35	1,370	10	2,480	30	1,210	165
Whooping cough	2,605	1,860	745	280	300	290	45	235	115	210	280	50	325	..	85	5	200	10	165	10
German measles	35	25	10	5	..	..	..	..	..	5	5	5	5	..	5	..	5	..	..	..
Scarlet fever	1,600	1,385	215	150	45	115	25	70	35	100	85	..	255	..	320	..	165	..	225	10
Septic sore throat	45	35	10	..	5	..	..	5	..	5	10	..	..	..	5	..	15	..	..	..
Other	40	15	25	15	20	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..
Home visit, suspect																				
Chickenpox	450	430	20	20	10	25	..	..	..	..	20	5	60	..	255	..	20	..	30	5
Measles	1,760	1,580	180	50	70	145	15	50	40	35	340	10	385	..	350	..	105	..	155	10
Whooping cough	455	445	10	10	5	15	..	15	5	..	105	..	160	..	60	..	40	..	40	..
German measles	75	75	..	..	..	..	..	10	..	..	5	..	10	..	45	..	5	..	..	..
Mumps	55	55	..	5	..	5	..	5	..	..	5	..	..	..	30	..	..	..	..	..
Scarlet fever	240	230	10	10	5	15	..	..	..	..	5	..	30	..	160	5	..	..	10	..
Other	30	20	10	..	10	..	..	..	..	..	10	..	..	..	5	..	5	..	..	..

Home visit, contact																				
Measles	355	295	60	..	10	5	..	15	5	30	25	..	40	..	65	..	80	..	65	15
Whooping cough	50	30	20	..	15	..	..	5	..	..	10	..	10	..	5	..	..	..	..	5
Scarlet fever	80	70	10	5	..	5	..	5	5	5	..	..	20	..	10	..	10	..	15	..
Other	10	10	..	5	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..
Home visit, immunization																				
Measles	180	75	105	30	65	5	15	15	20	5	10	..	10	..	..	..	5	..	..	..
Diphtheria	975	550	425	55	100	55	25	135	220	..	45	15	45	..	30	..	135	25	50	40
Typhoid fever*	130	40	90																	
Home visit, typhoid fever culture*	195	170	25																	
Follow-up cases	45	40	5	5	5	5	..	10	..	..	5	..	5	..	5	..	5	..	..	..
Home visit, not seen	905	685	220	75	75	155	..	70	35	60	85	5	100	5	40	..	110	25	50	15
Visit in behalf of case	70	35	35	5	30	..	..	5	..	5	10	..	10	..	..	..	5	..	..	..
Other Morbidity Service																				
All visits	7,810	4,045	3,765	765	2,150	735	70	405	475	565	350	115	130	15	510	15	515	215	510	60
Sore eye case	1,725	780	945	110	120	185	5	260	400	180	5	5	10	10	5	5	195	205	10	15
Infant																				
Diarrhea or dysentery	60	35	25	..	15	10	..	10	..	10	..	..	..	..	5	..	..	..	10	..
Other diseases	895	185	710	105	525	50	20	10	..	140	5	20	10	..	5	..	..	..	..	5
Preschool child	1,530	385	1,145	290	915	50	20	30	35	140	..	25	5	5	5	..	5	5	..	..
School child	2,595	2,220	375	155	255	365	5	25	15	25	340	25	105	..	470	10	290	..	470	40
Adult	360	205	155	55	60	15	..	20	10	..	..	10	..	..	5	..	..	..	5	..
Home visit, not seen	470	200	270	35	150	60	20	40	15	60	..	10	..	..	15	..	25	5	15	..
Visit in behalf of case	175	35	140	15	110	..	..	10	..	10	.	20	.	.	..	..	..	..	..	..
Boarding Home Service																				
All visits	785*	630	155																	
Inspection	55	45	10																	
Other visit	600	490	110																	
Home visit, not seen	130	95	35																	
All Other Services																				
All visits	440	225	215	15	35	45	5	25	10	50	50	75	15	10	5	5	25	10	10	10
Sanitary investigation	65	15	50	..	5	5	..	5	5	5	..	35	..	..	.	..	..	..	5	..
Vital statistics investigation	50	35	15	..	5	5	..	..	..	..	15	..	..	..	..	..	10	5	5	5
Other visits	260	150	110	15	10	35	5	15	..	35	25	30	10	10	5	5	10	5	..	5
Home visit, not seen	50	15	35	..	15	..	..	5	5	10	5	5	5	..	..	..	..	..	..	..
Visit in behalf of case	15	10	5	..	..	..	..	..	..	..	5	5	..	..	..	..	5	..	..	..

* Not classified by district.
Note: Tabulation based on twenty per cent sample.

SANITARY SECTION

SANITARY SECTION

Personnel

Wilmer H. Schulze, Phar. D., Director
Elizabeth M. Truxal, Senior Stenographer
George Boteler, Municipal Exchange Operator

SANITARY SECTION

Wilmer H. Schulze, Phar.D.

Director

Some of the more important activities of the Sanitary Section in 1946 were: The formation of a Baltimore City Rodent Control Coordinating Committee to coordinate the research findings of the Johns Hopkins School of Hygiene and Public Health in rodent control with the activities of city agencies concerned with this problem; an in-service training course covering the entire field of sanitation given for increasing the knowledge of the Sanitary Section inspection staff; a study of exposure to lead-containing dust in shooting galleries in connection with the occurrence of cases of lead poisoning; investigation in conjunction with the Bureau of Communicable Diseases and the Bureau of Laboratories of 2 cases of endemic typhus fever in relationship to rat infestation in the 600 block of North Calvert Street; establishment with the cooperation of the Water Engineer of precautionary measures against possible contamination of the drinking water supply in the occurrence of breakage of a large sewer main and a water supply line almost simultaneously and in close proximity to each other; a study of quaternary ammonium compounds and methods for their identification when used for the disinfection of eating utensils; investigation of the occurrence of cases of dermatitis associated with the use of a commercial cleaning powder; the ordering of a milk plant to cease operations because of failure to comply with Health Department regulations; the extension of the coordinated housing law enforcement program to include the city block just south of the one begun late in 1945; the investigation of the possibility of water contamination in connection with certain reports of gastro-intestinal disturbances; a study of pre-installed plumbing in prefabricated houses proposed for erection within the city; the concentration of effort on improving sanitation in bakeries and food warehouses; the inauguration, with the cooperation of the Buildings Engineer, of a procedure for examination of plans for new industrial plants or additions to existing ones to provide for protection against health hazards; improvement of the field inspection equipment in food control; the seizure of uninspected meats offered for sale followed by prosecution of the violators; discontinuance of one of the two remaining Selected Raw Milk Farms holding Health Department permits; improvement in sanitation in the operation of the public park swimming pools in conjunction with the Department of Public Parks; the printing of a *Handbook of Nutrition* for education and

guidance in this field; a revision of Industrial Health Series—No. 1 bulletin, *Occupational Disease Control* and an enlarged educational program on housing conditions in Baltimore including field trips to slum housing sections of the city.

Rodent Control Coordinating Committee

In August, Mr. Nathan L. Smith, Chief Engineer of Baltimore City, called a conference of representatives of the Johns Hopkins School of Hygiene and Public Health, the Bureau of Street Cleaning and the Baltimore City Health Department to discuss the integration of the research program in rodent control being carried on at the School of Hygiene with those city agencies concerned with the practical application of control measures. At a second meeting of this group there was formed the Baltimore City Rodent Control Coordinating Committee consisting of representatives of the Rodent Control Division of the Bureau of Street Cleaning, the Police Department, the Bureau of Buildings, the Bureau of Street Cleaning, the Johns Hopkins School of Hygiene and Public Health and the City Health Department. The Director of the Sanitary Section was appointed chairman of this committee.

The coordinating committee first met on September 4, at which time arrangements were made to meet monthly for the purpose of planning the coordination of the research in rodent control together with the activities of the city agencies involved in this problem. Toward the close of the year the committee had planned two major projects for 1947: (1) An in-service training course in rodent control for city employees concerned with this problem, and (2) the selection of a demonstration area of the city in which to carry out a coordinated rodent control program including all of the established principles necessary for the elimination of rats.

Housing Law-Enforcement Committee

The enforcement committee was enlarged by the addition of representatives of the Baltimore Redevelopment Commission, the Highways Engineer and the Board of Zoning Appeals. The enforcement program was extended to include a block adjoining the one begun late in 1945. By the close of the year the first block was practically completed and the second was well on the way to completion. Progress was necessarily delayed by lack of personnel and continued scarcity of materials and labor. In order to provide for an expanded coordinated program of enforcement of city ordinances pertaining to housing and sanitation provision has been made for some additional personnel in 1947. The committee also devoted attention to matter related to enforcement, such as: The need for uniformity in certain definitions; limitations as to occupancy in multiple

family dwellings; the advantages of a policy of elimination of board fences and the advisability of establishment of a requirement of occupancy permits for all rental dwellings.

Miscellaneous Activities

Other major activities of the Sanitary Section, some of which are enlarged upon in the reports of the bureau directors, included:

1. Denial by the Court of a petition for a mandamus to require the Commissioner of Health to issue a Housing Permit for a hotel following disapproval of an application for a permit because of the previous unsatisfactory record of the persons involved.

2. Cooperation given to the Maryland State Department of Health by making sanitary inspections of hospitals and convalescent homes located in Baltimore City.

3. Training classes for food handlers and for employees in local milk plants.

4. Review of plans filed with the Buildings Engineer for new dwellings to assure compliance with provisions of the City Housing Code.

5. Cooperation given the Maryland State Department of Health and the City Water Engineer in the compilation of sanitary regulations applicable to the use of the Prettyboy Dam and Lake Roland for recreational fishing.

6. The issuance of 1,061 plumbing permits for the removal of yard toilets (frost-proof hoppers) as compared with 1,221 issued in 1945.

7. Assistance to the Baltimore Housing Authority in matters pertaining to rodent control and refuse disposal.

8. Investigation of the sanitary quality of foods obtained from decommissioned naval vessels and offered for sale.

9. Trapping of rats for laboratory examination for evidence of endemic typhus fever infection in connection with the occurrence of two cases of this disease in the 600 block of North Calvert Street.

10. The connection of a number of properties in the Brooklyn area to the sanitary sewer which has made possible the elimination of insanitary privies.

11. Consultation services to management of industrial plants in the control of exposures to cyanides, lead, chromium compounds, fluorine, carbon monoxide and volatile solvents.

12. Assistance to the Mayor's Committee on Housing Coordination in compilation of a report with recommendations to the Mayor.

13. Legal proceedings which resulted in a verdict of guilty and imposition of a fine of an owner of a dwelling who permited the reoccupancy of the house without permission and which had been posted in accordance with the provisions of the City Housing Code.

14. Studies of instances of atmosphere pollution of industrial origin together with methods for control or elimination.

15. Continued cooperation with the Water Engineer in the study of domestic water supply treatment devices and in methods for the protection of the city water supply from possible contamination on piers where the supply is used for providing water for vessels.

16. Participation in special radio broadcasts given by the Better Baltimore Committee and by the Bureau of Street Cleaning.

17. Demonstrations of the activities of the Sanitary Section to visitors to the City Health Department.

The director attended an in-service training course in housing at the School of Public Health, University of Michigan, and continued to serve as a member of the Executive Committee of the Conference of Municipal Public Health Engineers.

BUREAU OF MILK CONTROL

BUREAU OF MILK CONTROL

Ivan M. Marty

Director

There was a slight but clearly perceptible trend throughout the year toward a return to the prewar status of city milk control. Giving promise of a slow but definite return to normal were such factors as a decided improvement in the war-depleted labor situation on dairy farms and in milk plants, ability to fill wartime vacancies in the bureau inspection staff and partial lifting of Federal restrictions such as those which curtailed the construction of milk plant and dairy farm buildings and limited the manufacture of dairy equipment.

As a result of a gradual but constant increase in the volume of milk produced throughout the year on the local milkshed, the amount of out-of-State emergency milk brought into the city in order to meet local demands totaled 9,000,000 gallons which was a 10 per cent decrease from 1945.

A one cent increase in the retail price of milk authorized by the Office of Price Administration in June, most of which was passed on to the farmers, was not sufficient to encourage greater milk production on the local milkshed and consequently following the abolishment of the Office of Price Administration price controls on milk and the removal of Federal feed subsidies, the local dealers increased the retail price of milk three cents per quart during the early part of July and again one cent per quart toward the end of the same month. The increases raised the farmers' price from $4.10 to $5.65 per hundredweight of 4.0 per cent butterfat milk, thereby stimulating greater milk production and arousing renewed interest in the Health Department dairy farm construction program.

In another effort to increase the local milk supply, which has been entirely inadequate since the beginning of the war, the Maryland Cooperative Milk Producers, Incorporated, representing approximately 85 per cent of the farms producing milk for Baltimore, decided to expand its membership and include owners of farms located outside of the Baltimore inspection area. Upon Health Department inspection of the farms of prospective members it was found that many of those located in the vicinities of Hagerstown in western Maryland and Queenstown on the Eastern Shore could readily meet minimum Health Department dairy farm requirements.

In one of the few instances in recent years in which a violator of the City Milk Code has been prosecuted in court, the owner of the Chestnut Farms

Dairy, Raspeburg, Maryland, whose Health Department Dairy Farm Permit was revoked by the Commissioner of Health in 1939, was charged on February 21 with the sale of unpermitted milk within the city. The owner of the farm had been charged with the same offense in 1943 and in both cases was convicted and fined in a magistrate's court.

One of the city milk pasteurization plants withdrew from the Baltimore market after having received a Health Department order to cease plant operations until such time as the plant and equipment were placed in full compliance with the provisions of the City Milk Ordinance and Health Department regulations. The owners of the plant were prohibited from selling selected raw milk in Baltimore by the Commissioner of Health in 1944 because of general insanitary conditions on the farm operated by them under a Selected Raw Milk Farm Permit.

Dairy Farm Program

Again as in 1945 all holders of Dairy Farm Permits were notified in October that they should plan to meet the Health Department construction standards as soon as possible. Although housing shortages interfered with the release of materials for the construction of dairy farm buildings most of the local milk producers encouraged by a 37 per cent increase in the price of milk and the prospect of an early release of building materials renewed interest in the Health Department dairy farm construction program which had virtually collapsed during the war.

A series of fifteen meetings were held in various parts of the milkshed in cooperation with the Maryland Cooperative Milk Producers, Incorporated. A total of approximately 1,500 holders of Dairy Farm Permits and members of their families attended the meetings which were held primarily for the purpose of encouraging greater fall production in order to eliminate the need for emergency milk and stimulating a prompt return to prewar standards of sanitation and renewal of interest in the dairy farm construction program.

Sanitary Milk Production Contest

The fifteenth annual Sanitary Milk Production Contest was won by Emmitsburg High School, Emmitsburg, Frederick County, Maryland, winner in the 1945 contest. Three hundred and five students from ten high schools located on the milkshed participated in the contest, thereby bringing the total number of prospective dairy farmers trained during the fifteen years in which the contest has been held to 5,156. The high schools in the 1946 contest finished in the following order: Emmitsburg, Maryland; Thurmont, Maryland; Walkersville, Maryland; Delta, Pennsylvania; Dublin, Maryland; Stewartstown, Pennsylvania; Fawn Township,

Pennsylvania; Lisbon, Maryland; Sparks, Maryland; Jarrettsville, Maryland.

A bronze plaque contributed by the local milk pasteurization plants was presented to the team from the Emmitsburg High School at the annual banquet of the Maryland Cooperative Milk Producers, Incorporated.

Dairy Farm Inspection

Some improvement in farm conditions was noticeable, particularly toward the end of the year, as the farm labor situation eased and more equipment replacements became available.

The bacterial control program was temporarily discontinued on an official basis in June when it was found by the Bureau of Laboratories that the techniques employed by the various plant laboratories which make bacterial counts on milk supplied by each producer twice monthly were not standardized. The investigation of unusually high bacterial counts was continued but farmers were not charged with counts slightly in excess of the maximum limit of 200,000 bacteria per cubic centimeter established by ordinance.

The decline in the number of permitted farms noticeable during the past five years continued but the average volume of milk produced per farm showed a decided increase. During the year 411 farms representing approximately 18,000 gallons of milk per day withdrew from the market while 342 permits were issued to dairy farms producing approximately 13,000 gallons daily. The increase in production is due mainly to a trend toward larger herds on farms where extensive alterations were necessary under the dairy farm construction program. At the end of the year there were 2,531 holders of Dairy Farm Permits as compared to 2,600 at the close of 1945 in addition to 850 holders of manufacturing dairy farm permits.

Pasteurization Plant Inspection

The city milk pasteurization plants which were unable throughout the war to maintain buildings and equipment in topnotch condition willingly undertook major corrective measures and accomplished gratifying results. Installations of the most modern milk handling and refrigeration equipment and extensive alterations and improvements were made in many of the city's milk and ice cream plants.

The adoption by the Mayor and City Council of a five-day week for city employees effective June 1 did not interfere with the bureau's daily inspection and phosphatase testing program. With few exceptions all city milk pasteurization plants were inspected daily and a total of 4,487 bottles of pasteurized milk were phosphatase tested by the Bureau of

Laboratories as compared with 3,555 in 1945. Five tests indicated faulty pasteurization, three of which were from the same milk plant. Intensive and prolonged investigation at the plant responsible for the three positive tests disclosed a mechanical defect in the pasteurization equipment which was remedied immediately. In this connection the cooperation rendered by the Bureau of Laboratories was extremely helpful and it was gratifying that most of the milk plants maintained almost constant phosphatase testing control of the pasteurized products thereby assisting greatly in preventing the distribution of potentially dangerous milk throughout the city. Of the average daily sales of 86,951 gallons of milk within the city 99.7 per cent was pasteurized. The withdrawal from the market in November of one of the two remaining raw milk farms supplying the city decreased the daily percentage of raw milk sales during the month of December to .14 per cent.

Educational Activities

Members of the staff attended the Sanitary Section In-service Training Course; the University of Maryland Dairy Technology Conference at College Park; the Dairy Industries Exposition at Atlantic City; the annual convention of the International Association of Milk Sanitarians at Atlantic City; the quarterly meetings of the Baltimore Conference of Food, Drug and Sanitary Officials; and the monthly meetings of the Dairy Technology Society of Maryland and District of Columbia.

Numerous students in milk sanitation from various parts of this country and from foreign lands studied the activities of the bureau. Lectures to groups of milk plant employees were continued with satisfactory results.

Personnel

Ivan M. Marty, Director
Marie R. Huppman, Senior Stenographer
Lillian R. Wolman, Senior Stenographer
Jennie G. Moore, Senior Clerk
Robert F. Gaddis, Chief, Division of Dairy Farm Inspection
Gulius D. D'Ambrogi, Chief, Division of Milk Plant Inspection
Charles R. Brown, Sanitarian
Courtney C. Buck, Sanitarian
Lemuel S. Cookman, Sanitarian
Vernon L. Corey, Sanitarian
Charles H. O'Donnell, Sanitarian
Joseph N. Pohlhaus, Sanitarian
Harry H. Shaffer, Sanitarian
Clarence L. Schieblein, Inspector—Food
Phillip H. Strauss, Inspector—Food

TABLE NO. 1

SUMMARY OF ACTIVITIES OF THE DAIRY FARM DIVISION

1946 AND 1945

Area of Baltimore milkshed..... 2,600 square miles (approximate)
Active shippers..... 2,531

ACTIVITIES	1946	1945
INSPECTIONS		
Total	5,211	5,596
Routine dairy farms	1,507	3,438
Special dairy farms	3,057	1,804
Applications	414	232
Receiving and by-products plants	221	105
Cream plants	12	17
OTHER ACTIVITIES		
Violation notices issued	1,236	2,728
Gallons of milk examined	567	..
Milk returned for high temperature	0	197
Permits issued	342	115
Permits cancelled	411	219
Producers' cans examined	13,300	..
SUSPENSIONS OF PERMITS		
Total	19	154
Department	2	0
Field	17	154

TABLE NO. 2

SUMMARY OF INSPECTIONS OF CITY MILK PLANTS—1946 AND 1945

TYPE OF PLANT	INSPECTIONS	AVERAGE NUMBER OF INSPECTIONS PER MONTH PER PLANT	CORRECTION NOTICES ISSUED
Milk Plants			
1946	4,783	27.71	873
1945	4,782	26.55	860
Ice cream plants pasteurizing on premises			
1946	1,129	4.94	756
1945	932	4.08	583
Ice cream plants buying pasteurized ingredients			
1946	581	3.68	292
1945	626	3.64	290

TABLE NO. 3

SUMMARY OF MILK AND MILK PRODUCT SAMPLES COLLECTED—1946 AND 1945

TYPE OF SAMPLE	1946	1945
ALL SAMPLES	7,379	7,573
Milk	5,852	6,101
Cream	324	329
Ice cream	856	897
Ice cream mix, evaporated and condensed milk	31	27
Empty bottles	227	128
Water samples	44	38
Miscellaneous samples	45	53
Dairy products cans inspected	3,912	475

BUREAU OF FOOD CONTROL

BUREAU OF FOOD CONTROL

Ferdinand A. Korff

Director

Opportunities that accompanied the postwar period were used to advantage for food establishment inspection. The increase in the number of persons available for food handling positions, the availability of new equipment for food establishments and the improvement in better qualified inspection personnel were capitalized on to improve sanitary conditions in the more than 10,000 food establishments. The increase in the amount and variety of food entering the city required alertness on the part of the inspection personnel. A three-fold program of instruction, inspection and prosecution when necessary, was begun that appeared to have brought about improvements in wholesale, manufacturing and retail food establishments in the city.

The diagnosis of the reasons why food establishments in the city were not operating in a clean and sanitary condition mentioned in the 1945 ANNUAL REPORT, namely, (1) lack of trained food handling personnel and (2) type of construction and location of equipment within the establishment, was again recognized and remedial methods were begun. This consisted of devising a chart entitled "Sanitary Engineering Aspects of Food Plant Control," for use in training personnel particularly in food manufacturing establishments, and recommending strongly relocation of present equipment and urging replacement of much of the old and outmoded installations.

Food Handler Instruction

The replacement of many of the 70,000 persons employed as food handlers in the city continued to take place but stabilization of more persons occurred in 1946 than during the war years. Continuing the instruction program which was begun on a large scale in 1941 over 2,300 persons in 38 groups were given training in the fundamentals of protection of food and the operation of food establishments. The following table gives the number of persons and group given such training.

YEAR	NUMBER OF GROUPS	NUMBER OF PERSONS
1946	38	2,305
1945	53	1,728
1944	118	3,625
1943	58	1,901
1942	29	600
TOTAL	296	10,150

Equipment Studies

The second remedial procedure carried out to improve sanitary food establishment operational procedures included insistence in moving equipment away from walls; elevating equipment from floors; painting floors 18 inches from walls with white paint; relocating radiators, conduits, meters, electrical outlet boxes, plumbing and pipes; removal of false ceilings and similar installations. Rodent and insect proofing of establishments was again taught instead of the antiquated methods of poisoning and trapping. Food technologists, representatives of the bottling, baking, restaurant and dairy industries were informed of this relatively new and apparently logical procedure and new establishments were required to comply with orders that included these preventive measures. Two organizations published the chart outlining these recommendations in their trade journals.

Violations

There was a decrease in the number of condemnations and the amount of food necessitated to be condemned in 1946 over 1945 with 171 condemnations and approximately 134,000 pounds of food in 1946 as compared with 212 condemnations and over 183,000 pounds of food in 1945. The number of complaints received from the lay public continued to decrease over recent years. Eleven prosecutions following court action were obtained requiring the payment of fines totaling over $600.00. The license of one operator of a tavern was suspended for persistent failure to comply with sanitary laws by the Board of Liquor License Commissioners on testimony of representatives of the bureau. Publicity in the newspapers was given in the majority of instances of prosecutions, an effective method of deterring violations in other food establishments in the city. A continuation of the procedure of inspecting prospective food establishments and taverns applied for through the Bureau of Buildings and the Board of Liquor License Commissioners aided materially in getting the necessary equipment in the new establishments and locating such equipment for ease of cleaning. Several hundred of the potentially hazardous frost-proof hopper type toilets were ordered removed during this inspection on application procedure. Hearings of violators of various food and sanitary laws were held in 169 instances in 1946. This procedure acted as a means of assuring corrections in the majority of instances and also was probably responsible for success in every case of prosecution in legal proceedings.

Food Establishment Inspection

Retail Food Establishments

No attempt was made to inspect all of the retail food establishments in the city during the year. In the prewar period every retail food es-

tablishment including grocery and meat stores, restaurants, drug store soda fountains, confectioneries, taverns, night clubs and fruit, vegetable and market stalls was visited at least once a year. With new inspection personnel to train, and the newer procedure of meticulous inspection of establishments inaugurated, "quantity of inspections" had to be curtailed for "quality of inspections." Efforts were concentrated in those areas of the city serving the most people and in strategic areas known to need frequent inspection. In spite of this selected assignment a great percentage of food establishments visited were found operating under excellent sanitary conditions as shown in the following table. More than 5,900 inspections in this group of food establishments were made, only slightly less than in 1945.

PERCENTAGE OF RETAIL FOOD ESTABLISHMENTS FOUND TOTALLY SATISFACTORY UPON INSPECTION, 1935–1946

Year	Percentage of Establishments	Year	Percentage of Establishments
1946	50.8	1940	60.1
1945	41.5	1939	48.8
1944	58.4	1938	58.4
1943	55.1	1937	57.1
1942	58.4	1936	52.7
1941	61.2	1935	50.9

Dual inspections by representatives of the bureau and of various corporations operating chains of stores were made in five instances. This procedure was instituted in order to teach representatives of industry the salient points of inspection from a public health point of view. Ultimately the procedure contributed thirty-two additional unofficial inspectorial personnel to the food control program or $12,000 worth of additional protection service to the city. A letter was sent to all of the large retail meat dealers in the city, urging these dealers to require their food handlers to wash their hands after cleaning poultry to prevent infection of food with organisms of food poisoning types that are known to exist in poultry feces. In cooperation with the Bureau of Meat Inspection two prosecutions of meat bootleggers were obtained in the Criminal Court and fines imposed.

Food utensil disinfection again was concentrated upon in taverns, restaurants and soda fountains. The following table gives bacteriologic results of the examination of swabbings of glasses from 1939 through 1946. The figures represent the bacteria per food utensil such as glass, cup rim or silverware and five utensils were swabbed in each instance.

Use of a number of additional quaternary ammonium chloride-type disinfectant preparations was begun in the city and simple test papers

NUMBER OF BACTERIA PER RIM OF GLASS

Year	Number of Samples	Under 100		101 to 500		501 to 1000		1001 to 10,000		Over 10,000	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1946	451	173	29.3	89	19.7	30	66.5	79	17.5	121	26.8
1945	356	73	20.5	60	16.8	19	5.3	70	19.7	134	37.6
1944	747	327	43.8	103	13.8	49	6.5	127	17.0	141	18.9
1943	445	202	45.4	97	21.8	26	5.8	59	18.3	61	18.7
1942	1,300	576	44.3	191	14.7	78	6.0	207	15.9	249	19.1
1941	2,121	1,235	58.2	254	11.9	124	5.8	212	9.9	296	13.9
1940	1,376	739	53.7	163	11.8	61	4.4	172	12.5	241	17.5
1939	94	32	34.0	16	17.0	6	6.3	20	21.3	20	21.3

were added to the inspectors' field kits for use in determining concentrations of these alleged disinfectants. Recommendations were strongly made to distributors of these preparations that only 10 per cent solutions be sold. This made for uniformity of dilution by the restaurant, soda fountain or tavern operator of a teaspoonful to a gallon of water, the same method of dilution when the easy-to-obtain liquid hypochlorite preparations are used. This was agreed upon by the distributors as a logical and helpful procedure for both enforcement and sales personnel.

Wholesale Food Establishments

Wholesale food establishment inspections during the year were centered around food warehouses and similar establishments. Rodent and insect infestation was looked for and again the recommendations of relocating stacks of food and equipment away from walls and elevating from floor were insisted upon.

A carload of grain containing 2 human cadavers was condemned and more than a ton of peaches was also condemned. The latter occurred after a train wreck within the city limits. Following the decommissioning of a number of naval vessels, large amounts of food of miscellaneous varieties were checked and required to be examined before further sale. This activity was conducted in cooperation with representatives of the Food and Drug Administration, Federal Security Agency.

Manufacturing Food Establishments

The continuous pressure upon food manufacturers to combat insect and rodent infestation was continued. Again the relocating of equipment and caulking, sealing and closing of all harboring places and entrances for pests that may defile the food both manufactured and stored was emphasized. There were 837 food samples obtained from 158 bakeries, 24 candy plants and 100 other establishments engaged in a variety of

food manufacturing and submitted for microscopic examination for filth. Of these samples 36 per cent were found to be contaminated with filth in microscopic amounts but indicative of either undesirable conditions within the plant where the food is manufactured or in the incoming ingredients. Directives were given all offending manufacturers and clean-up procedures followed. Commercial analysts, trained entomologists and sanitarians were employed by the industry to establish pest-free plants. Dual inspections were made to soft drink bottling plants by representatives of the Maryland State Department of Health and inspectors of the bureau and instructions were given in the newer procedure of inspection to the end of keeping filth out of the products.

Samples of all brands of mayonnaise sold in the city were obtained and submitted for examination for mineral oil. No evidence of the use of this oil was found in this food product. A quantity of vinegar was condemned and destroyed because of excessive zinc content due to the use of uncoated zinc caps on jars of this condiment.

Institutions and Miscellaneous Establishments

Following the passage by the Maryland State Legislature of the act requiring institutions to be licensed by the State Board of Health, inspections of food departments of hospitals, convalescent homes and similar institutions were made. Over 270 of these institutions were inspected, mostly by the female sanitarian of the bureau, acquainting owners and operators with the provisions of various requirements of the State and city concerning food-handling operations and requiring installations of additional equipment such as three-compartment wash troughs and hand-washing bowls, and relocation of equipment. Recommendations were forwarded to the enforcement agency of the State Department of Health concerning each institution inspected. Student nursing staffs of several institutions were given food-handling instruction.

Special Activities

Additional activities engaged in during the year were as follows:

1. Cooperation with the district health officers was urged, particularly in regard to food establishment sanitation in each of the local districts.

2. All egg dyes sold in the city prior to the Easter season were sampled and submitted for examination for lead or other heavy metals and were found to be harmless.

3. Objections were made to an attempt to have the Health Department enforce a kosher food law. The ordinance was adopted however but a separate commission was formed without direct cost to the city government for the enforcement of this sectarian nonpublic health law.

4. Cooperation was given the Sanitation Committee of the Grand Jury in the inspection of several locations and specific establishments.

5. Conferences were held with representatives of the local pest control operators to minimize friction that had developed between employees of these operators and inspectors. The promiscuous use of fluoride-containing insecticides was objected to by representatives of the bureau.

6. Cases for field equipment were obtained that facilitated carrying many vials and testing equipment used by the inspectors. Testing for impurities of food and for specific chemicals in the field again relieved the laboratory of large amounts of work. Approximately 600 tests were made not including the swabbing of more than 450 food utensils.

7. Applications for new food establishments totaled 1,633 and included 1,369 taverns, 198 retail food stores, 26 wholesale food establishments and 43 food manufacturing establishments.

Instructions were given in food inspection activities to representatives of the Maryland State Department of Health, County Sanitarians, and the Johns Hopkins School of Hygiene and Public Health. The bureau supervised issuance of 15,018 permits which included 6,693 milk, 7,172 meat, 740 rooming house and 413 gas appliance dealers.

Food Poisoning

There were twenty-nine investigations of alleged food poisoning outbreaks conducted during the year by the Department Food Poisoning Team. Four of the outbreaks were found to be caused by food as follows:

Outbreak No. 1. After participating in an entertainment sponsored by the Junior Class of a parochial school, approximately 80 persons became slightly ill 10 hours after eating a fruit cup, chicken cutlets and drinking a fruit beverage. Bacteriologic and chemical examinations of samples of the food and beverage gave no clue as to the cause of the illnesses. The exceptionally warm temperature of the day and the excessive amount of beverage consumed probably were contributory to the illnesses.

Outbreak No. 2. Fried fish and potato salad prepared by an individual resident of a neighborhood and served to the neighboring children caused the illness within several hours of 29 of the children. All of the symptoms were similar with vomiting and diarrhea and recovery within several days. Bacteriologic examination of samples of the food showed the presence of organisms of the Staphylococci and Salmonella groups. Lack of refrigeration, carelessness in washing utensils, excessive hand contact and unfamiliarity in the preparation of large masses of food each no doubt contributed to the contamination.

Outbreak No. 3. Bread pudding over which was poured a custard sauce served in a local restaurant, caused the illness of 8 persons scattered over a period of several weeks. All of the individuals showed similar symptoms of vomiting within 3 hours after eating the food. Storage of the sauce in warm environment and excessive hand contact probably were the causes of

the infection of the food. No samples of the food were available for examination.

Outbreak No. 4. Six girls ate chicken a la king at a local restaurant and within 8 hours became ill with diarrhea and slight vomiting. All of the 6 persons made ill ate the same food at the same time and became ill within the same interval of time. Although no samples of food were available for examination, the small outbreak showed evidence of a Salmonella infection.

A summary of the investigations of food poisoning outbreaks since 1927 through 1946 is as follows:

SUMMARY OF INVESTIGATIONS OF FOOD POISONING OUTBREAKS, 1927-1946

Period	Investigations		Outbreaks Established		
	Number	Persons Involved	Number	Persons Ill	Public Eating Establishments Involved
1942-1946	110	940	20	531	9
1946	29	191	4	121	3
1945	15	67	2	10	0
1944	19	330	4	264	3
1943	28	186	7	88	2
1942	19	166	3	48	1
1937-1941	147	1,035	27	627	9
1932-1936	114	829	10	580	8
1927-1931	18	459	6	406	2

One case of tularemia was reported during the latter part of the year. Investigation indicated that the 2 rabbits were bootlegged into the city in violation of the city ordinance. The Police Department was requested to enforce this ordinance.

Two cases of trichinosis were investigated, each of which upon investition, indicated that undercooked pork had been consumed. No attempt was made to ascertain the sources of the meat except that it was from sources under Federal inspection.

Aid was given to the Bureau of Communicable Diseases in the investigation of a case of typhoid fever that resulted in finding a carrier in the patient's home.

Division of Nutrition

The Chief of the Division of Nutrition continued the educational program as a major activity in 1946. Classes for public health nurses of the Department were held and extended to include personnel of the Instructive Visiting Nurse Association. Lectures on the fundamentals of the science of nutrition and their applications, such as low cost meals were given.

Sanitarians of the Department were also given a talk on the activities of the division. A tabulation of the instruction program of 1945 and 1946 is given in the following table:

EDUCATIONAL TALKS

	1946		1945	
	Talks	Persons Reached	Talks	Persons Reached
Within the Department	50	1,219	11	608
Outside the Department	21	567	43	2,559
Radio	5		1	
Total	76	1,786	55	3,167

The talks given outside the Department included groups from the Baltimore chapter of the American Red Cross, the Young Women's Christian Association, Girl Scouts, student nurses and various religious organizations.

Seven exhibits were prepared and displayed in the office of the Department of Public Welfare and the Eastern Health District. The exhibits, of sufficient simplicity for the least intelligent person to understand, included subjects of iron-rich foods, know your cereals, calcium-rich foods, a good breakfast, the comparative value of fresh whole milk, evaporated milk and buttermilk.

The handbook of nutrition was revised and printed with colored diagrams and distributed to members of the nursing bureau and other interested persons. Two special studies were made of feeding facilities at Sydenham Hospital and the actual cost of basic medical care at present in Baltimore in connection with a committee on low cost budgets.

Contact was continued with the Baltimore Nutrition Committee, the Baltimore Low Cost Budget Committee and the Baltimore Council of Social Agencies, the School Lunch Education Committee of the Department of Education, and the Health, Education and Recreation Commitee of the Young Women's Christian Association. These activities were integrated with those of the Department in connection with the community education procedures. The need for the selection of adequate foods was stressed in each of the proceedings of the committees.

Preparation was made for a program of individual education in good food selection by attending and observing in clinics of the Department and planning how individuals can be best reached for consultation activities.

Personnel

Ferdinand A. Korff, Director
Florence J. Neely, Chief, Division of Nutrition
May A. Hiltz, Senior Stenographer
Etta Levin, Senior Stenographer
Jacque G. Ayd, Sanitarian
Morris Cohen, Sanitarian
Benjamin Ginsberg, Sanitarian
William Sallow, Sanitarian
Fredda L. Staehle, Sanitarian
Viron van Williams, Sanitarian

TABLE NO. 1

INSPECTIONS OF RETAIL, WHOLESALE, MANUFACTURING AND MISCELLANEOUS FOOD ESTABLISHMENTS, 1946 AND 1945

INSPECTIONS AND ACTIVITIES	1946	1945
Total Inspections—All Establishments	14,340	18,504
RETAIL ESTABLISHMENTS		
Inspections	5,930	6,173
Initial inspections	1,754	2,252
Special inspections including school cafeterias and homes	3,117	2,827
Reinspections	1,059	1,094
Activities		
Violation notices issued	16	26
Number of condemnations of food	35	78
Hearings within bureau	141	128
Samples of food obtained for examination	625	482
Field tests by inspectors	592	1,783
Complaints received and investigated	653	731
Prosecutions	10	22
MANUFACTURING ESTABLISHMENTS		
Inspections	1,998	2,111
Initial inspections	1,093	916
Special inspections	620	200
Reinspections	285	995
Activities		
Violation notices issued	3	1
Number of condemnations of food	29	28
Hearings within bureau	27	19
Samples of food obtained for examination	596	515
Prosecutions	1	1
WHOLESALE ESTABLISHMENTS		
Inspections	540	573
Initial inspections	199	181
Special inspections	262	72
Reinspections	79	320
Activities		
Violation notices issued	1	3
Number of condemnations of food	107	106
Hearings within bureau	1	9
Samples of food obtained for examination	32	81
MARKET STALLS AND MISCELLANEOUS ESTABLISHMENTS		
Inspections	5,872	9,647
Market stalls	4,353	8,578
Initial inspections	250	2,400
Reinspections	4,103	6,178
Institutions	277	105
Miscellaneous	1,232	964

TABLE NO. 2

POUNDS OF FOOD CONDEMNED IN WHOLESALE, MANUFACTURING AND RETAIL FOOD ESTABLISHMENTS, 1946 AND 1945

Type of Food	Total	Found by Inspections	Requested for Decision
1946			
All Types of Food	134,614	19,897	114,717
Wholesale Food Establishments			
All types of food	89,356	14,086	75,270
Vegetables and fruits	55,222	1,090	54,132
Meats	184	90	94
Seafood	11,957	129	11,828
Poultry and game	830	..	830
Groceries, canned and bottled goods	5,269	1,339	3,930
Baking supplies, nuts and candies	15,894	11,438	4,456
Manufacturing Food Establishments			
All types of food	4,947	4,817	130
Vegetables and fruits	30	30	..
Seafood	130	..	130
Groceries, canned and bottled goods	2,450	2,450	..
Baking supplies, nuts and candies	2,337	2,337	..
Retail Food Establishments			
All types of food	40,311	994	39,317*
Vegetables and fruits	210	210	..
Meats	301	69	232
Seafood	15	15	..
Groceries, canned and bottled goods	39,437	583	38,854
Baking supplies, nuts and candies	21	7	14
Milk and dairy products	99	99	..
Poultry and game	227	10	217
1945			
All Types of Food	183,816	37,613	146,203
Wholesale Food Establishments			
All types of food	156,228	19,889	136,339**
Vegetables and fruits	60,725	..	60,725
Meats	420	360	60
Seafood	18,518	911	17,607
Poultry and game	565	..	565
Groceries, canned and bottled goods	54,364	8,193	46,171
Baking supplies, nuts and candies	21,551	10,340	11,211
Milk and dairy products	85	85	..
Manufacturing Food Establishments			
All types of food	739	739	..
Vegetables and fruits	..	..	..
Seafood	..	..	..
Groceries, canned and bottled goods	..	..	..
Baking supplies, nuts and candies	739	739	..
Retail Food Establishments			
All types of food	26,849	16,985	9,864***
Vegetables and fruits	..	..	..
Meats	389	389	..
Seafood	380	380	..
Groceries, canned and bottled goods	13,310	3,460	9,850
Baking supplies, nuts and candies	11,964	11,950	14
Milk and dairy products	257	257	..
Poultry and game	549	549	..

