CITY OF BALTIMORE

ONE HUNDRED AND THIRTY-FOURTH ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH

1948

To the Mayor and City Council of Baltimore for the Year Ended December 31, 1948

It can be done

Helen Keller

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Learn to Do Your Part in the Prevention of Disease

THE SUN

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PAUL PATTERSON, President

BALTIMORE, WEDNESDAY, MAY 26, 1948

A Year's Experience With The Housing Court

The idea of having a special police magistrate in Baltimore just to hear cases involving unsanitary housing conditions was first given serious consideration a year ago this month. At that time the Health and Police departments were getting almost nowhere in their attempts to force compliance with the city's housing regulations. The law, in the person of assorted police magistrates, was not strongly behind them. Landlords and tenants alike disregarded cleanup orders, and, if prosecuted, their cases usually died in court.

When Mr. Harry S. Kruger was appointed the city's (and probably the nation's) first housing magistrate last July, neither he nor anyone else knew exactly what he was supposed to do. The Housing Court was established on the somewhat nebulous basis that justice and efficiency would be better served if all cases of leaky roofs, clogged toilets, rat-infested cellars and illegal pigeon lofts were channeled to one magistrate. Since then Magistrate Kruger has heard about 1,200 cases, none of them pleasant ones, and has set a pattern for legal action against housing violations that is paying dividends in cleanliness.

The Kruger policy is simply a recognition of the fact that there is rarely a justifiable excuse for anyone's maintaining a public nuisance. While pulling no punches, the magistrate has kept his fines relatively low to date. "We don't want your money in fines," he has told landlords. "We'd rather you took more interest in your property and spent the money there." This policy of firmness, tempered with salutary punishments, has proved satisfactory both to those groups which wanted the new housing magistrate to "get tough" with property owners and to those that wanted him to appreciate the difficulties which property owners face.

While praise from opposing poles is significant, the real proof of the Housing Court's value is the faster rate at which unsanitary housing conditions in Baltimore are being abated. Whereas formerly the Health and Police departments frequently found their cleanup orders disregarded, their inspectors now have to take only one case in thirteen to court. With Magistrate Kruger on the receiving end of recalcitrant cases, most owners of clogged toilets and trash-laden back yards are willing to take a hint from a health inspector without waiting for a court order. It may be years before Baltimore can do any real boasting about its cleanliness, but at least it can now be said that the law does not condone filth.

THE PUBLIC INTEREST DEEPENS IN
BALTIMORE'S SLUM CONTROL AND HOUSING COURT

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in charge of the Baltimore Quarantine Station.

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DR. ABEL WOLMAN,
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Gustav H. Woltereck, M.D. c
Charles T. Woodland, M.D. v
Leroy James Young, 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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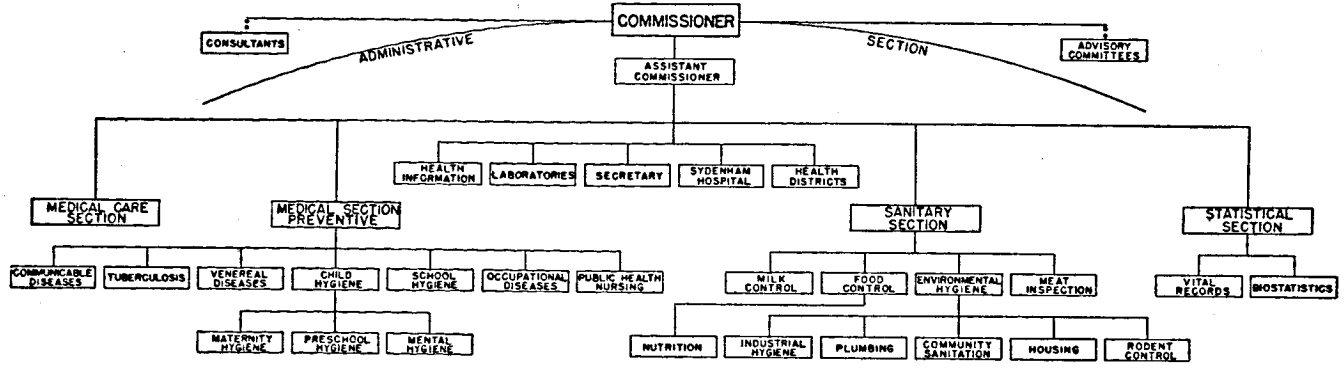
ORGANIZATION CHART

BALTIMORE CITY HEALTH DEPARTMENT



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

1948

REPORT OF THE COMMISSIONER OF HEALTH

The Honorable,

THE MAYOR AND CITY COUNCIL OF BALTIMORE

GENTLEMEN:

Pursuant to the provisions of Section 81 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-fourth 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, 1948.

Introduction

Most important in the public health picture of Baltimore for 1948 was the actual launching on June 15 of the new medical care program after years of careful preparation. Under Health Department administration the recipients of public assistance of the City Welfare Department began to receive ambulatory medical care clinic service from the two largest, medical school hospitals in Baltimore and through them home and office care from personally selected family physicians. That this new work will grow is inevitable and the opportunities for expanding the scope and quality of medical service are very great.

Satisfactory early progress was also made in the field of mental hygiene in connection with the Health Department's well baby clinics, and by the close of the year new appropriations were approved by Mayor Thomas D'Alesandro, Jr. that should make possible a systematic extension of the dental care of Baltimore's school children. Plans went forward likewise for the construction of the proposed Southern Health District building, and the city provided a salary for the health officer of the Eastern Health District for the first time in 1948 after having received this financial aid from the Johns Hopkins School of Hygiene and Public Health since the district was first established in 1932.

The vital statistics of the city for 1948 show a new low record for infant mortality, 28.7 per 1,000 live births. This is generally considered a reliable index of good civic health, and the figure was never below 32.7 before for any year. Typhoid fever was cut in half to a new low city record of 5 cases for 1948, and the reported cases of diphtheria and the city's tuberculosis death rates also reached new low records.

In November the voters approved city loans for replacing a worn-out tuberculosis building at the Baltimore City Hospitals and for the construction of health district buildings. On December 9 the final ceremonies were held in the transfer of the Babies Milk Fund Association work to the City Health Department. Slum control and rat control and industrial hygiene efforts were effective during the year. On May 1 the city milk supply became 100 per cent pasteurized for the first time by the closing out of the last half per cent of certified raw milk; and television was put to work for the health education of the people of Baltimore in a once-a-week program that was launched in December.

The city was honored by the services rendered to the World Health Organization by Dr. W. Thurber Fales, Director of the Statistical Section of the City Health Department. Dr. Fales, as Vice-Chairman of the Expert Committee and one of eleven United States delegates, went to Paris in April for the work of the Sixth International Conference for the Revision of the Lists of Diseases and Causes of Death. The Baltimore Color Plate entitled "Reactions to Smallpox Vaccination", issued by the City Health Department in 1936, has been republished from the original Hoen plates in four standard textbooks in medicine and public health in the United States. In 1948 it was reproduced in color with text in Spanish in the "Anales de la Clinica E Instituto de Enfermedades Infecciosas", a volume published by the National Ministry of Health at Montevideo, Uruguay. The Commissioner of Health presented a brief discussion entitled "The Local Health Officer and Sickness Surveys" at the annual meeting of the American Public Health Association in Boston in November and continued to serve as a member of the Governing Council of the Association and of its Committee on Professional Education.

The Health of the City

The estimated population of the city on July 1, 1948 which has been used for calculating the rates in this report was 958,000; the white population was 757,000 and the nonwhite population 201,000 or 21 per cent. The infant mortality rate set a new low record of 28.7 per 1,000 live births, as mentioned; for white infants the rate was 24.9 and for colored infants,

37.3. The maternal death rate of 1.1 deaths per 1,000 live births was the same as in 1947.

The resident birth rate for the city showed a slight drop from that reported in 1947. There were 22,083 babies born to Baltimore mothers during 1948 or a rate of 23.1 per 1,000 population. The white birth rate was 20.4 and the colored birth rate, 33.2.

Only 5 cases of typhoid fever were reported in 1948. A new low record of 46 cases of diphtheria was one less than the prior low of 47 cases recorded for the year 1941. There were 2 resident deaths from diphtheria during 1948. During the year there was a total of 8,943 cases of measles reported as compared with only 274 in 1947. The outbreak of measles commenced in March, continued to increase during the remaining months of spring and reached a peak of 3,071 cases reported during the month of June. Because of the lateness in the start of the outbreak all susceptibles were not attacked before the approach of warm weather, and the disease started to spread again in November. There were only 2 fatal cases, one in a two-year-old child and one in an adult. The number of newly reported cases of tuberculosis increased from 1,548 in 1947 to 1,581 in 1948. The tuberculosis death rate for 1948 was 68.6 per 1,000 population; the white death rate was 39.2 and the colored death rate was 179.1. All of these are the lowest resident death rates for tuberculosis to be recorded in the city's history and indicate a significant decrease in the mortality from this cause.

Principal Causes of Death

The death rates for the seven leading causes of death in 1948 and 1947 are shown in the accompanying table. Other vital statistics tables appear 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 1947-1948

Total Population			White Population			Colored Population		
Cause	Death Rate per 100,000		Cause	Death Rate per 100,000		Cause	Death Rate per 100,000	
	1948	1947		1948	1947		1948	1947
Diseases of heart	421.0	395.3	Diseases of heart	434.1	412.1	Diseases of heart	371.6	330.4
Cancer, all forms	152.7	156.9	Cancer, all forms	162.1	164.3	Tuberculosis, all forms	179.1	210.3
Nephritis	81.9	86.5	Cerebral hemorrhage	70.8	80.7	Nephritis	154.2	144.3
Cerebral hemorrhage	76.3	84.2	Nephritis	62.7	71.6	Cancer, all forms	117.4	128.3
Tuberculosis, all forms	68.6	75.8	Accidental causes	50.2	54.6	Cerebral hemorrhage	97.0	97.4
Accidental causes	55.4	56.6	Tuberculosis, all forms	39.2	41.2	Accidental causes	75.1	64.4
Pneumonia, all forms	36.0	38.7	Diabetes	37.0	35.7	Pneumonia, all forms	74.1	72.2

Administration

There follows a financial statement for the Baltimore City Health Department for the fiscal year ended December 31, 1948.

FINANCIAL STATEMENT

As of December 31, 1948

Total City Appropriations		$1,891,347.28
Total City Expenditures		1,729,814.97
Appropriations by Ordinance of Estimates, January 1, 1948	$1,813,124.00	
Appropriation for Transportation	40,047.46	
Supplementary Appropriations for Building Maintenance and Special Projects	38,175.82	
		$1,891,347.28

Expenditures of the Baltimore City Health Department

ADMINISTRATIVE SECTION

Administration	$38,603.99	
Health Information	20,745.73	
Laboratories	116,755.94	
Eastern Health District	75,404.62	
Western Health District	58,268.81	
Druid Health Center	90,710.00	
Southeastern Health District	61,203.16	
		$461,692.25
Sydenham Hospital		339,442.03

MEDICAL SECTION—PREVENTIVE

Communicable Diseases	$25,764.62	
Tuberculosis	40,472.73	
Venereal Diseases	110,232.01	
Occupational Diseases	2,781.08	
Child Hygiene	71,072.19	
School Hygiene	13,823.79	
Public Health Nursing	204,894.18	
		$469,040.60

MEDICAL CARE SECTION

Administration	$10,625.39	
		$10,625.39

SANITARY SECTION			
Administration	$19,544.20		
Milk Control	56,201.13		
Food Control	40,369.71		
Meat Inspection	65,139.24		
Environmental Hygiene	190,197.70		
		$371,451.98	
STATISTICAL SECTION			
Administration	$11,839.96		
Vital Records	43,894.01		
Biostatistics	21,828.75		
		$77,562.72	
Total, Salaries and Expenses			$1,729,814.97
Receipts			
Vital Records	$23,093.50		
Child Hygiene Licenses	71.00		
Milk Permits	13,410.00		
Plumbing Permits	27,693.75		
Meat Permits	24,863.00		
Rooming House Permits	891.00		
Sydenham Hospital, county patients	24,225.00		
Miscellaneous Revenue	327.50		
Total		$114,574.75	

Additional Non-Health Department Expenditures

There follow certain tabulations of expenditures for health work in Baltimore in 1948 which were closely related to the work of the City Health Department:

I OFFICIAL EXPENDITURES	
City Department of Education—high school medical services	$79,045.74
City Department of Welfare—tuberculosis hospital service	
Baltimore City Hospitals	360,520.57
Mt. Pleasant Sanatorium—city cases	5,655.82
Eudowood Sanatorium—city cases	27,787.50
City Department of Welfare—venereal disease hospital service	26,720.98
State Department of Health Funds	
State Tuberculosis Sanatoria—city cases	813,923.04
Mt. Pleasant Tuberculosis Sanatorium—city cases	19,645.00
City venereal disease control	4,800.00
Services for city crippled children	51,345.94
Medical care	187,561.51
Maternal and child health services	867.74
U. S. Public Health Service Funds	
General	24,484.24
The Johns Hopkins Hospital—venereal disease control	127,579.00
Rapid Treatment Center	69,320.62
Tuberculosis control	50,641.55
U. S. Children's Bureau Funds	
Services for crippled children	22,335.86
Services for cerebral palsy project	16,023.61
Maternal and child health services	3,031.50
	$1,891,200.22

II NONOFFICIAL EXPENDITURES	
Babies Milk Fund Association	$18,049.75
Baltimore Hearing Society	17,226.57
Eudowood Sanatorium—city cases	23,763.87
Food establishments—sanitary control	28,000.00†
Instructive Visiting Nurse Association	112,811.39
Johns Hopkins University—Eastern Health District	20,480.00
Laboratory services—hospital or private	87,000.00†
Maryland Chapter—National Foundation for Infantile Paralysis	49,811.41
Maryland Division—American Cancer Society	55,326.43
Maryland League for Crippled Children	68,032.96
Maryland Rheumatic Fever Association	7,468.08
Maryland Society for the Prevention of Blindness	9,806.14
Maryland Tuberculosis Association	92,800.00
Mt. Pleasant Sanatorium—city cases	101,906.48
Pasteurization plants—farm and laboratory control	115,000.00†
Venereal disease control—hospital dispensaries	100,000.00†
	$907,483.08
Total	$2,798,773.30

This $2,798,773.30 added to the City Health Department expenditures of $1,729,814.97 gives an estimated total of $4,528,588.27 or $4.73 per capita. This does not include large expenditures for water purification or sewerage, or for general hospital and medical care services rendered by the City Welfare Department.