* Includes 39,311 pounds damaged at fires.

** Includes 11,244 pounds damaged at fires.

*** Includes 9,850 pounds damaged at fires.

TABLE NO. 3

DISTRIBUTION OF INSPECTIONS OF WHOLESALE AND MANUFACTURING FOOD ESTABLISHMENTS ACCORDING TO TYPE OF ESTABLISHMENT, 1946 AND 1945

TYPE OF ESTABLISHMENT	NUMBER OF ESTABLISHMENTS IN CITY, 1946	NUMBER OF INSPECTIONS	
		1946	1945
Total	5,090	8,400	12,261
Wholesale and distributing establishments	674	540	483
Hucksters and loaded trucks	400*	89	16
Commission merchant houses	132	92	91
Wholesale groceries and warehouses	54	162	140
Candy jobbing houses	50	18	65
Wharves	3	22	8
Butter and egg distributing and breaking plants	14	13	13
Auction houses	10	63	51
Cold storage houses	5	18	14
Railroad terminals	6	63	85
Manufacturing food establishments	916	1,998	2,111
Bakeries	413	1,304	1,624
Poultry-killing—wholesale and retail	228	110	120
Candy manufacturing plants	65	140	133
Oyster packing plants	40	17	22
Soft drink bottling plants	29	104	42
Pickling plants	22	49	53
Canning plants	16	56	5
Salad manufacturing plants	18	60	30
Noodle and potato chip plants	10	8	34
Cod fish cake manufacturing plants	6	25	6
Extract bottling plants	40	77	23
Ice cream cone plants	3	10	4
Caterers and sandwich manufacturing plants	26	36	15
Market stalls	2,400	4,353	8,578
Others, homes, hospitals and so forth	1,100	1,509	1,089

* Approximate figure.

BUREAU OF MEAT INSPECTION

BUREAU OF MEAT INSPECTION

William Brenner, D.V.S.

Director

The limiting of Federal and local slaughterers in the production and sale of beef, pork and veal which was a wartime measure adopted by the Federal Government in 1942 was rescinded in October 1945, reestablished April 29, 1946 and continued to July 26, 1946, at which time all restrictions were abolished. Immediately thereafter all local slaughtering establishments resumed operations on a full time basis which necessitated, due to lack of help, the granting of overtime to a number of plants on general working days, Saturdays and Sundays.

On June 1 the City of Baltimore put into effect a five day working program. In view of the fact that some packers require inspection service on Saturdays, veterinarians and inspectors of meat were assigned to such work on an alternating schedule. Since June to the end of the year the inspection force worked 625 hours over the prescribed working hours from 7:00 A.M. to 4:30 P.M. daily.

The slaughtering of cattle reacting to Bang's disease, tuberculosis and Johne's disease was continued under municipal inspection on authorization of the Federal and State agencies. There were 702 animals inspected for food but none was condemned.

During the year the bureau director prosecuted and convicted four persons for offering for sale uninspected meats brought in from sources outside the city; and condemned 750 pounds of horsemeat brought into a manufacturing establishment for use in the manufacture of meat food products.

During the year four carloads of meat were brought into Baltimore from railroad wrecks for disposal to the trade. Such meats were sold by railroad officials, subject to inspection, and 3,216 pounds were condemned as unfit for human consumption. Car route shipments of meat and products from sources outside of the State showed a rapid decline in the number of shippers as the result of the high cost of livestock.

Service also was rendered to the U. S. Experimental Station, Beltsville, Md., and to St. Elizabeth's Hospital, Washington, D. C., in the examination of cattle for disease; to the Railway Express Company in the examination of meats from sources outside of the State; and to the several bureaus of the Department in the examination of domestic animals for rabies.

The following is a brief summary of the routine activities of the bureau during the year.

NATURE OF SERVICES	1946	1945
Inspection service provided to establishments	165	165
Inspection service provided to out-of-State shippers	7	30
Inspection service inaugurated at establishments	3	2
Supervision maintained over Federal establishments	11	11
Establishments discontinuing business	3	2
Establishments changing classification	1	3

Personnel

William Brenner, D.V.S., Director
Robert M. Cory, D.V.M., Veterinarian
William J. Gallagher, D.V.M., Veterinarian
Franklin C. Herndon, D.V.S., Veterinarian
Edward J. Moylan, D.V.M., Veterinarian
Edward P. Roberts, D.V.M., Veterinarian
John R. Saunders, D.V.M., Veterinarian
Charles D. Skippon, D.V.M., Veterinarian
E. P. Yager, D.V.M., Veterinarian
Matthew N. Bean, Inspector—Meat
Elmer Frederick, Inspector—Meat
Alois Leiterman, Inspector—Meat
Henry A. Miller, Inspector—Meat
Thomas J. Morris, Inspector—Meat
Philip A. Ottenritter, Inspector—Meat
Charles A. Ray, Inspector—Meat
Ernest H. Smith, Inspector—Meat
Lawrence Stettmeier, Inspector—Meat
Adolph Wobbeking, Jr., Inspector—Meat
Marie E. Cerney, Senior Stenographer
Katharine F. Losey, Senior Clerk

TABLE NO. 1

LIVESTOCK INSPECTED, CONDEMNATION OF ANIMALS, PRIMAL AND EDIBLE PARTS

Year	Cattle			Calves			Sheep			Swine			Goats		
	Inspected	Condemned		Inspected	Condemned		Inspected	Condemned		Inspected	Condemned		Inspected	Condemned	
		Carcasses	Parts		Carcasses	Parts		Carcasses	Parts		Carcasses	Parts		Carcasses	Parts
1946.....	46,236	104	2,418	98,995	28	222	81,785	10	7,313	92,821	65	29,367	224	..	..
1945.....	42,056	153	2,661	100,184	44	215	70,851	22	7,081	84,716	136	28,307	45	..	..
1944.....	45,506	116	3,220	116,444	27	293	68,530	40	5,976	114,516	197	32,919	92	1	..
1943.....	35,008	68	1,969	80,387	38	649	75,803	68	11,007	93,694	136	34,285	410	1	9
1942.....	41,600	104	2,492	92,838	75	382	83,587	120	10,819	96,625	229	34,001	89	..	..
1941.....	35,579	83	2,111	91,174	101	352	90,912	209	11,214	121,791	296	59,726	10	..	..
1940.....	27,572	96	2,457	91,825	90	731	95,067	70	3,391	143,235	202	43,636	15	..	..
1939.....	26,827	91	1,424	90,118	52	586	104,188	29	4,269	100,853	139	33,589	36	..	14
1938.....	20,346	18	1,010	87,854	68	756	106,594	36	4,945	81,103	129	28,256	33	..	..
1937.....	22,472	28	1,997	97,372	82	543	94,834	22	5,142	86,769	179	26,004	18	..	..
1936.....	23,211	38	2,303	95,987	74	717	97,275	19	4,946	81,739	126	24,558	15	..	..
1935.....	27,707	90	4,939	95,017	36	1,158	117,284	23	7,290	81,569	474	28,077	92	..	..
1934.....	27,355	175	5,448	94,002	56	1,302	97,854	39	5,773	138,116	870	44,105	10	..	..

TABLE NO. 2

POUNDS OF MEAT CONDEMNED ON REINSPECTION

Year	Total	Pork	Beef	Mutton	Veal	Meat Products	Mixed Products
1946.....	26,666	8,048	6,889	299	1,165	7,524	2,741
1945.....	25,250	3,916	3,202	142	140	15,296	2,554
1944.....	35,231	6,471	5,388	1,359	1,174	13,697	7,142
1943.....	25,633	5,902	5,527	693	1,171	7,051	5,289
1942.....	39,261	7,261	22,984	2,167	851	2,949	3,049
1941.....	58,200	14,765	21,043	2,609	629	7,409	12,345
1940.....	37,779	20,316	7,564	677	791	3,054	3,357
1939.....	30,630	10,604	7,384	570	497	3,799	7,676
1938.....	41,021	7,243	11,704	1,926	3,726	8,685	7,727
1937.....	35,324	9,450	15,414	454	557	7,707	1,742
1936.....	41,413	10,628	16,413	443	588	2,885	10,458
1935.....	53,024	10,511	7,888	1,202	503	6,374	6,546
1934.....	86,038	49,139	16,094	1,884	877	4,332	12,712

TABLE NO. 3

POUNDS OF MEAT AND MEAT FOOD PRODUCTS PREPARED, PROCESSED AND MANUFACTURED UNDER LOCAL INSPECTION

Type of Meat Products	City	Counties
Meat products (fresh)	759,172	..
Meat products (smoked)	2,983,834	751,295
Meat food products (fresh)	967,163	353,960
Meat food products (smoked)	4,335,304	588,730
Meat food products (cooked)	1,096,770	137,495
Meat food products (boiled)	332,607	188,970
Lard	679,427	434,308
Lard compound	264,375	..
Total pounds	11,418,652	2,454,758

BUREAU OF ENVIRONMENTAL HYGIENE

BUREAU OF ENVIRONMENTAL HYGIENE

George W. Schucker, B.E.

Director

The rehabilitation of slums on an area basis by the coordinated enforcement of existing ordinances as carried on by the Housing Law-Enforcement Committee in two areas in South Baltimore attracted national attention as well as endorsement by local, lay, religious and official agencies. A new approach to the old problem of rodent control was inaugurated the latter part of the year with the appointment of the Rodent Control Coordinating Committee, composed of representatives of the Johns Hopkins School of Hygiene and Public Health, the Department of Public Works, Police Department and the Health Department, to study and develop a comprehensive and coordinated rodent control program. Emphasis in industrial hygiene was placed upon the comprehensive evaluation of actual occupational disease hazards in industry and the incorporation of control measures in plans for new industrial constructions prior to their approval by the Buildings Engineer.

Industrial Hygiene

More emphasis was placed upon the comprehensive evaluation of actual hazardous conditions and the engineering study of their control than on industrial plant inspections. Thirty-nine detailed studies of exposure to toxic materials were made and because of these detailed studies, surveys were made of only 116 establishments employing 5,546 workers. Industrial plants made 220 improvements for the health and welfare of a total of 8,518 workers. In addition seven studies were made of industrial waste disposal. An invaluable service was rendered industry and workers by reviewing 195 applications and plans for new industrial plants, and incorporating recommendations for controlling toxic materials in the plans prior to their approval by the Buildings Engineer. Of the ninety-seven structures completed as of December 31, 1946, only two builders failed to comply fully with the original recommendations. As a guide for industry, a tentative draft of an industrial code covering personal service conveniences, ventilation, lighting, personal protective equipment, and noise was developed jointly with the Division of Industrial Health of the Maryland State Department of Health.

Toxic Dusts

During an engineering study of a chrome manufacturing plant, where at one time a majority of the employees had perforated nasal septums from

exposure to chrome dust, over 90 atmospheric samples were collected to establish the magnitude of the exposures. With the completion of the study of the plant, several of the most hazardous processes were brought under control in compliance with recommendations submitted to the company.

An unusual exposure to lead dust caused by the impact of lead bullets upon steel targets resulting in 3 cases of lead poisoning in attendants of two indoor shooting galleries, was studied and brought under control in one of the galleries by the installation of a push-pull exhaust ventilation system designed by the Division. Exposure to toxic concentrations of lead dust in an insecticide plant, where over 20 cases of excessive lead absorption occurred during the past five years, was also brought under control by the installation of an exhaust ventilation system designed by the Division.

Miscellaneous Activities and Studies

1. At the request of industry, systems for the control of hazardous materials were designed for a linotype printing establishment where 25 workers were affected by carbon monoxide; a printing establishment engaged in melting lead containing type metal; a paint company mixing lead pigments; and an electroplating plant using a large tank containing a cyanide solution; and one of the largest fabricating plants in the city where plating, heat treating, grinding, buffing, welding, and pickling processes are to be conducted.

2. The manufacture of acetylene tetrachloride and chamber fumigation of cargo with hydrogen cyanide, two unusual and potentially hazardous processes, were investigated and in both instances suitable control measures were taken to protect employees.

3. Subsequent to the exposure of carbon monoxide encountered in one printing shop a survey was made of the entire printing industry disclosing that only 26 of the 65 establishments were engaged in type casting and of this group five were found to require detailed studies.

4. In cooperation with the Director of the Bureau of Occupational Diseases a study was made of the possible use of BAL (British Anti-Lewsite) in industry for the prevention and treatment of certain metallic poisonings.

5. Atmospheric pollution problems caused by a varnish cooking plant, a plant dehydrating sour milk, a plant dehydrating fermented potatoes and the storage of large piles of cinders were brought under control by the installation of control equipment in the first two instances and discontinuance of operations in the latter cases. In two instances management installed equipment to control atmospheric pollution from a large industrial

ore furnace and volatile portions of tar distillates from an asphalt products manufacturing plant.

6. A study made of the discharge of pulp waste proved beyond doubt that one plant was responsible for silting the harbor necessitating the expenditure of approximately $70,000.00 for dredging in the past eleven years.

7. Assistance was given the Grand Jury in the investigation of the injury to two children due to the explosion of hydrogen-filled toy ballons.

8. Water samples for bacteriologic analyses were collected from nineteen industrial plants having private wells.

9. In cooperation with the Maryland State Department of Education inspections of environmental conditions were made of trade and technical schools requesting approval for G. I. Bill of Rights training courses.

10. At the request of the Better Business Bureau, an investigation of a substitute soap product disclosed that the product was exceedingly alkaline and as a result had caused a number of cases of dermatitis among housewives. Following the investigation the local manufacturer ceased production and withdrew the product from the market.

Gas Appliance Ordinance

With the return of industry to peacetime production the administration of the ordinance was again normal since the wartime gas appliances with substituted construction materials of questionable performance were no longer manufactured. There was a major increase in the registration and use of gas-fired conversion burners for heating buildings with the registration of 19 such appliances.

Of the domestic carbon monoxide cases occurring, one instance bears special mention. Two persons died from carbon monoxide poisoning when a tin can was placed over the vent of an approved gas-fired water heater. Even though the dangers of this practice have been publicized periodically, unfortunately such accidents occasionally occur.

Other activities in the enforcement of the Gas Appliance Ordinance are shown in the tables which follow:

GAS APPLIANCE ORDINANCE—ENFORCEMENT ACTIVITIES

Activities	1946	1945
Inspections	266	1,472
Violations	155	308
Detentions of unapproved appliances	224	262
Hearings of violations	7	12
Gas appliances registered	254	191
Gas fitters registered	140	10

GAS APPLIANCE DEALERS

LICENSES ISSUED	1946	1945
TOTAL	394	479
New	44	68
Renewal	350	411

Community Sanitation

Mr. George O. Motry returned from the military service to the position of Chief of the Division of Community Sanitation in January and Mr. Julius A. Messina who had ably filled the position during Mr. Motry's absence resigned on January 19, 1946 to enter private business.

Activities of the Division followed generally the pattern established in previous years, with adjustment of the emphasis placed upon different phases of these activities to meet the problems presented during the year. Sanitary inspections of hospitals and convalescent homes were started in cooperation with the Maryland State Department of Health, which now licenses these institutions. Participation in the programs being formulated by the Rodent Control Coordinating Committee offers a more adequate approach to the problem of rodent control.

Rodent Control

The Rodent Control Coordinating Committee consisting of representatives of the School of Hygiene and Public Health of The Johns Hopkins University, the Bureau of Street Cleaning, the Bureau of Buildings, the Police Department and Health Department was organized in September 1946 with the general objective of improving rodent control measures through collective action of the member agencies. Plans were made for conducting an intensive in-service training course in rodent control for municipal employees and an intensive comprehensive rodent control program in a small test area.

Following the reporting of two cases of typhus fever in occupants of a group of federally leased homes on the east side of the 600 block of North Calvert Street steps were taken to exterminate the rats and fleas and to have the properties ratproofed. The Division of Rodent Control of the Bureau of Street Cleaning cooperated by baiting the yards and cellars of the properties with ANTU. In this connection, a survey was started in cooperation with the National Institute of Health and the Bureau of Laboratories to determine to what extent rats in the city would give positive complement fixation tests for typhus fever. Of the 24 rats trapped and examined prior to the end of the year, the twelve which were found to

be positive for typhus antibodies came from the block where the cases occurred and the railroad yards in the immediate vicinity.

Mosquito Control

A new circular letter outlining the part the individual householder could play in mosquito control was prepared and 1,500 copies were distributed through a civic organization. Several mosquito breeding places were inspected and control accomplished through cooperation of property owners and the Bureau of Street Cleaning.

Water Supplies

The sanitary quality of the city water supply as delivered to the consumer was evaluated through analyses of 1,360 samples collected from 26 sampling stations throughout the city and it environs. The percentage of 10 ml. portions confirmed for coliform organisms was 0.50 as compared with 0.20 for 1945. In order to obtain a more accurate picture of the condition of the water at the time of sampling, since June, all samples of city water were dechlorinated with sodium thiosulphate. Other water supplies inspected and sampled included public and semi-private springs and wells and commercial bottled waters. Several private wells were tested upon request and two of these which were found to be unsatisfactory were eliminated by supplying city water to the users. One semi-public spring was posted as unfit for use and another was posted during a period in which its water was deemed unsafe for human consumption.

In December a break occurred in a large force main of the sewerage system in Bond Street causing a break in a six inch water main above the sewer which could have resulted in sewage entering the water system. Prompt action by the Bureau of Water Supply in isolating the broken section and the Bureau of Sewers in cutting off the force main reduced this possibility. However, as an added precaution, the Commissioner of Health and Water Engineer notified residents in the vicinity by press and radio to boil all drinking water and the Filtration Engineer increased the residual chlorine content of the water leaving the filtration plant during the emergency. Samples of water collected from the affected area on the date of the break and the following day were all negative for coliform organisms.

Swimming Pools

Pending a revision of the swimming pool regulations, the rule pertaining to chlorine residual was changed to require a residual of 0.4 to 0.6 ppm during all periods when the pools were in use. Both indoor and outdoor pools were inspected periodically and samples of water collected for laboratory examination. All indoor pools were found to be operating satis-

factorily and all commercial outdoor pools, while not of as high a standard as in previous years, were in general satisfactory. The Division worked closely with Park Officials before and during the operating season in an effort to devise means of treating and carrying out treatment to maintain the water of satisfactory quality in the public park pools. While only one park pool met currently accepted standards for sanitary quality of pool water, a marked improvement was noticed over the quality of pool water in previous years. Installation of recirculation systems providing continuous filtration and chlorination is felt to be the only manner in which satisfactory quality of pool waters can be assured.

In cooperation with the Bureau of Laboratories a study was conducted to determine the effect of the dechlorination of swimming pool samples at the time of sampling. The percentage of 10 ml. portions confirmed for coliform organisms in samples collected in sodium thiosulphate treated bottles was 13.6 as compared with 7.7 for samples collected in untreated containers, indicating that provision for dechlorination is desirable.

Defective Drainage

As in previous years, the Health Department was called on to correct defective drainage conditions, which were of little public health significance, but which were the source of property damage or extreme annoyance to citizens in the vicinity. In one case, where the nuisance was being caused by a builder who was still engaged in the development of a tract of land, the Buildings Engineer required the builder to abate the nuisance. In two other cases where alleys were involved, the Highways Engineer was able to remedy the conditions under the provisions of Ordinance No. 273, approved December 15, 1945.

Private Dumps

Considerable difficulty was encountered during the year in properly controlling the operation of private dumps. In one instance, it was necessary for the Health Department to request the Bureau of Highways to excavate a large area on a private dump in order to permit the Fire Department to extinguish a sub-surface fire which could not otherwise be quenched. It is possible that some licensing procedure for the filling of land is desirable to more adequately control the type of material placed on private dumps.

Complaint Investigations

During the year, 6,470 complaints were received and their investigation required the major part of the time of the sanitarians of the Division. A summary of complaint investigations is recorded in the tables following later in this report.

Miscellaneous Activities

1. The urgent need for sewerage facilities in the vicinity of the 6200–6300 blocks Reisterstown Road and at Wagners Point was brought to the attention of the Chief Engineer with the recommendation that sanitary sewers be extended to serve these areas at the earliest possible date.

2. Arrangements were made with the Bureau of Water Supply to inform the Health Department whenever they feel it necessary to discontinue service to an occupied property in order that the owner of the property could be promptly notified to resupply water.

3. Stream pollution surveys were continued and in addition to the replacement of stream pollution signs, where required, seven additional signs were posted along the upper portion of Western Run.

4. The Health Department joined with representatives of the Bureau of Water Supply in preparing a tentative draft of an ordinance to control the addition of chemicals to water systems for the prevention of corrosion.

5. A survey was made of municipal piers to determine the possibility of contamination of the city water supply by vessel watering practices at the piers. Methods of correcting the unsatisfactory conditions found are being studied.

6. Periodic inspections of the sanitary fill operations being conducted by the City disclosed that the fills were being operated without any nuisance.

Housing

The work of the Housing Law Enforcement Committee in South Baltimore in slum rehabilitation by a coordinated effort of the representatives of municipal departments concerned with housing and sanitation received the wholehearted support of religious, social and civic groups, the press, and the Real Estate Board. Plans were made for expanding the program in 1947 with increased personnel provided for in the 1947 budget. Although there was little easing of the shortage of materials, 1,030 dwelling units were improved to conform with the housing code. The educational program carried on in 1945 to inform and interest the public in the magnitude of the housing problems, its relation to health and the Health Department's activities in this field was still further expanded during the year. A total of 3,459 persons were reached directly through illustrated lectures and field tours through blighted areas as compared to 1000 persons for 1945.

Houses Unfit for Human Habitation

With no let up in the critical housing shortage it continued to be impractical to post and vacate dwellings other than those where extremely

hazardous and insanitary conditions existed. A total of 103 dwelling structures housing 882 persons were posted as unfit for human habitation as compared to 135 dwellings housing 885 persons for 1945. The time required to have the properties vacated varied from 10 days to one year. During the year 125 dwellings which had been posted and vacated were approved for occupancy following extensive improvements. Two properties which had been previously vacated were found to be illegally occupied and legal action in magistrate's court in one case and criminal court in the other resulted in fines of $50.00 and costs for each defendant.

Rooming Houses and Lodging Houses

The number of applications for housing permits to operate rooming houses, lodging houses and hotels was 888 as compared to 1,225 in 1945. Following 1,174 inspections and reinspections 658 were approved and permits were issued. Fifteen structures were posted to be vacated as unfit for human habitation and it was necessary to take legal action in the magistrate's court against seven operators.

Overcrowding

Housing inspections revealed 54 instances of overcrowded dwelling units occupied by a total of 384 persons of which 46 per cent were children under 12 years of age. In one instance 10 persons, including a set of two-week old twins, occupied a one-room apartment having one bed for which the rent was $8.00 a week. The Baltimore Housing Authority cooperated in relocating the family and the Office of Price Administration instituted action pertaining to the overcharge of rent. In another instance a small five-room house was found to be occupied by three families consisting of 22 persons 16 of whom were small children and all were clients of the Department of Public Welfare. Toilet facilities for the three families consisted of one choked and defective yard hopper.

Housing Rehabilitation

Slum rehabilitation in South Baltimore by the Housing Law Enforcement Committee which started in 1945 with Block 4 in Census Tract 23-01 was expanded to include Block 15 in Census Tract 23-01, which is bounded by Hamburg Street, Cross Street, Leadenhall Street, and Creek Alley. There were 34 structures having a total of 54 dwelling units, occupied by 206 persons and 4 commercial establishments. The structures in this block like those in Block 4 were characterized by defective hazardous frost-proof hoppers; defective plumbing; dilapidated and rat infested hopper enclosures, board fences and frame additions; structural defects; poor drainage and general disrepair. By the end of the year 23 of the 26 hazardous

outside toilets were replaced by inside toilets, all of the frame additions were removed and the owners of 20 of the properties had complied with drainage and ratproofing requirements.

Legal Procedures

In 140 instances it was necessary to have summonses issued to police magistrate courts of which 85 were for owners, 44 for tenants and 7 for rooming house operators who failed to correct unhealthful housing conditions. Of this number 21 defendants were found guilty and assessed fines totaling $375.00 and 10 were sent to the Grand Jury for further action. Five defendants were tried and convicted in Criminal Court and paid fines amounting to $275.00. The tendency of some police magistrates to act as arbitrators, granting postponement after postponement rather than rendering a decision resulted in long delays in the correction of unhealthful conditions and consumed valuable time which could have been devoted to the correction of other housing conditions.

Miscellaneous Activities

1. Hearings held with 21 operators of hotels in cooperation with the Bureau of Venereal Diseases resulted in the denial of three housing permits. In one instance following denial of a permit a petition in Superior Court for a Writ of Mandamus to compel the Commissioner of Health to issue the permit was heard and denied.

2. Two hundred and eighty-nine sets of plans from the Bureau of Buildings for new buildings and the conversion of structures to multiple family dwellings were reviewed for possible violations of the housing code and 95 were disapproved.

3. The review by the Zoning Enforcement Officer of the Bureau of Buildings of 176 housing investigations where multiple family occupancy existed disclosed that 37 of them were occupied in violation of the Zoning Ordinance.

4. Cooperation was given the Department of Public Welfare, the Fire Department, the Police Department and church and civic organizations in the investigation and correction of unhealthful housing conditions.

5. Mr. G. Yates Cook, Chief of the Division of Housing, served as a member of the Program Committee of the Maryland State Conference of Social Welfare, Home Safety Committee of the Baltimore Safety Council, Membership Committee of the Citizens Planning and Housing Association and attended an Inservice Training Course in Housing at the School of Public Health of the University of Michigan.

6. Photography again played a very active part in the enforcement of

the housing code and in this connection and in cooperation with other bureaus and departments 878 negatives and 761 enlargements were made.

Plumbing

In 1946 there were 815 properties connected to the sanitary sewerage system making a total of 174,608 in the city. A total of 2,690 potential cross connections were prevented or eliminated during the year as compared to 1,393 for 1945. Demonstrations of cross connections in plumbing systems and methods for correction were given to several interested groups including representatives of the Maryland State Department of Health who were to make inspections of hospitals and convalescent homes in connection with the new state licensing law. Cooperation was also given the Maryland State Department of Health in the examination of plumbing plans for a housing project in one of the counties.

Personnel

George W. Schucker, Director
Charles E. Couchman, Chief, Division of Industrial Hygiene
G. Yates Cook, Chief, Division of Housing
George O. Motry, Chief, Division of Community Sanitation
Carroll H. Reynolds, Chief, Division of Plumbing
Jacob G. Vogtmann, Principal Clerk
Irma E. Wehn, Principal Clerk
Joseph B. Finnan, Senior Clerk
Mildred M. King, Senior Clerk
Donald A. Stockley, Senior Clerk
Mary L. Rentz, Senior Stenographer
Edith O. Payson, Junior Stenographer
Margaret M. Ryan, Junior Stenographer
Vera N. Maciolek, Junior Typist
William O. Armstrong, III, Sanitarian
Sidney L. Berlin, Sanitarian
E. Shirley Biddison, Sanitarian
John F. Block, Sanitarian
Charles H. Borcherding, Jr., Sanitarian
Lee S. Bowers, Sanitarian
John H. Braunlein, Jr., Sanitarian
Howard R. Coggins, Inspector—Food
Elbert H. Cohen, Sanitarian
Milton P. Friedmann, Sanitarian
Albert J. Grossman, Sanitarian
Harold E. Hackman, Sanitarian
Floyd B. Hughlett, Sanitarian
Charles M. Kenealy, Sanitarian
James M. Lumpkin, Sanitarian
Felix H. Pretsch, Sanitarian
Ethel Y. Rice, Sanitarian

Wellington S. Ross, Sanitarian
C. Edward Sacls, Sanitarian
Charles B. Crighton, Inspector—Plumbing
Joshua L. Norris, Inspector—Plumbing
John H. Pike, Inspector—Plumbing
Henry G. Rausch, Inspector—Plumbing
Joseph P. Reynolds, Inspector—Plumbing
Benjamin F. Schwarzmann, Inspector—Plumbing
Walter Underwood, Inspector—Plumbing
William J. Wheeler, Inspector—Plumbing

TABLE NO. 1

HEALTH AND ACCIDENT HAZARDS ELIMINATED IN INDUSTRIAL PLANTS

TYPE OF IMPROVEMENT	NUMBER	POPULATION
TOTAL	220	8,518
Health-occupational hazards		
Atmospheric pollution corrected	13	600
Exposure to toxic materials controlled by:		
Materials discontinued	3	14
Installation of local exhaust system	14	302
Provision of masks or respirators	4	4
Exposure to carbon monoxide controlled by:		
Approved draft-hood	4	9
Approved venting	4	9
Lighting improved:		
Artificial	5	777
Noise eliminated	1	100
Ventilation improved:		
Artificial	5	78
Natural	2	19
Sanitation:		
Drinking facilities improved	6	328
Industrial drainage corrected	12	245
Insanitary premises cleaned	5	285
Insect, vermin, and rodent control instituted	4	237
Janitor services provided	2	413
Lockers provided	4	297
Lunchroom provided	1	300
Toilet facilities provided or improved	35	2,062
Washing facilities provided or improved	12	616
Accident hazards:		
Building defects corrected	4	53
Fire hazards eliminated	1	14
Good housekeeping instituted	8	653
Interior painted or cleaned	2	313
Machinery guarded	1	3
Obstructed passageways cleared	2	67
Other improvements:		
New building and equipment	66	720

TABLE NO. 2
DETAILED STUDIES MADE

Industries	Number of Studies	Dust		Fumes	Gases			Miscellaneous
		Chrome Compounds	Lead	Lead	Carbon Monoxide	Hydrogen Cyanide	Fluorine	
All industries studies	39	6	12	1	3	1	1	15
Amusement—shooting galleries	8	..	8	..	..	..	..	..
Automobile manufacturing	1	..	1	..	..	..	..	..
Chemical manufacturing	13	6	2	..	..	..	1	4
Electroplating	1	..	..	..	..	1	..	..
Food	1	..	..	..	..	..	..	1
Metal goods fabrication	2	..	..	..	..	..	..	2
Offices	7	..	..	..	..	..	..	7
Paint manufacturing	1	..	1	..	..	..	..	..
Papermill	1	..	..	..	..	..	..	1
Printing	4	..	..	1	3	..	..	..

TABLE NO. 3
INDUSTRIAL BUILDING APPLICATIONS AND PLANS REVIEWED
FOR OCCUPATIONAL HAZARDS AND SANITATION

Proposed Use of Building	Applications and Plans				Special Recommendations					Consultations
			Approved		Ventilation			Sanitation		
					Mechanical					
	Number Reviewed	Disapproved or Abandoned	No Recommendations	General Recommendations	Local	General	Natural	Industrial Waste Disposal	Personal Service Conveniences	
All types	195	15	20	160	37	23	5	1	23	97
Automotive—repair	41	6	1	34	19	15	..	..	4	22
Ceramic construction products	9	1	..	8	4	..	..	..	2	4
Chemical processing	18	..	1	17	1	..	..	..	4	9
Clothing fabrication	3	..	..	3	..	..	..	..	..	1
Dry cleaning	8	..	..	8	3	6	3	..	..	6
Electrical equipment	4	..	..	4	1	..	..	..	..	2
Food and grain	3	1	1	1	..	..	..	1	..	1
Foundry	5	..	1	4	..	..	..	..	1	4
Laundry	9	..	..	9	..	1	1	..	1	4
Metal goods fabrication	23	1	..	22	4	1	1	..	1	12
Office and mercantile	4	..	..	4	..	..	..	..	1	2
Paint products	5	1	1	3	2	..	..	..	1	3
Soap products	5	1	..	4	..	..	..	..	..	3
Warehouse	46	3	15	28	..	..	..	..	6	17
Woodworking	3	1	..	2	1	..	..	..	1	2
Others (<3 of 1 type)	9	..	..	9	2	..	..	..	1	5

TABLE NO. 4

SUMMARY OF INDUSTRIAL PLANTS SURVEYED, CLASSIFIED ACCORDING TO TYPE OF PLANT, AND POTENTIALLY HAZARDOUS MATERIALS

Type of Plant	Number of Plants	Number of Employees	Hazards																							
			Dusts			Gases					Vapors					Metals			Miscellaneous							
			Silica	Other Inorganic	Organic	Acetylene	Carbon Monoxide	Hydrogen Sulfide	Nitrogen Oxides	Sulfur Dioxide	Alcohols	Aliphatic Hydrocarbons	Aromatic Hydrocarbons	Halogenated Hydrocarbons	Petroleum Products	Antimony	Lead	Other	Acids	Alkalies	Dyes	Infections	Oils	Radiant Energy	Skin Irritants	Tars
All plants surveyed	116	5,546	5	68	14	5	50	1	2	2	1	13	8	4	47	27	55	3	5	12	3	1	12	1	6	1
Amusement—shooting galleries	15	98	..	15	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Automotive—repair	10	230	..	4	..	3	6	..	1	..	..	2	1	..	7	..	..	..	..	1	..	..	4	1	..	..
Brick, clay, cement, & asphalt products manufacturing	3	34	3	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	1
Chemical manufacturing	2	53	..	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..
Clothing manufacturing	3	63	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dry cleaning	5	36	..	..	..	..	4	..	..	..	..	..	..	..	4	..	..	..	2	5	..	..	1	..	..	..
Electrical apparatus manufacturing	2	10	..	..	..	..	..	..	..	1	..	1	..	1	..	..	1	..	..	..	..	..	..	..	1	..
Food industry	1	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Furniture manufacturing	1	40	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Glass and glassware manufacturing	1	60	..	1	..	..	1	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Laundries	3	56	..	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	3	..	..	..	..	..	..
Leather goods manufacturing	1	30	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Metal goods fabrication	15	1,703	1	8	..	2	2	1	1	1	1	3	3	2	1	..	4	2	2	1	..	..	5	..	1	..
Orthopedic and dental appliances	1	6	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Printing and allied trades	35	2,713	..	29	..	..	30	..	..	..	..	..	..	..	34	27	34	..	..	..	2	..	1	..	..	..
Rubber goods manufacturing	1	4	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Textile manufacturing	1	12	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Upholstery and bedding manufacturing	1	8	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Woodworking	8	285	1	5	8	..	..	..	..	..	..	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Wrecking and junk	1	6	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..
Other industries	5	59	..	2	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..

TABLE NO. 5

ACUTE CASES OF CARBON MONOXIDE POISONING (ILLUMINATING GAS) 1926-1946

Year	Total Cases	Suicides and Attempted Suicides	Accidents
1946	157	104	53
1945	130	69	61
1944	140	72	68
1943	178	66	112
1942	123	68	55
1941	137	95	42
1940	174	102	72
1939	202	77	125
1938	130	82	48
1937	114	71	43
1936	218	63	155
1935	130	80	50
1934	154	100	54
1933	157	100	57
1932	172	101	71
1931	152	93	59
1930	184	96	88
1929	142	78	64
1928	136	75	61
1927	154	81	73
1926	211	87	124

TABLE NO. 6

NONFATAL AND FATAL ACCIDENTS FROM ILLUMINATING GAS AND DEFECTIVE APPLIANCES FROM 1930-1946

Year	Total	Accidents from Unburned Gas		Accidents from Incomplete Combustion of Gases		Defective Appliances Causing Accidents
		Nonfatal	Fatal	Nonfatal	Fatal	
1946	53	29	10	10	4	8
1945	61	31	23	6	1	6
1944	68	35	20	12	1	5
1943	112	42	20	49	1	13
1942	55	28	9	16	2	8
1941	42	22	6	14	0	3
1940	72	45	6	19	2	5
1939	125	32	9	83	1	7
1938	48	30	12	6	0	0
1937	43	31	11	1	0	1
1936	155	131	22	2	0	0
1935	50	33	17	0	0	1
1934	54	41	13	0	0	3
1933	57	36	21	0	0	2
1932	71	36	29	5	1	6
1931	59	36	20	3	0	5
1930	88	55	28	2	3	9

TABLE NO. 7

COMPLAINTS, PATROL AND SPECIAL INVESTIGATIONS

Type of Condition	Complaints Received		Patrol and Special Investigations Made	
	1946	1945	1946	1945
Total	6,470	5,536	1,781	1,061
Complaints				
Ashes and garbage	471	521	36	27
Building defects	220	182	8	4
Choked sewers	118	61	28	34
Dead animals	2	4	..	9
Defective drainage	266	163	75	25
Defective heating equipment	56	121	2	3
Defective plumbing	1,038	889	39	23
Defective toilet facilities	764	871	22	18
Fowls and animals	322	271	11	49
Grass and weeds	335	309	76	45
Insanitary conditions	1,258	904	175	77
Insects	123	140	12	6
Miscellaneous	171	81	27	110
Privies and cesspools	89	27	128	20
Rats	570	486	228	38
Water in cellar	667	606	97	34
Special Investigations				
Carnivals	..	..	..	2
City dumps	..	..	122	45
Color tests	..	..	448	270
Environmental survey inspections	.	..	..	24
Filling stations	..	..	..	2
Hospitals and convalescent homes	..	..	57	..
Incinerators	..	..	..	2
Moving picture houses	..	..	65	80
Night soil dumps	..	..	..	1
Pet shops	..	..	..	31
Private dumps	..	..	9	17
Rat surveys	..	..	17	6
Rat resurveys	..	..	4	..
Sanitary survey inspections	..	..	5	19
Schools	..	..	5	5
Slum area surveys	..	..	1	..
Trailer camps	..	..	3	10
Unsewered area surveys	..	..	2	1
Vacant buildings	..	..	..	7
Watering points	..	..	79	17

TABLE NO. 8

COMPLAINT, PATROL AND SPECIAL INSPECTIONS

Type of Inspection	1946	1945
Total	15,955	10,837
Complaint	7,956	5,193
Patrol and special	1,781	1,061
Reinspection	6,218	4,583

TABLE NO. 9
COMPLAINTS

ACTION TAKEN	1946	1945
Handled by inspectors	6,779	4,294
Referred direct to other bureaus or departments	123	270
Investigated and referred to other bureaus or departments	577	561
Investigated and referred to police for follow-up	2,894	1,752
Notices issued to abate nuisances	3,824	3,549
Hearings for failure to comply with notices	276	422
Summonses issued for failure to comply with notices	37	50
DISPOSITION		
TOTAL	6,902	4,531
Abatement by inspector	2,774	2,291
Cancelled (withdrawn or corrected before inspection)	2,261	812
Conditions of no health significance	944	597
Direct reference to other bureaus or departments	133	270
Investigated and referred to other bureaus or departments	790	561
Reported abated by police	2,149	2,402

TABLE NO. 10
DWELLING INSPECTIONS

	TOTAL		STATE OF REPAIR							
			Satisfactory		Minor Repairs Needed		Major Repairs Needed		Unfit for Habitation	
	1946	1945	1946	1945	1946	1945	1946	1945	1946	1945
Number of dwellings inspected	255	280	9	12	64	67	140	159	42	42
Maintenance defects										
Overcrowding	49	46	2	4	10	5	27	29	10	8
Basement occupancies	26	11	1	1	9	3	13	7	3	0
Trash accumulations	216	213	3	1	49	44	125	132	39	36
Improper garbage disposal	119	144	1	1	19	22	69	91	30	30
Rat infestation	218	229	2	2	48	39	128	150	40	38
Vermin infestation	58	66	0	1	7	6	32	46	19	13
Plumbing defects	198	174	2	2	42	28	116	113	38	31
Inadequate toilet facilities	99	161	1	1	13	22	59	103	26	35
Inadequate washing facilities	41	45	0	0	8	5	18	19	15	21
Defective drainage	149	116	0	1	24	14	91	73	34	28
Inadequate ventilation	73	67	2	1	21	22	37	37	13	7

TABLE NO. 11
HANDLING OF DWELLING INSPECTIONS

ACTION TAKEN	1946	1945
Notices issued		
To owners	381	632
To tenants	482	692
To vacate premises or dwelling unit	103	135
Notice disposition		
Complied with	377	607
Housing permits issued	658	669
Housing permit applications disapproved	222	328
Hearings for failure to comply with notices	111	193
Summonses issued for failure to comply with notices	140	78
Cases tried in the Criminal Court	6	14
DISPOSITION		
No violations found	4	9
Dwelling units improved	1,030	1,937
Dwellings vacated	103	135
Dwellings demolished	14	10

TABLE NO. 12
HOUSING INSPECTIONS

TYPE OF INSPECTION	1946	1945
TOTAL	3,726	3,820
Dwellings	255	280
Rooming houses	667	1,022
Homes for the aged	..	38
Reinspections	2,804	2,479
Child-caring institutions	..	1

TABLE NO. 13
METHODS OF SEWAGE DISPOSAL

METHOD OF DISPOSAL	TOTAL TO DECEMBER 1946	NEW CONNECTIONS	DISCONNECTED
Connections to sanitary sewers	174,608	815	109
Private drains to sanitary sewers	15,136	3	..
Connections to storm water outlets	13,163	39	..
Privies	..	..	11
Cesspools	..	..	16

TABLE NO. 14

PERMITS, PLUMBING INSPECTIONS AND PLUMBING FIXTURES INSTALLED

GROUP	1946	1945
Total permits issued	12,765	7,986
Permits for sanitary sewer connections	3,216	485
Permits for plumbing installations	9,549	7,501
Inspections of plumbing	19,456	13,973
Plumbing fixtures installed	12,791	13,446
Bathtubs	1,666	961
Miscellaneous	819	1,642
Sinks	1,884	2,201
Slophoppers	38	58
Urinals	203	276
Wash basins	3,056	3,231
Water closets	4,348	4,147
Wash trays	777	930

TABLE NO. 15

CROSS CONNECTIONS PREVENTED OR CORRECTED

TYPE	1946	1945
TOTAL	2,690	1,393
Frost-proof hopper	1,241	927
Drinking fountain	3	..
Bar and soda fountain	10	3
Bathtub	623	196
Developing tank	..	1
Water closet	11	1
Wash basin	759	244
Dishwasher	10	..
Glasswasher	1	1
Cellar drainer	2	3
Industrial	..	2
Compressor	..	1
Wash tray	28	14
Air conditioning unit	1	..
Washing machine	1	..

STATISTICAL SECTION

STATISTICAL SECTION

W. Thurber Fales, Sc.D.

Director

Analytical studies of vital statistics and of bureau services were conducted during the year in cooperation with the administrative and bureau staffs. Consultation on special statistical problems was rendered to the bureau chiefs and plans were made for extending routine tabulating services to additional bureaus.

The availability of vital statistics and health data and the collection of related information by the section provided the basic statistics for the study of population distribution in the city. The section was called upon for special population studies on hospital and educational facilities. At the request of the Associated Jewish Charities a report on population trends and health conditions in Northwest Baltimore was prepared in connection with the development of a proposed Jewish Medical Center. A report on "Population Trends in Relation to Post-War School Construction Program" was prepared at the request of the Superintendent of Public Instruction. Requests for specific population and health information were received from many social and commercial organizations in the city, extending the demographic services of the section. The Health Department publication of "Boundary Lines of Census Tracts" was reprinted by the Research Department of the *Baltimore News-Post*. This volume will permit a larger number of agencies to study their statistical problems on the basis of uniform small areas.

The section director continued to serve on the U. S. Committee to Study Joint Causes of Death, including appointment to the Subcommittee on Classification of Diseases, Injuries and Causes of Death. Preliminary outlines for the Sixth Revision of the International Lists of Diseases and Causes of Death are being drafted by this committee. The Committee to Study the Medical Care Needs of Baltimore City continued its activities, with the section director as its secretary.

The section was visited during the year by three consultants to the U. S. Committee on Joint Causes of Death, Dr. Percy Stocks and Dr. A. H. T. Robb-Smith of England and Miss Winifred O'Brien of Canada. Dr. O. K. Sagen, Chief of the Division of Vital Statistics and Records of the Illinois State Department of Health also studied the organization and program of the section. The return of Mr. Langdon B. Backus from military leave on April 29 and the appointment of Miss Elaine Cramer on September 17

provided professional statistical services for the expanding responsibilities of the section.

Bureau of Biostatistics

Regular monthly tabulations of births, deaths, reported communicable diseases and diphtheria toxoid inoculations were prepared, in addition to the tabulation of the activities of public health nurses, food control inspectors and tuberculosis clinics. Interpretive reports for weekly, monthly and annual publication were prepared.

Data contributing to the study of population trends and distribution within the city were collected from other agencies, including the analysis of permits for residential building and demolition. At the request of the Circuit Court of Baltimore City a tabulation of cases heard before the Division for Juvenile Causes in 1945 was prepared.

Personnel

W. Thurber Fales, Sc.D., Director
Langdon B. Backus, Statistician
Margaret E. Amspacher, Senior Statistical Clerk
Elizabeth V. Steman, Senior Statistical Clerk
Ruth Gees, Statistical Clerk
Marian Kramer, Statistical Clerk
Mildred S. Lochenauer, Senior Tabulating Machine Operator
George F. Richardson, Tabulating Equipment Operator
Gladys Harback, Junior Stenographer
Jeannette Wheeler, Junior Draftsman
Myrtle Baker, Key Punch Operator
Helen Boesche, Key Punch Operator
Ida M. Padgett, Key Punch Operator
Wilmer G. Erbe, Messenger

BUREAU OF VITAL RECORDS

BUREAU OF VITAL RECORDS

Isadore Seeman, B.S.

Director

A larger number of births occurred in Baltimore during 1946 than in any year in the history of the city, requiring the registration of 27,412 certificates of birth as compared with the wartime peak of 25,934 certificates registered in 1943. The program of education and cooperation with hospital record librarians and private physicians was continued in an effort to facilitate the prompt and accurate reporting of births. Review of the information on each record by one of the parents was made possible by furnishing an abstract of the record to the public health nurse at the time of the neonatal home visit. Abstracts were mailed to parents living outside the city. The value of such a service was shown by the larger number of corrections received by the bureau within a few months after the birth. A *Notification of Birth Registration* was furnished to the parent when the birth certificate was shown to be complete and correct.

The registration of births not reported routinely was investigated at the request of parents, public health nurses, and social agencies and through routine checks conducted by the bureau. Of the 246 such reports originating during the year, 224 were successfully completed, resulting in the registration of 134 births not previously reported. Parents' knowledge that a *Notification of Birth Registration* should be received shortly after the birth of a child initiated requests for 53 records when such notifications had not been delivered, permitting the bureau to secure registration of these births. The search for a birth certificate for all Baltimore-born children dying in the city under six years of age revealed 29 unreported births which were later registered.

The number of registered deaths decreased from 11,674 in 1945 to 11,195 in 1946. The program of seminars in cause-of-death certification for fourth year medical students was continued in an effort to improve the accuracy of mortality statistics.

Division of Archives

The increased availability of death benefits both from social security and commercial insurance is reflected in the largest demand for copies of death certificates ever recorded. In 1946, 26,800 death transcripts were issued as compared with 25,897 copies in 1945. Requests for copies of birth records decreased from 20,361 transcripts in 1945 to 14,757 transcripts in 1946.

Official agencies requiring proof of birth are relying on direct verification from the vital records offices in increasing numbers. During 1946 the bureau issued 2,650 such birth verifications as compared with 2,144 in 1945. Official death verifications for 319 records were issued in 1946 as compared with 371 in 1945.

Requests were made for 1,538 records which were not on file, resulting in the recording of 286 delayed certificates of birth filed on the basis of documentary evidence. This represents a continuing decline from the 1942 wartime peak of 3,613 delayed certificates of birth recorded. The correction of older records continued, also requiring the evaluation of documentary evidence. A total of 3,112 interviews were required to complete such corrections and delayed registrations.

An increase in the number of birth certificates replaced following adoption was noted, with 419 replacements in 1946 and 340 in 1945. The filing of a new certificate for legitimated children decreased from 205 records in 1945 to 138 in 1946.

Special Activities

From September 16 to June 14 the director of the bureau was on leave of absence for graduate study at the University of Michigan. The director of the bureau presented a paper on "Community Vital Statistics" at the meeting of the American Association of Registration Executives in Chicago on March 20.

Division of the Morgue and Public Cemetery

The Anatomical Board received 906 bodies and 68 additional bodies were buried in the public cemetery. A total of 1,690 bodies was received at the morgue. The distribution of these cases by race, sex and age classification is shown in Table No. 1 which follows.

Personnel

Isadore Seeman, B.S., Director
Robert W. McCleary, Acting Director
Irving J. Hurwitz, Junior Administrative Officer
Ida S. Blum, Principal Clerk
James G. McLaughlin, Principal Clerk
Gertrude Cordish, Senior Clerk
Mary A. Hohrein, Senior Clerk
A. Walter Just, Senior Clerk
Rosalie Krause, Senior Clerk
Linda D. Whitney, Senior Clerk
Gertrude M. Fradin, Senior Stenographer
Ruth R. Costello, Junior Stenographer

Anna Leonard, Junior Clerk
Vera C. Hartman, Junior Clerk
Irene H. Fradin, Junior Typist
Sadie Ingrilli, Junior Typist
Mollie Rubin, Junior Typist
John P. Boyle, Chauffeur
James H. Carter, Chauffeur
C. L. Disney, Park Caretaker

TABLE NO. 1

ACTIVITIES OF DIVISION OF THE MORGUE AND PUBLIC CEMETERY—1946

	Total	White		Colored	
		Male	Female	Male	Female
BODIES DELIVERED TO ANATOMICAL BOARD					
All bodies	906*	302	165	250	165
Stillbirths	424*	117	100	92	91
Under 1 year	298	102	51	86	59
Other children	3	2	..	..	1
Adults	181	81	14	72	14
BODIES BURIED IN PUBLIC CEMETERY					
All bodies	68**	27	10	17	8
Stillbirths	32**	10	4	7	5
Under 1 year	20	5	6	6	3
Other children	..	..	..	..	..
Adults	16	12	..	4	..
BODIES RECEIVED AT MORGUE					
All bodies	1,690†	780	242	422	229
Stillbirths	66†	15	6	15	13
Under 1 year	86	30	14	21	21
Other children	78	37	10	17	14
Adults	1,460	698	212	269	181

* Includes 5 white and 5 colored stillbirths, sex undetermined; 5 male and 5 female stillbirths, color undetermined; 4 stillbirths, sex and color undetermined.

** Includes 4 male stillbirths, color undetermined; 1 white stillbirth, sex undetermined; 1 colored stillbirth, sex undetermined.

† Includes 4 white and 4 colored stillbirths, sex undetermined; 3 female stillbirths, color undetermined; 6 stillbirths, sex and color undetermined.

VITAL STATISTICS TABLES

VITAL STATISTICS TABLES

1946

TABLE NO. 1. ESTIMATED POPULATIONS AND RECORDED DEATH RATES; TOTAL, WHITE, COLORED, BALTIMORE—1930—1946.

TABLE NO. 2. ESTIMATED POPULATION, MARRIAGES, RECORDED AND RESIDENT BIRTHS AND DEATHS BY RACE AND CORRESPONDING RATES PER 1,000 POPULATION—1933—1946.

TABLE NO. 3. MONTHLY DISTRIBUTION OF RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO COLOR AND SEX—1946.

TABLE NO. 4. RECORDED AND RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO ATTENDANCE, HOSPITALIZATION, TERM AND PLURALITY—1946.

TABLE NO. 5. RESIDENT DEATHS CLASSIFIED BY COLOR, SEX AND AGE AND DISTRIBUTED BY COLOR AND AGE BY MONTHS—1946.

TABLE NO. 6. RECORDED AND RESIDENT DEATHS IN INSTITUTIONS BY COLOR—1946.

TABLE NO. 7. RESIDENT DEATHS UNDER ONE YEAR FOR EACH CAUSE OF DEATH ACCORDING TO AGE AND MONTH OF DEATH —1946.

TABLE NO. 8. RESIDENT DEATHS CLASSIFIED BY CAUSE, SEX, COLOR AND AGE—1946.

TABLE NO. 9. RECORDED AND RESIDENT DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN CAUSES AND GROUPS OF CAUSES, CLASSIFIED BY COLOR—1946.

TABLE NO. 10. ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE, BALTIMORE—1946.

TABLE NO. 11. RESIDENT AND RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN IMPORTANT CAUSES FOR TOTAL, WHITE AND COLORED POPULATIONS—1936-1946.

TABLE NO. 12. RESIDENT AND RECORDED DEATHS UNDER ONE MONTH OF AGE, DEATHS UNDER ONE YEAR OF AGE, AND MATERNAL DEATHS WITH CORRESPONDING DEATH RATES—1936-1946.

TABLE NO. 13. CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1946.

TABLE NO. 14. REPORTED CASES AND CASE RATES PER 100,000 POPULATION FOR CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1930—1946.

TABLE NO. 1

ESTIMATED POPULATIONS AND RECORDED DEATH RATES;
TOTAL, WHITE, COLORED, BALTIMORE—1930-1946

YEAR	ESTIMATED POPULATION AS OF JULY 1			DEATH RATES PER 1,000 POPULATION		
	Total	White	Colored	Total	White	Colored
1946	930,000	748,000	182,000	12.04	11.54	14.08
1945	930,000	748,000	182,000	12.55	12.05	14.61
1944	937,000	756,000	181,000	12.71	12.02	15.56
1943	930,000	748,000	182,000	13.90	13.23	16.67
1942	936,000	754,400	181,600	12.61	11.90	15.57
1941	866,000	698,000	168,000	13.40	12.46	17.32
1940	860,456	693,268	167,188	13.43	12.67	16.60
1939	855,033	690,318	164,715	12.72	12.13	15.21
1938	849,610	687,348	162,262	13.05	12.38	15.91
1937	844,187	684,361	159,826	13.97	13.09	17.72
1936	838,764	681,356	157,408	13.73	12.64	18.45
1935	833,341	678,332	155,009	13.38	12.31	18.04
1934	827,918	675,291	152,627	13.43	12.46	17.68
1933	822,495	672,232	150,263	13.13	12.26	17.00
1932	817,072	669,155	147,917	13.19	12.04	18.35
1931	811,649	666,059	145,590	14.20	12.91	20.07
1930	806,226	662,946	143,280	13.94	12.70	19.65

For corresponding figures from 1890 to 1929, see Annual Report of 1939, page 263.

TABLE NO. 2

ESTIMATED POPULATION, MARRIAGES, RECORDED AND RESIDENT BIRTHS AND DEATHS BY RACE AND CORRESPONDING RATES PER 1,000 POPULATION—1933-1946

Year	Total		White		Colored	
	Number	Rate	Number	Rate	Number	Rate
Estimated population as of July 1, 1946	930,000		748,000		182,000	
Marriages Recorded						
1946	21,445	23.1	16,340	21.8	5,105	28.0
1945	16,206	17.4	12,308	16.5	3,898	21.4
1944	15,818	16.9	11,542	15.3	4,276	23.6
1943	17,171	18.5	12,383	16.6	4,788	26.3
1942	19,595	20.9	15,167	20.1	4,428	24.4
1941	15,966	18.4	12,256	17.6	3,710	22.1
1940	11,305	13.1	8,658	12.5	2,647	15.8
1939	8,501	9.9	6,569	9.5	1,932	11.7
1938	8,521	10.0	6,578	9.6	1,943	12.0
1937	8,849	10.5	6,763	9.9	2,086	13.0
1936	8,134	9.7	6,208	9.1	1,926	12.2
1935	7,254	8.7	5,695	8.4	1,559	10.0
1934	7,235	8.7	5,494	8.1	1,741	11.4
1933	5,804	7.0	4,278	6.4	1,526	10.2
Births						
Resident						
1946	21,111	22.7	15,805	21.1	5,306	29.1
1945	17,848	19.2	13,308	17.8	4,540	24.9
1944	18,830	20.1	14,021	18.5	4,809	26.6
1943	21,054	22.6	16,077	21.5	4,977	27.3
1942	19,720	21.2	15,076	20.1	4,644	25.6
1941	15,995	18.5	11,886	17.0	4,109	24.4
1940	13,712	15.9	10,105	14.6	3,607	21.6
1939	12,525	14.6	9,211	13.3	3,314	20.1
1938	13,208	15.5	9,892	14.4	3,316	20.4
1937	12,516	14.8	9,370	13.7	3,146	19.7
1936	11,801	14.1	8,956	13.1	2,845	18.1
1935	12,332	14.8	9,363	13.8	2,969	19.2
1934	12,201	14.7	9,196	13.6	3,005	19.7
1933	12,189	14.8	9,130	13.6	3,059	20.4
Recorded						
1946	27,412	29.5	21,649	28.9	5,763	31.7
1945	22,936	24.7	18,025	24.1	4,911	27.0
1944	23,696	25.3	18,627	24.6	5,069	28.0
1943	25,934	27.9	20,649	27.6	5,285	29.0
1942	24,144	25.8	19,224	25.5	4,920	27.1
1941	19,406	22.4	14,992	21.5	4,414	26.3
1940	16,478	19.2	12,582	18.1	3,896	23.3
1939	14,887	17.4	11,350	16.4	3,537	21.5
1938	15,275	18.0	11,763	17.1	3,512	21.6
1937	14,272	16.9	10,921	16.0	3,351	21.0
1936	13,277	15.8	10,272	15.1	3,005	19.1
1935	13,641	16.4	10,521	15.5	3,120	20.1
1934	13,453	16.2	10,308	15.3	3,145	20.6
1933	13,409	16.3	10,211	15.2	3,198	21.3
Deaths						
Resident						
1946	10,798	11.6	8,061	10.8	2,737	15.0
1945	11,358	12.2	8,481	11.3	2,877	15.8
1944	11,544	12.3	8,552	11.3	2,992	16.5
1943	12,530	13.5	9,315	12.5	3,215	17.7
1942	11,347	12.1	8,397	11.1	2,950	16.2
1941	11,160	12.9	8,132	11.7	3,028	18.0
1940	11,096	12.9	8,243	11.9	2,853	17.1
1939	10,386	12.1	7,907	11.4	2,479	15.0
1938	10,618	12.5	8,034	11.7	2,584	15.9
1937	11,244	13.3	8,415	12.3	2,829	17.7
1936	11,058	13.2	8,134	11.9	2,924	18.6
1935	10,707	12.8	7,917	11.7	2,790	18.0
1934	10,764	13.0	8,049	11.9	2,715	17.8
1933	10,505	12.8	7,923	11.8	2,582	17.2
Recorded						
1946	11,195	12.0	8,633	11.5	2,562	14.1
1945	11,674	12.5	9,015	12.1	2,659	14.6
1944	11,907	12.7	9,090	12.0	2,817	15.6
1943	12,929	13.9	9,895	13.2	3,034	16.7
1942	11,803	12.6	8,976	11.9	2,827	15.5
1941	11,609	13.4	8,700	12.7	2,909	17.3
1940	11,557	13.4	8,782	12.7	2,775	16.6
1939	10,879	12.7	8,374	12.1	2,505	15.2
1938	11,091	13.0	8,509	12.4	2,582	15.9
1937	11,790	14.0	8,958	13.1	2,832	17.7
1936	11,516	13.7	8,612	12.6	2,904	18.4
1935	11,149	13.4	8,352	12.3	2,797	18.0
1934	11,116	13.4	8,417	12.5	2,699	17.7
1933	10,797	13.1	8,243	12.3	2,554	17.0

TABLE NO. 3

MONTHLY DISTRIBUTION OF RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO COLOR AND SEX—1946

Month	Live Births							Stillbirths						
	Total	White			Colored*			Total**	White			Colored		
		Total	Male	Female	Total	Male	Female		Male	Female	Unknown	Male	Female	Unknown
Total	21,111	15,805	8,112	7,693	5,306	2,696	2,610	635	199	127	25	133	124	11
January	1,427	1,060	552	508	367	192	175	41	14	9	2	7	8	..
February	1,350	994	503	491	356	187	169	41	6	10	3	10	8	1
March	1,449	1,045	569	476	404	190	214	37	8	10	1	4	10	1
April	1,343	997	521	476	346	181	165	46	15	10	3	10	6	2
May	1,548	1,193	595	598	355	183	172	61	20	12	2	17	8	..
June	1,578	1,172	609	563	406	210	196	45	14	8	1	13	9	..
July	1,829	1,388	723	665	441	217	224	62	21	10	2	13	14	2
August	1,984	1,515	805	710	469	244	225	56	15	13	3	16	6	1
September	2,083	1,585	817	768	498	248	250	54	26	10	..	6	6	1
October	2,156	1,632	825	807	524	288	236	70	21	9	4	11	22	3
November	2,148	1,578	771	807	570	294	276	56	15	11	2	14	14	..
December	2,216	1,646	822	824	570	262	308	66	24	15	2	12	13	..

* Included in colored live births are: Chinese: 8 male; 3 female.
Japanese: 2 male; 5 female.
Filipino: 1 female.
American Indian: 1 female.

** Included in stillbirth totals are 16 sex or color unknown.

TABLE NO. 4

RECORDED AND RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO ATTENDANCE, HOSPITALIZATION, TERM AND PLURALITY—1946

Place of Birth, Attendance, Term and Plurality	Recorded			Resident		
	Total	White	Colored	Total	White	Colored
Live Births						
Total	27,412	21,649	5,763	21,111	15,805	5,306
Physician	26,746	21,416	5,330	20,443	15,574	4,869
Home	2,763	1,286	1,477	2,756	1,276	1,480
Hospital	23,983	20,130	3,853	17,687	14,298	3,389
Midwife	666	233	433	668	231	437
Born in hospital	23,983	20,130	3,853	17,687	14,298	3,389
40 weeks or more	21,744	18,333	3,411	16,089	13,093	2,996
36-39 weeks	1,336	1,105	231	928	725	203
28-35 weeks	498	333	165	359	214	145
Less than 28 weeks	103	81	22	85	64	21
Unspecified	302	278	24	226	202	24
Born at home	3,429	1,519	1,910	3,424	1,507	1,917
40 weeks or more	2,770	1,299	1,471	2,772	1,293	1,479
36-39 weeks	382	112	270	377	108	269
28-35 weeks	84	36	48	84	37	47
Less than 28 weeks	34	20	14	32	18	14
Unspecified	159	52	107	159	51	108
Stillbirths						
Total	768	461	307	635	351	284
Physician	716	447	269	585	338	247
Home	160	61	99	158	61	97
Hospital	556	386	170	427	277	150
Midwife	2	..	2	2	..	2
Medical examiner	50	14	36	48	13	35
Plural Births						
Sets of twins	341	246	95	260	175	85
Both born alive	316	234	82	243	168	75
One born alive, 1 stillborn	19	8	11	12	4	8
Both stillborn	6	4	2	5	3	2
Sets of triplets	3	2	1	3	2	1
All born alive	2	1	1	2	1	1
All born dead	1	1	..	1	1	..
Set of quadruplets						
All born alive	1	1	..	..	..	..

TABLE NO. 5

RESIDENT DEATHS CLASSIFIED BY COLOR, SEX AND AGE AND DISTRIBUTED BY COLOR AND AGE BY MONTHS—1946

Age	Grand Total	Entire Year						Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
		White			Colored																										
		Total	Male	Female	Total	Male	Female	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
Total, All ages	10,798	8,061	4,413	3,648	2,737	1,466	1,271	820	261	684	219	729	202	662	224	663	233	629	237	614	227	583	230	592	220	686	219	653	211	746	254
Under one month	556	354	210	144	202	109	93	30	14	34	12	26	5	29	14	21	16	27	21	25	20	33	12	30	17	37	28	31	22	31	21
1 to 2 months	96	63	49	14	33	21	12	6	6	3	3	7	1	4	4	6	2	1	2	6	2	3	1	7	2	11	3	5	3	4	4
3 to 11 months	98	61	32	29	37	14	23	8	6	9	6	4	2	9	3	5	5	2	5	4	2	5	..	2	4	3	1	3	1	7	2
Total under 1 year	750	478	291	187	272	144	128	44	26	46	21	37	8	42	21	32	23	30	28	35	24	41	13	39	23	51	32	39	26	42	27
1 year	42	27	12	15	15	9	6	3	3	5	2	5	..	3	4	2	1	1	1	4	..	..	1	..	1	1	2	2	..	1	..
Total under 2 years	792	505	303	202	287	153	134	47	29	51	23	42	8	45	25	34	24	31	29	39	24	41	14	39	24	52	34	41	26	43	27
2 to 4 years	82	48	25	23	34	20	14	7	3	3	5	4	1	9	1	6	1	3	2	2	4	3	3	2	6	5	3	1	2	3	3
Total under 5 years	874	553	328	225	321	173	148	54	32	54	28	46	9	54	26	40	25	34	31	41	28	44	17	41	30	57	37	42	28	46	30
5 to 9 years	62	43	28	15	19	11	8	3	..	5	1	1	3	3	3	3	2	1	..	3	4	2	1	4	1	8	2	4	1	6	1
10 to 14 years	48	25	14	11	23	17	6	1	5	2	1	2	2	1	..	2	1	2	3	3	3	3	4	4	1	..	2	4	..	1	1
15 to 19 years	116	64	38	26	52	20	32	6	3	4	6	4	5	5	4	6	4	5	7	3	6	6	3	6	3	6	3	7	4	6	4
20 to 24 years	200	91	48	43	109	43	66	12	16	8	9	9	10	7	8	6	9	6	9	7	5	6	7	4	11	3	9	8	4	15	12
25 to 29 years	211	108	58	50	103	52	51	9	7	14	10	10	9	5	6	10	12	16	11	10	10	6	7	13	10	3	12	5	4	7	5
30 to 34 years	265	125	67	58	140	69	71	14	17	10	5	12	10	11	13	9	13	9	5	12	12	13	15	4	15	12	9	7	11	12	15
35 to 39 years	363	179	115	64	184	101	83	23	20	17	9	20	13	18	15	14	15	16	22	10	14	6	23	15	10	15	11	9	19	16	13
40 to 44 years	518	266	172	94	252	139	113	20	20	23	16	22	18	18	31	30	22	18	32	30	15	20	12	18	25	23	16	26	20	18	25
45 to 49 years	680	428	274	154	252	143	109	39	26	43	25	40	16	36	17	38	23	38	22	28	21	29	22	37	14	36	20	32	23	32	23
50 to 54 years	868	562	363	199	306	163	143	59	18	40	34	51	31	47	30	42	19	42	24	40	24	41	34	50	17	45	17	47	29	58	29
55 to 59 years	962	697	440	257	265	158	107	85	29	52	20	57	18	72	24	61	29	54	20	51	19	48	20	46	22	65	21	49	18	57	25
60 to 64 years	1,119	902	562	340	217	131	86	89	23	81	18	82	20	62	13	79	20	63	14	72	21	64	14	63	15	78	22	76	17	93	20
65 to 69 years	1,147	960	564	396	187	103	84	83	19	79	16	102	13	78	10	86	12	72	17	70	14	76	22	63	16	78	14	74	13	99	21
70 to 74 years	1,148	1,000	528	472	148	72	76	93	6	82	7	85	13	88	12	82	13	78	9	76	16	87	19	78	14	71	11	86	12	94	16
75 to 79 years	996	913	417	496	83	39	44	91	11	87	8	90	7	54	6	58	7	77	4	84	10	57	7	67	9	79	5	80	4	89	5
80 to 84 years	661	613	224	389	48	20	28	69	6	46	5	47	3	49	3	48	6	58	5	45	4	40	..	42	6	62	3	58	3	49	4
85 to 89 years	428	405	141	264	23	12	11	50	2	28	1	38	2	40	3	36	..	31	1	23	..	29	3	28	1	33	5	31	1	38	4
90 to 94 years	105	102	29	73	3	..	3	14	1	8	..	10	..	7	..	12	1	6	1	5	..	6	..	7	..	12	..	7	..	8	..
95 to 99 years	26	24	3	21	2	..	2	5	..	1	..	1	..	7	..	1	..	3	..	1	1	..	..	2	..	..	..	1	..	2	1
100 years and over	1	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE NO. 6
RECORDED AND RESIDENT DEATHS IN INSTITUTIONS
BY COLOR—1946

INSTITUTION	RECORDED			RESIDENT		
	Total	White	Colored	Total	White	Colored
Total deaths	11,195	8,633	2,562	10,798	8,061	2,737
Deaths in hospitals and institutions	6,389	4,845	1,544	5,865	4,173	1,692
Baltimore City Hospitals*	902	516	386	817	455	362
Sydenham Hospital	54	43	11	41	31	10
Other Baltimore hospitals	4,823	3,715	1,108	3,674	2,672	1,002
Hospitals in Maryland counties	..	..	..	15	12	3
Hospitals in other states	..	..	..	59	52	7
Tuberculosis hospitals*	..	..	..	236	107	129
Mental hospitals	24	24	..	337	241	96
Federal hospitals	162	138	24	228	161	67
Other institutions	424	409	15	458	442	16
Deaths at home	4,806	3,788	1,018	4,933	3,888	1,045

* Deaths in the tuberculosis division of the Baltimore City Hospitals are allocated to the Baltimore City Hospitals.

TABLE NO. 7
RESIDENT DEATHS UNDER ONE YEAR FOR EACH CAUSE OF DEATH ACCORDING TO AGE AND MONTH OF DEATH—1946

International List Number	Cause of Death	Color	Total Under 1 Year	Age Groups: Under 1 Day	1-6 Days	7-30 Days	1-2 Months	3-5 Months	6-11 Months	Month of Death: January	February	March	April	May	June	July	August	September	October	November	December
	All Causes	T	750	233	198	125	96	49	49	70	67	45	63	55	58	59	54	62	83	65	69
		W	478	157	124	73	63	30	31	44	46	37	42	32	30	35	41	39	51	39	42
		C	272	76	74	52	33	19	18	26	21	8	21	23	28	24	13	23	32	26	27
6	Meningococcus meningitis	W	2	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	1	..
9	Whooping cough	W	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..
		C	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
10	Diphtheria	C	1	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..
12	Tetanus	W	2	..	..	..	2	..	..	..	..	..	..	1	..	1	..	..	..	..	..
13	Tuberculosis of the respiratory system	W	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
		C	3	..	..	..	..	1	2	..	1	..	..	..	1	1	..	..	..	..	..
14	Tuberculosis of the meninges	W	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
24a	Septicemia	W	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..
30f	Syphilis, congenital	W	2	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	1	..
		C	8	3	2	2	1	..	..	..	1	..	..	1	..	1	..	2	..	1	2
33	Influenza	W	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
43	Mycoses	W	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
46h	Cancer of the mesentery and peritoneum	W	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
52a	Cancer of the kidney	W	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..
54b	Other and unspecified cancers of the brain and central nervous system	W	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..
56d	Nonmalignant tumors of the brain and other parts of the central nervous system	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
64	Diseases of the thymus gland	W	7	..	..	..	3	3	1	..	1	1	..	..	..	..	..	..	3	..	2
		C	5	..	..	..	2	1	2	1	1	..	..	..	..	..	..	2	..	1	..
66b	Other general diseases	W	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
70	Rickets	C	2	..	..	..	1	..	1	..	..	2	..	..	..	..	..	..	..	..	..
73d	Other and unspecified anemias (except splenic)	C	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
83a	Cerebral hemorrhage or effusion (excluding birth injuries)	W	1	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
84a	Mental deficiency	W	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
86	Convulsions	W	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
93b	Myocarditis (not specified as acute, chronic, or rheumatic)	W	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..
95a	Functional diseases of the heart (without mention of organic lesion)	C	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
101	Diseases of the lymphatic system	W	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
104a	Diseases of the nasal fossae and accessory sinuses	W	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
		C	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..