† Approximate figure.

Personnel

Dr. J. Wilfrid Davis became Director of the Medical Care Section on June 2 after the resignation of Dr. Wendell R. Ames. Dr. Davis received this promotion after more than four years of outstanding service as Director of the Bureau of Communicable Diseases. Dr. Myron G. Tull was transferred from Sydenham Hospital on May 24 to become Administrative Health Officer in the Bureau of Communicable Diseases and served as acting bureau director after the transfer of Dr. Davis to Medical Care. On September 27 Dr. George A. Silver was appointed Health Officer of the Eastern Health District and replaced Dr. Harry L. Chant who had resigned on June 15 to become Director of the Johns Hopkins Hospital Medical Care Clinic. Dr. Konstantin Sparkuhl, Assistant Health Officer of the District, resigned on May 28, and Dr. Elizabeth Woodward left the Bureau of Child Hygiene on August 19. Dr. Francis F. Schwentker, Pediatrician-in-Chief of the Johns Hopkins Hospital, resumed his connection with the City Health Department on July 1 when he was made Associate Medical Director at Sydenham Hospital to assist Dr. Horace L. Hodes, Medical Director, in the research program of the hospital.

By approval of the Board of Estimates and the City Service Commission the health information service was raised to a bureau level with the appointment of Isadore Seeman as bureau director on April 26. Sidney M. Norton replaced Mr. Seeman as Director of the Bureau of Vital Records on May 3. The new Bureau of Biostatistics was headed by its first director with the appointment of Matthew L. Taback on December 1. William

Sallow was promoted on July 23 to become Chief of the Division of Rodent Control, and on September 1 Miss Eleanor L. McKnight was appointed Chief of the Division of Nutrition. Miss Martha C. Eaton rendered valuable service as Head Statistician in the Medical Care Section from May 24 to December 28.

Health Information

In anticipation of the growing value of television as a medium for the broad dissemination of health information, the Commissioner of Health

THE HEALTH TELEVISION SERIES IS INAUGURATED

Left to right: Dr. Charles W. Maxson, *President of the Medical and Chirurgical Faculty of Maryland*, the Commissioner of Health, Mayor Thomas D'Alesandro, Jr., and Dr. Walter D. Wise, *Chairman of the Council of the Faculty.*

proposed to the officials of the Baltimore Sun Station WMAR-TV and to the President of the Medical and Chirurgical Faculty of Maryland the inauguration of a regular series of television health programs. The introductory telecast on December 15 and the subsequent programs which began on December 21 and 28 have been under the joint auspices of the City Health Department and the Medical and Chirurgical Faculty. This new series supplements the weekly radio broadcasts which have continued without interruption since their inauguration in 1932 under the same joint sponsorship. The scripts for the television dramas, under the general title "Your Family Doctor," were written by the director of health information who also played the role of "Dr. John Worthington," the

fictitious family doctor of the series. Each dramatization focuses on important facts in the prevention or cure of disease.

A two-day conference and demonstration on rodent control was held on April 8 and 9 with thirty-seven representatives of health and sanitation agencies from fifteen nearby cities in attendance. This conference was opened by Mayor D'Alesandro in the Board of Estimates room and was conducted under the joint auspices of the City Health Department and the Baltimore Rodent Control Coordinating Committee. Its purpose was to emphasize the importance of a thorough environmental control program for the elimination of rats in a city.

"YOUR FAMILY DOCTOR"
"Dr. John Worthington" and his office nurse "Miss Ross"
December 15, 1948

A summary of other health information activities during 1948 includes the following:

1. The publication of *Baltimore Health News* and its distribution to a mailing list of approximately 10,000 persons each month, including all of the physicians in the city. Special features published during the year were the report on a plan for the dental care program for school children, the first medical care contracts with hospitals, an article reviewing the special surveys and studies conducted in the Eastern Health District, the "Outline of Mental Hygiene" used in seminars with public health nurses, a review of the De-

partment's housing program since 1939, and an article on the facilities for the care of tuberculous patients in the state.

2. Department press releases which resulted in the publication of 403 articles in the city-wide and neighborhood newspapers. Many of these articles were based on the "Saturday Letters to the Mayor" which were sent each week and contained current vital statistics and brief messages on disease prevention, medical care or community sanitation.
3. The issuing of two new leaflets, one for the medical care program and one for instruction in the use of DDT for the treatment of head lice. A total of 545,045 pieces of City Health Department literature was distributed by department personnel and through the public and parochial schools and the leaflet racks.
4. The preparation of an exhibit on housing which was included in the Peale Museum display "Baltimore Housing—Past, Present and Future" from April 12 to July 1. Thereafter this Health Department exhibit was on tour and was shown at nine locations during the remainder of the year. Other exhibits were prepared for a regional meeting of the American Association for Health, Physical Education and Recreation, and for the Food Show. A total of more than 100 health panels was put on display in 50 exhibits during 1948. A copy of the new poster on the prevention of lead poisoning in children was made by the silk screen process for each well baby clinic.
5. The editing and distribution of the ANNUAL REPORT of the Department for 1947 to city officials and to reference libraries. The summary report of the Commissioner of Health, under the title GUARDING THE HEALTH OF BALTIMORE, was mailed to each physician in the city and to other persons on a mailing list of about 3,000 names. Copies of this summary report, issued annually since 1931, are used daily by the various bureaus and districts of the Department and are basic introductory material for the many visitors and students interested in Baltimore's public health work.
6. Talks on public health given by Department staff members to 592 groups which reached approximately 27,000 persons. These included lectures and seminars for students in medicine and public health as well as discussions for community organizations.
7. Requests for 82 public health film showings during the year, many of which included arrangements for a speaker from the Department.
8. Two special local observances of health significance in East Baltimore, Health Week in March and Health Day during Community

Week in December. Cooperation was also furnished in local programs for the following nation-wide health celebrations: Cancer Control Month, Child Health Day, Heart Week, the March of Dimes, Negro Health Week, Public Health Nursing Week, Syphilis Control Day and the Tuberculosis Seal Sale.

9. Editorial and library service made available to the administrative staff of the Department and supervision of an active duplicating and stencil service.

Laboratories

The number of laboratory examinations made by the Department for medical—diagnostic and sanitary enforcement purposes increased by more than 12,000 over the figure for 1947. A total of 243,240 examinations of 153,288 specimens and samples was completed in 1948. Special assistance of an emergency nature was given to a large hospital over a six-months period during an acute personnel shortage when the hospital laboratory

EMANUEL KAPLAN, Sc.D.

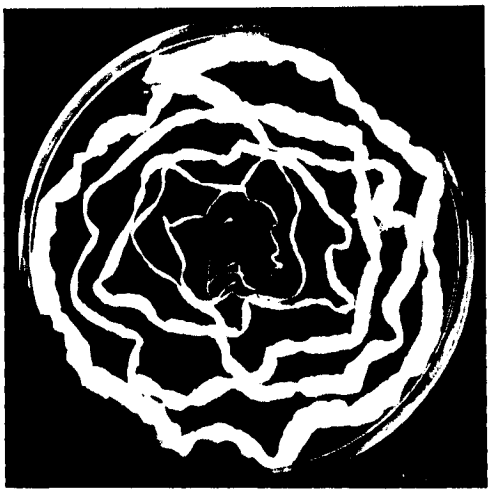
Chief, Division of Chemistry
Since August 1, 1934

was unable to perform needed tests for tuberculosis. In addition, the bureau cooperated with the Infectious Disease Division of the National Institutes of Health by supplying 175 positive syphilitic blood specimens for a study of rickettsial antigens.

Diagnostic and other services included the examination of 108,336 specimens of blood and spinal fluid for syphilis; 4,997 smears and 7,316 cultures for gonococcus infections; 11,703 specimens for tuberculosis; 1,240 cultures for diphtheria; 716 agglutination tests for infectious mononucleosis; 68 animals for rabies; and 16,188 samples of milk, food products and industrial or other materials.

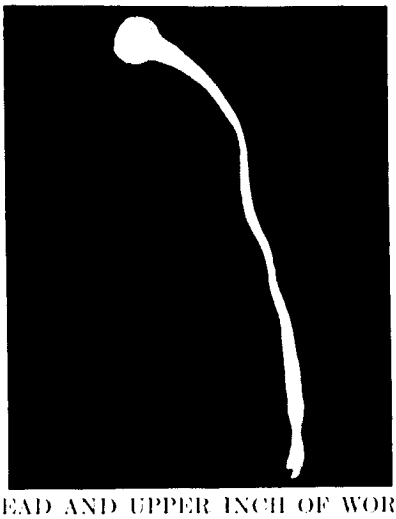
In the Division of Chemistry 31,885 examinations were made of 10,821

samples representing increases of 15.4 per cent in examinations and 5.4 per cent in samples. A total of 5,611 samples of pasteurized milk was ex



FIVE FEET (½ LENGTH) OF TAPEWORM

amined by the phosphatase test and in only 2 instances was there evidence of faulty pasteurization. Out of the 481 other samples of pasteurized



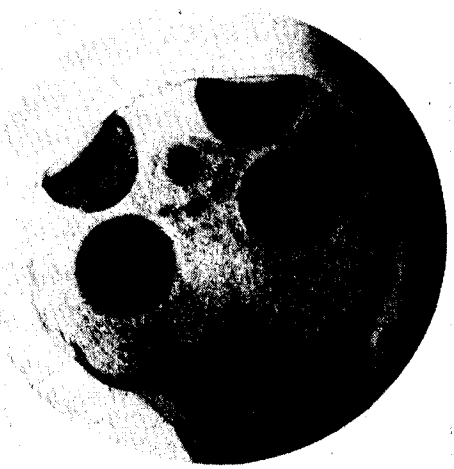
HEAD AND UPPER INCH OF WORM

cream, chocolate milk or other dairy products tested, only one gave a phosphatase reaction which indicated slight underpasteurization. Anal-

yses of 528 blood specimens, 37 samples of paint scrapings and 58 air samples were made in connection with investigations of possible exposure

ENLARGED VIEW OF HEAD

to lead poisoning. Forty other samples of air, dusts, solvents or other materials were tested in departmental studies of industrial hazards. These included analyses for lead, trichloroethylene, selenium, free silica, hydrogen sulfide, methyl chloride and carbon tetrachloride.



PHOTOMICROSCOPIC VIEW OF HEAD AFTER DEHYDRATION

There were 25,122 packages of antitoxins, vaccines, sera and other biologicals dispensed to physicians and hospitals for use in the prevention

or treatment of communicable diseases. Increases over 1947 occurred in the distribution of immune serum globulin for measles, tetanus toxoid, Rocky Mountain spotted fever vaccine, penicillin, tuberculin patch tests and typhoid vaccine. Decreases were experienced with diphtheria antitoxin, silver nitrate solution and antipertussis vaccine.

Special studies conducted during the year were related to: A survey of spinal fluid laboratory procedures, the minimum therapeutic dose of procaine penicillin in the treatment of gonorrhea, the development of a modified Loeffler's blood serum medium for growing diphtheria bacilli, a modified flocculation test for syphilis, the effect of aureomycin on the growth of tubercle bacilli, the quantity of lead ingested by young children who developed lead poisoning, methods for the quantitative estimation of the butterfat content of homogenized milk, the preparation of a chart useful in determining the identity of homogenized milk, a field test for differentiating methyl chloride from freon in refrigerants, the effect of the type of can opener on the metal fragment contamination of canned foods, the heavy metal content of carbonated water, and improvements in methods for the detection of filth in food. In addition, information was collected which revealed no health hazard associated with exhaust fumes from Diesel buses on the city streets, and a study was made of the use of isopropyl alcohol as a substitute for grain alcohol in skin disinfection. The Division of Chemistry also participated in a collaborative study of a method for the determination of lead in air directed by the American Conference of Governmental Industrial Hygienists.

T. C. Buck, Jr., Assistant Laboratory Director, assisted a family physician in curing a patient with beef tapeworm infection and developed the unusual photographs here shown that were described in the October issue of *Baltimore Health News*.

Eastern Health District

Dr. George A. Silver was appointed Health Officer of the Eastern Health District on September 27, after the resignation of the former Health Officer and Assistant Health Officer. As mentioned, Dr. Harry L. Chant left in June to become Director of the Medical Care Clinic of the Johns Hopkins Hospital and Dr. Konstantin Sparkuhl left in May to become a District Health Officer in Los Angeles.