TABLE NO. 7—Continued

RESIDENT DEATHS UNDER ONE YEAR FOR EACH CAUSE OF DEATH ACCORDING TO AGE AND MONTH OF DEATH—1946

International List Number	Cause of Death	Color	Total Under 1 Year	Age Groups						Month of Death											
				Under 1 Day	1-6 Days	7-30 Days	1-2 Months	3-5 Months	6-11 Months	January	February	March	April	May	June	July	August	September	October	November	December
106c	Bronchitis, unspecified	W	2	..	..	..	..	1	1	1	..	..	..	..	..	..	1	..	..	..	..
107	Bronchopneumonia	W	28	..	..	7	6	7	8	5	2	1	7	2	1	2	1	..	1	1	5
		C	21	..	..	6	5	5	5	2	4	..	5	3	2	1	1	1	..	..	2
108	Lobar pneumonia	W	9	..	1	1	3	2	2	..	1	2	..	4	..	..	..	..	1	..	1
		C	3	..	..	..	..	1	2	..	2	..	..	1	..	..	..	..	..	..	..
111a	Hemorrhagic infarction and thrombosis of the lungs	C	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
111c	Chronic and unspecified congestion of the lungs	W	2	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
113	Pulmonary emphysema	W	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
115b	Septic sore throat	W	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
115c	Diseases of the pharynx and tonsils	W	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
116	Diseases of the esophagus	W	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
119	Diarrhea and enteritis	W	44	..	..	18	18	5	3	4	3	3	4	2	1	3	3	7	6	5	3
		C	24	..	..	11	7	4	2	5	..	1	..	2	1	..	1	3	5	3	3
122a	Hernia	C	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..
122b	Intestinal obstruction	W	5	..	..	2	2	..	1	..	1	2	..	1	..	..	..	..	..	..	1
		C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
123	Other diseases of the intestines	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
127b	Other diseases of the gallbladder and biliary ducts	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
128	Diseases of the pancreas (except diabetes mellitus)	W	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
130	Acute nephritis	C	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
133a	Pyelitis, pyelonephritis, and pyelocystitis	W	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
133b	Other diseases of the kidneys and ureters	W	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
153	Other diseases of the skin and cellular tissue	W	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
157a	Congenital hydrocephalus	W	10	2	2	4	1	..	1	1	1	1	..	..	1	1	1	1	1	..	2
		C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
157b	Spina bifida and meningocele	W	11	1	5	3	..	1	1	1	1	2	2	1	1	1	1	..	1	..	..
157c	Anencephalus	W	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
157d	Other congenital malformation of the central nervous system	W	3	2	..	..	..	..	1	1	1	..	..	..	..	..	..	..	1	..	..
157e	Congenital malformations of the heart	W	27	7	8	1	9	1	1	2	3	2	2	2	2	4	1	1	1	4	3
		C	6	..	1	2	1	..	2	1	1	1	1	..	..	1	..	..	1	..	..
157g	Congenital malformations of the digestive system	W	13	1	..	7	4	..	1	2	2	..	2	1	..	..	1	2	1	1	1
		C	3	..	1	1	..	1	..	..	1	2	..	..	..	..	..	..	..	..	..
157h	Congenital malformations of the genitourinary system	W	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1

TABLE NO. 7—Continued
RESIDENT DEATHS UNDER ONE YEAR FOR EACH CAUSE OF DEATH ACCORDING TO AGE AND MONTH OF DEATH—1946

International List Number	Cause of Death	Color	Total Under 1 Year	Age Groups						Month of Death											
				Under 1 Day	1-6 Days	7-30 Days	1-2 Months	3-5 Months	6-11 Months	January	February	March	April	May	June	July	August	September	October	November	December
157m	Other and unspecified congenital malformations	W	3	2	1	..	..	..	..	1	..	..	..	1	..	..	..	..	1	..	..
158	Congenital debility (cause not stated)	W	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
		C	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
159	Premature birth (cause not stated)	W	169	92	62	14	1	..	..	14	14	18	12	8	15	9	19	19	14	17	10
		C	118	46	46	23	3	..	..	7	5	1	6	10	14	14	7	10	18	13	13
160a	Intracranial or spinal hemorrhage (birth injury)	W	38	10	19	6	2	1	..	4	3	..	3	3	5	4	2	1	5	4	4
		C	33	16	14	3	..	..	..	3	3	1	4	2	4	1	4	1	5	3	2
160c	Other injuries at birth	W	16	14	2	..	..	..	..	3	..	..	2	..	..	3	2	2	..	1	3
		C	2	2	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..
161a	Asphyxia (cause not specified), atelectasis	W	27	13	12	1	1	..	..	..	4	2	1	4	1	3	2	1	5	2	2
		C	18	8	6	2	2	..	..	..	1	..	2	1	2	3	..	3	1	4	1
161b	Infection of the umbilicus; pemphigus and other infections (non-syphilitic)	W	3	..	..	2	1	..	..	1	..	..	2	..	..	..	..	..	..	..	..
161c	Other specified diseases peculiar to the first year of life	W	12	7	5	..	..	..	..	..	2	..	..	1	1	1	1	2	2	1	1
		C	5	1	1	1	1	1	..	1	1	..	2	..	..	1	..	..	..	..	..
179x	Acute accidental poisoning by other and unspecified substances	C	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
180	Conflagration	C	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
181	Accidental burns (except conflagration)	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
182	Accidental mechanical suffocation	W	5	..	..	1	3	1	..	1	..	..	..	..	1	..	1	1	1	..	..
		C	3	..	..	..	2	1	..	1	..	..	..	1	1	..	..	..	..	..	..
186a	Accidental injury by fall	W	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..
195c	Lack of care of the newborn	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..
195d	Obstruction, suffocation, or puncture by ingested objects	W	2	..	1	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..
		C	2	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..
195e	Other and unspecified accidents	W	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
200c	Unknown or unspecified cause	W	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
		C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

TABLE NO. 8
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Age Groups: Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
	All Causes	10,798	W	8,061	M	4,413	291	12	8	9	8	28	14	38	48	58	67	115	172	274	363	440	562	564	528	417	224	173
					F	3,648	187	15	7	8	8	15	11	26	43	50	58	64	94	154	199	257	340	396	472	496	389	359
			C	2,737	M	1,466	144	9	9	4	7	11	17	20	43	52	69	101	139	143	163	158	131	103	72	39	20	12
					F	1,271	128	6	6	4	4	8	6	32	66	51	71	83	113	109	143	107	86	84	76	44	28	16
I	Infectious and parasitic diseases	1,042	W	495	M	343	7	2	3	3	2	9	2	5	11	8	16	24	27	38	35	47	38	28	22	11	2	3
					F	152	5	3	2	3	...	3	4	7	12	18	14	11	5	7	15	6	15	6	7	4	2	3
			C	547	M	344	7	4	6	3	5	3	4	7	17	28	26	37	54	47	31	27	12	13	7	3	1	2
					F	203	6	1	2	1	1	1	2	25	39	21	26	24	18	10	12	8	2	2	2	...	...	...
1	Typhoid fever	1	W	1	M	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Meningococcus meningitis	11	W	6	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	5	1	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
			C	5	M	5	...	1	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Scarlet fever	1	W	1	F	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Whooping cough	2	W	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Diphtheria	19	W	18	M	13	...	...	1	1	1	6	...	1	...	...	1	1	...	...	...	1	...	...	...	...	...	...
					F	5	...	...	...	1	...	1	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Erysipelas	2	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...

12	Tetanus	5	W	2	M	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	3	M	3	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
13–22	Tuberculosis, all forms	747	W	349	M	251	2	1	...	1	...	2	...	3	9	6	14	18	21	30	27	40	25	22	18	10	...	2
					F	98	...	2	...	1	...	...	...	6	11	16	12	9	3	5	10	3	8	4	4	2	1	1
			C	398	M	237	1	2	3	2	1	1	4	7	15	24	21	33	43	32	20	14	2	5	4	1	...	2
					F	161	2	...	2	1	1	...	2	25	39	19	24	18	12	7	6	1	1	...	1	...	...	...
13	Tuberculosis of the respiratory system	707	W	340	M	244	1	1	...	...	...	...	...	3	9	6	14	18	21	29	27	39	25	21	18	10	...	2
					F	96	...	1	...	1	...	...	...	6	11	15	12	9	3	5	10	3	8	4	4	2	1	1
			C	367	M	219	1	1	1	1	...	...	2	6	13	24	19	32	41	32	19	13	2	5	4	1	...	2
					F	148	2	...	1	1	1	...	1	22	34	19	23	17	11	7	6	1	1	...	1	...	...	...
14	Tuberculosis of the meninges and central nervous system	20	W	6	M	4	1	...	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	14	M	8	...	...	2	1	1	...	...	1	2	...	...	...	1	...	...	...	...	...	...	...	...	...
					F	6	...	...	1	...	...	...	1	1	2	...	...	...	1	...	...	...	...	...	...	...	...	...
15	Tuberculosis of the intestines and peritoneum	5	C	5	M	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
					F	4	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Tuberculosis of the vertebral column	9	W	2	M	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
			C	7	M	5	...	1	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
17	Tuberculosis of the bones and joints (except vertebral column)	3	C	3	M	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
19	Tuberculosis of the lymphatic system	1	C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
20	Tuberculosis of the genito-urinary system	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
21b	Tuberculosis of other organs	1	C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
24a	Septicemia (non-puerperal)	4	W	3	M	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27a	Dysentery, bacillary	1	W	1	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27b	Dysentery, amebic	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
27c	Dysentery, other and unspecified forms	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Yrs. and Over
28b	Malaria, quartan	1	C	1	M	1																1						
30	Syphilis, all forms	169	W	62	M	44									1	1		1	4	5	7	6	10	3	4		1	1
					F	18	2									1	1			1	4	3	3	2		1		
			C	107	M	81	6		1			1			1	2	4	4	8	14	10	11	10	6	3			
					F	26	2										2	4	3	3	6	4	1		1			
30b	Syphilis: general paralysis of the insane	44	W	15	M	14													1	3	3	3	3					1
					F	1											1											
			C	29	M	22									1		1	3	2	2	4	4	1	3	1			
					F	7											1	1			2	2			1			
30c	Syphilis: other syphilis of the central nervous system	17	W	10	M	5												1	2	1			1					
					F	5														1	2		1			1		
			C	7	M	6											2		1	1	1	1						
					F	1																1						
30d	Syphilis: aneurysm of the aorta	54	W	22	M	17													1	1	2	2	5	3	3			
					F	5															2		2	1				
			C	32	M	25										2	1		3	8	3	4	2		2			
					F	7											1	2	1	1	1		1					
30e	Syphilis: other syphilis of the circulatory system	26	W	6	M	5									1	1					1	1	1					
					F	1																1						
			C	20	M	13												1	1	3	1		5	2				
					F	7													1	2	3	1						
30f	Syphilis: congenital	12	W	2	F	2	2																					
			C	10	M	8	6		1			1																
					F	2	2																					

30g	Syphilis: other and unspecified forms	16	W	7	M	3																	1					1		1										
					F	4										1								2			1													
			C	9	M	7														1		1	2	2		1														
					F	2												1	1																					
32a	Weil's disease	4	W	3	M	3												2			1																			
			C	1	F	1						1																											
33a	Influenza with respiratory complication specified	24	W	11	M	4	1													1				2															
					F	7									1					2				1			1												2
			C	13	M	7										1	1			1		1	1			1										1				
					F	6										2		1	1							2													
33b	Influenza, without respiratory complication specified	16	W	9	M	8				1	1			1						1	1	1				2													
					F	1																								1									
			C	7	M	4			1	1																				2									
					F	3																	3																
35	Measles	6	W	4	M	2			1			1																											
					F	2			2																														
			C	2	M	1		1																															
					F	1		1																															
36	Acute poliomyelitis and polioencephalitis	4	W	4	M	1										1																							
					F	3						1	1				1																						
37c	Encephalitis lethargica	2	W	2	F	2																		2															
43	Mycoses	3	W	2	M	2	1														1																		
			C	1	F	1														1																			
44a	Venereal diseases (except gonorrhea and syphilis)	2	C	2	F	2												1	1																				
44b	Lymphogranulomatosis (Hodgkin's disease)	15	W	12	M	7							1				1	1						1	1		1	1											
					F	5								1				2			1			1															
			C	3	M	3									1				2																				
44c	Mumps	1	W	1	F	1				1																													
II	Cancer and other tumors	1,492	W	1,243	M	601	2					1		4	3	6	6	6	14	30	65	78	92	109	81	59	29	16											
					F	642	2		1	1	2	3		3	3	6	8	12	29	47	54	73	79	80	78	77	58	26										
			C	249	M	100					1		1	1	1	1	3	5	6	5	15	23	15	14	5	2	1	1										
					F	149			1	1	1			1	2	3	8	16	20	18	22	19	15	7	9	2	3	1										

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Yrs. and Over
45-55	Cancer and other malignant tumors	1,448	W	1,212	M	588	1	...	...	...	...	1	...	4	3	5	6	5	12	29	65	76	92	108	80	58	28	15
					F	624	2	...	1	1	1	3	...	1	2	6	7	11	27	44	53	73	78	79	77	75	57	26
			C	236	M	96	...	...	...	...	1	...	...	1	...	1	3	5	6	4	15	23	15	13	5	2	1	1
					F	140	...	...	...	...	1	...	...	1	1	3	8	15	19	17	20	19	15	7	9	2	2	1
45a	Cancer of the lip	4	W	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
45b	Cancer of the tongue	13	W	13	M	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	3	2	2	1	1
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
45c	Cancer of the mouth	8	W	6	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	2	...	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
45d	Cancer of the jaw bone	8	W	7	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	2	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
45e	Cancer of unspecified parts of the buccal cavity	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
45f	Cancer of the pharynx	14	W	11	M	7	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	2	3	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	1	...
			C	3	F	3	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...
46a	Cancer of the esophagus	29	W	24	M	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	5	4	1	2	1	2
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	1	...	...	...
			C	5	M	4	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...

46b	Cancer of the stomach	167	W	130	M	83											1		1	4	5	8	17	17	12	11	6	1
					F	47													2	3	4	5	6	4	11	6	4	2
			C	37	M	25												1	2	1	3	7	6	3	1		1	
					F	12												1	2	2	2	3	1					1
46c	Cancer of the duodenum	1	W	1	F	1																					1	
46d	Cancer of the rectum and anus	82	W	68	M	35											1	1	2	2	4	3	4	8	5	3	1	1
					F	33										1				2	4	2	7	2	3	6	4	2
			C	14	M	8												2			2	2		1		1		
					F	6														1	1	1	1		2			
46e	Cancer of the intestines (except duodenum and rectum)	156	W	139	M	48								1				1		2	4	8	4	7	10	6	4	1
					F	91									1				8	4	5	12	10	16	10	11	7	7
			C	17	M	7										1	1			1				2	2			
					F	10												1	2	1	3	1	1	1				
46f	Cancer of the liver and biliary passages	69	W	60	M	26														3	3	5	3	4	2	5	1	
					F	34													4	3	1	3	3	4	8	6	2	
			C	9	M	3												1		1	1							
					F	6												2	1				1	1	1			
46g	Cancer of the pancreas	53	W	44	M	23														2	3		3	7	1	5	1	1
					F	21													1	2	2	1	1	6	3	4	1	
			C	9	M	5											2					1		2				
					F	4													1				1	1	1			
46h	Cancer of the mesentery and peritoneum	15	W	11	M	6	1									1			1				1	1	1			
					F	5																1		2	1		1	
			C	4	F	4															2	1	1					
46m	Cancer of unspecified digestive organs	8	W	5	M	3																	1		1			1
					F	2																	1	1				
			C	3	M	2																	1	1				
					F	1																	1					
47a	Cancer of the larynx	24	W	22	M	21															3	5	3	4	3	2	1	
					F	1																			1			
			C	2	M	2															1			1				
47b	Cancer of the trachea	1	W	1	M	1																	1					

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
47c	Cancer of the bronchus	52	W	42	M	41	...	...	...	...	...	...	...	1	...	...	...	...	2	1	10	10	4	7	3	...	3	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
			C	10	M	9	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	3	2	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
47d	Cancer of the lung	86	W	76	M	67	...	...	...	...	...	...	...	...	...	...	1	2	2	2	13	15	16	10	4	1	...	1
					F	9	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	3	...	1	2	2	...	...
			C	10	M	7	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	3	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...
47e	Cancer of the pleura	1	W	1	M	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47f	Cancer of the mediastinum and unspecified sites of respiratory system	5	W	4	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
48a	Cancer of the cervix (of uterus)	76	W	50	F	50	...	...	...	...	...	...	...	...	...	...	2	3	3	8	7	2	6	10	5	1	2	1
			C	26	F	26	...	...	...	...	...	...	...	...	...	1	5	3	2	3	4	4	1	...	2	...	...	...
48b	Other cancer of the uterus	80	W	61	F	61	...	...	...	...	...	...	...	...	...	2	1	2	2	5	6	8	10	6	8	6	4	1
			C	19	F	19	...	...	...	...	...	...	...	...	...	...	...	3	3	5	3	3	...	1	...	...	1	...
49a	Cancer of the ovary	37	W	32	F	32	...	...	...	...	...	...	...	...	1	...	...	...	1	5	6	2	4	5	1	2	4	1
			C	5	F	5	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...	1	...	...	1	...	...	...
49c	Cancer of the vagina	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
49d	Cancer of the vulva	5	W	3	F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1
			C	2	F	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...
50	Cancer of the breast	152	W	131	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
					F	130	...	...	...	...	...	...	...	...	...	1	2	4	2	7	8	27	17	9	15	19	17	2
			C	21	F	21	...	...	...	...	...	...	...	...	...	1	1	...	4	3	1	3	3	2	2	1	...	...

51b	Cancer of the prostate	64	W	56	M	56	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	5	10	12	10	8	4	3
			C	8	M	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	1	...	...	1	...	1
51c	Cancer of the testes	6	W	6	M	6	...	...	...	...	...	...	...	...	2	2	2	...	...	...	...	...	...	...	...	...	...	...
51d	Cancer of the penis	2	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
52a	Cancer of the kidney	25	W	24	M	14	...	...	...	...	...	...	...	...	...	...	...	1	...	1	3	3	2	3	1	...	...
					F	10	1	...	...	...	...	...	...	...	...	1	...	...	1	...	2	2	2	...	1	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
52b	Cancer of the bladder	57	W	49	M	29	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	5	7	5	4	2	1
					F	20	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	4	5	...	4	...	4
			C	8	M	6	...	...	...	...	1	...	...	...	...	...	...	1	...	...	1	2	1	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
52c	Cancer of urinary organs, site other than kidney or bladder	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
53	Cancer of the skin (except vulva and scrotum)	23	W	21	M	9	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	4	...	1	...
					F	12	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	1	4	4
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
54a	Glioma	14	W	13	M	4	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	1	...	...	...	...	...
					F	9	...	...	1	...	1	2	...	1	...	1	...	...	1	...	1	1	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
54b	Other and unspecified cancers of the brain and central nervous system	14	W	12	M	7	...	...	...	...	...	...	...	1	...	...	...	1	2	3	...	...	...	...	...	...	...
					F	5	1	...	...	1	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...
			C	2	F	2	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
55a	Cancer of the adrenal glands	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
55b	Cancer of bones (except jaw bone and accessory sinuses)	10	W	9	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	1	...	...	...
					F	5	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	1	1
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
55c	Cancer of the thyroid gland	6	W	6	M	5	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	...	1	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
55d	Cancer of the nasal cavity and accessory sinuses	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
55e	Cancer of other and unspecified organs	76	W	64	M	37	...	...	...	...	...	1	...	...	...	1	1	...	1	2	5	2	6	9	4	2	2	1
					F	27	...	...	...	...	...	...	...	...	...	1	1	...	2	1	3	2	2	3	5	5	2	...
			C	12	M	6	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	1	1	1	...	...	...	...
					F	6	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	1	...	1	...	...	1	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
56a	Nonmalignant tumors of the ovary	4	W	4	F	4													1	1	1		1					
56b	Nonmalignant tumors of uterus	6	W	3	F	3												1	1	1								
			C	3	F	3													1		2							
56d	Nonmalignant tumors of brain and other parts of the central nervous system	14	W	9	M	6	1									1		1	1	1		1						
					F	3								1	1									1				
			C	5	M	2									1									1				
					F	3			1						1			1										
56e	Nonmalignant tumors of other and unspecified organs	8	W	6	M	2																1						1
					F	4								1						1						1	1	
			C	2	F	2														1							1	
57d	Tumors of the brain and other parts of the central nervous system, nature unspecified.	5	W	2	M	1													1									
					F	1											1											
			C	3	M	2							1							1								
					F	1				1																		
57e	Tumors of other and unspecified organs, nature unspecified	7	W	7	M	4																		1	1	1	1	
					F	3					1														1	1		
III	Rheumatism, diseases of nutrition and of the endocrine gland, other general diseases and avitaminoses	351	W	290	M	100	6	1		1		1		2	2	4	1	1	3	6	4	9	14	18	10	11	3	3
					F	190	2					2	3	2	4	1	1		3	8	10	23	42	19	35	21	6	8
			C	61	M	20	4					1	1	2		2				2	3		3	1	1			
					F	41	3					1	2	1		2	4	2	2	1	6	8		4	2	3		
58b	Acute rheumatic endocarditis	8	W	7	M	5								1		1	1		1			1						
					F	2								1		1												
			C	1	F	1											1											

58c	Acute rheumatic myocarditis	2	W	2	F	2							1		1																
58d	Other acute rheumatic heart diseases	25	W	13	M	7									1	3		1	1		1										
					F	6							2						1	2	1										
			C	12	M	5						1	1	2		1															
					F	7						1	2	1		1	2														
58e	Other forms of acute rheumatic fever	3	W	3	M	1									1																
					F	2						2																			
59a	Rheumatoid arthritis	1	W	1	F	1																									1
59b	Other chronic articular rheumatism	3	W	1	M	1																		1							
			C	2	F	2															1					1					
61	Diabetes mellitus	272	W	238	M	73													1	6	3	8	1	17	10	11	3	3			
					F	165								1	2				2	5	9	20	40	18	35	20	6	7			
			C	34	M	8														2	2		2	1	1						
					F	26										1	1	1	2	1	4	8		4	2	2					
63a	Simple goiter	2	W	1	F	1																		1							
			C	1	F	1															1										
63b	Exophthalmic goiter	9	W	7	M	1																	1								
					F	6									1					1		3	1								
			C	2	M	2										1					1										
63c	Myxedema and cretinism	1	W	1	M	1																	1								
63d	Other diseases of the thyroid glands	1	W	1	F	1												1													
64	Diseases of the thymus gland	15	W	10	M	9	6	1		1		1																			
					F	1	1																								
			C	5	M	2	2																								
					F	3	3																								
65a	Addison's disease (not specified as tuberculous)	1	W	1	F	1											1														
65b	Other diseases of the adrenal glands	3	W	2	M	1								1																	
					F	1																	1								
			C	1	M	1																	1								
66b	Other general diseases	2	W	2	M	1																	1								
					F	1	1																								
70	Rickets	2	C	2	M	2	2																								
71	Other avitaminoses	1	W	1	F	1																				1					

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
IV	Diseases of the blood and blood-forming organs	61	W	54	M	30			2	1		2		1		2	2	1		2	2	2	2	2	6	2	1	
					F	24				1	1	1		2		1	2	2	1	3	3			3	2	1	1	
			C	7	M	5	1					1		1	1				1									
					F	2								1		1												
72a	Primary purpuras	3	W	3	F	3														1	1				1			
72b	Hemophilia	1	C	1	M	1						1																
73a	Pernicious anemia	3	W	3	M	2																			1	1		
					F	1																					1	
73b	Hypochromic anemias	2	W	2	F	2										1								1				
73d	Other and unspecified anemias	9	W	6	M	4															2				1		1	
					F	2											1				1							
			C	3	M	2	1												1									
					F	1										1												
74a	Leukemia	37	W	34	M	20			2			1		1		2	1	1		2		2	2	2	4			
					F	14				1	1	1		2				1	1	2	1			2	1	1		
			C	3	M	2								1	1													
					F	1								1														
74b	Aleukemia	2	W	2	F	2											1	1										
75b	Splenomegaly (of undetermined nature)	3	W	3	M	3				1		1														1		
75c	Other diseases of the spleen	1	W	1	M	1											1											
V	Chronic poisoning and intoxication	34	W	26	M	19		1									1	1	7	3	1	1	2	1	1			
					F	7		1									1	3			1	1						
			C	8	M	3			1										1		1							
					F	5			1					1			1		2									

77c	Acute alcoholism	14	W	12	M	10											1	1	5	2		1						
					F	2											1	1										
			C	2	M	1													1									
					F	1								1														
77d	Chronic alcoholism	9	W	8	M	6													2				2	1	1			
					F	2															1	1						
			C	1	M	1															1							
77e	Other and unspecified alcoholism	3	W	2	M	1														1								
					F	1												1										
			C	1	F	1											1											
78a	Lead poisoning, specified as occupational	1	W	1	M	1															1							
78b	Lead poisoning, not specified as occupational	4	W	2	M	1		1																				
					F	1		1																				
			C	2	M	1			1																			
					F	1			1																			
79b	Chronic poisoning by other mineral or organic substances, not specified as occupational	3	W	1	F	1												1										
			C	2	F	2													2									
VI	Diseases of the nervous system and sense organs	800	W	599	M	268	3		1	1		1	2	1		2	1	6	4	11	23	31	38	29	43	42	19	10
					F	331		1		1			1	2		4	2	6	5	11	21	17	33	45	48	58	40	36
			C	201	M	96									2	2		1	17	11	11	12	15	11	7	4	2	1
					F	105		1				1			1	1	4	2	13	9	21	9	16	4	15	3	4	1
80a	Intracranial abscess	1	W	1	M	1																1						
80b	Other encephalitis (nonepidemic)	8	W	7	M	4			1	1				1				1										
					F	3		1									1	1										
			C	1	F	1						1																
81a	Simple meningitis	12	W	6	M	4													1	1	2							
					F	2				1						1												
			C	6	M	3										1				2								
					F	3		1													1		1					
82	Diseases of the spinal cord (except locomotor ataxia and disseminated sclerosis)	13	W	8	M	4										1							1		2			
					F	4													1					1	1	1		
			C	5	M	4													1	1				2				
					F	1										1												

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	By Color		By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
83a	Cerebral hemorrhage or effusion (excluding birth injuries)	642	W	468	M	199	1	...	...	...	...	...	1	...	...	1	1	2	3	6	15	25	31	23	31	36	15	8
					F	269	...	...	...	...	...	...	1	1	...	1	1	4	2	9	17	16	31	41	39	46	29	31
			C	174	M	79	...	...	...	...	...	...	...	...	1	1	...	1	14	8	9	11	14	7	6	4	2	1
					F	95	...	...	...	...	...	...	...	...	1	...	3	2	10	9	20	9	15	4	15	3	3	1
83b	Cerebral embolism and thrombosis	70	W	64	M	31	...	...	...	...	...	...	...	...	...	...	...	1	...	...	3	4	6	5	6	2	2	2
					F	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	6	8	9	5
			C	6	M	4	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	1	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
83c	Cerebral softening	3	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
83d	Hemiplegia and other paralysis of unspecified origin	10	W	9	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	2	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
84a	Mental deficiency (except general paralysis of the insane)	1	W	1	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
84b	Schizophrenia (dementia praecox)	1	C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
85	Epilepsy	11	W	6	M	5	...	...	...	...	...	...	1	...	...	...	...	...	...	1	2	...	...	...	1	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
			C	5	M	3	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
86	Convulsions (under 5 years of age)	1	W	1	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
87b	Neuritis (except rheumatic or alcoholic)	2	W	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
87c	Paralysis agitans (except result of encephalitis)	7	W	6	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...

87d	Disseminated sclerosis	7	W	7	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...
					F	4	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	1	...
87e	Other diseases of the nervous system	6	W	6	M	3	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...
88	Diseases of the organs of vision	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
89a	Otitis and other diseases of the ear	4	W	4	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...
VII	Diseases of the circulatory system	3,729	W	3,086	M	1,727	...	1	...	...	...	...	1	1	3	9	10	27	68	113	137	162	267	269	256	190	119	94
					F	1,359	2	...	1	...	...	...	1	2	2	1	6	11	21	45	52	90	114	167	220	232	196	196
			C	643	M	332	1	...	...	...	...	...	...	1	4	1	6	11	20	29	47	62	43	42	32	19	7	7
					F	311	...	1	...	...	...	...	1	...	4	1	6	14	21	34	55	44	22	39	23	23	13	10
90–95	Diseases of the heart	3,560	W	2,959	M	1,671	...	1	...	...	...	...	1	1	3	9	10	26	67	112	134	160	261	263	248	178	112	85
					F	1,288	1	...	1	...	...	...	1	1	2	1	4	11	21	44	52	88	111	159	212	215	186	178
			C	601	M	308	1	...	...	...	...	...	...	1	4	...	4	11	17	29	46	60	40	38	29	17	6	5
					F	293	...	1	...	...	...	...	1	...	4	1	6	14	21	34	51	42	22	35	20	20	11	10
90b	Pericarditis (except acute or chronic rheumatic)	6	W	3	M	3	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...
			C	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
91a	Bacterial endocarditis (acute, subacute or unspecified)	10	W	8	M	5	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
91b	Other acute or subacute endocarditis	2	C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
91c	Other endocarditis	1	W	1	F	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
92a	Diseases of the aortic valve (without mention of diseases of mitral valve or rheumatic fever)	38	W	26	M	17	...	...	...	...	...	...	...	...	...	...	...	1	3	3	...	2	1	3	3	...	1	...
					F	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	...	2	2	...	...
			C	12	M	9	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	3	1	1	1	...	...	...
					F	3	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	...	...
92b	Diseases of the mitral valve (whether or not specified as rheumatic)	86	W	67	M	22	...	...	...	...	...	...	...	...	...	2	1	1	5	...	...	4	4	1	2	1	1	...
					F	45	...	...	...	...	...	...	1	...	...	...	1	3	5	4	3	2	1	1	6	5	7	6
			C	19	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	...	1	...	...	...
					F	14	...	...	...	...	...	...	...	...	2	...	...	1	1	2	2	...	...	2	2	1	1	...
92c	Diseases of other and unspecified valves and chronic endocarditis, specified as rheumatic	13	W	12	M	9	...	...	...	...	...	...	...	...	2	...	...	...	...	...	3	1	2	...	1	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
92d	Diseases of other and unspecified valves and chronic endocarditis, not specified as rheumatic	59	W	41	M	22	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	5	5	2	2	4	1
					F	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	5	2	3	5
			C	18	M	12	...	...	...	...	...	...	...	...	...	...	...	1	1	4	2	...	2	...	1	1	...	...
					F	6	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	1	2	...	...
92e	Endocarditis (not specified as acute, chronic, or rheumatic, 45 years of age and over)	7	W	5	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...
			C	2	F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
93a	Acute myocarditis (except rheumatic)	10	W	7	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	1
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
			C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...
93b	Myocarditis (not specified as acute, chronic, or rheumatic under 45 years of age)	3	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
					F	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
93c	Chronic myocarditis and myocardial degeneration, specified as rheumatic	41	W	38	M	14	...	...	...	...	...	...	...	...	...	1	3	...	2	...	1	1	2	2	1	1	...	...
					F	24	...	...	...	...	...	...	...	...	...	...	1	1	...	2	1	1	2	1	3	7	3	2
			C	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
93d	Chronic myocarditis and myocardial degeneration, not specified as rheumatic	2,151	W	1,744	M	892	...	...	...	...	...	...	...	1	1	1	1	10	16	32	47	62	130	147	162	140	78	64
					F	852	...	...	...	...	...	...	...	...	...	...	1	3	7	18	29	50	73	114	142	146	140	129
			C	407	M	200	...	...	...	...	...	...	...	...	1	...	1	3	8	13	28	42	29	33	21	12	6	3
					F	207	...	1	...	...	...	...	...	...	1	...	4	8	13	20	39	33	17	25	13	15	9	9
93e	Other myocarditis (not specified as acute, chronic or rheumatic)	104	W	77	M	44	...	...	...	...	...	...	1	...	...	2	1	...	2	3	1	3	5	7	7	3	7	2
					F	33	...	...	...	...	...	...	...	...	...	1	...	2	...	...	1	...	4	5	5	5	3	7
			C	27	M	15	...	...	...	...	...	...	...	...	1	...	...	...	1	1	3	3	1	1	1	1	...	2
					F	12	...	...	...	...	...	...	...	...	...	...	...	1	3	...	1	3	1	1	...	...	1	1

94a	Diseases of the coronary arteries	883	W	819	M	585										3	3	11	33	70	77	77	103	89	65	28	14	12
					F	234											1		6	12	14	27	22	30	42	40	19	21
			C	64	M	42											3	2	4	5	10	7	4	3	2	2		
					F	22										1	1	2	2	4	4	3		2	2	1		
94b	Angina pectoris	22	W	20	M	12															1	3	2	2	2		1	1
					F	8															1	1	1	1	1	1	1	1
			C	2	F	2														1	1							
95a	Functional diseases of the heart (without mention of organic lesion)	4	W	3	F	3																	1		1	1		
			C	1	M	1	1																					
95b	Other diseases of the heart, specified as rheumatic	26	W	20	M	7											1		1		2	1		1	1			
					F	13							1						1	5	2	2			2			
			C	6	M	2								1									1					
					F	4												1	1		1			1				
95c	Other diseases of the heart, not specified as rheumatic	94	W	65	M	32												2		1	2	3	6	5	2	2	6	3
					F	33													1	1	1	3	2	4	2	4	8	7
			C	29	M	14												5	2	1	3	1			2			
					F	15						1					1			4	2	1	2	2	1	1		
96	Aneurysm (except of the heart and aorta)	10	W	6	M	6												1	1					1	2	1		
			C	4	M	3													1							1		1
					F	1															1							
97	Arteriosclerosis (except coronary or renal sclerosis)	134	W	102	M	44															1	2	4	5	6	10	7	9
					F	58														1			2	6	8	15	8	18
			C	32	M	17											1		1		1	1	3	4	3	1	1	1
					F	15															2	2		4	3	2	2	
98	Gangrene	4	W	3	F	3																		1		1	1	
			C	1	F	1															1							
99	Other diseases of the arteries	5	W	4	M	2																	1			1		
					F	2																1				1		
			C	1	F	1																				1		
100a	Varices	3	W	2	M	1															1							
					F	1																	1					
			C	1	M	1																1						

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Causes of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
100b	Other diseases of the veins	6	W	5	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
101	Diseases of the lymphatic system	1	W	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
102	High blood pressure (idiopathic)	5	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
103	Other diseases of the circulatory system	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
VIII	Diseases of the respiratory system	472	W	302	M	180	23	4	...	1	1	...	1	...	1	2	6	10	7	9	13	18	21	10	23	15	9	6
					F	122	20	2	1	1	1	2	...	1	3	1	1	1	4	2	4	4	6	12	14	14	13	15
			C	170	M	92	11	4	...	...	...	...	1	...	...	1	4	7	11	12	17	6	8	3	1	4	1	1
					F	78	15	1	...	1	...	2	...	...	3	5	3	5	10	12	5	1	3	2	5	3	2	...
104a	Diseases of the nasal fossae	5	W	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	4	M	3	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
105	Disease of the larynx	2	W	2	M	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
					F	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
106a	Bronchitis, acute	3	W	3	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
106b	Bronchitis, chronic	13	W	13	M	9	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	3	...	2	1	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1
106c	Bronchitis, unspecified	3	W	3	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...

107–109	Pneumonia, all forms	385	W	238	M	144	22	3	...	...	1	...	1	...	1	1	4	9	4	7	7	15	16	7	19	13	8	6
					F	94	15	2	1	...	1	1	...	...	2	...	...	...	3	1	4	3	4	12	10	10	13	12
			C	147	M	80	9	1	...	...	...	...	1	...	...	1	3	5	9	11	16	6	8	3	1	4	1	1
					F	67	15	...	...	1	...	2	...	...	3	4	3	2	7	10	5	1	3	1	5	3	2	...
107	Bronchopneumonia (including capillary bronchitis)	182	W	129	M	70	17	3	...	...	1	...	...	...	...	1	2	2	...	...	4	3	7	5	9	5	7	4
					F	59	11	1	1	...	...	1	...	...	1	...	...	...	3	...	3	1	2	8	5	7	6	9
			C	53	M	25	8	...	...	...	...	...	1	...	...	...	...	...	2	1	4	2	3	2	...	1	...	1
					F	28	13	...	...	1	...	1	...	...	1	...	1	2	...	1	2	1	1	...	2	...	2	...
108	Lobar pneumonia	192	W	103	M	71	5	...	...	...	...	...	1	...	1	...	2	5	4	7	3	12	8	2	10	8	1	2
					F	32	4	1	...	...	1	...	...	...	1	...	...	...	...	1	1	2	1	4	5	3	6	2
			C	89	M	50	1	...	...	...	...	...	...	...	...	1	2	5	6	9	11	4	5	1	1	3	1	...
					F	39	2	...	...	...	...	1	...	...	2	4	2	...	7	9	3	...	2	1	3	3	...	...
109	Pneumonia (unspecified)	11	W	6	M	3	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
			C	5	M	5	...	1	...	...	...	...	...	...	...	...	1	...	1	1	1	...	...	...	...	...	...	...
110a	Empyema	2	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
110b	Other and unspecified forms of pleurisy	9	W	8	M	6	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	...	1	1	...	...	...	...
					F	2	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
111a	Hemorrhagic infarction and thrombosis of the lungs	3	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...
			C	1	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
111b	Acute edema of the lungs	17	W	8	M	5	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	1	1	...
					F	3	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1
			C	9	M	4	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	...	...	...	...	...
					F	5	...	...	...	...	...	...	...	...	...	...	...	1	2	1	...	...	...	1	...	...	...	...
111c	Chronic and unspecified congestion of the lungs	3	W	3	F	3	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
112	Asthma	14	W	11	M	5	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	3	...	...	...	...	...	...
					F	6	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	2	...	...	2	...	...
			C	3	F	3	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...
113	Pulmonary emphysema	3	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
					F	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
114a	Silicosis	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
114b	Other and unspecified forms of pneumoconioses	1	C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
114c	Gangrene of lung	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
114d	Abscess of lung	6	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
			C	4	M	3	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
114e	Other and unspecified diseases of the respiratory system	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
IX	Diseases of the digestive system	496	W	390	M	231	41	3	...	...	...	...	...	2	2	2	1	5	7	21	27	35	26	16	19	15	8	1
					F	159	13	2	2	...	...	4	...	1	2	3	8	5	12	16	12	19	14	7	16	7	9	7
			C	106	M	53	16	...	...	...	...	1	1	...	2	1	3	4	2	6	7	3	3	1	2	...	1	...
					F	53	11	...	1	...	...	1	...	...	1	4	5	5	4	5	3	2	4	1	4	1	1	...
115b	Septic sore throat	3	W	3	M	2	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
115c	Diseases of the pharynx and tonsils	6	W	4	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	2	F	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
115d	Diseases of other and unspecified parts of the buccal cavity and adnexa	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
116	Diseases of the esophagus	4	W	2	M	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...
117a	Ulcer of the stomach	28	W	25	M	21	...	...	...	...	...	...	...	...	...	...	...	1	2	2	2	4	4	3	1	1	1	...
					F	4	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1	...	...	...
			C	3	M	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...