Measles was very prevalent in the district during the year, with a high incidence in June and again in December. Whooping cough declined sharply to 144 cases from the previous year's record of 508 cases. Diphtheria also decreased with only 5 cases in 1948 as compared with 20 cases in 1947.

Chest X-ray screening activities increased steadily, and this year there were 5,943 films taken of apparently healthy persons. Of these, 181 re-

quired follow-up, although only 9 new cases of tuberculosis previously unknown to the Health Department were discovered. Persons examined in addition to contacts of tuberculosis cases were prenatal patients, large numbers of federal, state and municipal workers receiving pre-employment examinations and many workers from private industry. The public health nurses of the district carried an average monthly case load of approximately 500 patients with active tuberculosis, slightly larger than the number in 1947.

Total visits to the venereal disease clinic at Somerset Health Center declined slightly from 13,054 in 1947 to 12,881 in 1948. A new children's clinic for diagnosis and treatment of congenital syphilis opened at the Center in June. A total of 4,728 school children received physical examinations during the year at the schools in the district. Child hygiene and prenatal services both increased over the previous year.

Teaching activities included an in-service training program for all new public health nurses employed by the City Health Department, and also lectures, seminars and field trips for medical students from the Johns Hopkins School of Medicine, for graduate students from the School of Hygiene and Public Health and for nursing students from the Johns Hopkins and Sinai Hospital Schools of Nursing. The Eastern Health District as in previous years was used as a research area for special studies in public health by the City Health Department and by the School of Hygiene. Important investigations in syphilis and mental hygiene were carried on throughout the year, and in the September issue of *Baltimore Health News* there appeared a special article entitled "The Unique Nature of the Eastern Health District Studies and Census Surveys."

Western Health District

There was a welcome decline in the prevalence of diphtheria in the Western Health District during the year. The total of 13 cases and 2 deaths reported for 1948 compared favorably with the record of 41 cases and 1 death in the preceding year. Intensive efforts were carried on to have every infant in the district inoculated with diphtheria toxoid and to give each child entering school for the first time a booster dose of this material.

The opening of the Medical Care Clinic at the University Hospital provided improved medical treatment to many Department of Welfare clients in the district. The new clinic utilized the district services of the Health Department as part of its program. The school health service was expanded through arrangements for giving physical examinations to occupational pupils and for the introduction of the Massachusetts Vision Testing program in the public schools of the district.

The senior medical students of the University of Maryland visited the

health district office in preparing their "Home Survey Reports" on selected patients. Student nurses from the University, St. Joseph's, and Franklin Square Hospitals carried on affiliate studies in public health nursing in the district during the year. Other educational activities included talks to neighborhood groups on health topics, news articles prepared for a neighborhood newspaper, the distribution of Department publications and conferences and orientation talks for the public health nurses of the district.

Druid Health Center

Several changes were made in the clinics staffed by personnel of the Druid Health Center in 1948. In order to provide services for children with venereal diseases in other sections of the city, the number of these clinics at the Center was decreased from three to two. Thus there are now twenty-five weekly Health Department clinics conducted at the Center as follows: Adult venereal disease, 12; children's venereal disease, 2; prenatal, 4; chest, 5; and infant and preschool, 2. Two well baby clinics were transferred from public schools to the Gilmor Housing Project and met at hours more suitable to the parents and the staff. The Maryland State Board of Mental Hygiene also maintained its usual weekly clinic session in the building.

As in the past the Druid Health Center enjoyed the full cooperation of the Maryland Tuberculosis Association which provided a trained medical social worker to assist patients with tuberculosis, and their families. The Baltimore Hearing Society held two weekly sessions at the Center for individuals with impaired hearing. Among the groups using the Center in 1948 were the Monumental City Medical Society, the Maryland Medical Association, the Maryland Dental Association, the Negro Health Week Committee, the Graduate Nurses Association, student nurses from the Maryland General Hospital, the Hospital for the Women of Maryland and Henryton Sanatorium, Alcoholics Anonymous, the Boy Scouts and visiting public school children.

Southeastern Health District

A significant drop in diphtheria occurred in the district, with 4 cases and no death in 1948 as compared with 31 cases and 1 death in 1947. Measles increased in prevalence during the year with 929 cases reported.

A preventive mental hygiene program was begun in April similar to the service in operation in the Eastern Health District, and outlined in the January–February issue of *Baltimore Health News*. For the third consecutive year the community chest X-ray survey sponsored by the Eastern Community Council was conducted at Public School No. 47, and be-

tween March 22 and April 2 the Department's mobile unit took 2,168 X-ray films of apparently healthy adults, a larger number than in either of the two earlier surveys. "Health Week" was observed in connection with this tuberculosis screening program and talks and film showings for neighborhood organizations in the district were held. An X-ray survey sponsored by the parent groups of a neighborhood school and church was held from June 21 to 25 in Public School No. 2.

The exhibit on "Baltimore Housing—Past, Present and Future" was shown at Public School No. 47 in August under the sponsorship of the Eastern Community Council and at the Enoch Pratt Branch Library No. 4 in October under the auspices of the Canton Area Project. In addition to the regular public health educational activities conducted during the year for persons living in the district, special health programs arranged by the school nurses were held in Public Schools No. 6 and 230. Health talks were given to lay and civic groups and news articles on health topics were published in community newspapers. The staff nurses held monthly educational conferences and nurses from the Union Memorial and Johns Hopkins Hospitals received field training in maternity and child hygiene. The East Baltimore Medical Society held regular monthly meetings in the district building for the seventh consecutive year.

Sydenham Hospital

During the early part of 1948 the hospital continued to experience great difficulty because of the shortage of nursing personnel, but toward the end of the year distinct improvement in the nursing situation at the hospital occurred. This improvement was due in part to a determined recruiting effort which was undertaken in November and December.

In 1948 a decrease in the number of patients admitted to the hospital for diphtheria was apparent; 40 such individuals were admitted as compared with 120 in 1947. However, there was a considerable increase in the number of patients received because of measles, 113 in 1948 as compared with only 8 in 1947. For the fifth consecutive year a relatively large number of patients suffering from paralytic poliomyelitis was admitted to the hospital. A total of 50 such persons were treated in the hospital, of which 22 were city cases, 27 came from the counties of Maryland and one was from a neighboring state. Fortunately, only two of these patients died and the majority of those who survived recovered their muscular function to a great extent. Several of the patients suffering from the bulbar type of poliomyelitis were treated by tracheotomy, a measure first instituted at Sydenham Hospital, in 1941. This treatment, as is so often the case, proved to be a life-saving measure.

The total number of deaths at the hospital during 1948 was 19. Four of

these deaths occurred in less than twenty-four hours after admission of the patient to the hospital. Of the 19 deaths 4 were due to tuberculous meningitis, 2 each to measles encephalitis and poliomyelitis, and 1 each to cerebral accident, leukemia, measles, influenzal meningitis, meningococcus meningitis, pneumococcus meningitis, streptococcus meningitis, nephritis, paralysis of unknown etiology, bacterial pneumonia and whooping cough. The death rate, excluding those patients who died in less than twenty-four hours after admission to the hospital, was 2.0 per cent as compared with 2.4 per cent in 1947 and 3.0 per cent in 1946. Of the 19 patients who died during 1948, 15 or 79 per cent were autopsied.

During 1948 an extensive survey of the management of the hospital was carried out by the Commission on Governmental Efficiency and Economy, Incorporated. Mr. Charles H. Buck, Chairman of the Board of Trustees of this organization, stated in a letter to Mayor Thomas D'Alesandro, Jr., which accompanied the report on the findings of the Commission, under date of November 18: "In the Sydenham Hospital the City has a service that is unusually well operated and managed. This reflects worthwhile personnel, qualified and interested employees in supervisory and key positions; especially it results from capable administration in this municipal service. In our opinion, the City would be wise to preserve and encourage such a standard of performance."

Research

Two new drugs were put into use at the hospital during 1948. One of these, chloromycetin, has proven to be effective in the treatment of patients suffering from typhoid fever. Two of the six persons treated for typhoid fever at Sydenham Hospital during 1948 were given this new drug with remarkable results. Aureomycin was also used for the first time in 1948. This drug has proven to be effective in the treatment of Rocky Mountain spotted fever and the two patients suffering from this disease who were treated at the hospital in 1948 recovered promptly following the administration of the drug. Aureomycin has also proven to be effective in the treatment of atypical pneumonia and has on a number of occasions been used successfully in curing infections with streptococci and staphylococci which were resistant to penicillin, streptomycin and sulfadiazine. At the end of the year work was begun on the use of chloromycetin and aureomycin in the treatment of pertussis. Preliminary work carried out at Sydenham Hospital as well as elsewhere indicates that these drugs may be of use in the treatment of infants suffering from this disease.

In 1941 the isolation of a virus which appeared to be one of the causes of epidemic diarrhea among newborn infants was reported by J. S. Light and H. L. Hodes from Sydenham Hospital. During the latter half of 1948

additional experiments were begun to extend these observations and the work was being continued at the end of the year. The data obtained tend to confirm the earlier work.

Communicable Diseases

A total of 29,653 cases of communicable diseases was reported during 1948. Increases were recorded in measles, mumps and chickenpox and decreases in diphtheria, whooping cough, scarlet fever, poliomyelitis and meningococcus meningitis during the year as compared with the number of reported cases of these diseases for 1947. As indicated, typhoid fever reached an all-time low for Baltimore with 5 cases recorded. There was 1 typhoid fever death.

Diphtheria and Meningococcus Meningitis

Mention has been made of the continued decline in diphtheria. There were 46 recorded cases, 1 less than the previous low of 47 cases in 1941; this is contrasted with 142 cases reported during 1947. There were 2 resident deaths due to diphtheria in 1948.

A total of 43,268 persons were recorded as having received toxoid inoculations in 1948 representing a new high record; of these inoculations 23,560 were booster doses.

CHILDREN RECORDED AS RECEIVING DIPHTHERIA TOXOID INOCULATION
BALTIMORE, 1944-1948

AGENCY	1948	1947	1946	1945	1944
Physician's Practice	11,909	12,582	8,309	7,887	9,838
Preschool Clinics	11,716	12,859	12,747	9,951	11,854
School Clinics	19,643	14,938	7,340	7,784	13,764
Total	43,268	40,379	28,396	25,622	35,456

For the fifth consecutive year a decline in the reported cases of meningococcus meningitis was noted: 20 cases and 2 deaths in 1948 as compared with 31 cases and 6 deaths for the previous year.

Other Communicable Diseases

Seventeen cases of undulant fever were recorded during the year. Fourteen were in persons who worked in slaughter houses. Three cases of tularemia were reported. All three were caused by the cleaning or dressing of wild rabbits shortly before the onset of illness.

The record for scarlet fever was again very favorable; fewer cases were reported than during any year since 1918, with 341 cases recorded, none of them fatal. There were 8,943 cases of measles reported with 2 deaths,

one in a child 2 years of age and one in a young adult. Whooping cough showed a marked decline in 1948; a total of 604 cases without a fatality were recorded as compared with 3,247 cases and 10 deaths in 1947. For the twentieth consecutive year there was no case of smallpox in Baltimore.

Examination of the scalp of 15,425 school children for tinea capitis was made by the Wood's ultra-violet light. Of these children 409 were found to be infected and were referred for treatment.

Tuberculosis

During 1948 the total number of deaths from all forms of tuberculosis among residents of Baltimore was 657 of which 297 occurred among the white population and 360 among Negroes. This represents an unusual decrease from the 1947 record when there was a total of 718 tuberculosis deaths, 310 among white persons and 408 among Negroes. Negroes still contribute disproportionately to fatalities from tuberculosis; they furnish 55 per cent of all tuberculosis deaths, although they constitute only 21 per cent of the city's population.

As shown earlier in the table for leading causes of death, the total tuberculosis death rate for Baltimore residents was 68.6 per 100,000 population. For white residents the rate was 39.2 and for Negro residents 179.1. Comparable figures for 1947 were 75.8 per 100,000 for the total tuberculosis death rate, 41.2 for the white race and 210.3 for Negroes. The 1948 rates are the lowest known for Baltimore for both races. In spite of the gratifying improvement in mortality among Negroes, the risk of death from tuberculosis was 4.6 times greater for the Negro than for the white resident of Baltimore in 1948.

From the incomplete evidence available at this time, a single factor, the use of streptomycin, appears to account for the unusual decline in tuberculosis mortality. In combination with bed rest and other recognized forms of treatment, this antibiotic agent has been used with considerable effectiveness in the medical treatment of fresh exudative forms of pulmonary tuberculosis and has proved itself useful in preventing the spread of the disease during and after major thoracic surgery in tuberculous patients. It is helpful in nonpulmonary forms of tuberculosis, and affords at present the only possible chance of recovery from tuberculous meningitis and acute disseminated tuberculosis. On May 20 streptomycin was made available without charge by the State Department of Health to selected patients under treatment in the various state sanatoria. The number receiving it in these institutions in 1948 was too small to have influenced mortality to any measurable degree. However, the combined effect produced by this beneficial adjunct to the established forms of treatment as undertaken in general hospitals, in the facilities of the Veter-

ans Administration and in other scattered places is the presumed explanation for the city's lowered tuberculosis mortality in 1948. Negroes display the clinical types of tuberculosis most likely to be benefited by streptomycin therapy and accordingly with clinical improvement and prolongation of life, their death rate from tuberculosis was much lower than anticipated from the trend of rates in the past.

During the year there were 1,581 new cases of tuberculosis reported, of which 900 were in white persons and 681 in Negroes. Of the total number 123 or 7.8 per cent were reported after death. Sixty-two of these late reports were for white persons and 61 were for Negroes.

The City Health Department with the assistance of the Maryland Tuberculosis Association was responsible during the year for making 57,686 X-ray examinations of apparently healthy persons with a mobile 70 millimeter unit. Added to these were 5,943 similar examinations of "well" individuals X-rayed with 4 x 5 inch films at the Eastern Health District screening clinic. In addition, the 70 millimeter units in three large hospitals provided earlier by the City Health Department X-rayed 36,143 individuals during the year, mainly new patients in their out-patient departments. Approximately one-third of these persons were Negroes. Johns Hopkins Hospital X-rayed 19,213 individuals, the University Hospital X-rayed 10,217, and the Baltimore City Hospitals did 6,713 examinations.

The appointment of Dr. Leon H. Hetherington as Chief of the Division of Tuberculosis Services in the Maryland State Department of Health was the most important news of the year in the field of sanatorium provision for the tuberculosis patients of both Baltimore City and the counties of Maryland. Reorganization of the treatment program and plans for expansion of sanatorium services were well under way by the end of the year.

As noted the voters of Baltimore City authorized a hospital loan on November 2 which will permit construction of a new tuberculosis unit at the City Hospitals. This is to be a 300-bed unit and will replace a dilapidated 140-bed structure used by Negro tuberculosis patients. The new hospital will bring the number of tuberculosis beds at Baltimore City Hospitals from the present total of 280 beds to a new total of 440.

Venereal Diseases

During the year 4,745 cases of syphilis, 6,025 cases of gonorrhea and 118 cases of chancroid were reported. There was no significant increase over 1947 in reported gonorrhea, but there was a significant decrease of 649 cases in reported syphilis, due entirely to a decline in reported cases of primary, secondary and early latent infections, which is consistent with a similar decline in reported early syphilis in the United States as a whole.

Approximately 40 per cent of the 7,076 contact investigations made by

the Health Department nurses and social workers were completed with the examination of the contact or the discovery of a previous record of infection. Of those examined, 44.3 per cent were found to have a venereal disease. The Health Department nurses and social workers made 8,938 visits during the year in the investigation of contacts and the follow-up of delinquent patients.

The Health Department venereal disease clinics admitted 11,510 patients during 1948 and these together with previously registered patients made 66,131 visits to the clinics as compared with 73,490 visits in 1947. The decrease in clinic visits was due almost entirely to a decrease of 220 in admissions for early syphilis, and to the closing of the special penicillin clinics for the treatment of gonorrhea. This disease is now being treated at the regular clinic sessions with the recently introduced procaine penicillin in oil, only a single dose of which is required.

Venereal disease clinics for children, previously operated only at the Druid Health Center, were opened at the Calvert Street clinic and the Somerset Health Center. Service for white children is now available at the Calvert Street clinic for the first time in any Baltimore City Health Department venereal disease clinic.

The Rapid Treatment Center at the Baltimore City Hospitals, a service of the City Welfare Department supported by the U. S. Public Health Service, admitted 1,565 patients with venereal disease, of whom 1,391 were residents of Baltimore. Approximately 80 per cent of the admissions were for early syphilis and in 27 per cent pregnancy, complicated by syphilis, was a factor in the admissions. Nearly 54 per cent of the 418 pregnant women admitted had early syphilis. Admission to the Rapid Treatment Center was opened this year to patients with granuloma inguinale, lymphogranuloma venereum and certain forms of neurosyphilis, and 91 patients were admitted with one or the other of these conditions. Nearly 90 per cent of the patients admitted to the Rapid Treatment Center were colored and approximately 60 per cent were females. The Health Department venereal disease clinics referred 1,055 or 67 per cent of the patients admitted to the Center. The Health Department venereal disease clinics also referred 17 children under twelve years of age to the Pediatric Service at the Baltimore City Hospitals for the treatment of congenital syphilis.

It was necessary to resort to legal action to require treatment for an infectious venereal disease by invoking the provisions of City Ordinance No. 217 in 45 instances during the year, and to summons 7 of these recalcitrant patients to court. Twenty-nine of the 45 patients went to the Rapid Treatment Center as a result of action under this ordinance, 5 returned to the clinics for treatment and 11 could not be found. Since the

adoption of Health Department Regulation No. 1 under Ordinance 217 in August, 1945, action has been taken against 110 persons, 31 of whom could not be found and 79 of whom were returned to treatment. Of the 110 persons involved only 26 were brought into court.

The City Health Department and the Armed Forces collaborated in the investigation of 374 contacts of infected military personnel and in the discouragement of the "facilitation" process, particularly through the monthly meetings of the reorganized Armed Forces Disciplinary Control Board which were attended by the director of the bureau as a member of the Civilian Advisory Board. The Health Department venereal disease clinics and the Baltimore Rapid Treatment Center provided treatment for a small number of selectees and enlistees who were found at the Armed Forces induction station to have a venereal disease and who needed treatment prior to induction.

The Baltimore Venereal Disease Council again in 1948 served as a forum for the discussion of venereal disease problems. The Protective Service for girls and young women promoted by the Council and conducted by the City Department of Welfare received national and international recognition as an effective and wholesome departure from the usual procedure of punishing promiscuous girls without offering them any help or constructive encouragement toward a better way of life.

In spite of an apparent nation-wide decline in the reported incidence of early syphilis, it still cannot be said that epidemiological investigation and therapy will bring the venereal diseases under control. The decline may be due, in large part, to the post-war stabilization of the population with a concurrent decrease in sexual promiscuity. The same phenomenon was noted after the first World War and has been observed repeatedly in the Scandinavian countries over many decades. Penicillin and an accelerated and improved control program certainly have reduced the risk of dangerous complications and may even lower the endemic level of incidence, the attainment of either of which ends makes the effort well worthwhile.

It is still possible, however, that lacking other means of prevention, such as effective, acceptable and universally applied prophylaxis or immunization, the venereal diseases will not finally be brought under real control as long as man remains as promiscuous as he is. In this connection the publication of the Kinsey Report on January 5, 1948 on "Sexual Behavior in the Human Male" is of real significance and would confirm the view of some health officials responsible for venereal disease control programs. Excellent "pocket-book" summaries and comments on the Kinsey findings make the contents of the report readily available, and a special review of the volume by C. E.-A. Winslow from a public health viewpoint appeared in the April, 1948 issue of the *American Journal of Public Health*. What apparently is needed for masses of persons is greater

opportunity for them to learn how to train the children of the future to understand the importance of family solidarity and the inevitable responsibilities they must face in the male-female relationship.

Child Hygiene

It is gratifying that the reduction in the infant mortality rate, as mentioned, set a new all-time low figure of 28.7 deaths under one year of age per 1,000 live births in Baltimore for 1948. The rate ten years ago was 51.7 so the rate for 1948 represents a significant decrease of 44 per cent in the ten-year period. Continuing efforts are being made to decrease the infant mortality particularly among infants born prematurely, since deaths of such infants in the city represent about one-third of all children dying in the first year of life. The maternal mortality rate recorded for 1948 was the same as that for the previous year, 1.1 per 1,000 live births.

The eighth annual transfer of clinics from the Babies Milk Fund Association to the Bureau of Child Hygiene took place on January 1, 1948 when two clinics were taken over in the northern section of the city. During the year well baby clinics were conducted at 39 locations with 77 sessions each week to which a total of 66,590 visits was made. Prenatal clinics were in operation at 8 locations with 12 sessions each week to which 10,129 visits were made. At the prenatal clinics, 1,501 new patients were registered in 1948 of whom 385 were referred by midwives.

The Bureau of Public Health Nursing was assigned 21,566 records of infants for neonatal home visits and the delivery of the *Notification of Birth Registration*. Six month greeting cards were mailed by the Commissioner of Health to 21,323 infants urging diphtheria toxoid inoculation. Preventive toxoid was given to 10,158 children in the City Health Department well baby clinics and the Babies Milk Fund Association clinics. There were 195 cases of ophthalmia neonatorum assigned by the Bureau of Child Hygiene to the public health nurses who treated these cases in the homes with penicillin.

Child-Placing Institutions

During the year 415 licenses for boarding homes were issued jointly with the State Department of Welfare after a thorough inspection of each home by the Sanitary Section of the City Health Department. Forty-three day nurseries and nursery schools were licensed during the year with a maximum capacity of 1,531 children.

Mental Hygiene

The mental hygiene program begun in the Eastern Health District in 1947 was expanded to include all the other districts in the city in 1948. The in-service training of clinic physicians and public health nurses has

been carried on steadily and was nearing completion by the end of the year. In addition, community education was advanced by means of lectures, discussion group meetings, the radio and motion pictures.

School Hygiene

A total of 29,059 pupils was examined by the school physicians in the public and parochial elementary schools during 1948. One or more physical defects were found in 12,051 of these children. Of the total of 5,026 who had enlarged tonsils and adenoids, 1,557 had them removed. There were 6,258 pupils in need of dental attention and 2,007 had the defects corrected. Defective vision of sufficient degree to advise an examination by an ophthalmologist was found in 1,109 children; of these, 829 had their eyes refracted and obtained glasses and 93 had their eyes refracted and the wearing of glasses was found not to be necessary.

As in previous years, parents of children entering school for the first time were urged to take their children to their family physician for a booster dose of diphtheria toxoid or to request its administration in the school by the school physician. A total of 16,670 diphtheria toxoid inoculations was administered to school children and 802 to preschool children in the school clinics. There were 507 school children and 234 preschool children vaccinated against smallpox during the year by the school physicians.

A total of 640 school children made 1,549 visits to the eye clinic maintained by the Department. Of this number, 576 were given mydriatics and 520 had their eyes refracted. In the ear clinic, 769 patients made 1,493 visits. There were 1,361 audiometric tests given and 224 radium treatments administered.

Children with serious heart defects, orthopedic deformities or severe eye or ear defects were recommended for transfer to special classes for the physically handicapped maintained by the Department of Education. Children who were unable to attend school due to a protracted illness were recommended to receive home teaching.

Dental Hygiene

A part time supervisor and one part time Negro dentist operated the five dental clinics located in the public schools. The remaining eleven clinics were not reopened due to lack of adequate salaries to secure professional personnel. The work of the limited staff consisted mainly in relieving those children suffering with toothache by giving sedative treatments or doing extractions. Parents were urged to take children in need of extensive dental care to their private dentists or to the clinic at the Dental School of the University of Maryland.

A summary of work done during the year follows:

Patients registered at clinics	1,391
Visits to clinics	1,627
Prophylactic treatments given	520
Teeth filled	455
Temporary teeth extracted	1,090
Permanent teeth extracted	937
Cases discharged	1,407

The report on the proposed new dental care program for school children recommended by the Committee to Study the Medical Care Needs of Baltimore City was published in the May–June issue of *Baltimore Health News*. Plans were made to inaugurate the enlarged service by the appointment of a full time public health dental director and by the initiation of a city-wide dental care program for kindergarten and grade children.

Public Health Nursing

At the close of the year the Bureau of Public Health Nursing consisted of 174 public health nurses including the supervisory staff. During the year thirty-four nurses resigned, one retired on disability pension, six new nurses were certified for appointment by the City Service Commission and one nurse was transferred to the Department from the Babies Milk Fund Association.

Eight public health nurses volunteered to work at Sydenham Hospital for periods of about two months when the nursing shortage became acute in that institution. This increase in the hospital nursing staff provided additional care for children suffering with communicable diseases and made it possible to hospitalize patients who otherwise would have had to remain at home.

A total of 164,768 home visits was made on all of the nursing services. The prevalence of measles accounted for 19,845 visits of the public health nurses and 210 doses of immune serum globulin were given by the nursing staff to children under three years of age. Instructions were also given to parents for the protection of susceptible household contacts.

Public health nursing service was provided in two additional well baby clinics which were transferred from the Babies Milk Fund Association in January, 1948. In the tuberculosis program each public health nurse carried an average caseload of approximately twenty patients. There were 16,585 visits made because of tuberculosis. In many of the homes visited the contacts in the younger age group were patch tested and those found to have a positive test were referred to the chest clinic for X-ray examination. This procedure was a time saving one for both the family and the clinic.

Nine nurses were assigned full time to the venereal disease control program. One was a supervisor, five were epidemiologist-nurses and three were nurse-technicians. In addition, eighteen public health nurses received training during the year as venereal disease technicians so they could give treatment in the Department clinics under the direction of a clinic physician. This plan of training expanded in 1948 to include a teaching course at the new clinic at 414 N. Calvert Street in addition to the course at the Druid Health Center initiated in 1947 and the training course at the Johns Hopkins Hospital conducted since 1944. By the end of 1948 a total of 63 Health Department nurses had received such instruction.

During 1948 approximately 30 per cent of all the public health nursing time was spent in clinic service. A total of 153 clinic sessions was held each week, of which 25 sessions were held in the evening.

Two special nurses assisted in the testing of eyes with the Massachusetts Vision Testing kit. A survey was conducted in the public and parochial elementary schools to determine the number of children having tinea capitis and to get them under medical supervision. Every child was examined in those schools where more than five cases were found, and children in selected classrooms were examined in those schools where fewer than five cases were found. A total of 15,425 children was examined.