117b	Ulcer of the duodenum	12	W	11	M	9																		3	1	2					3										
					F	2																	1								1										
			C	1	F	1																	1																		
118	Other diseases of the stomach (except cancer)	6	W	6	M	4																			3					1											
					F	2																		1	1																
119	Diarrhea and enteritis, under 2 years of age	71	W	47	M	34	32	2																																	
					F	13	12	1																																	
			C	24	M	14	14																																		
					F	10	10																																		
120a	Diarrhea and enteritis, 2 years of age and over	8	W	5	M	4																		1	1	1			1												
					F	1																									1										
			C	3	F	3			1									1								1															
120b	Ulceration of the intestines, 2 years of age and over (except duodenum)	7	W	7	M	4									1	1	1							1																	
					F	3										1		1							1																
121	Appendicitis	27	W	22	M	15									1		1		1					2	5	1	1	2	1												
					F	7			1			1				1					1	1						1												1
			C	5	M	4						1	1											1	1																
					F	1																			1																
122a	Hernia	45	W	38	M	21															1	1	2	3		5	2	5	1	1											
					F	17																1		5	2	2	1	1	4	1											
			C	7	M	4	1															1	1						1												
					F	3																				1		2													
122b	Intestinal obstruction	46	W	30	M	12	4	1											1					2	2																
					F	18	1											2	1	1	2			3	1		2	1	2	2											
			C	16	M	5	1									1							1	1	1																
					F	11												2	1	2	1	1		2			1		1												
123	Other diseases of the intestines	22	W	19	M	12	1														2	2	2	2			3														
					F	7												1			1	1				2	2														
			C	3	M	2															1			1																	
					F	1											1																								
124a	Cirrhosis of the liver, with mention of alcoholism	23	W	21	M	12													1		2	2	3	2	1		1														
					F	9												1	2	2	2	2																			
			C	2	F	2													1	1																					
124b	Cirrhosis of the liver, without mention of alcoholism	113	W	94	M	54													1	1	8	9	7	10	4	8	5	1													
					F	40												1	2	6	7	6	3	7	2	2	2			2												
			C	19	M	14												2	4		4	2		1		1															
					F	5													1		2	2																			

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
125a	Acute yellow atrophy of the liver (non-puerperal)	10	W	7	M	3													2	1								
					F	4						1		1								2						
			C	3	M	1									1													
					F	2									1			1										
125b	Other diseases of the liver	11	W	6	M	3											1				1					1		
					F	3		1												1		1						
			C	5	M	2															1				1			
					F	3										2	1											
126	Biliary calculi	21	W	19	M	7													1	1		2		1	2			
					F	12											1		1		1	2	2		3	1		1
			C	2	F	2																		1	1			
127a	Cholecystitis (without mention of biliary calculus)	6	W	6	M	1																	1					
					F	5										2							1			1	1	
127b	Other diseases of the gallbladder and biliary ducts	8	W	5	M	3														2				1				
					F	2															1					1		
			C	3	M	1															1							
					F	2	1										1											
128	Diseases of the pancreas (except diabetes mellitus)	12	W	9	M	6	1													1	2	2						
					F	3													1						2			
			C	3	M	2										1	1											
					F	1																1						
129	Peritonitis (cause not stated)	6	W	3	M	1														1								
					F	2											1						1					
			C	3	F	3										1			1	1								

X	Diseases of the genito-urinary system	951	W	629	M	327	2	...	...	...	...	3	1	3	3	4	1	4	11	10	23	28	40	49	47	49	21	28
					F	302	...	...	...	1	...	...	...	1	2	3	2	4	3	11	15	17	25	46	37	50	38	47
			C	322	M	162	1	...	...	...	...	...	...	...	2	2	5	13	9	17	24	21	27	14	17	3	7	...
					F	160	...	...	...	...	1	...	...	1	...	3	3	9	17	19	17	16	21	24	15	7	4	3
130–132	Nephritis, all forms	849	W	554	M	267	...	...	...	...	...	3	1	1	3	4	1	4	9	8	19	24	33	43	41	37	12	24
					F	287	...	...	...	...	...	...	...	1	2	1	2	4	2	10	14	16	25	43	36	46	38	47
			C	295	M	142	1	...	...	...	...	...	...	...	2	2	5	12	7	15	18	17	26	12	15	3	7	...
					F	153	...	...	...	...	1	...	...	...	...	1	3	9	16	18	17	15	20	24	15	7	4	3
130	Acute nephritis	17	W	8	M	5	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...
					F	3	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...
			C	9	M	6	1	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...
131a	Arteriosclerotic kidney	683	W	444	M	213	...	...	...	...	...	...	...	...	2	3	1	1	6	5	14	21	28	37	32	32	12	19
					F	231	...	...	...	...	...	...	...	...	2	...	1	2	1	7	11	11	20	36	30	38	34	38
			C	239	M	114	...	...	...	...	...	...	...	...	1	1	3	10	6	9	15	14	23	12	12	2	6	...
					F	125	...	...	...	...	1	...	...	...	...	...	...	8	14	12	15	14	17	17	14	6	4	3
131b	Other chronic nephritis	132	W	87	M	44	...	...	...	...	...	1	1	1	1	1	...	3	3	3	3	3	5	3	6	5	...	5
					F	43	...	...	...	...	...	...	...	...	...	1	...	2	...	2	3	4	3	7	5	6	3	7
			C	45	M	20	...	...	...	...	...	...	...	...	1	...	...	1	1	5	3	3	2	...	2	1	1	...
					F	25	...	...	...	...	...	...	...	...	...	1	3	1	1	4	2	1	3	7	1	1	...	...
132	Nephritis, unspecified (10 years of age and over)	17	W	15	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	3	1	...	...	...
					F	10	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	...	1	2	1	2
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...
133a	Pyelitis, pyelonephritis and pyelocystitis	18	W	14	M	9	1	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	2	...	2	...	1	...
					F	5	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2	...	...
			C	4	M	4	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	1	...	...	...	...
133b	Other diseases of the kidneys and ureters	11	W	8	M	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...
					F	4	...	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	...
			C	3	M	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
134a	Calculi of the kidneys and ureters	11	W	9	M	6	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	...	1	...	...	...	1
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	By Color		By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
134c	Calculi of other and unspecified parts of the urinary passages	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
135a	Cystitis	2	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
136a	Stricture of the urethra	5	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
			C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...
136b	Other diseases of the urethra (except calculus)	1	C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
137a	Hypertrophy of the prostate	45	W	37	M	37	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	5	4	2	10	7	3
			C	8	M	8	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	1	1	1	...	...	...
137b	Other diseases of the prostate	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
139a	Diseases of the ovaries, fallopian tubes, and parametria	6	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
			C	5	F	5	...	...	...	...	...	...	...	1	...	2	...	...	...	1	...	...	1	...	...	...	...	...
139b	Diseases of the uterus	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
XI	Diseases of pregnancy, childbirth and the puerperium	26	W	13	F	13	...	...	...	...	...	...	...	...	3	4	4	1	1	...	...	...	...	...	...	...	...	...
			C	13	F	13	...	...	...	...	...	...	...	...	6	2	4	1	...	...	...	...	...	...	...	...	...	...
140a	Abortion (spontaneous, therapeutic, or of unspecified origin) with mention of pyelitis	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
140b	Abortion, spontaneous therapeutic or unspecified, with mention of septicemia (except pyelitis)	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...

140c	Abortion, self-induced, with mention of infection	2	W	1	F	1												1													
			C	1	F	1									1																
140d	Abortion induced by persons other than the woman herself	1	W	1	F	1									1																
141d	Abortion without mention of hemorrhage, trauma or shock or toxemia	1	C	1	F	1										1															
141f	Abortion (induced for nontherapeutic reasons by persons other than the woman herself)	1	C	1	F	1											1														
142a	Ectopic gestation (with mention of infection)	1	C	1	F	1									1																
142b	Ectopic gestation (without mention of infection)	1	C	1	F	1												1													
144a	Eclampsia of pregnancy	3	W	2	F	2										1			1												
			C	1	F	1											1														
145	Other diseases and accidents of pregnancy (death before delivery)	1	C	1	F	1									1																
146a	Placenta praevia (with childbirth)	1	W	1	F	1											1														
146b	Premature separation of placenta (with childbirth)	2	W	2	F	2										1	1														
147b	General or local puerperal infection (except pyelitis)	1	C	1	F	1									1																
147d	Puerperal embolism and sudden death	1	W	1	F	1									1																
148a	Puerperal eclampsia	1	W	1	F	1									1																
148b	Puerperal albuminuria and nephritis	1	C	1	F	1										1															
149a	Laceration, rupture, or other trauma of pelvic organs and tissue	3	W	2	F	2										2															
			C	1	F	1											1														
149b	Other specified conditions of childbirth	2	W	1	F	1											1														
			C	1	F	1									1																
150c	Other and unspecified conditions of childbirth and the puerperium	1	C	1	F	1									1																

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	By Color		By Sex		Age Groups: Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
XII	Diseases of the skin and cellular tissue	3	W	2	M	1															1							
					F	1	1																					
			C	1	M	1																	1					
152	Phlegmon and acute abscess	1	W	1	M	1															1							
153	Other diseases of the skin and cellular tissue	2	W	1	F	1	1																					
			C	1	M	1																	1					
XIII	Diseases of the bones and organs of movement	8	W	6	M	3											1							1			1	
					F	3											1				1					1		
			C	2	M	1											1											
					F	1										1												
154b	Chronic or unspecified osteomyelitis and periostitis	1	W	1	M	1																					1	
155	Other diseases of the bones (except tuberculosis)	1	W	1	F	1																				1		
156a	Diseases of the joints (except tuberculosis and rheumatism)	3	W	3	M	2											1							1				
					F	1															1							
156b	Diseases of other and unspecified organs of movement	3	W	1	F	1											1											
			C	2	M	1											1											
					F	1										1												
XIV	Congenital malformations	92	W	80	M	45	41				2	1	1															
					F	35	29	4			1			1														
			C	12	M	7	5								1			1										
					F	5	5																					

157a	Congenital hydrocephalus	14	W	13	M	7	5				1		1																						
					F	6	5				1																								
			C	1	F	1	1																												
157b	Spina bifida and meningocele	11	W	11	M	7	7																												
					F	4	4																												
157c	Anencephalus	1	W	1	F	1	1																												
157d	Other congenital malformations of the central nervous system	4	W	4	M	1	1																												
					F	3	2	1																											
157e	Congenital malformations of the heart	40	W	32	M	19	17				1	1																							
					F	13	10	2						1																					
			C	8	M	5	3								1			1																	
					F	3	3																												
157g	Congenital malformations of the digestive system	16	W	13	M	7	7																												
					F	6	6																												
			C	3	M	2	2																												
					F	1	1																												
157h	Congenital malformations of the genito-urinary system	2	W	2	M	2	2																												
157m	Other and unspecified congenital malformations	4	W	4	M	2	2																												
					F	2	1	1																											
XV	Diseases peculiar to the first year of life	445	W	268	M	158	158																												
					F	110	110																												
			C	177	M	94	94																												
					F	83	83																												
158	Congenital debility (cause not stated)	4	W	3	M	2	2																												
					F	1	1																												
			C	1	F	1	1																												
159	Premature birth (cause not stated)	287	W	169	M	100	100																												
					F	69	69																												
			C	118	M	58	58																												
					F	60	60																												
160a	Intracranial or spinal hemorrhage (birth injury)	71	W	38	M	20	20																												
					F	18	18																												
			C	33	M	23	23																												
					F	10	10																												

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
160c	Other injuries at birth	18	W	16	M	9	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161a	Asphyxia (cause not specified), atelectasis	45	W	27	M	20	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	18	M	8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161b	Infection of the umbilicus; pemphigus and other infections (non-syphilitic)	3	W	3	F	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161c	Other specified diseases peculiar to the first year of life	17	W	12	M	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	5	M	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XVI	Senility	14	W	11	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	2
					F	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1
			C	3	F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
162a	Senility, with mention of senile dementia	4	W	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
162b	Senility, without mention of senile dementia	10	W	8	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1
					F	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1
			C	2	F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

XVII	Violent or accidental deaths	767	W	556	M	365	7	...	2	2	3	10	6	19	23	19	21	30	24	30	31	28	21	31	16	22	11	9
					F	191	3	2	...	...	3	...	2	3	12	8	8	8	10	4	11	7	11	11	15	29	24	20
			C	211	M	153	3	...	2	1	1	5	9	8	13	14	21	22	18	13	7	4	4	4	...	4	...	...
					F	58	5	2	1	1	1	2	1	1	10	7	7	5	6	1	2	...	3	1	1	1	...	...
163–164	Suicide	126	W	117	M	71	...	...	...	...	...	...	...	1	5	4	4	11	4	10	7	9	3	7	2	2	1	1
					F	46	...	...	...	...	...	...	...	1	5	5	4	7	2	3	5	4	5	...	2	1	2	...
			C	9	M	7	...	...	...	...	...	...	...	...	...	...	3	1	...	1	1	...	...	1	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
163a	Suicide by arsenic and compounds	1	W	1	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
163b	Suicide by barbituric acid and derivatives	7	W	7	M	3	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	1	...	...	...	...	...	...
163c	Suicide by cresol compounds	1	C	1	F	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
163d	Suicide by mercury and compounds	2	W	2	F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
163e	Suicide by nux vomica and strychnine	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
163g	Suicide by other solid or liquid poisons	3	W	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
163h	Suicide by illuminating gas	46	W	44	M	20	...	...	...	...	...	...	...	...	...	1	...	5	1	5	...	3	1	...	1	2	...	1
					F	24	...	...	...	...	...	...	...	...	3	2	1	3	1	2	3	2	3	...	1	1	2	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
163x	Suicide by other poisonous gas	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
163m	Suicide by motor-vehicle exhaust gas	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
164a	Suicide by hanging or strangulation	20	W	19	M	14	...	...	...	...	...	...	...	...	...	1	1	2	1	...	4	3	...	2	...	...	...	...
					F	5	...	...	...	...	...	...	...	...	2	1	...	1	...	...	1	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
164b	Suicide by drowning	5	W	4	M	3	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
164c	Suicide by firearms and explosives	22	W	20	M	16	...	...	...	...	...	...	...	1	3	1	1	1	...	3	2	1	1	...	1	...	1	...
					F	4	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
164d	Suicide by cutting or piercing instruments	7	W	6	M	5													1	1	1	1		1				
					F	1																			1			
			C	1	M	1												1										
164e	Suicide by jumping from high places	7	W	7	M	5											1	1				1	1	1				
					F	2								1			1											
164f	Suicide by crushing	2	W	2	M	1									1													
					F	1												1										
165–168	Homicide	105	W	29	M	18									1	3	2	4	2	4	1			1				
					F	11									1	2	3		3	1				1				
			C	76	M	60				1			2	3	5	9	12	10	6	7	2	2		1				
					F	16									4	5	3	2	1	1								
166	Homicide by firearms	51	W	7	M	3										1			1		1							
					F	4									1	1	2											
			C	44	M	37							2	2	4	9	8	3	5	3	1							
					F	7										2	3	1	1									
167	Homicide by cutting or piercing instruments	27	W	9	M	4									1			2		1								
					F	5										1			3	1								
			C	18	M	13								1	1		3	4		2		1		1				
					F	5									2	3												
168	Homicide by other means	27	W	13	M	11										2	2	2	1	3				1				
					F	2											1							1				
			C	14	M	10				1							1	3	1	2	1	1						
					F	4									2			1		1								
169–195	Accidental deaths	536	W	410	M	276	7		2	2	3	10	6	18	17	12	15	15	18	16	23	19	18	23	14	20	10	8
					F	134	3	2			3		2	2	6	1	1	1	5		6	3	6	10	13	28	22	20
			C	126	M	86	3		2		1	5	7	5	8	5	6	11	12	5	4	2	4	2		4		
					F	40	5	2	1	1	1	2	1	1	5	2	4	3	4		2		3	1	1	1		
169	Railway accidents (except collisions with motor vehicles)	12	W	10	M	10									1		1	1	2	2			2		1			
			C	2	M	2											1		1									

170a	Collisions between automobiles and trains	1	W	1	M	1									1															
170b	Collisions between automobiles and streetcars	1	W	1	M	1																	1							
170c	Automobile accidents (except collisions with trains or streetcars	133	W	94	M	76			1		2	6	1	8	5	1	4	4	2	4	7	5	5	7	2	7	4	1
					F	18					1		1		3	1						3		2	4	2	1	
			C	39	M	27			1		1	1	1	1	3	1	2	6	3	1	3	1		1		1		
					F	12						1		1	1	2		1	3		1		1			1		
170d	Motorcycle accidents (except collisions with automobiles)	2	W	2	M	2									1		1											
171a	Streetcar accidents (except collisons with trains or motor vehicles)	20	W	17	M	11								2				2			2		1	2		2		
					F	6					1								1					1		2	1	
			C	3	M	3						1						1					1					
172	Water-transport accidents	9	W	6	M	6										1			1		2	1	1					
			C	3	M	3										2		1										
173	Air-transport accidents	2	W	2	....	.....									1			1										
176	Other accidents involving machinery	2	W	1	M	1									1													
			C	1	M	1											1											
178a	Accidental absorption of illuminating gas	16	W	13	M	8									1			1	1	2	1		1			1		
					F	5									1		1		1		1			1				
			C	3	M	2											1						1					
					F	1																	1					
178b	Accidental absorption of motor-vehicle exhaust gas	1	W	1	M	1											1											
178c	Accidental absorption of other carbon monoxide gas	3	W	2	M	2													1							1		
			C	1	M	1												1										
178x	Accidental absorption of other poisonous gases	1	W	1	M	1																1						
179b	Acute accidental poisoning by barbituric acid and derivatives	2	W	2	M	1															1							
					F	1																	1					
179g	Acute accidental poisoning by lye and potash	1	C	1	F	1									1													
179h	Acute accidental poisoning by tobacco and derivatives	1	W	1	F	1																						1
179x	Acute accidental poisoning by other and unspecified substances	5	W	3	M	1												1										
					F	2		1							1													
			C	2	M	2	1		1																			

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1946

International List No.	Cause of Death	Totals: Grand Total	Totals: By Color	Totals: By Sex	Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Yrs. and Over
180	Conflagration	11	W 3	M 3														1			1				1	
			C 8	M 4												1	2							1		
				F 4	1	1										1						1				
181	Accidental burns (except conflagration)	31	W 19	M 13			1	1	1	2				1	1	1	2		2	1						
				F 6													2		1		1			1		1
			C 12	M 3									1								1			1		
				F 9	1	1		1	1	1			1		1						1		1			
182	Accidental mechanical suffocation	9	W 6	M 5	4															1						
				F 1	1																					
			C 3	M 1	1																					
				F 2	2																					
183	Accidental drowning	56	W 37	M 33						2	2	3	3	6	3	1	2	3	1	3	1	2		1		
				F 4								2	1									1				
			C 19	M 18						1	6	4	2	1		1	1	1		1						
				F 1									1													
184	Accidental injury by firearms	12	W 7	M 5							2	2											1			
				F 2					1		1															
			C 5	M 4						2				1			1									
				F 1							1															
185	Accidental injury by cutting or piercing instruments	1	W 1	M 1																1						
186a	Accidental injury by fall	172	W 159	M 77	1			1			1	1	1	1	3	2	4	4	6	6	5	11	10	8	5	7
				F 82		1										1	1		3		4	5	8	22	20	17
			C 13	M 7									1				4	1						1		
				F 6			1								2	1	1		1							
186b	Accidental injury by crushing	2	W 2	M 2								1			1											
190	Excessive cold	1	C 1	M 1																		1				

193	*Accidents due to electric currents (except lightning)*	4	W	2	M	2	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
195b	Accidents due to medical or surgical intervention except preventive immunization, inoculation, or vaccination	2	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
195c	Lack of care of the newborn	1	W	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
195d	Obstruction, suffocation or puncture by ingested objects	5	W	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	3	M	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
195e	Other and unspecified accidents	17	W	13	M	10	1	...	...	...	...	...	...	1	2	1	...	1	2	...	1	...	...	1	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1
			C	4	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
XVIII	Ill-defined and unknown causes	15	W	11	M	9	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	1	1	1	...	1
					F	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...
			C	4	M	3	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
200a	Ill-defined cause	7	W	5	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
			C	2	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
200b	Found dead (cause unknown)	4	W	3	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...
					F	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
200c	Unknown or unspecified cause	4	W	3	M	3	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...
			C	1	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTE:—Deaths by color, include the following non-Negro race:
Tetanus—1 male Chinese, 48 years of age.
Tuberculosis of the respiratory system—1 female Chinese, 16 years of age; 1 male Chinese, 17 years of age.
Cancer of the prostate—1 male Chinese, 55 years of age.
Cancer of the breast—1 female Chinese, 42 years of age.
Cancer of the stomach—1 male Chinese, 40 years of age.
Cerebral hemorrhage or effusion—1 male Chinese, 49 years of age.
Chronic myocarditis and myocardial degeneration, not specified as rheumatic—1 male Chinese, 62 years of age; 1 male Chinese, 63 years of age; 1 male Chinese, 76 years of age; 1 male Chinese, 79 years of age.
Bronchopneumonia—1 male Chinese, 64 years of age.
Lobar pneumonia—1 male Chinese, 59 years of age.
Diseases of the pancreas, except diabetes—1 male Chinese, 31 years of age.
Chronic nephritis, arteriosclerotic kidney—1 male Chinese, 74 years of age; 1 male Chinese, 77 years of age.
Congenital malformations of the digestive system—1 female Indian, 5 days old.

TABLE NO. 9

RECORDED AND RESIDENT DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN CAUSES AND GROUPS OF CAUSES, CLASSIFIED BY COLOR—1946

Cause of Death	Recorded						Resident					
	Number			Rate per 100,000 Population*			Number			Rate per 100,000 Population*		
	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored
All Causes	11,195	8,633	2,562	12.0	11.5	14.1	10,798	8,061	2,737	11.6	10.8	15.0
Typhoid fever (1)	1	1	..	0.1	0.1	..	1	1	..	0.1	0.1	..
Scarlet fever (8)	1	1	..	0.1	0.1	..	1	1	..	0.1	0.1	..
Whooping cough (9)	2	1	1	0.2	0.1	0.5	2	1	1	0.2	0.1	0.5
Diphtheria (10)	27	26	1	2.9	3.5	0.5	19	18	1	2.0	2.4	0.5
Erysipelas (11)	2	1	1	0.2	0.1	0.5	2	1	1	0.2	0.1	0.5
Tetanus (12)	5	3	2	0.5	0.4	1.1	5	2	3	0.5	0.3	1.6
Tuberculosis, all forms (13–22)	471	229	242	50.6	30.6	133.0	747	349	398	80.3	46.7	218.7
Pulmonary tuberculosis (13)	*427*	*216*	*211*	*45.9*	*28.9*	*115.9*	*707*	*340*	*367*	*76.0*	*45.5*	*201.6*
Gonococcus infection (25)	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery (27)	4	4	..	0.4	0.5	..	3	3	..	0.3	0.4	..
Malaria (28)	..	..	..	..	..	..	1	..	1	0.1	..	0.5
Syphilis (30)	127	47	80	13.7	6.3	43.9	169	62	107	18.2	8.3	58.8
Influenza (33)	43	23	20	4.6	3.1	11.0	40	20	20	4.3	2.7	11.0
Smallpox (34)	..	..	..	..	..	..	..	..	..	..	..	..
Measles (35)	8	6	2	0.9	0.8	1.1	6	4	2	0.6	0.5	1.1
Typhus fever (39a, b)	..	..	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever (39c)	3	1	2	0.3	0.1	1.1	..	..	..	..	..	..
Other infectious diseases	55	39	16	5.9	5.2	8.8	46	33	13	4.9	4.4	7.1
Meningococcus meningitis (6)	*15*	*9*	*6*	*1.6*	*1.2*	*3.3*	*11*	*6*	*5*	*1.2*	*0.8*	*2.7*
Acute poliomyelitis (36)	*3*	*3*	..	*0.3*	*0.4*	..	*4*	*4*	..	*0.4*	*0.5*	..
Epidemic encephalitis (37)	*3*	*2*	*1*	*0.3*	*0.3*	*0.5*	*2*	*2*	..	*0.2*	*0.3*	..
Cancer (45–55)	1,646	1,402	244	177.0	187.4	134.1	1,448	1,212	236	155.7	162.0	129.7
Non-malignant tumors (56, 57)	59	42	17	6.3	5.6	9.3	44	31	13	4.7	4.1	7.1
Acute rheumatic fever (58)	44	32	12	4.7	4.3	6.6	38	25	13	4.1	3.3	7.1
Chronic rheumatism, gout (59, 60)	5	3	2	0.5	0.4	1.1	4	2	2	0.4	0.3	1.1
Diabetes (61)	299	263	36	32.1	35.2	19.8	272	238	34	29.2	31.8	18.7
Alcoholism, acute and chronic (77)	20	16	4	2.1	2.1	2.2	26	22	4	2.8	2.9	2.2
Avitaminosis, other general diseases and chronic poisonings (62–76, 78, 79)	122	95	27	13.1	12.7	14.8	106	83	23	11.4	11.1	12.6
Simple meningitis and spinal cord diseases (81, 82)	29	19	10	3.1	2.5	5.5	25	14	11	2.7	1.9	6.0
Intracranial lesions of vascular origin (83)	707	527	180	76.0	70.5	98.9	725	543	182	77.9	72.6	100.0
Other diseases of the nervous system and sense organs (80, 84–89)	56	51	5	6.0	6.8	2.7	50	42	8	5.4	5.6	4.4

* Except that death rates for all causes are per 1,000 population and for puerperal causes are per 1,000 live births.

TABLE NO. 9—Continued

RECORDED AND RESIDENT DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN CAUSES AND GROUPS OF CAUSES, CLASSIFIED BY COLOR—1946

Cause of Death	Recorded						Resident					
	Number			Rate per 100,000 Population*			Number			Rate per 100,000 Population*		
	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored
Diseases of the heart (90–95)	3,565	2,980	585	383.3	398.4	321.4	3,560	2,959	601	382.8	395.6	330.2
Other diseases of the circulatory system (96–103)	142	118	24	15.3	15.8	13.2	169	127	42	18.2	17.0	23.1
Arteriosclerosis (97)	*103*	*89*	*14*	*11.1*	*11.9*	*7.7*	*134*	*102*	*32*	*14.4*	*13.6*	*17.6*
Bronchitis (106)	23	23	..	2.5	3.1	..	19	19	..	2.0	2.5	..
Pneumonia, all forms (107–109)	397	247	150	42.7	33.0	82.4	385	238	147	41.4	31.8	80.8
Bronchopneumonia (107)	*190*	*134*	*56*	*20.4*	*17.9*	*30.8*	*182*	*129*	*53*	*19.6*	*17.2*	*29.1*
Lobar pneumonia (108)	*194*	*105*	*89*	*20.9*	*14.0*	*48.9*	*192*	*103*	*89*	*20.6*	*13.8*	*48.9*
Other respiratory diseases (except tuberculosis) (104–105, 110–114)	76	52	24	8.2	6.9	13.2	68	45	23	7.3	6.0	12.6
Diarrhea and enteritis (119, 120)	104	74	30	11.2	9.9	16.5	86	59	27	9.2	7.9	14.8
Diarrhea and enteritis under 2 years of age (119)	*91*	*64*	*27*	*9.8*	*8.5*	*14.8*	*71*	*47*	*24*	*7.6*	*6.3*	*13.2*
Appendicitis (121)	34	29	5	3.7	3.9	2.7	27	22	5	2.9	2.9	2.7
Hernia, intestinal obstruction (122)	104	80	24	11.2	10.7	13.2	91	68	23	9.8	9.1	12.6
Cirrhosis of the liver (124)	150	129	21	16.1	17.2	11.5	136	115	21	14.6	15.4	11.5
Other diseases of the liver and biliary passages (125–127)	64	51	13	6.9	6.8	7.1	56	43	13	6.0	5.7	7.1
Other digestive diseases (115–118, 123, 128, 129)	115	96	19	12.4	12.8	10.4	100	83	17	10.7	11.1	9.3
Nephritis, all forms (130–132)	859	566	293	92.4	75.7	161.0	849	554	295	91.3	74.1	162.1
Other diseases of the urinary and genital systems (133–139)	133	104	29	14.3	13.9	15.9	102	75	27	11.0	10.0	14.8
Puerperal causes (140–150)	34	20	14	1.2	0.9	2.4	26	13	13	1.2	0.8	2.5
Puerperal septicemia (140, 142a, 147)	*10*	*5*	*5*	*0.4*	*0.2*	*0.9*	*8*	*4*	*4*	*0.4*	*0.3*	*0.7*
Puerperal toxemias (141a, c, 144, 148)	*7*	*5*	*2*	*0.3*	*0.2*	*0.3*	*5*	*3*	*2*	*0.2*	*0.2*	*0.4*
Diseases of the skin and bones (151–156)	15	11	4	1.6	1.5	2.2	11	8	3	1.2	1.1	1.6
Congenital malformations (157)	187	173	14	20.1	23.1	7.7	92	80	12	9.9	10.7	6.6
Diseases of early infancy (158–161)	595	394	201	64.0	52.7	110.4	445	268	177	47.8	35.8	97.3
Senility (162)	10	8	2	1.1	1.1	1.1	14	11	3	1.5	1.5	1.6
Suicides (163, 164)	126	118	8	13.5	15.8	4.4	126	117	9	13.5	15.6	4.9
Homicides (165–168)	105	29	76	11.3	3.9	41.7	105	29	76	11.3	3.9	41.7
Violent and accidental deaths (169–198)	611	492	119	65.7	65.8	65.4	536	410	126	57.6	54.8	69.2
Home accidents	*250*	*203*	*47*	*26.9*	*27.1*	*25.8*	*212*	*167*	*45*	*22.8*	*22.3*	*24.7*
Occupational accidents	*49*	*38*	*11*	*5.3*	*5.1*	*6.0*	*46*	*34*	*12*	*4.9*	*4.5*	*6.6*
Automobile accidents (170)	*168*	*133*	*30*	*17.6*	*17.8*	*16.5*	*137*	*98*	*39*	*14.7*	*13.1*	*21.4*
Other public accidents	*144*	*118*	*26*	*15.5*	*15.8*	*14.3*	*141*	*111*	*30*	*15.2*	*14.8*	*16.5*
Other violent deaths (196–198)	*5*	..	*5*	*0.5*	..	*2.7*	..	..	..	..	..	..
Cause not known or ill-defined (199, 200)	10	7	3	1.1	0.9	1.6	15	11	4	1.6	1.5	2.2

* Except that death rates for all causes are per 1,000 population and for puerperal causes are per 1,000 live births.

TABLE NO. 10

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE

BALTIMORE—1946

International List Number	Cause of Death	Total Recorded Deaths		Residents of						Baltimore Residents Dying Elsewhere				Total Resident Deaths	
				Baltimore		Counties of Maryland		Other States		Counties of Maryland		Other States			
		White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd
	All Causes*	8,633	2,562	7,295	2,408	952	118	386	36	618	293	148	36	8,061	2,737
	I—Infectious and Parasitic Diseases														
1	Typhoid fever	1	..	1	..	..	..	..	..	..	..	..	..	1	..
6	Meningococcus meningitis	9	6	6	5	3	1	..	..	..	..	..	..	6	5
8	Scarlet fever	1	..	1	..	..	..	..	..	..	..	..	..	1	..
9	Whooping cough	1	1	1	1	..	..	..	..	..	..	..	..	1	1
10	Diphtheria	26	1	18	1	7	..	1	..	..	..	..	..	18	1
11	Erysipelas	1	1	1	1	..	..	..	..	..	..	..	..	1	1
12	Tetanus	3	2	2	2	1	..	..	..	..	1	..	..	2	3
13	Tuberculosis of the respiratory system	216	211	199	206	11	5	6	..	134	153	7	8	340	367
14	Tuberculosis of the meninges and central nervous system	9	17	5	13	3	3	1	1	1	1	..	..	6	14
15	Tuberculosis of the intestines and peritoneum	..	5	..	5	..	..	..	..	..	..	..	..	..	5
16	Tuberculosis of the vertebral column	2	5	2	5	..	..	..	..	..	2	..	..	..	7
17	Tuberculosis of the bones and joints (except vertebral column)	..	2	..	2	..	..	..	..	..	1	..	..	..	3
19	Tuberculosis of the lymphatic system	..	1	..	1	..	..	..	..	..	..	..	..	..	1
20	Tuberculosis of the genito-urinary system	2	..	1	..	..	..	1	..	..	..	..	..	1	..
21b	Tuberculosis of other organs	..	1	..	1	..	..	..	..	..	..	..	..	..	1
24a	Septicemia (nonpuerperal)	2	1	2	1	..	..	..	..	..	..	1	..	3	1
27a	Bacillary dysentery	2	..	1	..	1	..	..	..	..	..	..	..	1	..
27b	Amebic dysentery	1	..	1	..	..	..	..	..	..	..	..	..	1	..
27c	Other and unspecified forms of dysentery	1	..	1	..	..	..	..	..	..	..	..	..	1	..
28b	Quartan malaria	..	..	..	..	..	..	..	..	..	1	..	..	..	1
30a	Locomotor ataxia (tabes dorsalis)	2	..	..	..	1	..	1	..	..	..	..	..	..	..
30b	General paralysis of the insane	2	1	1	1	..	..	1	..	14	28	..	..	15	29
30c	Other syphilis of the central nervous system	6	6	6	5	..	1	..	..	4	1	..	1	10	7
30d	Aneurysm of the aorta	20	32	19	31	1	1	..	..	2	1	1	..	22	32
30e	Other syphilis of the circulatory system	7	22	5	20	2	1	..	1	..	..	1	..	6	20
30f	Congenital syphilis	3	13	2	10	1	3	..	..	..	..	..	..	2	10
30g	Other and unspecified forms of syphilis	7	6	6	6	1	..	..	..	1	3	..	..	7	9
32a	Weil's disease	3	1	2	1	1	..	..	..	1	..	..	..	3	1
33a	Influenza with respiratory complications specified	11	13	10	13	1	..	..	..	1	..	..	..	11	13
33b	Influenza without respiratory complications specified	12	7	9	7	2	..	1	..	..	..	..	..	9	7
35	Measles	6	2	4	2	1	..	1	..	..	..	..	..	4	2
36	Acute poliomyelitis and acute polioencephalitis	3	..	3	..	..	..	..	..	1	..	..	..	4	..

* There were no deaths from causes not listed in this table.

37c	Encephalitis lethargica, unqualified	2	1	2	..	..	1	..	..	..	..	..	..	2	..
39c	Rocky Mountain spotted fever	1	2	..	..	1	2	..	..	..	..	..	..	..	..
43	Mycoses	3	1	2	1	1	..	..	..	..	..	..	..	2	1
44a	Venereal diseases (except gonorrhea and syphilis)	..	3	..	2	..	..	..	1	..	..	..	..	..	2
44b	Lymphogranulomatosis (Hodgkin's disease)	16	3	11	3	3	..	2	..	..	..	1	..	12	3
44c	Mumps	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	II—CANCER AND OTHER TUMORS														
	Cancer of the buccal cavity and pharynx														
45a	Lip	5	..	3	..	1	..	1	..	..	1	..	..	3	1
45b	Tongue	17	..	13	..	1	.	3	..	..	..	..	..	13	..
45c	Mouth	8	2	6	2	..	..	2	..	..	..	..	..	6	2
45d	Jaw bone	8	1	6	1	..	..	2	..	1	..	..	..	7	1
45e	Unspecified parts of the buccal cavity	1	..	1	..	..	..	..	..	..	..	..	..	1	..
45f	Pharynx	16	4	10	3	3	..	3	1	..	..	1	..	11	3
	Cancer of the digestive organs and peritoneum														..
46a	Esophagus	34	6	24	5	3	1	7	..	..	..	..	..	24	5
46b	Stomach	145	38	120	35	12	3	13	..	7	2	3	..	130	37
46c	Duodenum	2	..	1	..	1	..	..	..	..	..	..	..	1	..
46d	Rectum and anus	75	13	65	13	4	..	6	..	1	1	2	..	68	14
46e	Intestines (except duodenum and rectum)	166	21	135	17	20	3	11	1	3	..	1	..	139	17
46f	Liver and biliary passages	68	10	57	9	6	..	5	1	2	..	1	..	60	9
46g	Pancreas	41	9	38	9	3	..	..	..	5	..	1	..	44	9
46h	Mesentery and peritoneum	12	4	11	4	..	..	1	..	..	..	..	..	11	4
46m	Other and unspecified sites	5	3	4	3	1	..	..	..	1	..	..	..	5	3
	Cancer of the respiratory system														
47a	Larynx	27	2	19	2	3	..	5	..	3	..	..	..	22	2
47b	Trachea	1	..	1	..	..	..	..	..	..	..	..	..	1	..
47c	Bronchus	49	9	39	9	7	..	3	..	2	1	1	..	42	10
47d	Lung	85	10	70	10	4	..	11	..	4	..	2	..	76	10
47e	Pleura	..	..	..	..	..	..	..	..	..	..	1	..	1	..
47f	Mediastinum and unspecified sites	7	1	4	1	1	..	2	..	..	..	..	..	4	1
	Cancer of the uterus														
48a	Cervix	52	26	49	26	1	..	2	..	1	..	..	..	50	26
48b	Other and unspecified sites	66	19	61	18	4	1	1	..	..	1	..	..	61	19
	Cancer of other female genital organs														
49a	Ovary	41	6	29	5	10	1	2	..	1	..	2	..	32	5
49c	Vagina	1	..	1	..	..	..	..	..	..	..	..	..	1	..
49d	Vulva	3	2	3	2	..	..	..	..	..	..	..	..	3	2
50	Cancer of the breast	137	21	128	21	8	..	1	..	1	..	2	..	131	21
	Cancer of male genital organs														
51b	Prostate	64	8	53	5	7	2	4	1	3	2	..	1	56	8
51c	Testes	7	..	2	..	2	..	3	..	2	..	2	..	6	..
51d	Penis	2	..	2	..	..	..	..	..	..	..	..	..	2	..
	Cancer of the urinary organs (male and female)														
52a	Kidney	26	1	22	1	3	..	1	..	2	..	..	..	24	1
52b	Bladder	57	9	46	8	8	1	3	..	3	..	..	..	49	8
52c	Other and unspecified sites	2	..	1	..	1	..	..	..	..	..	..	..	1	..
53	Cancer of the skin (except vulva and scrotum)	20	2	20	2	..	..	..	..	1	..	..	..	21	2
54a	Glioma	33	2	13	1	8	..	12	1	..	..	..	..	13	1
54b	Other and unspecified cancers of the brain and central nervous system	15	2	11	2	2	..	2	..	..	..	1	..	12	2

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE
BALTIMORE—1946

International List Number	Cause of Death	Total Recorded Deaths		Residents of						Baltimore Residents Dying Elsewhere				Total Resident Deaths	
				Baltimore		Counties of Maryland		Other States		Counties of Maryland		Other States			
		White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd
	II—Cancer and Other Tumors—*Cont'd*														
	Cancer of other and unspecified organs														
55a	Adrenal gland	1	..	1	..	..	..	..	..	..	..	..	..	1	..
55b	Bone (except jaw bone and accessory sinuses)	10	1	9	1	1	..	..	..	..	..	..	..	9	1
55c	Thyroid gland	6	..	5	..	1	..	..	..	1	..	..	..	6	..
55d	Nasal cavity and accessory sinuses	2	..	1	..	1	..	..	..	..	..	..	..	1	..
55e	Other and unspecified organs	85	12	61	11	10	1	14	..	2	1	1	..	64	12
	Nonmalignant tumors														
56a	Ovary	4	..	4	..	..	..	..	..	..	..	..	..	4	..
56b	Uterus	3	3	2	3	1	..	..	..	..	..	1	..	3	3
56d	Brain and other parts of the central nervous system	14	5	8	5	3	..	3	..	1	..	..	..	9	5
56e	Other and unspecified organs	7	5	6	2	..	1	1	2	..	..	..	..	6	2
	Tumors of unspecified nature														
57d	Brain and other parts of the central nervous system	6	4	1	3	2	..	3	1	1	..	..	..	2	3
57e	Other and unspecified organs	8	..	7	..	1	..	..	..	..	..	..	..	7	..
	III—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, Other General Diseases and Avitaminoses														
	Acute rheumatic fever														
58b	Acute rheumatic endocarditis	10	1	6	1	4	..	..	..	1	..	..	..	7	1
58c	Acute rheumatic myocarditis	2	..	2	..	..	..	..	..	..	..	..	..	2	..
58d	Other acute rheumatic heart diseases	16	11	13	11	2	..	1	..	..	1	..	..	13	12
58e	Other forms of acute rheumatic fever	4	..	3	..	1	..	..	..	..	..	..	..	3	..
	Chronic rheumatism and other rheumatic diseases														
59a	Rheumatoid arthritis	1	..	1	..	..	..	..	..	..	..	..	..	1	..
59b	Other chronic articular rheumatism	2	2	1	2	1	..	..	..	..	..	..	..	1	2
61	Diabetes mellitus	263	36	228	33	30	2	5	1	8	1	2	..	238	34
	Diseases of the thyroid and parathyroid glands														
63a	Simple goiter	1	1	1	1	..	..	.	..	..	..	..	..	1	1
63b	Exophthalmic goiter	8	2	6	2	2	..	..	..	..	..	1	..	7	2
63c	Myxedema and cretinism	2	..	1	..	1	..	..	..	..	..	..	..	1	..
63d	Other diseases of the thyroid glands	..	1	..	1	..	..	..	..	..	..	..	..	..	1
64	Diseases of the thymus gland	10	5	10	5	..	..	..	..	..	..	..	..	10	5
	Diseases of the adrenal glands (not specified as tuberculous)														
65a	Addison's disease (not specified as tuberculous)	1	1	1	..	..	1	..	..	..	..	..	..	1	..
65b	Other diseases of the adrenal glands	2	1	2	1	..	..	..	..	..	..	..	..	2	1

66b	Other general diseases	3	..	2	..	1	..	..	..	..	..	..	..	2	..
70	Rickets	..	2	..	2	..	..	..	..	..	..	..	..	..	2
71	Other avitaminoses	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	IV—Diseases of the Blood and Blood-forming Organs														
72a	Primary purpuras	3	..	3	..	..	..	..	..	..	..	..	..	3	..
72b	Hemophilia	1	1	..	1	1	..	..	..	..	..	..	..	..	1
	Anemias (except splenic anemia)														
73a	Pernicious anemia	3	..	3	..	..	..	..	..	..	..	..	..	3	..
73b	Other hypochromic anemias	2	..	2	..	..	..	..	..	..	..	..	..	2	..
73d	Other and unspecified anemias	6	3	4	3	1	..	1	..	2	..	..	..	6	3
74a	Leukemias	41	4	31	3	4	1	6	..	2	..	1	..	34	3
74b	Aleukemias	2	..	2	..	..	..	..	..	..	..	..	..	2	..
75b	Splenomegaly (undetermined nature)	3	1	3	..	..	1	..	..	..	..	..	..	3	..
75c	Other diseases of the spleen	1	1	1	.	..	1	..	..	..	..	..	..	1	..
76d	Other diseases of the blood and blood-forming organs	1	..	..	..	1	..	..	..	..	..	..	..	..	..
	V—Chronic Poisonings and Intoxications														
77c	Acute alcoholism	8	2	7	2	1	..	..	..	1	..	4	..	12	2
77d	Chronic alcoholism	5	1	5	1	..	..	..	..	3	..	..	..	8	1
77e	Other and unspecified alcoholism	3	1	2	1	..	..	1	..	..	..	..	..	2	1
78a	Lead poisoning specified as occupational	1	..	1	..	..	..	..	..	..	..	..	..	1	..
78b	Lead poisoning, not specified as occupational	2	2	2	2	..	..	..	..	..	..	..	..	2	2
79b	Chronic poisoning by other mineral or organic substances, not specified as occupational	1	2	1	2	..	..	..	..	..	..	..	..	1	2
	VI—Diseases of the Nervous System and Sense Organs														
	Encephalitis (nonepidemic)														
80a	Intracranial abscess	3	..	1	..	1	..	1	..	..	..	..	..	1	..
80b	Other encephalitis, nonepidemic	7	1	5	1	2	..	..	..	2	..	..	..	7	1
	Meningitis (not due to meningococcus)														
81a	Simple meningitis	9	6	6	5	2	1	1	..	..	1	..	..	6	6
81b	Acute cerebrospinal meningitis (not due to meningococcus)	1	..	..	..	1	..	..	..	..	..	..	..	..	..
82	Diseases of the spinal cord (except locomotor ataxia and disseminated sclerosis)	9	4	7	4	1	..	1	..	..	1	1	..	8	5
83a	Cerebral hemorrhage or effusion (excluding birth injury)	458	173	419	166	37	5	2	2	39	6	10	2	468	174
83b	Cerebral embolism and thrombosis	62	5	57	5	4	..	1	..	6	1	1	..	64	6
83c	Cerebral softening	1	1	1	1	..	..	..	..	..	..	1	..	2	1
83d	Hemiplegia and other paralysis of unspecified origin	6	1	6	1	..	..	..	..	2	..	1	..	9	1
84a	Mental deficiency	3	..	1	..	2	..	..	..	..	..	..	..	1	..
84b	Schizophrenia (dementia praecox)	..	..	..	..	..	..	..	..	..	1	..	..	..	1
85	Epilepsy	6	3	4	3	1	..	1	..	..	2	2	..	6	5
86	Convulsions (under 5 years of age)	2	..	1	..	1	..	..	..	..	..	..	..	1	..
87b	Neuritis (except rheumatic or alcoholic)	2	..	2	..	..	..	..	..	..	..	..	..	2	..
87c	Paralysis agitans (except result of encephalitis)	8	1	6	1	2	..	..	..	..	..	..	..	6	1
87d	Disseminated sclerosis	6	..	6	..	..	..	..	..	1	..	..	..	7	..
87e	Other diseases of the nervous system	4	..	3	..	1	..	..	..	3	..	..	..	6	..