Three nurses were granted leaves of absence to pursue postgraduate collegiate study in public health. The assistant director of the bureau in September began an academic year's study for the Master of Public Health degree at the Johns Hopkins School of Hygiene and Public Health.

Medical Care

The Medical Care Section spent most of the first half of 1948 in planning, promotion and organization work. In preparation for the establishment of

J. WILFRID DAVIS, M.D., M.P.H.

Director, Bureau of Communicable Diseases
December 1, 1943–June 1, 1948

Director, Medical Care Section
Since June 2, 1948

medical care clinics at hospitals to provide services for persons receiving public assistance from the City Welfare Department, the section director met with various hospital, medical and pharmacist groups to explain plans and procedures for the new program. Cooperative working arrangements with the Welfare Department were developed, and a highly efficient and workable system of records was evolved. In this the Statistical Section rendered invaluable aid, and generally the guidance of the State Department of Health was most helpful. Contracts between the Commissioner of Health and hospitals agreeing to establish medical care

BALTIMORE LAUNCHES ITS NEW MEDICAL CARE PROGRAM
JUNE 15, 1948

Left to right: Dr. Edwin L. Crosby, *Director of the Johns Hopkins Hospital;* Mr. T. J. S. Waxter, *Director of Welfare of Baltimore City;* Mr. Herbert Fallin, *City Budget Director;* Mayor D'Alesandro; the Commissioner of Health; Dr. J. Wilfrid Davis, *Director of the City Health Department Medical Care Section;* Dr. Harry L. Chant, *Medical Director of the Johns Hopkins Hospital Medical Care Clinic;* and Dr. H. Boyd Wylie, *Dean of the Medical School of the University of Maryland.*

clinics were drawn up with the aid of the City Solicitor and the hospital attorneys.

On June 15 agreements for the establishment and maintenance of two medical care clinics, one at the University Hospital and one at the Johns Hopkins Hospital, were signed in the office of the Mayor by the Commissioner of Health and representatives of the hospitals. Thus provision was made for the care of at least 14,000 Baltimore recipients of public assistance. Of this total the University Hospital assumed responsibility for 4,000 clients and the Johns Hopkins Hospital for 10,000 persons. By

August 9 the first persons applying for care under the Baltimore City Medical Care Program had registered at the Johns Hopkins Hospital Medical Care Clinic and at the University Hospital Medical Care Clinic. Thereafter the registration continued at a steady and fairly rapid rate at both clinics, so that by the end of the year 1,169 persons were registered at the University Hospital clinic and 2,374 registrations had been received by the Johns Hopkins Hospital clinic. During the year in addition to the staffs at the two medical care clinics, 99 personal physicians and 147 pharmacies had participated in the new program.

In order to meet its rapid growth the section staff was increased to six persons. Throughout the year the fine teamwork of all those in the system was noteworthy. At the close of the year plans for its extension were well developed.

Milk Control

Efforts in milk control in 1948 were directed mainly toward reliable and positive performance in the over-all pasteurization of the city's milk supply. With the unprecedented cooperation of the milk dealers the milk control bureau was able to establish firmly in each of the ten commercial milk plants an efficient system of routine phosphatase testing by the plant laboratory as a daily safeguard in the pasteurization process. Although a record high number of 5,611 samples of pasteurized milk was phosphatase tested by the Health Department laboratories, in only two instances was there evidence during the year of faulty pasteurization. Due to the effectiveness of the joint milk plant and Health Department control work, in neither instance did any of the improperly pasteurized milk reach the consumer. Daily supervision of pasteurization temperature controls and mechanical pasteurization safeguards were continued with an average number of approximately thirty inspections per plant each month.

Mention has been made of the fact that the entire city milk supply was 100 per cent pasteurized for the first time in Baltimore's history beginning on May 1 when the last holder of a City Health Department certified raw milk farm permit discontinued supplying the half per cent of the city milk that had been sold unpasteurized. Where this 100 per cent pasteurized status is usually reached by legal mandate, in Baltimore it was achieved patiently on a voluntary basis. At the request of ten of the chief milk pasteurization plants, permission to process and sell homogenized milk fortified with vitamin D was granted following the adoption of necessary regulations by the Commissioner of Health on April 9.

Two increases in the price of milk to both producers and consumers established record highs of $6.10 per hundredweight and twenty-two cents per quart, respectively. Continued increased production and decreased

consumption of milk in the Baltimore area effected a reduction in the amount of out-of-state emergency milk brought into the city in order to meet local demands from a peak of 12,000,000 gallons in 1944 to 4,700,000 in 1948. The 1948 Sanitary Milk Production Contest was won by students at Thurmont High School, Frederick County, Maryland, with Emmitsburg High School, Frederick County, and Dublin High School, Harford County, finishing in second and third places, respectively. Nearly 6,000 junior dairy farmers have been trained for the contests during the seventeen years in which they have been held.

Food Control

Reports of 19 alleged outbreaks of food poisoning were investigated, but only 8 were found to have been caused by food. Several of the outbreaks occurred in connection with meals served by caterers and study was given to the need for specific regulation of this type of food purveyor. The five sanitarians added to the personnel of the bureau concentrated their activities in those sections of the city where most food-serving establishments exist and in the shopping centers. Relocation of equipment, insect and rodent proofing, floor and equipment cleaning, repainting, and removal of outdoor hopper-type toilets were insisted upon in restaurant inspections and surveys of specific areas indicated marked improvement in the general appearance of the soda fountains and restaurants. Instruction of over 1,700 food handlers in 41 groups was given during 1948 and since 1940 over 18,500 have been given elementary training in the proper methods of operating food establishments in a sanitary manner.

Prosecution of 8 food establishment operators was required and fines in excess of $450.00 were imposed. Failure to abate nuisances within and surrounding the food establishment and having in possession impure food were the causes for the prosecutions. There was an increase in the number of organizations employing personnel to maintain supervision of the food units of their establishments. Eleven companies employed personnel to supervise several hundred retail outlets in addition to the inspection service of the Department sanitarians. Plans and applications for new food businesses and reconstruction work were reviewed in 950 instances and emphasis was placed on design so as to permit ease in maintaining the establishments in a clean and sanitary condition.

Additional activities incident to the control of food and food dispensing included the following: Study of sanitary aspects of the retail sale of beer; study of the action of carbonated water on nickel copper piping; study of the preparation and serving of food by caterers; collaboration with the Bureau of Environmental Hygiene in plans for the collection and disposal of garbage and trash in the city-owned markets; study of the storage of

boric acid in a small nursery; collaboration with the Grand Jury in the inspection of taverns; collaboration with the Maryland State Game and Inland Fish Commission in the control of the sale of wild rabbits; cooperation with the Bureau of Tuberculosis in removing active cases of tuberculosis from food handling activity; and cooperation in the investigation of cases of undulant fever.

Nutrition

During 1948 the Division of Nutrition continued to offer consultant service to all other units of the City Health Department. Although the division was without a chief for the major portion of the year, the services rendered included: Consultation and instruction in prenatal clinics, in-service training of newly appointed nurses in the Health Department, preparation of new nutrition service materials such as a pamphlet on family nutrition, nutrition history forms for both children and adults, and a form for the analysis of the adequacy of institutional menus, and consultation to small institutions regarding food services. One nutrition exhibit was prepared and shown at the Baltimore Food Show and at one of the Enoch Pratt branch libraries. Approximately 500 pieces of nutrition literature were distributed during the year.

Meat Inspection

As a result of the 261,334 inspections of livestock before slaughter, it was necessary to condemn 281 carcasses and 36,539 animal parts as unfit for human consumption. The most frequent diseases found in order of importance, which caused condemnation of carcasses were: Hog cholera, pyemia, septicemia, pneumonia, traumatic pericarditis and sarcoma. Condemnation of parts of carcasses was made because of parasites, abscesses, cirrhosis and hydromas.

Service was rendered to federal and state agencies in connection with the slaughtering of 298 cattle reacting to Bang's disease or tuberculosis, none of which was condemned; and to three state institutions in the examination of swine.

Other activities included: Strict supervision over establishments processing meat and manufacturing meat food products; reinspection of meats and products at wholesale establishments and car route shipments at railroad yards from sources outside of the state; and surveys of plant equipment and sanitation and general construction improvements.

Environmental Hygiene

Industrial Hygiene

A total of 833 industrial improvements affecting the health and welfare of 5,697 workers was made as a result of the continued emphasis on the

study and control of health hazards in industry and the examination for and adoption of control measures in plans for new or expanded industrial construction. Technical studies of hazardous conditions included those related to: Silica dust in the street asphalt paving industry; lead dust following cases of lead poisoning in ceramic, metal fabrication, chemical and paint industries; mercury vapor in three laboratories; carbon tetrachloride in a carton factory; methyl chloride leaking into a drinking water fountain in a clothing factory; trichloroethylene in a degreasing operation; carbon monoxide from diesel engines used in the construction of a city water tunnel and in automotive repair shops; selenium dioxide from furnaces making stainless steel; and radiation from X-ray equipment, from an atomic energy exhibit and from the use of radium.

A Baltimore chromate production plant, the largest in the country, made important improvements to control the health hazard from chrome dust as the result of long range studies previously made by the City Health Department. These corrections are significant in view of a recent mortality study conducted by the chrome industry which disclosed that exposure to chrome dust is related to the development of cancer of the lung. A report on this entitled "Cancer of the Respiratory System in the United States Chromate-producing Industry" appeared in the August 27, 1948 issue of *Public Health Reports* of the U. S. Public Health Service.

The occurrence of 13 of the 17 reported cases of brucellosis in workers in the meat packing industry pointed to another unsolved occupational disease hazard which is being given further study in cooperation with the U. S. Public Health Service. Investigation of 31 confirmed and 11 probable cases of lead poisoning in children, four of which were fatal, disclosed that all of the children lived in rented properties where interior surfaces had been painted with lead-containing paint. In two-thirds of the cases the paint was scaling and notices were issued to the property owners to correct this unsafe condition. Consideration was given to outlawing this hazard by a special regulation under the city housing code.

Community Sanitation

On the basis of requests from builders to discharge untreated sewage from proposed housing developments into the Vail Street stream in southeast Baltimore and into Western Run in Mt. Washington, a study of the two streams was made. Since it was found that such a step would increase the existing human pollution of these streams, it was recommended that no construction be authorized unless provision was made for treating the sewage before discharge into the streams or for some other sanitary method of disposal. Investigation of complaints that sewage was backing into cellars of properties in four blocks in the northwestern section of the city revealed that both the sewage and storm water outlets were con-

nected to storm drains and that insanitary conditions occurred following heavy storms. The property owners disconnected the sewer outlets from the storm drains and, with the cooperation of the Bureau of Sewers, the sewage outlets were incorporated into the city sanitary sewerage system.

Other outstanding activities in community sanitation included: Inspection of watering points at all piers in the city supplying water to vessels in cooperation with the U. S. Public Health Service; sanitary inspections of all theatres in the city and bringing deficiencies to the attention of the management; studies of defective drainage conditions resulting from past or current building operations; close cooperation with the Department of Recreation and Parks in the operation of the public park swimming pools to bring the sanitary quality of the water up to currently accepted standards, and conferences with representatives of that Department and consulting engineering firms on the rebuilding and modernization of the pools.

Housing

Reclamation of slums on a block basis under the direction of the Housing Law Enforcement Committee was expanded in 1948 to include 33 blocks containing 1,263 dwelling units. A total of 61 blocks containing 2,266 dwelling units in five separate areas of the city has been included in the program since its inception in 1945 and 32 blocks containing 1,119 dwelling units have been rehabilitated to meet the standards of the city housing code.

A total of 10,424 housing investigations was made during the year and resulted in the improvement of 1,879 dwelling units, the licensing of 766 rooming houses and the approval of 399 Class A boarding homes for children. It was necessary to post and vacate 104 dwelling structures and seven rooming houses as unfit for human habitation. The City Housing Court completed its first full year of operation on July 23. During this year 227 cases were brought before the court by the City Health Department, sixty-eight per cent of which resulted in the imposition of fines on violators, chiefly under the authority of the city housing code. Experience shows that more than ten violators comply with legal sanitary orders without the need for Housing Court action for every case that requires to be taken to this very helpful magistrate's service.

Plumbing

Building construction reached such a high peak in 1948 that it was impossible for the inspection and clerical forces to keep up with the volume of work, and to meet this emergency the Board of Estimates authorized employment of four additional senior inspectors of plumbing and one senior clerk. Despite the shortage of personnel, there was only one in-

stance of faulty plumbing work in connection with veterans' homes and in this instance the faulty work, which was installed after the final plumbing inspection, was corrected after conferences with the builder, the City Solicitor and the Commissioner of Health. Two minor changes were made in the regulations governing plumbing work in order to provide flexibility in plans for the proposed municipal stadium. Seven domestic garbage grinders were tested for performance and approved by the Commissioner of Health in cooperation with the Bureau of Sewers. Plumbing permits were issued for the removal of 3,703 frost proof and hazardous yard hopper-type toilets during the year. There were 3,955 properties connected to the sanitary sewerage system in 1948, making a total of 181,418 connections in the city.

Rodent Control

An environmental rodent control program on a block basis was initiated and included work in 33 blocks in four areas of the city. This service required 1,284 initial survey inspections. In addition, 1,881 complaints were investigated and 3,334 reinspections were made in the complaint and block-by-block studies. As a result of these investigations correction of 7,277 faulty conditions was secured. The study and report on the public market situation by representatives of the City Health Department working with the Department of Public Works, the Police Department and the Bureau of Markets resulted in the purchase of the special Dempster Dumpster equipment with bulk type refuse containers and truck-mounted hoist units for refuse disposal at the markets.

Prompt investigation was made of fourteen rat-bite cases which came to the attention of the City Health Department during the year to determine the nature and cause of the rat infestation, and immediate action was taken to eliminate the infestation and its causes. Mention has already been made of the representatives from fifteen cities in Maryland, Virginia and West Virginia and the representatives from interested trade organizations and industries who attended the two-day conference on rat control held on April 8 and 9. This conference stimulated widespread interest in environmental control and resulted in inquiries from several foreign countries and numerous cities in other states.

Biostatistics

The Statistical Section, working with the Maryland State Planning Commission, the City Department of Planning and the Baltimore County Planning Commission, submitted to the U. S. Bureau of the Census suggestions for additional census tracts in Baltimore City and the delimitation of census tracts in the surrounding metropolitan area. The new census

tracts were approved by the Census Bureau and will be used in the enumeration and tabulation of the 1950 census. The Street Location Index according to census tracts was revised and distributed to all persons interested in the allocation of records to census tracts.

The Statistical Section continued to cooperate with the Bureau of Research and Statistics of the City Department of Education and continued the study of the future school population of Baltimore as indicated from the analysis of birth registration and migration trends. The section assisted the Medical Care Section in setting up and organizing the recording and statistical procedures required in the establishment of the organized program of medical care for the recipients of public assistance of the City Welfare Department.

On December 1, 1948 Matthew L. Taback became Director of the Bureau of Biostatistics which will undertake active participation in providing statistical services to the various bureaus of the Health Department, paying particular attention to the definition of health problems and evaluating the results of control programs.

The director of the section participated in the Sixth International Conference for the Revision of the International Lists of Diseases, Injuries and Causes of Death at Paris, France in April as a member of the United States delegation to the Conference and as Vice-Chairman of the Expert Committee appointed by the World Health Organization for preparing the sixth revision of the international lists.

Vital Records

Private physicians, hospital superintendents and funeral directors cooperated and gave valuable assistance in the continued effort to improve the quality and accuracy of birth and death registration. A total of 45,621 transcripts of vital records was issued during the year as compared with 39,895 for the previous year. The increase of almost 5,000 transcripts of birth certificates was due largely to the demand for evidence by veterans for subsistence allowances and for entrance into trade and technical schools under the G.I. Bill of Rights. Official and private agencies received 5,612 verifications of birth records and 396 verifications of death records. A total of 5,896 verifications of birth records on the short-form statement-of-age card was furnished to minors for employment purposes, to children for admission to school and to participants in amateur athletic events sponsored by the Department of Recreation and Parks.

During the year there were 204 births placed on file by the delayed registration process. A systematic follow-up of unreported recent births resulted in 95 of them being placed on file. There were 4,507 interviews for corrections and for delayed registrations of birth. A total of 479 birth

records was replaced on the basis of legal adoption and an additional 180 received similar handling on the basis of legitimation. On December 1 the Commissioner of Health adopted a rule prohibiting the opening of caskets containing the disinterred remains of persons arriving in Baltimore City for burial.

Conclusion

The highlights of Baltimore's public health record for 1948 have been presented in this summary. In spite of difficulties which resulted from vacancies in certain key professional staff positions in the City Health Department the hygienic status of this large city has been maintained and in certain respects strengthened. The chief new advances were in the launching of the Baltimore City Medical Care Program for the recipients of public assistance and in establishing a long needed plan to improve the dental care of the school children.

There is no reason for the people of the city to continue to ignore the fact that there remain many fields of public health endeavor where the surface has barely been scratched in Baltimore. Industrial hygiene and the prevention of the occupational diseases is perhaps the best example. The slow process of achieving adequate appropriations may be inevitable, but it is hoped that with the support of the medical profession and of interested nonprofessional groups obvious and needed improvements in the total city health machinery may be added to the existing structure at a somewhat accelerated rate. Why should Baltimore be content to do without the public health protection that is possible?

Respectfully submitted,

Huntington Williams, M.D.

Commissioner of Health.

Baltimore, Maryland
May 1, 1949

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HEALTH DEPARTMENT PUBLICATIONS

BALTIMORE HEALTH NEWS, Monthly, 1948

TO RID THE HAIR OF HEAD LICE (Revised) (DDT powder)

MEDICAL CARE. A program for recipients of public assistance

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
Dorothy I. Allen, Secretary-Stenographer
Sadie E. Figg, Senior Stenographer
Helen von Wachter, Senior Stenographer
Anne P. Madden, Principal Addressograph Operator
Margaret Kaiser, 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, 1948.

ASSISTANT COMMISSIONER OF HEALTH

ASSISTANT COMMISSIONER OF HEALTH

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

Administrative activities during 1948 were conducted in close cooperation with the Commissioner of Health. Various assignments from the Commissioner of Health have become a routine responsibility of the Assistant Commissioner of Health, and several of the more important of these are mentioned below in detail. However, a major function was the day by day assignments from the Commissioner of Health which usually concerned such problems as field, office or personnel questions, or unexpected visitors, often requiring immediate action and special conferences.

Of the activities which are most definitely supervised from this office, the following represent the more significant ones:

1. Regular visits were made to the district health offices for conferences with the district administrative staff. These conferences occupy from one to two hours each and are an important factor in the establishment and maintenance of good working relationships between the administrative staff, the district health offices and the bureaus of the central office.
2. The arranging of schedules for visitors occupies considerable time of the Assistant Commissioner of Health, as well as of various bureau directors. The visitors as in previous years fall into three main groups:
   a. Representatives and groups from local organizations in and around Baltimore City who come for short visits to see certain activities in the Department. These groups come from public schools, private schools, boy and girl scout organizations, church organizations and boys' clubs.
   b. Workers from other health departments and allied official or nonofficial agencies in the United States.
   c. Visitors from foreign countries. This group comprised the largest single class of visitors and represented the following countries: Canada, China, Iran, India, Korea, Norway, Union of South Africa and Indo-China.

Expanding City Health Department programs requiring new personnel continued to present the problem of finding adequate space for workers' desks. The acuteness of the situation necessitated the removal of certain bureaus and divisions to quarters outside of the central headquarters building and during the year it was necessary to prepare quarters at 202 Guilford Avenue for the Division of Rodent Control and the Bureau of Meat Inspection.

Lecture schedules for junior students at the University of Maryland Medical School were prepared for classes in public health and hygiene and examinations were prepared and graded on conclusion of the lectures.

BUREAU OF HEALTH INFORMATION

BUREAU OF HEALTH INFORMATION

Isadore Seeman, M.P.H.

Director

On April 26 the health information service was given the status of a bureau when approval was granted by the City Service Commission and the Board of Estimates for the creation of the position of Director of the Bureau of Health Information.

Publications

The *Baltimore Health News* was published monthly and in addition to the regular distribution several issues which contained special articles were mailed to persons who requested them. The bureau complied with approximately 214 requests for 1,307 copies of the January-February number which included the "Outline Of Mental Hygiene In Maternal And Preschool Child Health For Public Health Nurses." Many of these requests resulted from favorable notices which the outline received in the New York State *Health News* column "Dr. Jones Says" and in the *American Journal of Public Health*. Other features published in 1948 issues included the report on the dental care program for school children, the medical care contracts, an article on the Eastern Health District studies and census surveys, unusual microphotographs of the head of a tapeworm taken in the Department laboratories, an article on the state's facilities for the treatment of tuberculosis, and a review of the Department's housing program.

A new leaflet for distribution to persons eligible for the Baltimore Medical Care Program was prepared and the instructional leaflet on the treatment for head lice was revised to include information on the use of DDT. More than 545,000 leaflets and other pieces of literature were distributed by the public health nurses, sanitarians and other Department personnel and through the leaflet racks throughout the city.

The "Saturday Letter To The Mayor" was prepared each week and received wide publicity in the city newspapers. These and other press releases resulted in a total of 403 articles covering 3,566 column inches, giving pertinent information on disease prevention.

Reprints of three articles written by Department staff members were sent to all of the physicians in the city. These papers included a special review article on "The Health Officer's Bookshelf" by the Commissioner of Health, a discussion of endemic typhus in Baltimore, and a paper written jointly by the Commissioner of Health and the Director of Welfare.

The ANNUAL REPORT for 1947 and the summary, *Guarding the Health of Baltimore*, were edited and followed through to publication. Copies of the summary were distributed to physicians in the city and to public health leaders throughout the country and abroad.

Television and Radio

On December 15 the first of a regular series of weekly television programs was presented over Station WMAR-TV under the joint auspices of the City Health Department and the Medical and Chirurgical Faculty of Maryland. This introductory telecast featured a discussion by the Mayor of Baltimore, the President of the Medical and Chirurgical Faculty and the Chairman of its Council, and the Commissioner of Health. Fifteen-minute dramatizations on subjects of interest in family and community health were presented on following weeks under the general title "Your Family Doctor," with the fictitious Dr. John Worthington as the central unifying character. The scripts were written by the bureau director who also enacted the role of Dr. Worthington.

The "Keeping Well" radio dramas featuring the fictitious Dr. Richard C. Ashley continued for the tenth year of drama broadcasts and the seventeenth consecutive year of regular weekly radio programs. This radio series is also sponsored jointly by the City Health Department and the state medical association.

Meetings, Film Services and Exhibits

Arrangements were made for speakers and for film showings at many meetings of community organizations. The bureau director spoke at several school assemblies and public meetings in addition to talks given as a part of Department in-service courses. The film "Journey Into Medicine" part of which was filmed with the assistance of the Department staff, was shown at a meeting of the section and bureau directors and to all of the public health nurses.

An exhibit on housing was prepared and displayed as a part of the general city exhibit "Baltimore Housing—Past, Present and Future." This display opened at the Peale Museum and later was seen at nine other locations throughout the city. Special exhibits were prepared for use at the Food Show and at the regional meeting of the American Association for Health, Physical Education and Recreation. Other exhibits were shown during special health observances and at community centers.

Special Celebrations

Health Week was observed in East Baltimore in connection with the chest X-ray survey sponsored by the Eastern Community Council in

March. Talks and film showing were arranged for nine meetings in the area and several exhibits were displayed. In December Community Week was celebrated locally and the Department participated actively on Health Day, December 13. Cooperation was given to local chapters celebrating nation-wide health observances and included programs for the March of Dimes, Syphilis Control Day, Heart Week, Cancer Control Month, Negro Health Week, Public Health Nursing Week, Child Health Day and the Tuberculosis Seal Sale.

Services to the Department

The Department library was maintained and interlibrary loans were arranged at the request of staff members. Editorial service was made available to the administrative staff. The printing of 216 Department forms was supervised.

Miscellaneous Activities

Many visitors to the Department were welcomed and the bureau program was discussed. More than 100 public school teachers in the city visited the chemical laboratory and were given a selected group of Department publications. Other persons who observed the activities of the bureau included students in the city's schools and foreign students of public health.

The director of the bureau served on a city-wide committee to prepare plans for a survey of adult education interests and activities in Baltimore.

Personnel

Isadore Seeman, M.P.H., Director
Dorothy Regina Kalben, R.N., B.S., Chief, Division of Publications
Bessie K. Sothoron, Senior Stenographer

TABLE NO. 1

SUMMARY OF EDUCATIONAL WORK DONE BY THE HEALTH DEPARTMENT IN 1948

Section or Bureau	Publications	Newspaper Publicity		Printed Material Distributed		Articles in Baltimore Health News	Addresses, Lectures and Seminars		Visual Education			Radio Broadcasts	Television Programs	Health Contests	Training of Department Personnel		Meetings Attended
		Articles	Column Inches	Requests	Pieces		Health Addresses	Persons Reached	Exhibits	Films, Slides	Persons Reached				Number of Meetings	Number of Persons	
Entire Department	30	403	3,566	34,813	545,045	30	592	27,019	47	82	74,390	64	5	1	422	5,202	1,691
Administrative Section																	
Commissioner of Health	5	30	202	150	5,000	4	150	5,000	..	..	..	10	1	..	40	500	350
Asst. Commissioner of Health	..	1	3	..	..	..	1	100	..	..	..	3	..	..	..	..	76
Health Information	..	12	103	727	188,781	2	6	1,695	40	56	30,595	2	1	..	1	50	150
Baltimore Health News	9	..	..	412	124,792	..	..	..	..	..	..	..	..	..	..	..	..
Rack Distribution	..	..	..	68	50,546	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	247	13,443	..	..	..	..	..	..	..	..	..	..	..	..
Laboratories	3	1	7	532	1,887	2	13	924	..	2	5	1	..	..	17	345	91
Eastern Health District	..	24	205	..	1,365	1	43	1,348	..	3	175	1	..	..	51	139	68
Western Health District	..	9	99	614	2,796	..	9	115	..	..	..	1	..	..	14	100	82
Druid Health Center	..	..	..	2,080	5,261	..	17	435	..	4	2,465	1	..	..	73	1,395	23
Southeastern Health District	..	21	160	4,330	5,165	..	26	690	..	1	10	..	..	..	3	30	52
Sydenham Hospital	..	4	40	18	1,180	1	..	..	..	..	..	1	..	..	..	..	16
Medical Section—Preventive																	
Communicable Diseases	1	21	100	559	36,571	..	19	1,316	..	..	..	10	2	..	8	158	15
Tuberculosis	1	57	481	..	..	2	14	560	..	..	..	5	..	..	2	2	93
Venereal Diseases	..	1	6	..	..	..	54	1,401	..	..	..	2	..	..	71	335	84
Child Hygiene	..	8	69	43	28,802	1	48	2,665	..	1	70	8	..	..	2	820	114
School Hygiene	1	3	26	..	..	..	..	..	..	..	..	3	..	..	..	..	..
Dental Clinics	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	17
Public Health Nursing	..	1	12	10,644	32,442	..	46	1,049	..	4	560	1	..	..	65	437	128
Medical Care Section																	
Administration	2	31	344	60	6,304	3	7	1,135	..	..	..	1	..	..	5	30	3
Sanitary Section																	
Administration	2	30	372	249	1,029	..	12	596	..	..	..	7	..	..	2	37	60
Milk Control	..	21	175	186	297	..	11	389	..	..	..	..	..	1	2	35	26
Food Control	2	11	114	3,224	5,691	..	42	1,737	2	..	35,000	3	..	..	2	19	140
Meat Inspection	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
Environmental Hygiene	3	55	745	1,170	17,693	3	59	5,714	5	11	5,510	3	1	..	55	720	60
Statistical Section	1	62	303	9,500	16,000	10	15	150	..	..	..	1	..	..	9	50	300