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE. BALTIMORE—1946

International List Number	Cause of Death	Total Recorded Deaths		Residents of						Baltimore Residents Dying Elsewhere				Total Resident Deaths	
				Baltimore		Counties of Maryland		Other States		Counties of Maryland		Other States			
		White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd
	VI—Diseases of the Nervous System and Sense Organs—*Cont'd*														
88	Diseases of the organs of vision	2	..	1	..	..	..	1	..	..	..	..	..	1	..
89a	Otitis and other diseases of the ear	7	..	4	..	3	..	..	..	..	..	..	..	4	..
89b	Diseases of the mastoid process	1	..	..	..	1	..	..	..	..	..	..	..	..	..
	VII—Diseases of the Circulatory System														
90b	Pericarditis, except acute and chronic rheumatic pericarditis	3	3	3	3	..	..	..	..	..	..	..	..	3	3
	Acute endocarditis (except rheumatic)														
91a	Bacterial endocarditis	13	3	8	2	3	1	2	..	..	..	..	..	8	2
91b	Other acute or subacute endocarditis	..	2	..	2	..	..	..	..	..	..	..	..	..	2
91c	Other endocarditis	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	Chronic affections of the valves and endocardium														
92a	Diseases of the aortic valve	24	13	22	11	1	2	1	..	4	1	..	..	26	12
92b	Diseases of the mitral valve	70	19	63	18	4	1	3	..	3	..	1	1	67	19
92c	Diseases of other and unspecified valves and chronic endocarditis, specified as rheumatic	13	..	12	..	..	..	1	..	..	1	..	..	12	1
92d	Diseases of other and unspecified valves and chronic endocarditis, not specified as rheumatic	40	18	37	18	1	..	2	..	3	...	1	..	41	18
92e	Endocarditis (not specified as acute, chronic or rheumatic, 45 years of age and over)	5	2	5	2	..	..	..	..	..	..	..	..	5	2
	Diseases of the myocardium														
93a	Acute myocarditis (except rheumatic)	6	4	6	3	..	..	..	1	1	..	..	..	7	3
93b	Myocarditis (not specified as acute, chronic or rheumatic, under 45 years of age)	4	..	3	..	1	..	..	..	..	..	..	..	3	..
93c	Chronic myocarditis (rheumatic)	43	3	38	3	3	..	2	..	..	..	..	..	38	3
93d	Chronic myocarditis (non-rheumatic)	1,759	391	1,626	383	106	7	27	1	109	21	9	3	1,744	407
93e	Other myocarditis	75	28	70	26	4	..	1	2	3	1	4	..	77	27
94a	Diseases of the coronary arteries	822	61	741	56	55	4	26	1	51	5	27	3	819	64
94b	Angina pectoris	20	2	19	2	..	..	1	..	..	..	1	..	20	2
	Other diseases of the heart														
95a	Functional diseases of the heart	3	1	3	1	..	..	..	..	..	..	..	..	3	1
95b	Other diseases of the heart (rheumatic)	21	6	18	6	3	..	..	..	2	..	..	..	20	6
95c	Other diseases of the heart (non-rheumatic)	58	29	53	29	5	..	..	..	10	..	2	..	65	29
96	Aneurysm (except of the heart and aorta)	9	3	4	3	1	..	4	..	2	1	..	..	6	4
97	Arteriosclerosis	89	14	85	13	4	1	..	..	17	19	..	..	102	32
98	Gangrene	3	1	2	1	1	..	..	..	1	..	..	..	3	1
99	Other diseases of the arteries	3	1	3	1	..	..	..	..	1	..	..	..	4	1

100a	Varices	2	1	2	1	..	..	..	..	..	..	..	..	2	1
100b	Other diseases of the veins	6	1	5	1	1	..	..	..	..	..	..	..	5	1
101	Diseases of the lymphatic system	1	..	1	..	..	..	..	..	..	..	..	..	1	..
102	High blood pressure (idiopathic)	4	3	3	2	1	..	..	1	..	..	..	..	3	2
103	Other diseases of the circulatory system	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	VIII—DISEASES OF THE RESPIRATORY SYSTEM														
104a	Diseases of the nasal fossae	1	4	1	4	..	..	..	..	..	..	..	..	1	4
104b	Diseases of the accessory sinuses	1	..	..	..	..	..	1	..	..	..	..	..	..	..
105	Diseases of the larynx	2	..	1	..	1	..	..	..	..	..	1	..	2	..
	Bronchitis														
106a	Acute	4	..	3	..	1	..	..	..	..	..	..	..	3	..
106b	Chronic	14	..	12	..	1	..	1	..	1	..	..	..	13	..
106c	Unspecified	5	..	3	..	2	..	..	..	..	..	..	..	3	..
107	Bronchopneumonia	134	56	109	51	23	5	2	..	18	2	2	..	129	53
108	Lobar pneumonia	105	89	92	87	10	2	3	..	11	2	..	..	103	89
109	Pneumonia, unspecified	8	5	6	4	2	1	..	..	..	1	..	..	6	5
	Pleurisy (not specified as tuberculous)														
110a	Empyema	3	..	2	..	..	..	1	..	..	..	..	..	2	..
110b	Other and unspecified forms of pleurisy	9	1	8	1	1	..	..	..	..	..	..	..	8	1
111a	Hemorrhagic infarction and thrombosis of the lung	3	1	2	1	1	..	..	..	..	..	..	..	2	1
111b	Acute edema of the lungs	8	9	8	9	..	..	..	..	..	..	..	..	8	9
111c	Chronic and unspecified congestion of the lung	4	..	3	..	1	..	..	..	..	..	..	..	3	..
112	Asthma	12	4	11	3	1	1	..	..	..	..	..	..	11	3
113	Pulmonary emphysema	2	..	2	..	..	..	..	..	1	..	..	..	3	..
	Other diseases of the respiratory system (except tuberculosis)														
114a	Silicosis	1	..	1	..	..	..	..	..	..	..	..	..	1	..
114b	Other and unspecified forms of pneumoconioses	..	1	..	1	..	..	..	..	..	..	..	..	..	1
114c	Gangrene of lung	1	..	1	..	..	..	..	..	..	..	..	..	1	..
114d	Abscess of lung	3	4	2	4	..	..	1	..	..	..	..	..	2	4
114e	Other and unspecified diseases of the respiratory system	2	..	1	..	..	..	1	..	..	..	..	..	1	..
	IX—DISEASES OF THE DIGESTIVE SYSTEM														
115b	Septic sore throat	4	..	3	..	1	..	..	..	..	..	..	..	3	..
115c	Diseases of the pharynx and tonsils	4	3	4	2	..	1	..	..	..	..	..	..	4	2
115d	Diseases of other and unspecified parts of the buccal cavity and adnexa	1	..	1	..	..	..	..	..	..	..	..	..	1	..
116	Diseases of the esophagus	2	2	2	2	..	..	..	..	..	..	..	..	2	2
117a	Ulcer of stomach	30	3	24	3	5	..	1	..	1	..	..	..	25	3
117b	Ulcer of duodenum	13	1	9	1	3	..	1	..	1	..	1	..	11	1
118	Other diseases of the stomach	5	..	5	..	..	..	..	..	1	..	..	..	6	..
119	Diarrhea and enteritis (under 2 years of age)	64	27	46	24	17	3	1	..	..	..	1	..	47	24
120a	Diarrhea and enteritis (2 years of age and over)	2	3	2	3	..	..	..	..	2	..	1	..	5	3
120b	Ulceration of the intestines (2 years of age and over)	8	..	7	..	1	..	..	..	..	..	..	..	7	..
121	Appendicitis	29	5	21	5	6	..	2	..	1	..	..	..	22	5
122a	Hernia	43	8	35	7	8	1	..	..	1	..	2	..	38	7
122b	Intestinal obstruction	37	16	27	15	5	..	5	1	2	1	1	..	30	16
123	Other diseases of the intestines	23	3	17	3	4	..	2	..	2	..	..	..	19	3

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE, BALTIMORE—1946

International List Number	Cause of Death	Total Recorded Deaths		Residents of						Baltimore Residents Dying Elsewhere				Total Resident Deaths	
				Baltimore		Counties of Maryland		Other States		Counties of Maryland		Other States			
		White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd
	IX—Diseases of the Digestive System—*Cont'd*														
	Cirrhosis of the liver														
124a	With mention of alcoholism	27	2	20	2	3	..	4	..	1	..	..	..	21	2
124b	Without mention of alcoholism	102	19	87	19	8	..	7	..	5	..	2	..	94	19
125a	Acute yellow atrophy of the liver	6	2	5	2	..	..	1	..	2	..	..	1	7	3
125b	Other diseases of the liver	8	5	6	5	1	..	1	..	..	..	..	..	6	5
126	Biliary calculi	22	3	17	2	4	1	1	..	..	..	2	..	19	2
127a	Cholecystitis (without mention of biliary calculus)	8	..	5	..	3	..	..	..	1	..	..	..	6	..
127b	Other diseases of the gallbladder and biliary ducts	7	3	5	3	..	..	2	..	..	..	..	..	5	3
128	Diseases of the pancreas	10	4	9	3	1	..	..	1	..	..	..	..	9	3
129	Peritonitis (cause not stated)	4	3	3	3	1	..	..	..	..	..	..	..	3	3
	X—Diseases of the Genito-urinary System														..
130	Acute nephritis	11	10	8	9	2	1	1	..	..	..	..	..	8	9
	Chronic nephritis														
131a	Arteriosclerotic kidney	454	237	423	232	24	3	7	2	19	6	2	1	444	239
131b	Other chronic nephritis	89	45	78	44	7	..	4	1	8	1	1	..	87	45
132	Nephritis, unspecified (10 years of age and over)	12	1	12	1	..	..	..	..	2	..	1	1	15	2
133a	Pyelitis, pyelonephritis and pyelocystitis	17	3	14	3	2	..	1	..	..	1	..	..	14	4
133b	Other diseases of the kidneys and ureters	12	3	8	3	4	..	..	..	..	..	..	..	8	3
134a	Calculi of the kidneys and ureters	13	3	9	2	3	1	1	..	..	..	..	..	9	2
134b	Calculi of the bladder	1	..	..	..	1	..	..	..	..	..	..	..	..	..
134c	Calculi of other and unspecified parts of the urinary passages	1	..	1	..	..	..	..	..	..	..	..	..	1	..
135a	Cystitis	2	2	1	1	1	1	..	..	..	..	..	..	1	1
135b	Other diseases of the bladder	2	1	..	..	1	1	1	..	..	..	..	..	..	..
136a	Stricture of the urethra	2	2	2	2	..	..	..	..	..	1	..	..	2	3
136b	Other diseases of the urethra	..	1	..	1	..	..	..	..	..	..	..	..	..	1
137a	Hypertrophy of the prostate	49	9	37	8	10	..	2	1	..	..	..	..	37	8
137b	Other diseases of the prostate	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	Diseases of the female genital organs														5
139a	Ovaries, fallopian tubes and parametria	3	5	1	5	1	..	1	..	..	..	..	..	1	..
139b	Uterus	1	..	1	..	..	..	..	..	..	..	..	..	1	
	XI—Diseases of Pregnancy, Childbirth and the Puerperium														
	Abortion with mention of infection														
	Spontaneous, therapeutic or of unspecified origin														
140a	With mention of pyelitis	1	..	1	..	..	..	..	..	..	..	..	..	1	..

140b	With mention of other infection	..	1	..	1	..	..	..	..	..	..	..	..	..	1
	Non-therapeutic														
140c	Self-induced	1	1	1	1	..	..	..	..	..	..	..	..	1	1
140d	Induced by persons other than the woman herself	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	Abortion without mention of infection														
141d	Spontaneous, therapeutic or of unspecified origin, without mention of hemorrhage, trauma or shock or toxemia	..	1	..	1	..	..	..	..	..	..	..	..	..	1
141f	Non-therapeutic, induced by persons other than the woman herself	..	1	..	1	..	..	..	..	..	..	..	..	..	1
	Ectopic gestation														
142a	With mention of infection	..	1	..	1	..	..	..	..	..	..	..	..	..	1
142b	Without mention of infection	1	1	..	1	1	..	..	..	..	..	..	..	..	1
144a	Eclampsia of pregnancy	4	1	2	1	2	..	..	..	..	..	..	..	2	1
145	Other diseases and accidents of pregnancy (death before delivery)	1	1	..	1	1	..	..	..	..	..	..	..	..	1
	Hemorrhage of childbirth and the puerperium														
146a	Placenta praevia (with childbirth)	2	..	1	..	1	..	..	..	..	..	..	..	1	..
146b	Premature separation of placenta (with childbirth)	2	..	2	..	..	..	..	..	..	..	..	..	2	..
146c	Other and unspecified hemorrhages of childbirth and the puerperium	1	..	..	..	1	..	..	..	..	..	..	..	..	..
	Infection during childbirth and the puerperium														
147b	General or local puerperal infection (except pyelitis)	1	1	..	1	1	..	..	..	..	..	..	..	..	1
147d	Puerperal embolism and sudden death	1	1	1	..	..	1	..	..	..	..	..	..	1	..
	Puerperal toxemias (excluding death before delivery)														
148a	Puerperal eclampsia	1	..	1	..	..	..	..	..	..	..	..	..	1	..
148b	Puerperal albuminuria and nephritis	..	1	..	1	..	..	..	..	..	..	..	..	..	1
	Other accidents and specified conditions of childbirth														
149a	Laceration, rupture, or other trauma of pelvic organs and tissue	2	1	2	1	..	..	..	..	..	..	..	..	2	1
149b	Other specified conditions of childbirth	1	1	1	1	..	..	..	..	..	..	..	..	1	1
150c	Other and unspecified conditions of childbirth and the puerperium	..	1	..	1	..	..	..	..	..	..	..	..	..	1
	XII—DISEASES OF THE SKIN AND CELLULAR TISSUE														
152	Phlegmon and acute abscess	2	..	1	..	1	..	..	..	..	..	..	..	1	..
153	Other diseases of the skin and cellular tissue	3	2	1	1	..	1	2	..	..	..	..	..	1	1
	XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT														
154b	Osteomyelitis and periostitis, chronic or unspecified)	1	..	1	..	..	..	..	..	..	..	..	..	1	..
155	Other diseases of the bones (except tuberculosis)	1	..	1	..	..	..	..	..	..	..	..	..	1	..
156a	Diseases of the joints (except tuberculosis and rheumatism)	3	..	3	..	..	..	..	..	..	..	..	..	3	..
156b	Diseases of other and unspecified organs of movement	1	2	1	2	..	..	..	..	..	..	..	..	1	2
	XIV—CONGENITAL MALFORMATIONS														
157a	Congenital hydrocephalus	19	2	13	1	6	..	..	1	..	..	..	..	13	1
157b	Spina bifida and meningocele	11	..	11	..	..	..	..	..	..	..	..	..	11	..
157c	Anencephalus	1	..	1	..	..	..	..	..	..	..	..	..	1	..

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE

BALTIMORE—1946

International List Number	Cause of Death	Total Recorded Deaths		Residents of						Baltimore Residents Dying Elsewhere				Total Resident Deaths	
				Baltimore		Counties of Maryland		Other States		Counties of Maryland		Other States			
		White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd	White	Col'd
	XIV—Congenital Malformations—*Cont'd*														
157d	Other congenital malformations of the central nervous system	7	..	3	..	4	..	..	..	1	..	..	..	4	..
157e	Congenital malformations of the heart	100	9	31	8	21	1	48	..	1	..	..	..	32	8
157g	Congenital malformations of the digestive system	20	3	13	3	3	..	4	..	..	..	..	..	13	3
157h	Congenital malformations of the genito-urinary system	2	..	2	..	..	..	..	..	..	..	..	..	2	..
157m	Other and unspecified congenital malformations	13	..	4	..	7	..	2	..	..	..	..	..	4	..
	XV—Diseases Peculiar to the First Year of Life														
158	Congenital debility (cause not stated)	5	1	3	1	2	..	..	..	..	..	..	..	3	1
159	Premature birth (cause not stated)	242	136	166	118	72	17	4	1	1	..	2	..	169	118
160a	Injury at birth, intracranial or spinal hemorrhage	62	37	38	33	23	4	1	..	..	..	..	..	38	33
160c	Other injuries at birth	20	3	16	2	4	1	..	..	..	..	..	..	16	2
	Other diseases peculiar to the first year of life														
161a	Asphyxia (cause not specified), atelectasis	38	19	27	18	11	1	..	..	..	..	..	..	27	18
161b	Infection of the umbilicus; pemphigus and other infections (non-syphilitic)	3	..	3	..	..	..	..	..	..	..	..	..	3	..
161c	Other specified diseases peculiar to the first year of life	24	5	12	5	12	..	..	..	..	..	..	..	12	5
	XVI—Senility														
162a	With mention of senile dementia	1	..	1	..	..	..	..	..	2	1	..	..	3	1
162b	Without mention of senile dementia	7	2	7	2	..	..	..	..	1	..	..	..	8	2
	XVII—Violent or Accidental Deaths														
	Suicide by														
163a	Arsenic and compounds	..	..	..	..	..	..	..	..	1	..	..	..	1	..
163b	Barbituric acid and derivatives	6	..	6	..	..	..	..	..	..	..	1	..	7	..
163c	Cresol compounds	..	1	..	1	..	..	..	..	..	..	..	..	..	1
163d	Mercury and compounds	2	..	2	..	..	..	..	..	..	..	..	..	2	..
163e	Nux vomica and strychnine	1	..	1	..	..	..	..	..	..	..	..	..	1	..
163g	Other solid and liquid poisons	3	1	2	1	1	..	..	..	..	..	..	..	2	1
163h	Illuminating gas	45	2	44	2	1	..	..	..	..	..	..	..	44	2
163x	Other poisonous gases	1	..	1	..	..	..	..	..	..	..	..	..	1	..
163m	Motor-vehicle exhaust gas	1	..	1	..	..	..	..	..	..	..	..	..	1	..
164a	Hanging or strangulation	21	..	19	..	1	..	1	..	..	..	..	1	19	1
164b	Drowning	3	1	3	1	..	..	..	..	..	..	1	..	4	1
164c	Firearms and explosives	19	2	16	2	3	..	..	..	3	..	1	..	20	2
164d	Cutting or piercing instruments	6	1	5	1	..	..	1	..	1	..	..	..	6	1
164e	Jumping from high places	9	..	7	..	1	..	1	..	..	..	..	..	7	..
164f	Crushing	1	..	1	..	..	..	..	..	1	..	..	..	2	..

	Homicide by														
166	Firearms	7	45	7	42	..	1	..	2	..	1	..	1	7	44
167	Cutting or piercing instruments	11	18	9	18	..	..	2	..	..	..	..	..	9	18
168	Other means	11	13	10	13	1	..	..	..	1	..	2	1	13	14
169	Railway accidents	12	..	8	..	2	..	2	..	2	1	..	1	10	2
	Motor vehicle accidents														
170a	Collisions between automobiles and trains	1	..	1	..	..	..	..	..	..	..	..	..	1	..
170b	Collisions between automobiles and streetcars	3	..	1	..	2	..	..	..	..	..	..	..	1	..
170c	Automobile accidents (except collisions with trains or streetcars)	126	30	72	27	43	2	11	1	11	4	11	8	94	39
170d	Motorcycle accidents (except collisions with automobiles)	3	..	1	..	2	..	..	..	..	..	1	..	2	..
171a	Streetcar accidents (except collisions with trains or motor vehicles)	18	2	17	2	1	..	..	..	..	1	..	..	17	3
172	Water-transport accidents	7	3	6	3	..	..	1	..	..	..	..	..	6	3
173	Air-transport accidents	..	..	..	..	..	..	..	..	1	..	1	..	2	..
176	Other accidents involving machinery	2	2	1	1	1	1	..	..	..	..	..	..	1	1
	Accidental absorption of poisonous gas														
178a	Illuminating gas	13	3	13	3	..	..	..	..	..	..	..	..	13	3
178b	Motor-vehicle exhaust gas	..	..	..	..	..	..	..	..	..	..	1	..	1	..
178c	Other carbon monoxide gas	3	..	2	..	1	..	..	..	..	1	..	..	2	1
178x	Other poisonous gases	2	..	1	..	1	..	..	..	..	..	..	..	1	..
	Acute accidental poisoning by														
179b	Barbituric acid and derivatives	2	..	2	..	..	..	..	..	..	..	..	..	2	..
179g	Lye and potash	..	1	..	1	..	..	..	..	..	..	..	..	..	1
179h	Tobacco and derivatives	1	..	1	..	..	..	..	..	..	..	..	..	1	..
179x	Other and unspecified substances	4	2	3	2	1	..	..	..	..	..	..	..	3	2
180	Conflagration	4	8	3	8	1	..	..	..	..	..	..	..	3	8
181	Accidental burns (except conflagration)	29	14	18	12	10	1	1	1	..	..	1	..	19	12
182	Accidental mechanical suffocation	9	3	5	3	2	..	2	..	..	..	1	..	6	3
183	Accidental drowning	32	14	25	14	2	..	5	..	11	4	1	1	37	19
184	Accidental injury by firearms	9	7	7	5	2	2	..	..	..	..	..	..	7	5
185	Accidental injury by cutting or piercing instruments	1	..	1	..	..	..	..	..	..	..	..	..	1	..
186a	Accidental injury by fall	184	14	147	13	33	..	4	1	10	..	2	..	159	13
186b	Accidental injury by crushing	2	..	2	..	..	..	..	..	..	..	..	..	2	..
190	Excessive cold	..	1	..	1	..	..	..	..	..	..	..	..	..	1
193	Accidents due to electric currents (except lightning)	..	2	..	1	..	..	..	1	1	1	1	..	2	2
195b	Other accidents due to medical or surgical intervention	2	1	1	1	1	..	..	..	..	..	..	..	1	1
195c	Lack of care of the new-born	1	..	1	..	..	..	..	..	..	..	..	..	1	..
195d	Obstruction, suffocation, or puncture by ingested objects	5	3	2	3	1	..	2	..	..	..	..	..	2	3
195e	Other and unspecified accidents	17	4	10	4	5	..	2	..	3	..	..	..	13	4
198	Legal executions	..	5	..	..	..	3	..	2	..	..	..	..	..	..
	XVIII—Ill-defined Causes of Death														
200a	Ill-defined cause	4	1	4	1	..	..	..	..	..	..	1	1	5	2
200b	Found dead (cause unknown)	1	1	1	1	..	..	..	..	2	..	..	..	3	1
200c	Unknown or unspecified cause	2	1	2	1	..	..	..	..	..	..	1	..	3	1

TABLE NO. 11

RESIDENT AND RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN IMPORTANT CAUSES FOR TOTAL, WHITE AND COLORED POPULATIONS—1936-1946

Year	Typhoid Fever						Measles						Scarlet Fever					
	Number			Rate per 100,000 Population			Number			Rate per 100,000 Population			Number			Rate per 100,000 Population		
	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd
Resident																		
1946	1	1	..	0.1	0.1	..	6	4	2	0.6	0.5	1.1	1	1	..	0.1	0.1	..
1945	1	1	..	0.1	0.1	..	..	..	..	..	..	..	1	1	..	0.1	0.1	..
1944	1	..	1	0.1	..	0.5	10	3	7	1.1	0.4	3.9	1	1	..	0.1	0.1	..
1943	1	1	..	0.1	0.1	..	1	1	..	0.1	0.1	..	1	1	..	0.1	0.1	..
1942	1	1	..	0.1	0.1	..	1	..	1	0.1	..	0.5	..	..	..	..	..	..
1941	3	1	2	0.3	0.1	1.2	3	2	1	0.3	0.3	0.6	..	..	..	..	..	..
1940	1	..	1	0.1	..	0.6	..	..	..	..	..	..	2	1	1	0.2	0.1	0.6
1939	1	1	..	0.1	0.1	..	9	7	2	1.0	1.0	1.2	1	1	..	0.1	0.1	..
1938	8	5	3	0.9	0.7	1.8	..	..	..	..	..	..	3	3	..	0.4	0.4	..
1937	7	4	3	0.8	0.6	1.9	25	16	9	3.0	2.3	5.6	4	3	1	0.5	0.4	0.6
1936	8	2	6	1.0	0.3	3.8	7	6	1	0.8	0.9	0.6	5	5	..	0.6	0.7	..
Recorded																		
1946	1	1	..	0.1	0.1	..	8	6	2	0.9	0.8	1.1	1	1	..	0.1	0.1	..
1945	2	2	..	0.2	0.3	..	..	..	..	..	..	..	1	1	..	0.1	0.1	..
1944	1	..	1	0.1	..	0.5	12	5	7	1.3	0.7	3.9	1	1	..	0.1	0.1	..
1943	2	2	..	0.2	0.3	..	3	3	..	0.3	0.4	..	1	1	..	0.1	0.1	..
1942	3	3	..	0.3	0.4	..	1	..	1	0.1	..	0.5	..	..	..	..	..	..
1941	6	4	2	0.7	0.6	1.2	6	4	2	0.7	0.6	1.2	1	..	1	0.1	..	0.6
1940	3	2	1	0.3	0.3	0.6	..	..	..	..	..	..	2	1	1	0.2	0.1	0.6
1939	5	2	3	0.6	0.3	1.8	10	8	2	1.2	1.2	1.2	1	1	..	0.1	0.1	..
1938	13	8	5	1.5	1.2	3.1	..	..	..	..	..	..	3	3	..	0.4	0.4	..
1937	10	7	3	1.2	1.0	1.9	28	18	10	3.3	2.6	6.2	4	3	1	0.5	0.4	0.6
1936	8	2	6	1.0	0.3	3.8	8	7	1	1.0	1.0	0.6	8	8	..	1.0	1.2	..

Year	Whooping Cough						Diphtheria						Influenza					
Resident																		
1946	2	1	1	0.2	0.1	0.5	19	18	1	2.0	2.4	0.5	40	20	20	4.3	2.7	11.0
1945	12	5	7	1.3	0.7	3.8	19	17	2	2.0	2.3	1.1	37	23	14	4.0	3.1	7.7
1944	11	6	5	1.2	0.8	2.8	13	13	..	1.4	1.7	..	65	32	33	6.9	4.2	18.2
1943	10	6	4	1.1	0.8	2.2	3	2	1	0.3	0.3	0.5	102	72	30	11.0	9.6	16.5
1942	9	4	5	1.0	0.5	2.7	2	1	1	0.2	0.1	0.5	60	34	26	6.4	4.5	14.3
1941	30	3	27	3.5	0.4	16.1	3	2	1	0.3	0.3	0.6	67	38	29	7.7	5.4	17.3
1940	24	11	13	2.8	1.6	7.8	1	1	..	0.1	0.1	..	56	41	15	6.5	5.9	9.0
1939	9	4	5	1.0	0.6	3.0	3	3	..	0.4	0.4	..	63	37	26	7.4	5.4	15.8
1938	19	7	12	2.2	1.0	7.4	3	3	..	0.4	0.4	..	53	37	16	6.2	5.4	9.9
1937	35	17	18	4.1	2.5	11.3	7	5	2	0.8	0.7	1.2	104	68	36	12.3	9.9	22.5
1936	36	13	23	4.3	1.9	14.6	8	3	5	1.0	0.4	3.2	76	57	19	9.1	8.4	12.1

RECORDED																		
1946	2	1	1	0.2	0.1	0.5	27	26	1	2.9	3.5	0.5	43	23	20	4.6	3.1	11.0
1945	18	8	10	1.9	1.1	5.5	25	22	3	2.7	2.9	1.6	43	28	15	4.6	3.7	8.2
1944	16	8	8	1.7	1.1	4.4	13	13	..	1.4	1.7	..	67	33	34	7.1	4.4	18.8
1943	15	10	5	1.6	1.3	2.7	7	6	1	0.8	0.8	0.5	106	76	30	11.4	10.2	16.5
1942	11	5	6	1.2	0.7	3.3	2	1	1	0.2	0.1	0.5	62	35	27	6.6	4.6	14.9
1941	34	7	27	3.9	1.0	16.1	5	3	2	0.6	0.4	1.2	72	41	31	8.3	5.9	18.4
1940	30	17	13	3.5	2.4	7.8	3	2	1	0.3	0.3	0.6	58	43	15	6.7	6.2	9.0
1939	11	5	6	1.3	0.7	3.6	9	9	..	1.0	1.3	..	69	40	29	8.1	5.8	17.6
1938	21	9	12	2.5	1.3	7.4	6	5	1	0.7	0.7	0.6	57	39	18	6.7	5.7	11.1
1937	42	24	18	5.0	3.5	11.3	11	9	2	1.3	1.3	1.2	112	78	34	13.3	11.4	21.3
1936	39	15	24	4.6	2.2	15.2	10	5	5	1.2	0.7	3.2	83	64	19	9.9	9.4	12.1
	TUBERCULOSIS, ALL FORMS						PULMONARY TUBERCULOSIS						CANCER					
RESIDENT																		
1946	747	349	398	80.3	46.7	218.7	707	340	367	76.0	45.5	201.6	1,448	1,212	236	155.7	162.0	129.7
1945	773	349	424	83.1	46.7	233.0	714	326	388	76.8	43.6	213.2	1,400	1,179	221	150.5	157.6	121.4
1944	801	367	434	85.5	48.5	239.8	737	347	390	78.7	45.9	215.5	1,380	1,156	224	147.3	152.9	123.7
1943	805	402	403	86.6	53.7	221.4	755	387	368	81.2	51.7	202.2	1,393	1,189	204	149.8	159.0	112.1
1942	810	374	436	86.5	49.6	240.1	749	354	395	80.0	46.9	217.5	1,257	1,071	186	134.3	142.0	102.4
1941	811	355	456	93.7	50.9	271.4	760	339	421	87.8	48.6	250.6	1,368	1,162	206	158.0	166.5	122.6
1940	816	393	423	94.9	56.7	253.0	769	378	391	89.4	54.5	233.9	1,294	1,081	213	150.4	155.9	127.4
1939	673	336	337	78.7	48.7	204.6	631	316	315	73.8	45.8	191.2	1,237	1,060	177	144.7	153.6	107.4
1938	711	379	332	83.7	55.1	204.6	668	359	309	78.6	52.2	190.4	1,217	1,054	163	143.2	153.3	100.4
1937	861	452	409	102.0	66.0	255.9	810	427	383	96.0	62.4	239.6	1,205	1,034	171	142.7	151.1	107.0
1936	836	433	403	99.7	63.5	256.0	790	417	373	94.2	61.2	237.0	1,114	948	166	132.8	139.1	105.4
RECORDED																		
1946	471	229	242	50.6	30.6	133.0	427	216	211	45.9	28.9	115.9	1,646	1,402	244	177.1	187.4	134.1
1945	496	224	272	53.3	29.9	149.5	436	195	241	46.9	26.1	132.4	1,590	1,362	228	171.0	182.1	125.3
1944	531	264	267	56.7	34.9	147.5	462	237	225	49.3	31.3	124.3	1,560	1,324	236	166.5	175.1	130.4
1943	527	279	248	56.7	37.3	136.3	474	257	217	51.0	34.4	119.2	1,586	1,378	208	170.5	184.2	114.3
1942	570	276	294	60.9	36.6	161.9	509	249	260	54.4	33.0	143.2	1,482	1,277	205	158.3	169.3	112.9
1941	547	247	300	63.2	35.4	178.6	490	230	260	56.6	33.0	154.8	1,593	1,370	223	183.9	196.3	132.7
1940	604	297	307	70.2	42.8	183.6	554	276	278	64.4	39.8	166.3	1,488	1,262	226	172.9	182.0	135.2
1939	561	267	294	65.6	38.6	178.5	512	244	268	59.9	35.3	162.7	1,400	1,207	193	163.7	174.8	117.2
1938	553	278	275	65.0	40.4	169.4	505	256	249	59.4	37.2	153.4	1,352	1,184	168	159.1	172.2	103.5
1937	678	335	343	80.3	48.9	214.6	620	304	316	73.4	44.4	197.7	1,376	1,182	194	163.0	172.7	121.4
1936	680	338	342	81.1	49.6	217.3	627	316	311	74.8	46.4	197.6	1,269	1,095	174	151.3	160.7	110.5
	HEART DISEASE						BRONCHOPNEUMONIA						LOBAR PNEUMONIA					
RESIDENT																		
1946	3,560	2,959	601	382.8	395.6	330.2	182	129	53	19.6	17.2	29.1	192	103	89	20.6	13.8	48.9
1945	3,686	3,082	604	396.3	412.0	331.9	264	187	77	28.4	25.0	42.3	287	156	131	30.9	20.9	72.0
1944	3,633	3,040	593	387.7	402.1	327.6	260	157	103	27.7	20.8	56.9	341	173	168	36.4	22.9	92.8
1943	3,964	3,251	713	426.2	434.6	391.8	357	231	126	38.4	30.9	69.2	455	244	211	48.9	32.6	115.9
1942	3,556	2,946	610	379.9	390.5	335.9	373	243	130	39.9	32.2	71.6	334	190	144	35.7	25.2	79.3
1941	3,366	2,773	593	388.7	397.3	353.0	277	191	86	32.0	27.4	51.2	350	181	169	40.4	25.9	100.6
1940	3,331	2,761	570	387.1	398.3	340.9	308	211	97	35.8	30.4	58.0	320	203	117	37.2	29.3	70.0
1939	2,970	2,536	434	347.4	367.4	263.5	363	249	114	42.4	36.1	69.2	305	182	123	35.7	26.4	74.7
1938	2,916	2,461	455	343.2	358.0	280.4	405	278	127	47.7	40.4	78.3	359	217	142	42.2	31.6	87.5
1937	2,758	2,369	389	326.7	346.2	243.4	481	350	131	57.0	51.1	82.0	557	333	224	66.0	48.6	140.2
1936	2,602	2,145	457	310.2	314.8	290.3	474	316	158	56.5	46.4	100.4	549	289	260	65.4	42.4	165.2

TABLE NO. 11—Continued

RESIDENT AND RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN IMPORTANT CAUSES FOR TOTAL, WHITE AND COLORED POPULATIONS—1936-1946

Year	Heart Disease—Cont'd						Bronchopneumonia—Cont'd						Lobar Pneumonia—Cont'd					
	Number			Rate per 100,000 Population			Number			Rate per 100,000 Population			Number			Rate per 100,000 Population		
	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd
Recorded																		
1946	3,565	2,980	585	383.3	398.4	321.4	190	134	56	20.4	17.9	30.8	194	105	89	20.9	14.0	48.9
1945	3,663	3,076	587	393.9	411.2	322.5	261	183	78	28.1	24.5	42.9	285	154	131	30.6	20.6	72.0
1944	3,655	3,077	578	390.1	407.0	319.3	267	166	101	28.5	21.9	55.8	358	189	169	38.2	25.0	93.4
1943	3,953	3,272	681	425.1	437.4	374.2	384	255	129	41.3	34.1	70.9	482	274	208	51.8	36.6	114.3
1942	3,546	2,961	585	378.8	392.5	322.1	377	246	131	40.3	32.6	72.1	371	223	148	39.6	29.6	81.5
1941	3,386	2,800	586	391.0	401.1	348.8	288	201	87	33.2	28.8	51.8	365	194	171	42.1	27.8	101.8
1940	3,357	2,785	572	390.1	401.7	342.1	319	225	94	37.1	32.5	56.2	347	232	115	40.3	33.5	68.8
1939	2,978	2,550	428	348.3	369.4	259.8	376	259	117	44.0	37.5	71.0	333	202	131	38.9	29.3	79.5
1938	2,910	2,463	447	342.5	358.3	275.5	424	297	127	49.9	43.2	78.3	391	246	145	46.0	35.8	89.4
1937	2,757	2,376	381	326.6	347.2	238.4	504	365	139	59.7	53.3	87.0	609	375	234	72.1	54.8	146.4
1936	2,608	2,154	454	310.9	316.1	288.4	498	340	158	59.4	49.9	100.4	592	324	268	70.6	47.6	170.2
	Diarrhea and Enteritis Under Two Years						Chronic Nephritis						Premature Birth					
Resident																		
1946	71	47	24	7.6	6.3	13.2	815	531	284	87.6	71.0	156.0	287	169	118	30.9	22.6	64.8
1945	105	58	47	11.3	7.7	25.8	886	614	272	95.3	82.1	149.5	191	115	76	20.5	15.4	41.7
1944	90	54	36	9.6	7.1	19.9	954	652	302	101.8	86.2	166.9	223	147	76	23.8	19.4	42.0
1943	162	104	58	17.4	13.9	31.9	1,023	697	326	110.0	93.2	179.1	251	168	83	27.0	22.5	45.6
1942	102	64	38	10.9	8.5	20.9	974	677	297	104.1	89.7	163.5	219	152	67	23.4	20.1	36.9
1941	144	66	78	16.6	9.4	46.4	1,008	713	295	116.4	102.1	175.6	219	131	88	25.3	18.8	52.4
1940	54	32	22	6.3	4.6	13.2	1,169	820	349	135.8	118.3	208.7	206	132	74	23.9	19.0	44.3
1939	45	24	21	5.3	3.5	12.7	1,017	790	227	118.9	114.4	137.8	163	105	58	19.1	15.2	35.2
1938	80	51	29	9.4	7.4	17.9	1,033	770	263	121.6	112.0	162.1	183	118	65	21.5	17.2	40.0
1937	69	51	18	8.2	7.4	11.3	1,087	828	259	128.8	121.0	162.0	198	128	70	23.4	18.7	43.8
1936	90	60	30	10.7	8.8	19.0	1,046	800	246	124.7	117.4	156.3	196	131	65	23.4	19.2	41.3
Recorded																		
1946	91	64	27	9.8	8.5	14.8	825	543	282	88.7	72.6	154.9	378	242	136	40.6	32.3	74.7
1945	121	71	50	13.0	9.5	27.5	879	609	270	94.5	81.4	148.3	252	170	82	27.1	22.7	45.1
1944	107	67	40	11.4	8.9	22.1	949	642	307	101.3	84.9	169.6	304	218	86	32.4	28.8	47.5
1943	185	127	58	19.9	17.0	31.9	1,032	695	337	111.0	92.9	185.2	304	210	94	32.7	28.1	51.6
1942	128	84	44	13.7	11.1	24.2	990	685	305	105.8	90.8	168.0	279	201	78	29.8	26.6	43.0
1941	192	95	97	22.2	13.6	57.7	1,019	715	304	117.7	102.4	181.0	276	178	98	31.9	25.5	58.3
1940	63	41	22	7.3	5.9	13.2	1,183	820	363	137.5	118.3	217.1	250	165	85	29.0	23.8	50.8
1939	56	32	24	6.5	4.6	14.6	1,052	805	247	123.0	116.6	150.0	196	131	65	22.9	19.0	39.5
1938	94	60	34	11.1	8.7	21.0	1,090	820	270	128.3	119.3	166.4	221	151	70	26.0	22.0	43.1
1937	91	67	24	10.8	9.8	15.0	1,121	853	268	132.8	124.6	167.7	238	163	75	28.2	23.8	46.9
1936	103	67	36	12.3	9.8	22.9	1,066	813	253	127.1	119.3	160.7	222	155	67	26.5	22.7	42.6

TABLE NO. 12

RESIDENT AND RECORDED DEATHS UNDER ONE MONTH OF AGE, DEATHS UNDER ONE YEAR OF AGE, AND MATERNAL DEATHS WITH CORRESPONDING DEATH RATES—1936–1946

Year	Deaths Under One Month of Age						Deaths Under One Year of Age						Maternal Deaths					
	Number			Rate per 1,000 Live Births			Number			Rate per 1,000 Live Births			Number			Rate per 1,000 Live Births		
	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd	Total	White	Col'd
Resident																		
1946	556	354	202	26.3	22.4	38.1	750	478	272	35.5	30.2	51.3	26	13	13	1.2	0.8	2.5
1945	439	290	149	24.6	21.8	32.8	708	436	272	39.7	32.8	59.9	27	17	10	1.5	1.3	2.2
1944	472	313	159	25.1	22.3	33.1	766	478	288	40.7	34.1	59.9	40	30	10	2.1	2.1	2.1
1943	553	388	165	26.3	24.1	33.2	973	619	354	46.2	38.5	71.1	34	17	17	1.6	1.1	3.4
1942	489	349	140	24.8	23.1	30.1	778	516	262	39.5	34.2	56.4	35	18	17	1.7	1.3	3.7
1941	422	271	151	26.4	22.8	36.7	794	451	343	49.6	37.9	83.5	36	21	15	2.3	1.8	3.6
1940	382	241	141	27.8	23.8	39.1	641	387	254	46.7	38.3	70.4	28	15	13	2.0	1.5	3.6
1939	300	194	106	24.0	21.1	32.0	511	302	209	40.8	32.8	63.1	45	28	17	3.6	3.0	5.1
1938	364	239	125	27.6	24.2	37.7	683	429	254	51.7	43.4	76.6	44	29	15	3.3	2.9	4.5
1937	348	223	125	27.8	23.8	39.7	664	393	271	53.1	41.9	86.1	42	28	14	3.4	3.0	4.4
1936	381	250	131	32.3	27.9	46.0	763	461	302	64.7	51.5	106.2	49	35	14	4.2	3.9	4.9
Recorded																		
1946	733	505	228	26.7	23.3	39.6	990	684	306	36.1	31.6	53.1	34	20	14	1.2	0.9	2.4
1945	572	409	163	24.9	22.7	33.2	909	609	300	39.6	33.8	61.1	36	23	13	1.6	1.3	2.6
1944	607	434	173	25.6	23.3	34.1	963	653	310	40.6	35.1	61.1	48	34	14	2.0	1.8	2.8
1943	674	495	179	26.0	24.0	33.9	1,168	792	376	45.0	38.4	71.1	41	21	20	1.6	1.0	3.8
1942	635	468	167	26.1	24.1	33.9	981	677	304	40.6	35.2	61.8	50	28	22	2.1	1.5	4.5
1941	536	365	171	27.6	24.3	38.7	987	600	387	50.9	40.0	87.7	44	27	17	2.3	1.8	3.8
1940	477	319	158	28.9	25.4	40.6	785	507	278	47.6	40.3	71.4	41	25	16	2.5	2.0	4.1
1939	367	251	116	24.7	22.1	32.8	640	401	239	43.0	35.3	67.6	59	38	21	4.0	3.3	5.9
1938	431	296	135	28.2	25.2	38.4	815	535	280	53.4	45.5	79.7	56	36	20	3.6	3.1	5.7
1937	427	289	138	29.9	26.5	41.2	817	512	305	57.2	46.9	91.0	64	43	21	4.5	3.9	6.3
1936	437	299	138	32.9	29.1	45.9	894	568	326	67.3	55.3	108.5	62	44	18	4.7	4.3	6.0

TABLE NO. 13

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE—1946

International Code No.	Disease	Totals: Grand Total	Totals: By Color		Totals: By Sex		Age Groups: Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Years and Over	Age Not Specified
1	Typhoid fever	10	W	7	M	5	....	1	1	....	....	1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....
					F	2	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
			C	3	M	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	2	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
6	Meningococcus meningitis	46	W	36	M	16	3	....	2	....	....	1	3	4	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....
					F	20	2	1	1	1	....	5	3	..	1	....	....	2	1	....	2	....	....	....	1	....	....	....	....
			C	10	M	8	1	1	....	....	4	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	2	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
8	Scarlet fever	806	W	733	M	369	1	6	30	28	38	154	59	32	6	8	3	3	....	1	....	....	....	....	....	....	....	....	....
					F	364	2	5	14	24	28	171	57	25	19	10	2	6	....	1	....	....	....	....	....	....	....	....	....
			C	73	M	36	1	2	3	3	6	19	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	37	....	1	2	1	7	22	2	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
9	Whooping cough	1,004	W	759	M	362	40	20	34	61	41	157	6	2	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
					F	397	46	49	47	41	58	147	6	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....
			C	245	M	117	16	22	24	16	11	27	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	128	26	16	25	19	13	28	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
10	Diphtheria	424	W	385	M	185	2	4	11	23	18	65	25	7	8	4	6	3	1	2	3	1	1	1	....	....	....	....	....
					F	200	1	2	6	24	19	57	36	17	16	8	7	5	1	1	....	....	....	....	....	....	....	....	....
			C	39	M	23	....	....	4	2	3	5	2	2	2	1	1	....	....	1	....	....	....	....	....	....	....	....	....
					F	16	1	....	2	4	....	2	2	....	3	....	....	1	....	....	1	....	....	....	....	....	....	....	....
11	Erysipelas	8	W	7	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....
					F	5	....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	1	..	....	....	1	....	....
			C	1	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
12	Tetanus	9	W	5	M	3	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
					F	2	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	4	M	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	3	....	....	....	....	....	....	1	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....

13	Pulmonary tuberculosis	1,468	W	867	M	544	4	1	2	1	1	3	3	8	42	44	32	4	57	54	72	66	44	32	22	9	...	1	....
					F	323	1	4	2	3	....	1	1	22	54	58	40	35	19	23	15	13	11	8	8	2	3	....	....
			C	601	M	318	2	3	3	1	8	7	5	20	26	31	23	33	41	41	29	20	9	10	3	1	1	1	....
					F	283	4	3	9	4	....	14	7	35	60	36	34	27	14	17	7	3	6	3	...	...	...	....	....
14-22	Tuberculosis, other forms	56	W	15	M	8	1	....	....	1	1	2	....	1	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....
					F	7	....	2	....	1	....	....	2	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	41	M	21	....	1	....	1	2	....	2	1	4	2	3	1	2	1	....	1	....	....	....	....	....	....	....
					F	20	....	....	....	2	....	2	....	3	4	1	1	1	2	1	1	....	....	....	....	2	....	....	....
25	Gonococcus infection	4,025	W	1,123	M	808	....	....	....	....	....	....	3	60	299	206	122	62	29	14	6	3	1	....	....	....	....	....	3
					F	315	....	....	1	1	....	2	....	68	123	71	18	22	5	3	1	....	....	....	....	....	....	....	....
			C	2,902	M	2,512	1	....	....	....	....	5	15	371	1,142	584	213	99	46	22	8	1	....	....	....	....	....	....	5
					F	390	1	2	2	3	2	12	10	113	143	61	22	18	1	....	....	....	....	....	....	....	....	....	....
25c	Gonococcic ophthalmia	22	W	3	M	2	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	19	M	6	3	....	1	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
					F	13	8	2	2	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
26a	Tularemia	1	W	1	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
27a	Dysentery, bacillary	15	W	6	M	4	....	2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1
					F	2	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	9	M	5	1	2	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	4	2	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
27b	Dysentery, amebic	7	W	6	M	5	....	....	....	....	....	....	....	....	....	1	2	1	....	....	1	....	....	....	....	....	....	....	....
					F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
			C	1	M	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
27c	Dysentery, unspecified	10	W	5	M	2	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1
			C	5	M	2	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	2	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
28	Malaria*	28	W	26	M	26	....	....	....	....	....	....	1	1	10	11	....	1	1	....	....	....	....	....	....	....	....	....	1
			C	2	M	2	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....
30	Syphilis	5,558	W	1,272	M	731	....	....	....	....	....	....	2	25	163	144	97	75	62	47	42	27	23	15	4	1	1	....	3
					F	541	1	....	....	....	....	....	3	67	148	107	79	46	27	22	21	9	5	1	1	....	....	....	4
			C	4,286	M	2,263	8	5	....	....	....	2	16	183	559	531	321	218	163	101	65	43	19	12	5	2	1	....	9
					F	2,023	10	1	2	....	1	5	30	375	627	435	237	142	63	43	22	14	6	2	2	....	....	....	6

* Contracted outside continental United States.

TABLE NO. 13—Continued

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE—1946

International Code No.	Disease	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Years and Over	Age Not Specified
32a	Infectious hepatitis	8	W	5	M	4	....	....	....	....	....	2	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
					F	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	3	M	2	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
33	Influenza	136	W	107	M	44	2	....	2	1	2	3	....	3	5	5	2	2	3	5	2	1	4	2	....	....	....	....	....
					F	63	1	1	3	1		4	....	2	25	8	2	1	2	3	2	3	2	....	1	1	....	1	....
			C	29	M	16	2	....	1	1	....	....	....	....	1	2	1	....	2	....	1	1	....	1	....	2	1	....	....
					F	13	....	....	....	....	....	1	1	....	....	2	....	2	2	....	....	3	....	2	....	....	....	....	....
35	Measles	8,136	W	6,511	M	3,270	82	224	314	431	441	1,629	84	42	8	5	3	....	4	1	1	1	....	....	....	....	....	....	....
					F	3,241	100	199	289	406	430	1,651	80	30	15	17	12	10	1	....	....	1	....	....	....	....	....	....	....
			C	1,625	M	794	36	112	140	112	104	254	23	2	5	5	....	1	....	....	....	....	....	....	....	....	....	....	....
					F	831	44	114	143	123	103	266	14	7	7	5	3	1	....	1	....	....	....	....	....	....	....	....	....
36	Poliomyelitis (paralytic cases)	34	W	25	M	13	2	1	2	....	3	2	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	12	....	1	1	1	1	3	2	....	....	2	1	....	....	....	....	....	....	....	....	....	....	....	....
			C	9	M	6	2	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	3	....	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
37	Acute infectious encephalitis (lethargic)	4	W	4	F	4	....	....	....	....	....	....	2	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
38d	German measles	498	W	478	M	218	6	10	5	4	7	113	36	28	3	2	4	....	....	....	....	....	....	....	....	....	....	....	....
					F	260	8	7	8	10	10	109	46	30	16	9	5	1	....	....	1	....	....	....	....	....	....	....	....
			C	20	M	13	1	1	....	1	1	8	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	7	1	1	....	1	....	3	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
38e	Chickenpox	2,268	W	2,012	M	1,012	35	55	61	82	94	632	28	12	1	4	4	2	1	....	1	....	....	....	....	....	....	....	....
					F	1,000	40	36	60	78	73	653	41	4	8	3	2	2	....	....	....	....	....	....	....	....	....	....	....
			C	256	M	139	9	17	18	12	18	52	6	1	1	3	1	1	....	....	....	....	....	....	....	....	....	....	....
					F	117	9	10	11	7	9	59	5	1	2	1	1	....	1	....	1	....	....	....	....	....	....	....	....

38f	Dengue fever*	1	W	1	M	1									1																
38f	Infectious mononucleosis	16	W	12	M	8	1				1		1	2	1	1		1													
					F	4						1	2			1															
			C	4	M	3			1	1		1																			
					F	1							1																		
39b	Typhus fever	2	W	2	M	1							1																		
					F	1							1																		
39c	Rocky Mountain spotted fever	1	W	1	M	1												1													
					F																										
42	Trichinosis	1	W	1	M	1												1													
44a	Chancroid	140	W	21	M	18									5	7	1	2	2		1										
					F	3									1	1	1														
			C	119	M	98							1	11	29	25	10	16	3	3											
					F	21								7	5	6		1		1				1							
44c	Mumps	338	W	310	M	179		5	10	12	24	98	14	4	3	5	3		1												
					F	131		7	4	13	13	67	10	7	2	2	2	1	2												1
			C	28	M	16		3	2	3		2		1	4	1															
					F	12	1		2	1		3	2	1		2															
44e, f	Other venereal diseases	21	C	21	M	18									4	8	2	2	1	1											
					F	3									3																
58a	Rheumatic fever	45	W	21	M	7				1		2	3		1																
					F	14						6	4	1		1				1	1										
			C	24	M	5						1	2	1		1															
					F	19					1	10		3	2	2	1														
58d	Rheumatic heart disease	43	W	21	M	12								1	1	4	1	1	3		1										
					F	9						1	3		1	1	1		1	1											
			C	22	M	10					1	2	1	2				2	1		1										
					F	12					2	2	3			2	1		1		1										
107	Bronchopneumonia	322	W	181	M	99	18	4	4	2	2	3		1	3	2	3	2	1	2	6	10	10	5	10	1	6	4			
					F	82	18	4	1	3	1	4		1	2			1	3	3	2	8	2	8	5	1	5	10			
			C	141	M	78	16	12	15	4	2	5	1	1	1		1		3	1	3	3	2	2	3		1	1	1		
					F	63	19	13	4	6	2	3			1		1	3	1	2	2	1	1		2		2				

* Contracted outside continental United States.

TABLE NO. 13—Continued

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE—1946

International Code No.	Disease	Totals: Grand Total	Totals: By Color		Totals: By Sex		Age Groups: Under 1 Year	1 Year	2 Years	3 Years	4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40–44 Years	45–49 Years	50–54 Years	55–59 Years	60–64 Years	65–69 Years	70–74 Years	75–79 Years	80–84 Years	85 Years and Over	Age Not Specified
108	Lobar pneumonia	369	W	204	M	137	7	5	1	3	1	1	2	6	6	6	7	14	7	16	7	25	10	3	7	...	1	2	....
					F	67	6	2	3	2	3	4	2	....	3	1	2	1	2	3	1	8	2	5	9	1	5	2	....
			C	165	M	95	8	2	2	2	1	2	....	4	3	5	7	7	9	11	14	9	5	1	1	...	2	....	....
					F	70	2	2	5	1	....	3	....	....	6	7	4	7	7	12	4	3	3	1	3	...	....	....	....
109	Pneumonia, unspecified	266	W	74	M	46	6	7	5	3	1	7	4	1	2	2	2	2	2	...	1	...	1	...	...	...	...	....	....
					F	28	3	2	5	2	2	3	3	....	2	2	....	1	1	...	...	...	1	...	...	...	1	....	....
			C	192	M	117	28	19	16	10	13	14	4	....	2	2	3	1	2	1	...	...	...	...	1	...	...	....	1
					F	75	15	17	16	8	2	12	1	....	2	1	....	...	...	...	1	...	...	...	...	...	...	....	....
115b	Septic sore throat	83	W	60	M	23	1	1	1	....	....	5	2	3	5	1	1	2	1	...	...	...	...	...	...	...	...	....	....
					F	37	1	1	....	3	2	4	1	2	7	4	4	4	...	1	2	...	...	...	1	...	...	....	....
			C	23	M	5	....	1	1	....	....	1	....	....	1	1	....	...	...	...	...	...	...	...	...	...	...	....	....
					F	18	....	1	....	2	1	4	1	1	3	2	....	3	...	...	...	...	...	...	...	...	...	....	....
119, 120	Diarrhea and enteritis	95	W	62	M	39	33	3	....	....	....	1	1	....	....	....	....	...	...	...	...	...	...	...	1	...	...	....	....
					F	23	13	2	....	2	....	....	....	....	2	1	....	...	...	...	1	1	1	...	...	...	...	....	....
			C	33	M	19	17	1	....	....	....	....	....	1	....	....	....	...	...	...	...	...	...	...	...	...	...	....	....
					F	14	12	....	1	....	....	....	....	....	....	....	....	...	...	...	...	...	1	...	...	...	...	....	....

TABLE NO. 14

REPORTED CASES AND CASE RATES PER 100,000 POPULATION FOR CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1930-1946

Disease	Year	Total		White		Colored	
		Reported Cases	Rate per 100,000 Population	Reported Cases	Rate per 100,000 Population	Reported Cases	Rate per 100,000 Population
Typhoid Fever (not including paratyphoid fever)	1946	10	1.1	7	0.9	3	1.6
	1945	11	1.2	6	0.8	5	2.7
	1944	15	1.6	11	1.5	4	2.2
	1943	20	2.2	19	2.5	1	0.5
	1942	31	3.3	24	3.2	7	3.9
	1941	35	4.0	21	3.0	14	8.3
	1940	23	2.7	15	2.2	8	4.8
	1939	24	2.8	14	2.0	10	6.1
	1938	51	6.0	35	5.1	16	9.9
	1937	68	8.0	40	5.8	28	17.5
	1936	49	5.8	32	4.7	17	10.8
	1935	69	8.3	58	8.6	11	7.1
	1934	81	9.8	58	8.6	23	15.1
	1933	53	6.4	46	6.8	7	4.6
	1932	85	10.4	64	9.6	21	14.2
	1931	107	13.2	75	11.3	32	22.0
	1930	132	16.4	96	14.5	36	25.1
Measles	1946	8,136	874.8	6,511	870.5	1,625	892.9
	1945	206	22.1	178	23.8	28	15.4
	1944	10,324	1,101.8	9,050	1,197.1	1,274	703.9
	1943	2,213	238.0	2,101	280.9	112	61.5
	1942	6,445	632.6	6,155	815.9	290	159.7
	1941	4,458	514.8	3,572	511.7	886	527.4
	1940	88	10.2	76	11.0	12	7.2
	1939	11,833	1,383.9	10,663	1,544.6	1,170	710.3
	1938	1,119	131.7	861	125.3	258	159.0
	1937	9,227	1,093.0	8,140	1,189.4	1,087	680.1
	1936	4,361	519.9	4,050	594.4	311	197.6
	1935	533	64.0	453	66.8	80	51.6
	1934	18,612	2,248.0	16,307	2,414.8	2,305	1,510.2
	1933	128	15.6	100	14.9	28	18.6
	1932	165	20.2	150	22.4	15	10.1
	1931	15,019	1,850.4	13,654	2,050.0	1,365	937.6
	1930	451	55.9	400	60.3	51	35.6
Scarlet Fever	1946	806	86.7	733	98.0	73	40.1
	1945	2,202	236.8	2,068	276.5	134	73.6
	1944	2,297	245.1	2,182	288.6	115	63.5
	1943	1,432	154.0	1,360	181.8	72	39.6
	1942	826	88.2	724	96.0	102	56.2
	1941	857	99.0	689	98.7	168	100.0
	1940	571	66.4	459	66.2	112	67.0
	1939	598	69.9	477	69.1	121	73.5
	1938	1,092	128.5	954	138.8	138	85.0
	1937	810	96.0	737	107.7	73	45.7
	1936	1,046	124.7	979	143.7	67	42.6
	1935	1,699	203.9	1,595	235.1	104	67.1
	1934	1,358	164.0	1,258	186.3	100	65.5
	1933	2,075	252.3	1,948	289.8	127	84.5
	1932	2,094	256.3	2,011	300.5	83	56.1
	1931	1,245	153.4	1,171	175.8	74	50.8
	1930	1,777	220.4	1,700	256.4	77	53.7

TABLE NO. 14—Continued

REPORTED CASES AND CASE RATES PER 100,000 POPULATION FOR CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1930-1946

Disease	Year	Total		White		Colored	
		Reported Cases	Rate per 100,000 Population	Reported Cases	Rate per 100,000 Population	Reported Cases	Rate per 100,000 Population
Whooping Cough	1946	1,004	107.9	759	101.5	245	134.6
	1945	2,172	233.5	1,313	175.5	859	472.0
	1944	2,349	250.7	1,423	188.2	926	511.6
	1943	3,400	365.6	2,414	322.7	986	541.8
	1942	2,174	232.3	1,504	149.4	670	368.9
	1941	2,560	295.6	1,672	239.5	888	528.6
	1940	5,258	611.1	4,124	594.9	1,134	678.3
	1939	1,575	184.2	1,136	164.6	439	266.5
	1938	1,548	182.2	897	130.5	651	401.2
	1937	3,661	433.7	3,184	465.2	477	298.4
	1936	3,570	425.6	2,443	358.5	1,127	716.0
	1935	1,100	132.0	998	147.1	102	65.8
	1934	4,566	530.6	4,035	597.5	531	347.9
	1933	2,059	250.3	1,398	208.0	661	439.9
	1932	3,759	460.0	3,384	505.7	375	253.5
	1931	3,294	405.8	2,661	399.5	633	434.8
	1930	1,028	127.5	961	145.0	67	46.8
Diphtheria	1946	424	45.6	385	51.5	39	21.4
	1945	353	38.0	310	41.4	43	23.6
	1944	226	24.1	188	24.9	38	21.0
	1943	106	11.4	90	12.0	16	8.8
	1942	74	7.9	62	8.2	12	6.6
	1941	47	5.4	36	5.2	11	6.5
	1940	49	5.7	37	5.3	12	7.2
	1939	67	7.8	61	8.8	6	3.6
	1938	125	14.7	103	15.0	22	13.6
	1937	257	30.4	198	28.9	59	36.9
	1936	146	17.4	118	17.3	28	17.8
	1935	119	14.3	100	14.7	19	12.2
	1934	108	13.0	91	13.5	17	11.1
	1933	137	16.6	122	18.1	15	10.0
	1932	254	31.1	196	29.3	58	39.2
	1931	416	51.2	318	47.7	98	67.3
	1930	522	64.7	437	65.9	85	59.3
Pulmonary Tuberculosis	1946	1,468	157.8	867	115.9	601	330.2
	1945	1,872	201.3	1,216	162.6	656	360.4
	1944	1,870	199.6	1,076	142.3	794	438.7
	1943	1,901	204.4	1,043	139.4	858	471.4
	1942	1,631	174.3	865	114.7	766	421.8
	1941	1,842	212.7	885	128.5	957	569.6
	1940	1,474	171.3	755	108.9	719	430.0
	1939	1,430	167.2	678	98.2	752	456.5
	1938	1,613	189.8	875	127.3	738	454.8
	1937	1,755	207.9	1,012	147.9	743	464.9
	1936	1,497	178.5	862	126.5	635	403.4
	1935	1,708	205.0	982	144.8	726	468.4
	1934	1,372	165.7	811	120.1	561	367.6
	1933	1,375	167.2	880	130.9	495	329.4
	1932	1,187	145.3	720	107.6	467	315.7
	1931	1,391	171.4	903	135.6	488	335.2
	1930	1,254	155.5	803	121.1	451	314.8

APPENDIX

CITY CHARTER REVISION

The Baltimore City Charter was revised and amended by Resolution No. 18 of the Mayor and City Council, approved July 17, 1946, and the revision was adopted by the voters at the general election held on November 5, 1946, in accordance with the provisions of Article 11A of the Constitution of Maryland. This was a thoroughgoing rewriting which resulted from the studies and recommendations of the Charter Revision Commission appointed for the purpose. The revised Charter goes into effect on May 20, 1947.

Sections 6 and 11 of the new Charter, dealing with General Powers and with Health and Nuisances respectively, read as follows:

> 6. The Mayor and City Council of Baltimore shall have full power and authority to exercise all of the powers heretofore or hereafter granted to it by the Constitution of Maryland or by any Public General or Public Local Laws of the State of Maryland; and in particular, without limitation upon the foregoing, shall have power by ordinance, or such other method as may be provided for in its Charter, subject to the provisions of said Constitution and Public General Laws:
>
> 11. To provide for the preservation of the health of all persons within the city; to prevent the introduction of contagious diseases within the city, and within three miles of the same upon land, and within fifteen miles thereof upon the navigable waters leading thereto; and to prevent and remove nuisances.

Section 81 of the new Charter replaces Sections 91-97 inclusive of the former Charter as compiled and published in 1938, and deals with the Baltimore City Health Department. The new Section 81 reads as follows:

Department of Health

> 81. Department of Health—Creation. There shall be a Department of Health, the head of which shall be the Commissioner of Health who shall be appointed by the Mayor, in the mode prescribed in Section 12, except that the term of the Commissioner in office on July 1, 1947, shall expire June 30, 1950, and thereafter the term of the office shall be six years beginning on July 1, 1950. He shall cause all ordinances for the preservation of the health of the inhabitants of Baltimore City to be faithfully executed and strictly observed. He shall be paid such salary as shall be provided in the Ordinance of Estimates. He shall be a physician trained in public health work, with at least five years' actual experience in public health work performed by departments of federal, state or local governments. He shall perform such other duties as are now required or may hereafter be prescribed by ordinance not inconsistent with the Charter or law and shall exercise all power and authority vested in the Commissioner of Health by the Charter or by any law or ordinance. He may appoint such physicians, inspectors, nurses, assistants, clerks, and employees as may be provided for in the Ordinance of Estimates. All such physicians, inspectors, nurses, assistants, clerks and employees shall perform such duties as may be prescribed by ordinance or by the Commissioner of Health.

In Section 82 of the newly adopted City Charter, which is devoted to the Department of Welfare, the existing provision is continued that requires the Mayor and the Commissioner of Health to be *ex officio* members of the Advisory Welfare Committee.

COMMUNICABLE DISEASE CONTROL ORDINANCE MADE PERMANENT

City Ordnance No. 693

An ordinance to repeal and reordain, with amendments, Section 5 of Ordinance No. 217,* approved June 20, 1945, entitled "An ordinance to prevent and control the spread of communicable diseases in the City of Baltimore and to authorize the Commissioner of Health to make and adopt rules and regulations for such purpose, and to provide punishment for the violation of this ordinance or said rules and regulations," making the provisions of said ordinance permanent.

SECTION 1. *Be it ordained by the Mayor and City Council of Baltimore*, That Section 5 of Ordinance No. 217, approved June 20, 1945, entitled "An ordinance to prevent and control the spread of communicable diseases in the City of Baltimore and to authorize the Commissioner of Health to make and adopt rules and regulations for such purpose, and to provide punishment for the violation of this ordinance or said rules and regulations," be and it is hereby repealed and reordained, with amendments, to read as follows:

5. This ordinance shall take effect from the date of its passage.

SECTION 2. *And be it further ordained*, That this ordinance shall take effect from the date of its passage.

Approved, December 2, 1946.

THEODORE R. MCKELDIN, *Mayor*.

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* Ordinance No. 217 as adopted June 20, 1945 appears on page 343 of the ANNUAL REPORT of the Baltimore City Health Department for the year 1945.

STATE POST MORTEM LAW OF 1945

An act to repeal and re-enact, with amendments, Section 2 of Article 22 of the Annotated Code of Maryland (1943 supplement), title "Post Mortem Examiners", relating to the compensation to be paid to the Chief Medical Examiner and the Assistant Medical Examiners.

Chapter 706

SECTION 1. *Be it enacted by the General Assembly of Maryland,* That Section 2 of Article 22 of the Annotated Code of Maryland (1943 Supplement), title "Post Mortem Examiners", be and it is hereby repealed and re-enacted, with amendments, to read as follows:

2. The said Commission is hereby authorized and directed to appoint three medical examiners, one to be known as Chief Medical Examiner, and the other two as Assistant Medical Examiners, at such compensation as may be provided for in the Annual Ordinance of Estimates. The Chief Medical Examiner and the Assistant Medical Examiners shall be licensed Doctors of Medicine, and shall have had at least two years post-graduate training in pathology. The said Commission shall appoint, to such extent as may be authorized by the Board of Estimates of Baltimore City, such other professional or technical personnel, clerks and other employees as may be necessary for the proper administration of the Department and at such compensation as may be provided for by said Board of Estimates in the Ordinance of Estimates of Baltimore City. The salaries of said Examiners shall be included in the Ordinance of Estimates each year. Such other professional or technical personnel and the clerks and employees shall be appointed in accordance with the provisions of Sections 268 to 284, inclusive, of the Baltimore City Charter (1938 Edition), known as the Merit System.

Nothing in this section shall be construed to prevent the Commission from employing the services of physicians on a contract basis for part-time services, as may be authorized by the Board of Estimates of Baltimore City.

SECTION 2. *And be it further enacted,* That this Act shall take effect June 1, 1945.

Approved April 23, 1945.

THE FIRST YEAR'S WORK OF THE ASSISTANT DIRECTOR OF WELFARE FOR MEDICAL CARE[1]

W. Ross Cameron, M.D.

Assistant Director of Welfare for Medical Care

Introduction

In Baltimore most of the public medical care facilities and services of the city are administered by its Department of Welfare. A comprehensive program has been developed to provide medical services for citizens unable to meet the full costs of private care. A number of City Health Department activities are related to this medical care program, specifically the clinics for expectant mothers and well babies and the clinics and control programs for tuberculosis and the venereal diseases. The Medical Service Division of the Department of Welfare operates a hospital admission service for expectant mothers and for tuberculosis patients referred to that agency by the City Health Department. The large majority of these patients are treated in the Baltimore City Hospitals which also are administered by the Department of Welfare. In addition, the opportunity for effective teamwork between the City Health and the City Welfare Departments is enhanced by the city charter provision that the Commissioner of Health be, ex-officio, a member of the Advisory Board of the Welfare Department.

In recent years the need became urgent for the appointment of a qualified physician not only to direct the medical program of the Department of Welfare but to coordinate the activities of other public and private agencies functioning in the field of medical care. On April 14, 1944 the Board of Estimates, at the request of Mayor Theodore R. McKeldin, approved the creation in the City Department of Welfare of a new position of Assistant Director of Welfare for Medical Care.[2] On July 1, 1945 the writer was appointed to that position and received from the Commissioner of Health the designation "Deputy Commissioner of Health" and thereby became, for liaison purposes, a member of the City Health Department staff. As of June 30, 1946, therefore it seems appropriate to review his activities during the first year of service.

Principal Activities of the Medical Service Division

During the period under review, the functions of the Medical Service Division included the following:

1. Certification of eligibility for hospital care at public expense in general and special hospitals.
2. Supervision of the City Dispensaries.
3. Administration of a Home Emergency Medical Service.
4. Supervision of the Emergency Maternity and Infant Care Program.
5. Advisory services to the Baltimore City Hospitals.
6. Special studies.

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[1] Reprinted from *Baltimore Health News*, July, 1946.

[2] See *Baltimore Health News*, June, 1944.

1. Hospital Certification and Payment

The largest and one of the most important services is that of certifying and paying for hospital care. The conditions under which funds are appropriated permit the certification not only of persons receiving assistance from the Department of Public Welfare but also those who are unable to pay by reason of limited income.

Patients were certified for admission not only to the several units administered by the Baltimore City Hospitals but, also, to the beds in the private general hospitals under contract with the City of Baltimore, as well as to those hospitals receiving payment from the State of Maryland through the State Department of Welfare. The latter agency has delegated to the Medical Service Division in the city the responsibility for certifying medically needy Baltimore residents for admission to private general hospitals, payments for which are chargeable to the State. The City in its annual Ordinance of Estimates also carried an item of $255,000 for care given to the medically needy Baltimoreans by private general hospitals for care of patients admitted through this service. During the same year the expenditures by the State of Maryland for the same purpose was somewhat in excess of this city figure.

Certification service was also provided for patients treated in special types of hospitals, including Rosewood and Crownsville for feeble-minded white and colored children, the Happy Hills Convalescent Home and various State tuberculosis sanatoria. The Medical Service Division likewise maintained a certification service for mentally ill patients admitted to the State mental hospitals. There were approximately 5,000 Baltimore patients receiving treatment from the State mental hospitals during the year. Approximately one hundred of these patients were admitted each month and a slightly smaller number were discharged each month. Two part time doctors were employed to examine these persons who are reported to be in need of hospitalization and, if necessary, certification for admission was completed.

2. Supervision of City Dispensaries

The Medical Service Division administered seven public dispensaries and subsidized two privately owned facilities of this type. Each were staffed by one or two physicians and one nurse, the latter a member of the staff of the Instructive Visiting Nurse Association. These dispensaries are located in the low rent areas of Baltimore. There is no means test for admission but the facilities are open to the population of the areas served. In 1945 welfare clients formed approximately 30 per cent of the patients. A total of about 19,000 visits was recorded. The majority of these dispensaries are open two hours per day, three days each week.

3. Emergency Medical Service in the Home

Provisions are made for emergency medical service in the homes of the sick poor by physicians and nurses to needy individuals who are critically ill. During the day calls are made by physicians in charge of the dispensary located in the area in which the patient resides. At night these calls are made by a physician selected from a panel of doctors who have agreed to render this type of service.