TABLE NO. 2

RADIO DRAMAS BROADCAST UNDER THE JOINT AUSPICES OF THE BALTIMORE CITY HEALTH DEPARTMENT AND THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, 1948

"KEEPING WELL" SERIES

DATE	TITLE	SUBJECT
January 1	Wanton Waste	Food conservation
8	Keep It To Yourself	Colds and influenza
15	Silent Killers	Heating hazards
22	Second Call	Entering school in February
29	Keep 'em Marching	March of Dimes
February 5	Still Fighting	Syphilis Control Day
12	Have A Heart	Rheumatic fever
19	Take It Easy	Automobile accidents
26	The Chill That Kills	Pneumonia
March 4	The Hidden Scar	Tuberculosis
11	Outposts Of Health	Health districts
18	Take No Chances	Maternity hygiene
25	The Straw Of Life	Sydenham Hospital
April 1	Facts Fight Cancer	Cancer
8	The Future Is Today	Negro Health Week
15	Going My Way	Public Health Nursing Week
22	House Of Peril	Home accidents
29	Hard To Swallow	Mumps
May 6	A Fair Chance	Child Health Day
13	Too Young	Measles
20	Danger—Ticks Ahead	Ticks
27	Avoirdupois	Overweight
June 3	Perishable	Home care of food
10	No Regrets	Vacation hazards
17	Dangerous Waters	Typhoid fever
24	Cool And Content	Infant care in hot weather
July 1	Stop, Look, Listen	Motor vehicle accidents
8	Hope For Health	Self-medication
15	The Uninvited Pest	Insects
22	The Searchers	Laboratory services
29	Heart Menace	Rheumatic fever
August 5	Disease Detectives	Epidemiology
12	Pressure It	Home canning
19	Get Them Ready	Getting ready for school
26	Screening Test	Tuberculosis
September 2	Midday Treat	School lunches
9	Prove It	Birth certificates
16	Block By Block	Rodent control
23	Firing Up	Heating hazards
30	Double Check	False positive blood test
October 7	Medical Inventory	Medical examination
14	Medical Care	Medical care
21	Neighborhood Service	Health district buildings
28	A Good Beginning	Prenatal care
November 4	Mother's Blood	Rh factor
11	Find Tuberculosis	Tuberculosis case finding
18	Treat Tuberculosis	Tuberculosis hospital care
25	Back At Work	Tuberculosis Seal Sale
December 2	Be A Good Santa	Home accidents
9	Got The Sniffles	Colds
16	Danger Under Three	Measles
23	Just A Touch Of Flu	Influenza
30	Complications	Pneumonia

BUREAU OF LABORATORIES

BUREAU OF LABORATORIES

Clinton L. Ewing

Director

Requests for routine diagnostic laboratory services increased slightly in 1948. Certain problems that developed during the year were related to the shortage of professional personnel and competent helpers. There were eight resignations in 1948, one less than in the previous year. Replacements were fairly prompt, but there were still three vacancies at the close of the year.

Assistance of an emergency nature was given to the biological laboratory of a large Baltimore hospital. Because of acute personnel shortages that developed in the latter part of 1947, the hospital was unable to make any laboratory tests for tuberculosis. In the first six months of 1948 a total of 1,694 specimens of sputum, gastric washings, urine and exudates was submitted to the city bureau for laboratory examinations.

Diagnostic and Other Services

Demands for routine services involved 243,240 examinations of 153,288 specimens and samples. Of these totals, 200,207 examinations of 137,100 specimens were made to assist in the diagnosis and control of communicable diseases; and 11,148 bacteriologic and 31,885 chemical examinations were made of 16,188 samples of milk and food products and industrial or other materials. The number of examinations increased by 5.4 per cent over the 1947 record.

Medical Bacteriology and Serology

Considerable interest has been stimulated in the problem of brucellosis as a result of the isolation of *Brucella suis* from blood specimens from employees of local meat packing plants. Improvements in laboratory procedures and the apparent increase in the incidence of the disease have expanded this type of service.

The low incidence of diphtheria in 1948 resulted in a marked decrease in the number of specimens submitted for diphtheria examinations. A total of 4,513 microscopic tests and 226 virulence tests was made on 1,240 specimens. In 1947, 2,751 cultures were submitted and there were 6,717 microscopic studies and 773 virulence tests made.

STS work likewise decreased in 1948. The 108,336 specimens of blood and spinal fluid submitted for syphilis serology represented a decrease of 2.2 per cent in comparison with the number submitted in 1947. Of the total

specimens received, 106,505 were blood and 1,831 were spinal fluid. However, there was a slight increase in the number of titre or quantitative tests with a total of 17,343 such tests made in 1948. The distribution of the sources of specimens for STS for the last ten years is shown in Table No. 8.

Although there were 15 more animals tested for rabies in 1948 than in 1947, none was positive. This is the first year since 1944 when no positives were obtained. In the period from 1931 to 1943, inclusive, the city was apparently free of rabies. In 1944, however, 5 dogs were found to be positive; in 1945, 16 were positive; in 1946, 17 were positive and 2 were positive in 1947.

An increase of 3,837 specimens for examination for tuberculosis and of 50 blood cultures was observed. Decreases of 154 blood specimens for agglutination tests and 76 fecal specimens were also recorded.

Activities of the approval service laboratory were expanded during 1948. In addition to maintaining its monthly STS survey of hospital and private laboratories in the city, 5,131 tests were made of 1,819 blood specimens and 1,777 tests of 1,831 spinal fluid specimens. These figures represent an increase of 95.2 per cent in blood specimens and a decrease of 2.5 per cent in spinal fluid specimens in comparison with 1947. Other special types of work included 716 agglutination tests for infectious mononucleosis, complement fixation tests on 47 blood specimens for endemic typhus, and examination of 54 blood specimens for Rocky Mountain spotted fever and 16 specimens for ornithosis.

This special serology service laboratory and the routine serology laboratory participated in the Maryland State-Wide Serology Survey conducted by the Bureau of Bacteriology of the State Department of Health. The survey, which began in December when 70 specimens were received, will be continued in 1949 until approximately 200 specimens have been tested. In addition to the City Bureau of Laboratories, 12 hospital and 3 private laboratories located in Baltimore are also participating in the study.

Assistance was given Dr. Robert J. Huebner of the National Institutes of Health in a study of rickettsial antigens. A total of 175 positive STS specimens was sent to Dr. Huebner's laboratory, where complement fixation tests were made with various rickettsial antigens. Dr. Huebner reported that no false positive reactions were obtained on any of the specimens.

Routine gonococcus laboratory services involved the examination of 4,997 smears and 7,316 cultures, representing a decrease of 40.8 per cent in smears and an increase of 39.8 per cent in cultures in comparison with the work performed in 1947. The striking decrease in smears is attributed to the marked reduction in the number of such specimens submitted by the venereal disease clinics. Culturing services were made available to all of the

Department clinics and to a few practicing physicians. The increase in this latter activity more than offsets the decrease in smear examinations because of the more involved procedures.

Sanitary Bacteriology

There were 11,148 examinations made of 8,115 samples of milk and dairy products, water, sea food, food utensil swabbings and miscellaneous materials representing increases in comparison with work done in 1947 of 6.6 per cent in examinations and 11.4 per cent in samples.

For the fourth consecutive year, assistance was given to the Bureau of Sewers in a study of the discharge of effluent into Back River. In the period from April 20 to October 19, inclusive, a total of 197 samples of river water was tested for coliform bacteria.

Although many samples of food were submitted in 1948 relatively few were received as part of food poisoning outbreak investigations. Four outstanding outbreaks requiring laboratory assistance occurred in 1948: The first was in March when enterotoxin-producing staphylococci were isolated from a sample of roast beef; the second outbreak was in July and involved a salmon salad in which tremendous numbers of coliform bacteria were found; in the third outbreak in November *Salmonella enteritidis* was isolated from each of two samples of raw hamburger; the last study, also in November, was concerned with an outbreak in which a variety of food samples were examined and found to contain staphylococci and in addition a turkey salad was found to contain large numbers of coliform bacteria as well as the staphylococci.

Chemistry

Despite personnel changes and protracted vacancies, the Division of Chemistry made 31,885 examinations of 10,821 samples submitted, principally by the bureaus of the Sanitary Section. These figures represent increases of 15.4 per cent in examinations and 5.1 per cent in samples when compared with the 1947 record.

A total of 7,788 samples of milk and dairy products was examined during 1948, an increase of 298 samples. In the testing of these samples, deviations from chemical standards were observed as follows: Butterfat deficiency in 83 samples; excessive sediment in 23 samples; chlorine rinse water in 4 samples and in one instance raw milk was being used in the preparation of soda fountain beverages. Only three samples of bottled milk were found to be improperly pasteurized in the examination by the phosphatase test of 5,611 samples, and one of the positive results represented a repeat specimen. The total number of samples tested by this procedure represents an increase of 12 per cent over 1947.

Microanalyses for filth were made of 85 per cent of 675 miscellaneous food samples submitted by the Bureau of Food Control. Such filth as rodent contamination and insect infestation was found in 40 per cent of 576 samples collected from 306 local establishments including, principally, bakeries and confectioners.

The examination of 528 specimens of blood for the presence of lead as an aid in the diagnosis of lead poisoning represented an increase of more than 50 per cent in this type of work over the previous year. These specimens constituted the largest number tested in any year since the service was instituted in 1935. Fourteen hospitals and 48 private physicians submitted blood specimens from 197 adults and 150 children. Abnormal amounts of lead were detected in specimens from 56 adults, more than half of whom were occupied in enamel-ware manufacture and in the fabrication of lead-coated wire. Lead in excessive amounts was also found in specimens from 46 children and of these 4 died of lead poisoning. The number of children showing abnormal absorption of lead is more than twice the number for 1947, and more than three times the average for the past twelve years. In addition, 37 samples of paint scrapings from surfaces that had been chewed by children were submitted for lead test coincident with investgations of lead poisoning in children.

Studies of industrial hazards included the testing of 58 air samples collected in connection with such activities as lead arsenate manufacture, sanding of bronze, fabrication of lead-coated wire, use of permograph paper and the manufacture of enamel frit. Forty other samples of air, dusts and solvents submitted by the Division of Industrial Hygiene were examined for hazardous chemicals such as lead, trichloroethylene, selenium, free silica, hydrogen sulfide, methyl chloride and carbon tetrachloride.

The Chief of the Division of Chemistry continued his after-hour emergency consulting service to the medical staffs of several hospitals. A number of emergency telephone calls were received concerning the composition of materials accidentally swallowed by young children. Among the substances involved were fly spray, floor wax, camphorated oil, castor oil, oil of bergamot, ink, rat bait, suppositories, matches and laundry bleach.

Biologicals

Requests for antitoxins, vaccines, sera and other biologicals decreased in 1948. A total of 25,122 packages was distributed, which was 8.2 per cent less than the amount for 1947. Demands for diphtheria antitoxin declined from 21,180,000 units in 1947 to 13,970,000 units in 1948, a decrease of 7,210,000 units. Distribution of alum-precipitated diphtheria toxoid increased by 2,189 c.c. while diphtheria toxoid combined with pertussis

vaccine decreased by 2,030 c.c. The total amount of combined and uncombined toxoid distributed involved 70,430 c.c.

Immune Serum Globulin for Measles Control

The city-wide outbreak of measles that began in March was responsible for the tremendous demands for immune serum globulin. A total of 17,042 c.c. was distributed, representing an increase of 16,612 c.c. over 1947. In 1946, a total of 3,812 c.c. was given out. This biological is a fraction or by-product of human blood and is supplied free to the City Health Department by the American Red Cross. The globulin is made from the surplus blood plasma left from World War II.

Other Biologicals

Epidemic typhus vaccine was made available in July, on a limited basis, for use in inoculating persons who planned to travel in foreign countries where this disease was prevalent.

A total of 208 cases or 2,550 units of Army surplus dried blood plasma was distributed to local hospitals. This amount was 21 cases or 198 units less than the amount withdrawn in 1947. This biological is likewise provided by the American Red Cross for free distribution to hospitals and physicians.

Increased demands were noted for tetanus toxoid, penicillin, tuberculin patch tests, Rocky Mountain spotted fever vaccine and typhoid-paratyphoid vaccine. Decreases were recorded for silver nitrate solution, typhoid vaccine and anti-pertussis rabbit serum.