Emergency night calls are transmitted through the Fire Department switchboard where the operator communicates with one of the physicians on the panel. On the following day a nurse from the Instructive Visiting Nurse Association visits the patient if, in the meantime, the latter has not been admitted to a hospital. The Medical Service Division receives reports on the condition of the patient from both

physician and the nurse. Approximately 5,000 visits of this kind were made during the past year.

4. Emergency Maternity and Infant Care Program

In Baltimore, the administration of the Emergency Maternity and Infant Care Program is a responsibility assumed by the Medical Service Division of the Department of Welfare. This involves the determination of eligibility of the wives and children of members of the Armed Forces for obstetrical and pediatric care at Government expense. At the Federal and State levels the program is administered by the Children's Bureau of the U. S. Department of Labor and the Maryland State Department of Health, respectively. Approximately 3,000 Baltimore citizens received this type of medical care during the year.

5. Advisory Service to the Baltimore City Hospitals

The largest single phase of the Welfare Department's medical care program is the administration of the Baltimore City Hospitals, which consists of a large acute hospital of 409 beds, a chronic hospital of 515 beds, a Rapid Treatment Center of 60 beds for patients suffering with acute infectious venereal disease, a tuberculosis hospital of 250 beds and an Infirmary for the ambulatory aged which can provide for 1,200 patients. The total bed capacity of the Baltimore City Hospitals is therefore 2,434 beds.

The Baltimore City Hospitals are administered under the Director of Welfare and the Welfare Department's Board. An Advisory Committee consists of the Deans of the University of Maryland and the Johns Hopkins University medical schools, the Chiefs of the various services, the Director of Welfare, the Assistant Director of Welfare for Medical Care, and the Commissioner of Health. This institution is administered by the Superintendent of the Hospital who is responsible to the Director of Welfare. The Assistant Director of Welfare for Medical Care acts in an advisory relationship to the hospital and represents the Department's Board and the Director of Welfare. He has assisted in reaching a solution of some of the hospital problems, principally in the preparation of plans for a new out-patient department, and in other matters related chiefly to external affairs.

6. Special Studies

During the year, special studies were undertaken for the purpose of (a) developing a more efficient city medical care administration, (b) planning the medical care program of the future and (c) assisting the Committee to Study Medical Care Needs of Baltimore City, under the chairmanship of Dr. Lowell J. Reed.

The Special studies included the following subjects:

1. The administrative practices in a medical care program for persons receiving assistance from a city department of welfare.
2. The indications for the need for a central hospital admission service in the City of Baltimore, with an outline of a plan for a joint State-City Service.
3. The functions of the Baltimore City Dispensaries and selected out-patient departments of private general hospitals.
4. The frequency of illness in families receiving assistance, together with an analysis of the economic and medical factors contributing to the development of disease in this group of persons.

5. The payment of city funds to private general hospitals for bed care of certified medically needy patients in eight cities in the United States in the year 1943.
6. The organization and flow of medical records in a public welfare agency.

All or nearly all of these studies were undertaken by the Assistant Director of Welfare for Medical Care in cooperation with Dr. Antonio Ciocco, Chief of the Statistical and Methods Section in the Division of Public Health Methods of the United States Public Health Service, and W. Thurber Fales, Sc.D., Director of the Statistical Section in the Baltimore City Health Department. For this study the U. S. Public Health Service assigned to the Medical Service Division three qualified full time persons to assist in the collection and analysis of data.

City-Wide Study in Progress

Heretofore the individual medical care agencies in Baltimore serving the medically needy have been developed with little reference to an all inclusive city-wide program. The entire structure is now being reviewed in detail by the Committee to Study Medical Care Needs of Baltimore City which is in reality a sub-committee of the Committee on Medical Care of the Maryland State Planning Commission.

Before adopting any drastic changes in the activities of the Medical Service Division, it is planned to await the issuance of the report of this Committee under Dr. Reed. In the meantime, however, certain advances have been made, the indications for which were obvious. These include the following:

1. The reorganization of the staff dealing with medical matters within the City Department of Welfare, and the combination of what were formerly known as the Hospital Division and the Psychopathic Division to form the Medical Service Division.
2. The remodelling and reconditioning of a building at 413 St. Paul Place to provide more efficient administration and privacy in interviewing applicants.
3. The establishment of an appointment system for applicants for certification for hospital care.
4. The development of a screening procedure by means of which patients are selected for admission to the Baltimore City Hospitals on the basis of urgency of need for hospital care.

   This service is made possible through the good offices of the Commissioner of Health, who assigned Miss Bess C. Lang, a public health nurse, to the Medical Service Division. In addition, Miss Lang has visited all of the nine dispensaries at regular intervals, has organized and purchased equipment for a new dispensary at 413 St. Paul Place, has cooperated with two members of the staff who conduct emergency home medical service and has performed other related duties.
5. The opening of the new dispensary at St. Paul Place. This was needed because one of the vital problems in the administration of the Aid to Dependent Children and General Public Assistance is the determination of employability of the individual assisted. The new dispensary provides physical examinations and their interpretation, and in addition it gives medical services to the needy in the adjacent areas.
6. The appointment of an Advisory Council for Medical Services. This was one of the chief advances during the year. The group includes the following representatives of public and private organizations active in the field of medical care: Dr. Alan Chesney, *Dean, School of Medicine, The Johns Hopkins Univer-*

sity; Dr. Edwin L. Crosby, *Director, The Johns Hopkins Hospital;* Mr. Francis A. Davis, *Chairman, Advisory Committee, City Department of Public Welfare;* Dr. Robert U. Patterson, *Dean, School of Medicine, University of Maryland;* Dr. Maurice C. Pincoffs, *Chairman, Committee on Medical Care of the Maryland State Planning Commission;* Dr. Lowell J. Reed, *Dean, School of Hygiene and Public Health, The Johns Hopkins University;* Dr. Dean Roberts, *Chief, Bureau of Medical Services, State Department of Health;* Mr. T. J. S. Waxter, *Director, City Department of Public Welfare;* Dr. Johns C. Whitehorn, *Psychiatrist-in-Chief, The Johns Hopkins Hospital;* Dr. Huntington Williams, *Commissioner of Health;* Dr. W. Ross Cameron, *Assistant Director of Welfare for Medical Care.*

Beginning on March 1, 1946, the Advisory Council met each month and studied the various functions and activities of the Medical Service Division and rendered valuable assistance in solving some of the problems that confront this Division.

7. The planning for a twenty-four-hour service. Plans were completed for the extension of the activities of the Medical Service Division to include twenty-four-hour service. The present arrangements are extremely unsatisfactory, both from the point of view of the administration and of the needy patients. It is expected that a twenty-four-hour service will be begun in July, 1946 and will go far in improving the efficiency of the Division.

Unsolved Problems

While the program of the Medical Service Division is a comprehensive one there remain facilities and services that present numerous unsolved problems among which are the following:

1. Providing care for the chronically ill. The existing arrangements for the care of the chronic sick are very unsatisfactory. There are patients at home who should be in a chronic hospital, and chronic patients in hospitals that treat only acute illness. There are patients in homes for the aged which are not prepared to administer to their medical needs, and patients in convalescent homes occupying beds needed for other purposes. Chronic patients must scramble to find refuge wherever they may. Some institutions admit them and are not in a position to give them the care that is needed. Many public and private agencies accept with reluctance the burden of the chronic sick or try to find other ways of meeting the needs of these unfortunates.

   There is an obvious and urgent call for a detailed study of this problem as it exists in Baltimore City. The Medical Service Division has an active waiting list of over 500 chronic sick persons whose plight is often pitiful in the extreme. While the State of Maryland is planning the construction of a hospital for the care of a limited number of chronic cases who are residents of the City of Baltimore, this will, by no means, solve the problem. The prime essential is the establishment of a strong full program for the care of these unfortunates, with active and adequate correlation of the various existing and needed facilities, both public and private.

2. Providing more complete dispensary and emergency medical home service. The medical services rendered both in the City Dispensaries and in the homes of the medically needy are inadequate. Added laboratory facilities are necessary in order to improve the diagnostic and therapeutic services.

3. The payment to private general hospitals. The payment to private hospitals for the care of persons in the lower income brackets appears to be inadequate.
4. Unmet needs. In the fields of mental hygiene, dental care, cardiac disease and cancer, public clinic facilities for study, treatment and possible prevention are in general inadequate.

These comments represent some of the major unsolved problems in the field of medical care in Baltimore City. It is clear that the solution of the unsolved problems calls for vigorous action and wholehearted cooperation on the part of all public and private groups and agencies working in this field and for energetic support from an enlightened citizenry.

INTERIM REPORT TO THE COMMITTEE ON MEDICAL CARE OF THE STATE PLANNING COMMISSION FROM THE COMMITTEE TO STUDY THE MEDICAL CARE NEEDS OF BALTIMORE CITY*

Introduction

At the request of the Medical and Chirurgical Faculty of Maryland, the Committee on Medical Care was established early in 1940 as a standing committee of the Maryland State Planning Commission. Because of the urgent problems of medical care in the counties of Maryland, the Committee turned its first attention to a study of these needs. A field survey of the medical facilities available in the counties was conducted during 1941. The analysis of these data, however, was delayed by the exigencies of the war. A "Report on Medical Care in the Counties of Maryland" was finally published by the Maryland State Planning Commission in April, 1944.

The principal recommendation called for the establishment of a program by the State of Maryland for the medical care of the indigent and the medically indigent. The report recommended that the formulation of the program and its administration should be the responsibility of the State Department of Health. In order to implement this recommendation, the report advocated that the State Board of Health be authorized to establish a Council of Medical Care to act in an advisory capacity and a Bureau of Medical Care within the State Department of Health. The report further recommended that the county health officer should administer the local aspects of the medical care program in cooperation with the county medical societies.

In February, 1945 the General Assembly of Maryland passed a law authorizing the State Board of Health to establish a Bureau of Medical Services that should begin its work on July 1, 1945. The law provides that:

"The Bureau of Medical Services, under the direction of the Director of Health, shall administer a program of medical care in the State of Maryland for indigent and medically indigent persons, or either of such classes; for the purpose the Bureau of Medical Services is hereby authorized to contract with physicians, dentists and hospitals for the medical, dental, surgical and hospital treatment of eligible persons; within the provisions of the budget the said Bureau is hereby authorized to provide bedside nursing care for eligible persons."

The program for the first two years under this legislation was limited to the counties of Maryland in accordance with the recommendation in the Report on Medical Care in the Counties of Maryland. The Committee on Medical Care in this report, however, recognized that a program should be developed to accomplish similar results in Baltimore City, but considered that such a program should be the subject of a separate inquiry and report by a local committee.

Organization of the Baltimore Committee

On August 5, 1944, Dr. Victor F. Cullen, Acting Chairman of the Committee on Medical Care, appointed the following Committee to study the medical care needs of Baltimore City:

Dr. Lowell J. Reed, Chairman	Dr. Edwin L. Crosby
Dr. George M. Anderson	Dr. C. Reid Edwards

* Reprinted from *Baltimore Health News*, January–February–March, 1947.

Mr. Herbert Fallin
Dr. Frank J. Geraghty
Mr. L. Edwin Goldman
Dr. Thomas P. Sprunt
Judge T. J. S. Waxter
Mr. Harvey H. Weiss
Dr. H. Maceo Williams
Dr. Huntington Williams
Dr. Samuel Wolman
Dr. W. H. Woody

In a letter to the Chairman dated September 21, 1944, Dr. Cullen charged the committee as follows:

"It is the privilege and the responsibility of your Committee:
to take a broad view of the work of all these medical care resources of Baltimore;
to outline a pattern of relationship among them and to suggest any intensification or curtailment of the activities of any of them which will make their efforts most productive; and
to suggest the means for translating modern health and medical knowledge most fully into service available to citizens—both sick and well."

The first meeting of the Committee was held on September 27, 1944, and was devoted to a discussion of the objectives as stated in the above charge. The Committee agreed to review the activities of all the private, voluntary and governmental agencies which are connected with the problem of medical care, with a view to suggesting means for the integration of all these activities into a program of medical care as beneficial as possible to all the people of the city.

To enable the Committee to review these activities in a systematic manner, the chairman was authorized to organize a small staff to prepare the factual material required in the committee's study of the problem. Dr. Huntington Williams, Commissioner of Health of Baltimore City, made available to the committee the services of Dr. W. Thurber Fales, Director of the Statistical Section of the Baltimore City Health Department, to have charge of the collection and analysis of these data. Dr. Fales was also selected to serve as secretary of the Committee.

Outline of Subjects Reviewed by the Committee

During the last two years, the Committee has met at frequent intervals to study the material assembled by the working staff under the direction of the chairman. The wide range of subjects covered in this review is illustrated by the following outline that is modified but slightly from that presented at an early meeting of the Committee.

OUTLINE

A. Population
- Composition
  - Race, age, income, family size, geographic distribution
- Trends
  - Changing age composition, aging of the population, increase in Negro component

B. Estimates of illness
- Prevalence and incidence
- Distribution
  - Race, sex, age, income
- Cause of illness and disability
- Geographic distribution

- Source of data—Eastern Health District Studies
  - Other studies
- Selective Service examinations

C. Facilities for medical care
- Physicians
  - Number and distribution
  - General practitioners—specialists
  - Trend
- Dispensaries—out patient departments
  - General and special
  - Public dispensaries of Department of Public Welfare
- Health Department clinics
  - Tuberculosis
  - Venereal disease
  - Prenatal
  - Well baby clinics
  - Immunization clinics
- Other health clinics
  - Babies' Milk Fund Association
  - Industrial
- Hospitals
  - Public
    - Baltimore City Hospitals
    - Sydenham Hospital
  - Private
    - General
    - Special
- Auxiliary facilities
  - Laboratories
    - Hospital
    - Health Department
    - Private
  - X-Ray
  - Other

D. Distribution of sickness load

E. Adequacy or inadequacy of facilities to meet needs

F. Financial problems involved
- Cost of services
- Individual aspects
- Institutional aspects
- Public participation
- Hospital and other forms of health insurance

G. Outstanding problems requiring special study
- Domiciliary and ambulatory care
  - Welfare clients
  - Population in general
- Dental care
- Convalescent care
  - Home
  - Institutional
- Hospitalization and home care of chronic ill
- Nursing homes

Correction of remedial defects
Rehabilitation
H. Possible solutions

The discussions of the Committee have followed this outline in a systematic fashion with the exception that the financial aspects of the problem have not as yet been studied in detail. Later deliberations of the Committee will deal more fully with this phase and also will cover more completely those aspects of the problem that the Committee has so far considered in only a general way.

The Committee is not prepared at the present time to submit a final report giving the detail evidence that has been collected around this outline and the conclusions that follow from this evidence. There are, however, several urgent issues that should be brought to the attention of the Committee on Medical Care of the State Planning Commission; hence this interim report.

Summary of Committee Discussions

As the Committee proceeded in the study of medical care in Baltimore City, the complexities of the problem stood out more and more clearly. It became apparent that the medical care program for an urban community like Baltimore City has many different facets. It could not confine itself to the physician's care of individual patients even though this included provisions for hospital care, dental care or nursing care.

The Committee's study of the distribution of illness revealed clearly that it is erroneous to consider the population as separated into two groups—the ill and the well. Health or its converse, illness, is a graded matter for every individual. In a very true sense it may be said that each person is ill to a certain degree and well to a certain degree. Thus the individuals in the population may be graded into ordered classes such as, essentially well, ill to a minor degree, more seriously ill, ill to the extent of calling for highly specialized services. A person's need for medical services depends upon his position within this classification and his passage from one category to another. Thus the problem of medical care involves a constant screening process that is carried out partially by the individual himself, partially by the physician, and partially by the various agencies and organizations that are concerned with maintaining or restoring health.

With the tremendous advances in the science of medicine, the interest of a larger and larger share of the medical profession is focused on illnesses that require special diagnostic and therapeutic facilities. A decreasing proportion of the time and energy of the medical profession is available for problems of medical care related to the treatment of minor illness and the maintenance of health. This lack of balance in medical effort is at variance with the objectives of a medical care program for a community, which are to maintain its population in health, to prevent minor illnesses from developing into major ones, and to restore to health as rapidly as possible those who have become ill.

To correct this we need to develop preventive services that will be integrated with our present diagnostic and therapeutic facilities. This calls for the creation of medical centers offering comprehensive medical care. Although such a program is not yet available to the population, much can be accomplished by a better coordination of the services offered by physicians, hospitals, clinics, the City Health Department and the many other public and private agencies.

That this is the case is well illustrated by the achievements in the fields of mater-

nity, infant and child care where the Baltimore City Health Department, in cooperation with the physicians of the city, has provided better organization of medical services for both well and ill. This cooperation has expressed itself in such ways as (1) the continuous campaign for diphtheria toxoid inoculation for infants, in which the physicians of the city play an important role by giving an ever-increasing proportion of the inoculations, and (2) the investigation of every maternal death and its subsequent review, at the monthly meeting of the Joint Health Department and City Medical Society's Committee on Maternal Deaths, for the purpose of determining which ones of these are preventable. These are but instances of a number of cooperative efforts that have led to a striking improvement of health and to a considerable conservation of life in the maternity and infancy groups.

Discussion of Committee Recommendations

Consideration of the needs previously expressed for more comprehensive medical services with an increased emphasis on preventive medicine, and realization of the accomplishments obtained in certain fields through cooperative efforts, led the Committee to its first major recommendation, which is as follows:

That the responsibility for coordination of all the Health Services for the population of the city should be publicly acknowledged as a proper function of the City Health Department. In carrying out this responsibility, the City Health Department should utilize the services of a qualified full-time medical administrative officer who will, under the Commissioner of Health, be responsible for planning and executing the program of a new Medical Care Section within the City Health Department.

Specific Problems

The Committee's study of the various factors influencing the problems of medical care in Baltimore revealed numerous shortcomings in specific facilities and programs. Many of these have been reviewed in the past and recommendations for remedial measures have been made. In some instances action has been taken to correct deficiencies, but in recent years war conditions have delayed implementation of recommendations already accepted by governmental authorities. In order that certain deficiencies may receive immediate attention by the Committee on Medical Care and by the coming session of the General Assembly, recommendations on two specific problems are presented in this interim report.

Problem A—Chronic Disease Hospital for the Baltimore Area

The population of Baltimore is steadily aging. The proportion of the population over 45 years of age increased from 20.5 percent in 1910 to 26.5 percent in 1940. The relative increase in the population 65 years of age and over has been even greater, rising from 4.2 percent in 1910 to 6.8 percent in 1940. In the future the proportion of elderly persons will continue to increase.

A recent survey of illness in 1,500 families living in the Eastern Health District of Baltimore revealed that twenty percent of the population over 40 years of age suffers from chronic disease. Approximately three-fourths of the sick days for persons over 40 years of age in these families were due to chronic disease. The Committee found that these illnesses present one of the most pressing medical problems facing the community. Between 500 and 600 chronically ill persons are continually on waiting lists for hospital beds.

The last session of the General Assembly provided for the construction of three chronic disease hospitals in the State. The law provides that one should care for long term patients from Baltimore City and the five counties—Anne Arundel, Baltimore, Carroll, Harford and Howard.

In discussing the location of these State Hospitals for Chronic Disease, the original report of the Governor's Commission on Chronic Diseases recommended that these institutions should be built in proximity to general hospitals, in order that the special facilities of such hospitals might be available to the chronic ill as required. The Committee's study of this problem led to the same conclusion and the Committee has already submitted on January 7, 1946 to the Committee on Medical Care and the State Board of Health the following resolution on the location of the institution for the Baltimore Area:

"The Committee recommends that the Baltimore City Hospitals grounds be selected as a site for the chronic hospital for the Baltimore area and that the chronic hospital be closely integrated as to medical staff and facilities with the Baltimore City Hospitals through appropriate cooperative agreements."

The Committee reaffirms this resolution and incorporates it in this report as one of the items that needs immediate action. In taking this action, the Committee realizes that adequate provision for hospitalization for the chronic ill represents but one phase of the problem. The final report will contain the Committee's recommendations for handling other aspects of this growing problem.

Problem B—Medical Care of Indigent and Medically Indigent

The second pressing problem is one for which the State has recognized its responsibility and is one of the specific items which led to the appointment of the present Baltimore Committee. This problem is concerned with the provision for medical care to recipients of public assistance and other persons in low economic groups. As the Committee reviewed the medical services for these groups as now provided by the Department of Public Welfare of Baltimore City, it found many deficiencies that have developed because of the lack of any organized plan of medical service to individuals in these groups.

A program for providing medical care to corresponding groups in the counties of the State was inaugurated on July 1, 1945. While the program for a similar service in Baltimore City should be an extension of that already inaugurated in the counties, the pattern of service will be different in order that the greater medical facilities of the city may be utilized. The program, however, should be acceptable to the State Bureau of Medical Services and the State Council on Medical Care which are charged by law with the formulation of programs for such medical service throughout the State.

The Committee's third recommendation is that a specific plan be adopted to meet the medical care needs of the welfare population of Baltimore City. The essential elements of such a plan are presented in Appendix A. Although the suggested plan is directed at welfare clients, it is the belief of the Committee that it could be extended to pick up the problem of the medically indigent as soon as the service is sufficiently well organized to handle the load of individuals now on direct public assistance. The development and administration of the program should be the responsibility of the Commissioner of Health of Baltimore City, but would require the creation of a Medical Care Section in the Health Department for its specific administration.

Recommendations

In the present interim report, the Committee submits to the Committee on Medical Care of the State Planning Commission, the following three recommendations:

1. It should be publicly recognized that the conservation of the health of the community and the individuals residing therein is officially the responsibility of the Baltimore City Health Department. In addition to the usual services of public health, which include sanitation, the prevention of communicable diseases and positive health services in such fields as maternity and child hygiene, the Health Department should assume community leadership in the coordination of medical facilities in such a manner as will best serve the interests of the citizens of Baltimore City. In carrying out this recommendation there should be established in the City Health Department at an early date, a Medical Care Section under the direction of a qualified medical administrator.

2. The Committee recommends that the Baltimore City Hospitals grounds be selected as a site for the chronic hospital for the Baltimore area and that the chronic hospital be closely integrated as to medical staff and facilities with the Baltimore City Hospitals through appropriate cooperative agreements.

3. The Committee recommends the adoption of an organized plan for meeting the medical care needs of the recipients of public assistance. Such a program should meet emergency medical needs of this group and should also provide a comprehensive medical service for their long term needs. The specific elements of such a plan are presented in Appendix A of this report.

APPENDIX A

A PLAN FOR ORGANIZED MEDICAL CARE FOR WELFARE CLIENTS RESIDING IN BALTIMORE CITY

Prepared by Maryland State Planning Commission
Committee to Study the Medical Care Needs of Baltimore City

FOREWORD

The following outline presents the essential elements of a plan for medical care of public assistance clients of Baltimore City. It has been prepared by the Committee to Study the Medical Care Needs of Baltimore City for submission to the Committee on Medical Care of the Maryland State Planning Commission. While it forms a part of an interim report to the State Committee on Medical Care, it will be included as an appropriate section of the final report of the Committee.

The ultimate objective is to provide for the welfare group in the city, continuous medical care comprising preventive, diagnostic, and therapeutic services, and such auxiliary services in the fields of dentistry, nursing, and rehabilitation as are feasible.

The program suggests the organization of medical centers associated with existing hospitals in order to provide a system of home and ambulatory medical care through the integration of the facilities of the hospital dispensary and the services of the physicians practicing in the area.

Outline of Specific Plan

1. The planning and administration of medical care for welfare clients of the Department of Public Welfare of Baltimore City should be the responsibility of the Commissioner of Health of Baltimore City. For this purpose there should be created in the Baltimore City Health Department, a Medical Care Section. An advisory Committee on Medical Care composed of representatives of participating professions

and groups should be appointed by the Commissioner of Health to assist in the planning and to advise on administrative policy.

2. Each family or individual accepted for public assistance by the Department of Public Welfare of Baltimore City will be certified to the proposed Medical Care Section as eligible for medical care. The Department of Public Welfare will furnish the Medical Care Section with a statement as to the assistance classification of the client and such other information contained in the welfare records as may be required, to plan for appropriate medical care. The Medical Care Section will furnish the Department of Public Welfare, upon request, reports of the physical status of public assistance clients assigned to it.

3. The Medical Care Section will formulate two plans of medical service: (a) a plan for emergency medical service for those clients of the Department of Public Welfare that are given only temporary public assistance, and (b) a plan for comprehensive medical service for those clients who will be given public assistance over a considerable period of time. The program for emergency medical care will be an extension of the current program to provide that physician services and hospitalization shall be available 24 hours of the day. The program for comprehensive medical service will be outlined below.

4. Each welfare client certified to the Medical Care Section will be assigned to plan (a) or (b) and will be instructed as to the medical services available to him. If his service is to be under plan (b), he will be instructed to register promptly at the medical center to which he is assigned by the Medical Care Section, even though he has no immediate medical care needs.

5. The Medical Care Section will sponsor in appropriate sections of the city, the organization of a number of medical centers. Insofar as practical, the medical center should be a part of the outpatient department of a hospital in the area. These centers will assume responsibility for home and ambulatory medical care for the families referred to it.

6. The medical center will appoint a competent medical administrator whose duty would be to organize and administer a program of comprehensive medical service for welfare clients assigned to the center. The medical facilities, services, and staff of each medical center participating in the program shall conform to certain minimum standards established by the Medical Care Section in consultation with its Advisory Committee on Medical Care.

7. In arranging for comprehensive medical service, the medical center will explain the nature of the program to the physicians practicing in the area and invite their cooperation in furnishing home and office care to welfare clients. The center will keep a register of physicians who express a willingness to participate in the medical care of these families.

8. The Medical Care Section will assign the welfare client to the medical center in accordance with the residence of the family. Upon registering at the medical center, the welfare client will be given specific information as to what he should do in case of illness in his family. If the welfare client has a family physician, he will be instructed to continue the physician's services. If the client has no physician, he should choose one from the list of participating physicians. In both instances the medical center will inform the selected physician of the client's registration with the medical center and ask the physician's cooperation in furnishing comprehensive medical service to the family. The medical center will be responsible for seeing that an adequate initial examination of the physical status of each welfare client is made and that the medical center and the client's physician have a copy of the findings of this examination.

9. The personal physician chosen by the welfare client will be the important keystone in furnishing medical service to this group. He should have general supervision of the health of those who select him. He will be expected to provide these families with those services that may be considered within the field of general practice. The physician will keep a record of all services rendered the client and periodically will furnish the center with a summary report. When the physician decides that the client requires diagnostic and therapeutic services not ordinarily provided by a general practitioner, he will refer the client to the Medical Center. He will consult with the Center on any medical problems of the family while under his care. The Center in every such instance shall furnish the physician with a complete report.

10. While the Medical Center may render medical care in emergency cases, it will ordinarily refer the patient to his physician for all care of a routine nature. The Center will inform the client's physician of any medical service rendered at any time by the Center. From time to time, the Medical Center will arrange for consultations and conferences with participating physicians relative to the program in general and the medical care needs of particular families and individuals.

11. The success of the program will depend upon the team work developed between the Medical Center and the participating physicians. In order to make such cooperation effective, each Medical Center will appoint an advisory committee composed of physicians selected from the staff of the Center, the register of participating physicians, and of individuals representing other professional groups participating in the program. The committee will advise on the plans for organizing the services proposed and will develop through experience minimum standards for handling certain classes of cases. The committee will review from time to time the services of the Medical Center, the participating physicians and other professional personnel and make recommendations for improving the service.

12. The Medical Center and participating physicians shall utilize fully the preventive, special diagnostic, and nursing services of the Baltimore City Health Department. The bureau directors and district health officers of the Health Department will cooperate with the Medical Care Section in making these facilities available on a referral basis to the Centers and to the participating physicians. The Medical Center will not be expected to develop for welfare clients, clinic services in such fields as venereal disease, tuberculosis, prenatal care, etc., which services are available through already established clinics of the Health Department.

13. When the physician finds that the condition of a welfare client requires hospitalization, he will notify the Medical Center which will then arrange with the Medical Care Section for hospitalization, under the program already in operation. The hospital will furnish the Medical Center and the physician with a report of the hospitalization that should include recommendation as to subsequent handling of the case.

14. A limited dental service for welfare clients will be organized by each Medical Center in order to provide for emergency dental service.

15. Such drugs as are required will be dispensed through the Medical Centers and retail druggists upon a participating physician's prescription. The policies for furnishing drugs should be determined by the Medical Care Section in cooperation with the local Advisory Committee on Medical Care. Biological products should be furnished the Medical Center and the participating physicians by the Laboratories of the Baltimore City Health Department in accordance with the current plan for general distribution of such products to the physicians of the city.

16. The principal financial support of the proposed plan for medical care of welfare

clients should come from the State appropriation to the Bureau of Medical Services of the State Department of Health for providing medical service to the indigent and medically indigent of the State. Legislation should be secured at the next session of the Maryland Assembly authorizing the transfer of funds to the Mayor and City Council so that the plan may be administered by the Baltimore City Health Department.

Payment for services of the Medical Center will be based on the number of public assistance clients assigned to it. Payment to the participating physicians will follow the same principle and will be based on the number of clients selecting the physician for service. This capitation concept of payment is recommended by the Committee for several reasons, among which are (a) that this plan will permit greater freedom in the referral of any individual to his personal physician by the Medical Center, and by the physician to the Center as the medical condition of the patient requires; and (b) that this plan simplifies the administration of the program and reduces to a minimum the paper work that the general practitioner will be called upon to undertake.

The proposed tentative budget, which is based on an estimated load of 20,000 individuals on public assistance, covers the funds recommended for the operation of the plan for the first two years:

	1947-48	1948-49
Services of physicians	$150,000	$165,000
Services of medical centers	150,000	165,000
Emergency dental care	22,000	25,000
Drugs	40,000	48,000
Administration	14,000	15,000
Total	$376,000	$418,000

Flow of Services under the Plan

The accompanying diagram indicates the organization and flow of essential services as follows (see frontispiece on page 4):

1. The family (client) applies to Department of Public Welfare for public assistance. If accepted, the welfare client is referred to the Medical Care Section for inclusion in the program of medical care.
2. The welfare client is referred to the medical center for comprehensive medical service. The Medical Care Section notifies the medical center of the client's eligibility for medical service under the plan.
3. The client registers with the medical center and selects a physician. The medical center sets up a record of medical services for each client.
4. The medical center then notifies the physician of his selection as personal physician for the client. After this, the welfare client will receive such home and ambulatory care as is required from the physician.
5. The physician of his choice refers the welfare client to the medical center for special diagnostic and therapeutic services.
6. The physician and medical center exchange records of all services rendered the client.
7. The medical center arranges for conferences and consultations with the physician concerning the medical care needs of the welfare client.

December 20, 1946.

A MINORITY VIEW—MEDICAL CARE*

N. Y. C. 600 W. 168
Oct. 28 and 29
et. seq.

Southold, N. Y.
Box 73
Friday, Oct. 25, 1946

Dear Dr. Williams:

Please pardon this delay in answering your letter of October 18. I was in Michigan until October 23 and then came off here to the farm for an interrupted vacation. I'll do my best to write what seems to me the good reasons why in a modern large city of the U. S. A. there should be separate departments for Health Care of the indigent sick and for Welfare or Relief.

When the Charter of New York City was revised to take effect in January, 1938 after forty years of experiment there were many arguments and discussions before an unusually well-qualified Charter Revision Commission and all interests at stake were heard and had every opportunity to make their points. Over the previous forty years hospitals had been run by a Department of Charities (Welfare) and by a separate set of Trustees of Bellevue and Allied Hospitals and in re contagious diseases by the Department of Health. The decision was whole hearted to the effect that only by a single administrative head could the tax-supported hospitals of the city be economically and efficiently operated.

It was also maintained and by all hands definitely accepted that each of the three functions of municipal government, Health, Hospital and Welfare, called for the direction of an expert in administration in each of the respective fields, and that the complexities of the medical, social, political, economic, legal and police functions involved in any one of the three services to be provided were sufficient to tax to the utmost the capabilities of any person of even the highest professional and administrative abilities. Furthermore, it was agreed that for each department or commissionership a person especially qualified by professional education or practical experience was necessary.

The City Charter makes these points of view effective and defines clearly the separate and distinct functions of the three departments of health, hospitals and welfare. There has been no criticism and no attempt to change this set-up. The only point of uncertainty has been due to the fact that the Department of Welfare has needed home service for the sick for which there was no organization in the Department of Hospitals. So as a matter of fact there are health examinations and diagnostic and treatment facilities provided by the doctors, nurses and medical social workers of the Department of Welfare for their clients who can be better served at taxpayers expense that way than by bed or out-patient department care at the hospitals and dispensaries of the Department of Hospitals or at the special clinics of the Health Department.

This will be ultimately adjusted. Most of the Health Department out-patient services for tuberculosis and venereal diseases are now carried on under hospital auspices, as is the case with prenatal care, best at hospital out-patient departments where delivery is to be provided.

* A letter from Dr. Haven Emerson read by the Commissioner of Health of Baltimore at the 20th meeting of the Committee to Study the Medical Care Needs of Baltimore City on November 7, 1946.

Philadelphia and St. Louis have since 1938, I forget the exact date, separated their hospitals from the Health Department. In both these cities there were previously health and hospital departments with neither function competently conducted for various reasons, among which is that the Health Officer's time and attention inevitably went where most of the money and most of the personnel were involved, that is, to the hospitals. A decided improvement in both health and hospital functions has occurred in these two cities since this separation. My own opinions based on some years of study of Health Administration are about as follows:

Special qualifications and concentration on all social and scientific techniques for prevention and control of disease and development and maintenance of personal and community health are indispensable, especially in a great city. Also the job is so serious and demands such constant attention and varied talents that there is no time or ability that can properly be spared or diverted into other channels.

The sick will always receive attention because of their necessities and the standards of humane treatment of our fellows, and such care as we must give the indigent sick will generally cost from ten to twenty times as much as the community is willing to pay for health services. The hospital and its personnel require quite a different type of attention, salesmanship and financing from those needed in a health department.

Specialization is recognized by our universities which have established Schools of Public Health, Social Work and Hospital Administration. Here there is a certain desirable amount of cross reference and fertilization of topics of interest to each type of special vocational professional student.

In rural communities, such for example as those of extra—Baltimore, Maryland, where local county or district government cannot well afford more than one well-paid and expert medical officer as a chief of health and other medical services for the county, it seems to me natural and reasonable that this County Health Officer should be expected to be responsible for the medical care of the indigent but only if he is provided with competent nonmedical or medical administrators of hospitals or other medical institutions in his area.

The pressure for merging preventive and "curative" medicine is the product of social theorists and represents a tempting idea without the benefit of reality. Diagnosis and treatment of disease is inseparable from preventive medicine, whether in hospital or private practice. There is no higher professional responsibility and no greater service of physicians than good general practice in which prevention shares with treatment at every contact between doctor and patient. Obstetrics and pediatrics have reached the top in this kind of practice.

Health protection and development and prevention of the preventable diseases requires as you know different sciences and arts, and an imagination and purpose of quite a different order. Relief of the dependent indigent, etc., involves medical elements but primarily the expression of a social purpose in which care of the sick and health protection are relatively subordinate problems.

The main distinction between hospital care and relief work on one side and the Health Department on the other is the character of their respective clients. The hospital or medical care service and the welfare agency is primarily concerned with the *person*, the individual in trouble. The Health Department is chiefly concerned with the community, the mass, the natural history of disease, not in the person, organ, tissue or cell, but in the group, the family, shop or neighborhood. It is less concerned with the patient with typhoid than with the chain of circumstances that led to it and will follow after.

It is my opinion that the carefully and painfully developed functions of civil government now specially provided by a Department of Health will suffer neglect, deterioration and subordination if the Health Officer must spend the majority of his attention and time and the money appropriated to the care of the sick. Also the community will suffer. I see no offsetting benefits to be expected from loading the medical care of the people on the one person or department capable of reducing their sicknesses. Rather than put medical care from the Welfare Department upon the Health Department I should urge the creation of a Department of Medical Care or of Hospitals and follow the pattern of New York City where the functions of the three departments are clearly defined.

They will quote Hugh Leavell's combined hospital and health department at Louisville and of course Alan Gregg and all the well wishers of a government operated compulsory medical insurance scheme, will press for a single integration of social sickness and health after the federal model.

Of course the Health Officer should be aware and informed about all medical services in his bailiwick and use his public and private influence to see that they are the best that the people will pay for but the moment he is made responsible for supplying them his words will be taken as bureaucratic, self-seeking and not objective scientific advice. S. S. Goldwater was once (for two years) a great Health Commissioner and once (for nine years) our first and best Hospital Commissioner; never did he do both at once and he never could have in spite of his rare abilities!

We have had good hospital, good welfare and good health commissioners in New York since 1938 chiefly because we called for competent specialization in these three departments. "Tearing down the division between curative and preventive medicine" is a dangerous slogan by people who will be responsible for neither. The merger would make indiscriminate and inexact and confused what are now well-defined fields of authority and professional competence.

I fear I have rambled and left you without those specific constructive references you asked for. The reason is that this subject has not been discussed in any general terms or dealt with except by indirection.

My Nelson's Loose Leaf Medicine volume "Administrative Medicine" which Dr. Freeman thought well of was written (by many authors) to make clear the content of medical administration for health (each function given in some detail) and medical administration of organized care of the sick by institutions and agencies. I do not know of any better way of emphasizing to a city commission the relative differences and the great complexity and specialization of the fields of health and medical care than to refer to the introduction and contents (yes and the text, too) of that volume. I am wholly of your mind as to the threat of the suggested merger upon the integrity, development and support of public health work in Baltimore. I also agree heartily with the last paragraph of your letter as to the proper role of the Health Commissioner. I deeply regret the probable uselessness of what I have written but it is the best I can think of at the moment.

The tendency in private or clinical medicine as in administrative medicine (public health and medical care and hospitals) is toward specialization. Government can't afford to confuse the public by making one department responsible for their sickness and their health as the social reformers would wish us to do. My advice is to fight hard for the distinction of our specialty, make much of the uncompleted jobs in preventive medicine, explain how the merger would clutter up, delay, postpone and reduce prestige and accomplishment of the city's most creditable department.

Let me know if I can be of any real help.

Sincerely your friend,
(Signed) HAVEN EMERSON

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