Special Investigations

A survey of spinal fluid laboratory procedures which began in November, 1947 and in which the bureau was participating, was continued through March, 1948. As a result of the resignation of Dr. Thomas W. Farmer of the Johns Hopkins Hospital staff who was in charge of the study, the survey was discontinued, although plans had been made by Dr. Joseph E. Moore to continue it during subsequent months. Five laboratories collaborated in testing portions of 25 specimens of spinal fluid. Tests made on these specimens included colloidal mastic, complement fixation, flocculation and total protein. The number of specimens tested was insufficient to draw any definite conclusions, but the results obtained in the bureau agreed, in general, with the tests made in the other laboratories. It is hoped that the study will be reactivated in 1949.

In collaboration with the Bureau of Venereal Diseases, a study was made to determine the practical therapeutic dose of procaine penicillin in the treatment of gonorrhea. Cultures and smears were made for gonococci on

252 clinic patients with clinical gonorrhea and as a result, the dose used in the Department clinics was reduced to 75,000 units.

Because of the apparent lack of information on the quantity of lead ingested by children who develop lead poisoning, an investigation was conducted in the Division of Chemistry on this problem. Quantitative examinations were made of samples of paint scrapings collected from the homes of children who were made ill after chewing on window sills. In seven nonfatal cases studied, areas of paint equivalent in size to those apparently chewed by the children contained an average of 126 mg. of lead.

Another study related to the development of a modified Loeffler's blood serum medium for growing diphtheria bacilli. This work was done by T. C. Buck, Jr., Assistant Director, and a paper on the findings has been prepared.

Other studies included work on: A modified flocculation test for syphilis, reasons for variations in titre STS, the effect of aureomycin on the growth of the tubercle bacillus, methods for determining butterfat in homogenized milk, preparation of a chart useful in the analysis of homogenized milk (to be published), a field test for differentiating methyl chloride and freon in refrigerants, effect of the type of can opener on the metal fragment contamination of canned foods, heavy metal content of carbonated water and improvements in methods for the detection of filth in food.

The Division of Chemistry also compiled data concerning the possible health hazard associated with exhaust fumes from Diesel buses on city streets and on the use of isopropyl alcohol as a substitute for grain alcohol in skin disinfection. The division also participated in a collaborative study of a method for the determination of lead in air conducted by the American Conference of Governmental Industrial Hygienists.

Personnel

Clinton L. Ewing, Director
Theodore C. Buck, Jr., Assistant Director
Emanuel Kaplan, Sc.D., Chief, Division of Chemistry
Katherine E. Welsh, Principal Bacteriologist
Melissa P. Mann, Senior Bacteriologist
Mabel G. Miller, Senior Bacteriologist
Katherine Shea, Senior Bacteriologist
Ruth Sullivan, Senior Bacteriologist
Rudolpha Turner, Senior Bacteriologist
Irmgard L. Wolf, Senior Chemist
Mary McManus, Junior Bacteriologist
Evelyn Medwedeff, Junior Bacteriologist
James Roy Troxel, Junior Bacteriologist
Bryd G. Wenke, Junior Bacteriologist
Robert Shaull, Junior Chemist
Nadine A. George, Laboratory Assistant
Louise B. Hitchcock, Laboratory Assistant

Mary M. Moran, Laboratory Assistant
Ruth A. Peterman, Laboratory Assistant
Harry L. Carman, Principal Clerk
John A. Wheeler, Principal Clerk
Edwina Auman, Senior Stenographer
Kathryn H. Hiltner, Senior Stenographer
Frieda Ernst, Senior Clerk
Laura B. Grim, Senior Clerk
Marie R. Guckert, Senior Clerk
M. J. Doonan, Senior Storekeeper
James L. Mitchell, Stockhandler
Warren Barnes, Chauffeur
Raymond Buettner, Laborer
Thomas H. Hale, Laborer
George H. Johnson, Laborer
Michael Madigan, Laborer
Louis Svatora, Laborer

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	553	225	238	80	10
Biochemic					
Lead					
Blood	528	204	234	80	10
Urine	17	17	..	..	..
Arsenic					
Hair	2	1	1	..	..
Nail	1	1	..	..	..
Urine	5	2	3	..	..
PNEUMONIA					
Total	3	2	1	..	..
Blood, culture	1	1	..	..	..
Sputum					
Culture	1	..	1	..	..
Microscopic	1	1	..	..	..
RABIES					
Total	136	..	134	1	1
Animal inoculation					
Brain emulsion	68	..	68	..	..
Microscopic					
Animal brain	68	..	66	1	1
STREPTOCOCCUS INFECTIONS					
Total	34	21	13	..	..
Culture					
Blood	15	15	..	..	..
Exudate	3	2	1	..	..
Sputum	2	2	..	..	..
Swab	13	1	12	..	..
Urine	1	1	..	..	..
SYPHILIS					
Total	135,246	45,139	87,554	2,023	530
Biochemic					
Globulin	1,799	221	1,568	..	10
Gum mastic	1,779	132	1,636	..	11
Total protein	834	834	..	..	..
Complement-fixation					
Eagle					
Blood	1,746	565	977	204	..
Spinal fluid	1,777	150	1,505	88	34
Flocculation					
Eagle					
Blood	106,505	24,520	80,447	1,063	475
Kahn, Standard					
Blood	1,296	432	707	157	..
Kline diagnostic					
Blood	1,805	737	635	433	..
Mazzini					
Blood	284	127	79	78	..
Titre	17,421	17,421	..	..	..

TABLE NO. 2—Concluded

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY TYPE AND RESULT OF EXAMINATION

TYPE OF EXAMINATION	TOTAL	POSITIVE	NEGATIVE	DOUBTFUL	UNSATISFACTORY
TRICHOMONIASIS					
Exudate, microscopic	224	185	39	..	..
TUBERCULOSIS					
Total	11,807	1,469	9,127	212	999
Animal inoculation					
Exudate	21	4	17	..	..
Sputum	9	..	9	..	..
Stomach lavage	7	..	7	..	..
Urine	80	7	73	..	..
Culture					
Exudate	30	2	21	..	7
Sputum	304	35	264	..	5
Stomach lavage	476	37	390	..	49
Urine	23	2	17	..	4
Microscopic					
Exudate	75	7	63	2	3
Sputum	9,956	1,324	7,513	192	927
Stomach lavage	751	35	697	18	1
Urine	75	16	56	..	3
TULAREMIA					
Total	154	3	151	..	..
Agglutination					
Blood	153	3	150	..	..
Cat, for observation	1	..	1	..	..
TYPHUS GROUP					
Total	1,690	24	1,614	50	2
Agglutination					
Blood					
Proteus OX_2	795	11	754	30	..
Proteus OX_{19}	794	3	775	16	..
Complement-fixation					
Blood					
Endemic typhus	47	4	42	1	..
Rocky Mountain spotted fever	54	6	43	3	2
VINCENT'S INFECTION					
Exudate, microscopic	45	22	18	5	..
OTHER EXAMINATIONS					
Total	89	68	17	2	2
Biochemic	6	5	1	..	..
Culture	67	61	5	..	1
Serologic					
Ornithosis (complement-fixation)	14	2	9	2	1
Psittacosis (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 agglutination tests	3,078	229	2,459	390	..
Salmonella typhosa	1,957	170	1,476	311	..
Salmonella choleraesuis	45	..	45	..	..
S. paratyphi and *schottmuelleri*	979	56	852	71	..
Salmonella enteritidis	20	3	12	5	..
Shigella dysenteriae polyvalent	77	..	74	3	..

BACTERIOLOGIC TESTS

Total tests	2,333
Positive results	62
Alcaligenes faecalis	13
Bacterium aerogenes (type I)*	2
Bacterium coli (type I)*	9
Intermediate Coliform (type II)*	3
Proteus mirabilis	1
Pseudomonas aeruginosa	3
Pseudomonas pavonacea	2
Salmonella sp. (type Bareilly)	1
Salmonella abortivoequina	1
Salmonella enteritidis	1
Salmonella typhisuis	2
Salmonella typhosa	10
Shigella alkalescens	2
Shigella paradysenteriae	2
Shigella pfaffii	1
Shigella sonnei	2
Unidentified Paracolon	1
Unidentified Salmonella	6
Negative results	2,191
Unsatisfactory results	80

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

All others taken from *Bergey's Manual of Determinative Bacteriology*, Sixth Edition, 1948.

TABLE NO. 4
BIOLOGICALS DISTRIBUTED TO PHYSICIANS, HOSPITALS AND INSTITUTIONS

PRODUCT	NUMBER OF PACKAGES	BASIC CONTENT	TOTAL AMOUNT
Total	25,122		
Diphtheria biologicals			
Antitoxin	744	Unit	13,970,000 units
Toxin for Schick test	37	Test	370 tests
Toxin for Schick test control	26	Test	260 tests
Toxoid, alum precipitated	3,318	Cubic centimeter	33,180 c.c.
Toxoid, fluid	4	Cubic centimeter	93 c.c.
Conjunctival tests			
Horse serum	33	Test	264 tests
Rabbit serum	102	Test	816 tests
Influenza meningitis diagnostic serum type A	2	Test	6 tests
Influenza meningitis diagnostic serum type B	24	Test	72 tests
Influenza meningitis therapeutic serum type B	143	Milligram	3,575 m gm.
Measles			
Immune serum globulin	3,597	Cubic centimeter	17,042 c.c.
Penicillin	2,063	Unit	1,908,100,000 units
Pertussis biologicals			
Pertussis vaccine and diphtheria toxoid combined	3,725	Cubic centimeter	37,250 c.c.
Antipertussis serum (rabbit)	162	Cubic centimeter	648 c.c.
Plasma, human dried	214	Unit	2,409 units
Rocky Mountain spotted fever vaccine	578	Cubic centimeter	2,312 c.c.
Scarlet fever biologicals			
Antitoxin	3	Unit	27,000 units
Antitoxin for Schultz-Charlton test	3	Test	15 tests
Toxin for Dick test	9	Test	180 tests
Toxin for permanent immunity	1	Skin test dose	1,431,500 s.t.d.
Silver nitrate solution, one per cent	537	Ampule	1,362 ampules
Smallpox vaccine	7,276	Tube	36,380 tubes
Tetanus biologicals			
Antitoxin	436	Unit	846,500 units
Toxoid, alum precipitated	322	Cubic centimeter	3,220 c.c.
Tuberculin biologicals			
Koch's old	426	Cubic centimeter	2,130 c.c.
Patch test	675	Test	5,464 tests
Typhoid vaccine	288	Cubic centimeter	3,229 c.c.
Typhoid-paratyphoid vaccine	331	Cubic centimeter	3,989 c.c.
Typhus vaccine (endemic)	3	Cubic centimeter	60 c.c.
Typhus vaccine (epidemic)	10	Cubic centimeter	20 c.c.

TABLE NO. 5
SUPPLY MATERIALS AND OUTFITS PREPARED AND DISTRIBUTED

Glassware and material cleaned (units)	1,156,025
Sterilized	593,200
Bottles	49,989
Petri dishes	95,312
Pipettes	231,232
Tubes	211,947
Miscellaneous	4,810
Media prepared	
Liters	1,726
Bottles	15,765
Petri dishes	21,562
Tubes	64,785
Outfits	
Prepared	150,032
Distributed	145,683
Culture stations	1,69[illegible]
Health districts	76,15[illegible]
Laboratory	67,875
Water distilled (gallons)	1,620

TABLE NO. 6

FOOD AND OTHER SAMPLES SUBMITTED FOR BACTERIOLOGIC ANALYSIS AND EXAMINATIONS PERFORMED

TYPE OF SAMPLE	NUMBER OF SAMPLES	NUMBER OF TESTS
Total	8,115*	11,148
Cream, pasteurized (dairy, store, truck)	361	
Plate count	..	362
Microscopic count	..	3
Cream, raw	2	
Plate count	..	2
Equipment for sterility (bottles)	255	
Plate count	..	255
Food Products	59	
Plate count	..	37
Microscopic count	..	2
Coliform count	..	25
Special tests	..	75
Food poisoning	37	
Culture tests	..	5
Plate count	..	21
Special tests	..	118
Ice cream	602	
Plate count	..	602
Milk, pasteurized (dairy, store, truck)	1,586	
Plate count	..	89
Coliform count	..	2,073
Milk, chocolate, pasteurized	199	
Plate count	..	199
Milk, raw (batch, certified, shipper)	835	
Plate count	..	835
Microscopic count	..	126
Swabbings from utensils and equipment	1,910	
Plate count	..	1,910
Coliform count	..	20
Special tests	..	23
Water	2,269	
Plate count	..	541
Coliform count	..	3,166
Special tests	..	659

* Of this number, 5,232 samples were submitted for bacteriologic examination only; the other 2,883 samples were submitted for bacteriologic and chemical analysis.

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	10,821*	31,885
Body fluids and excreta	1,399	
Lead test	..	1,637
Total protein	..	1,563
Unclassified biochemic tests	..	97
Dairy products (milk, cream, chocolate milk, ice cream)	7,788	
Butterfat test	..	7,071
Refractive index (added water)	..	364
Phosphatase test	..	12,153
Sediment test	..	1,076
Unclassified tests	..	1,098
Food products	675	
Filth test (rodent and insect infestation)	..	1,781
Adulteration test	..	193
Decomposition tests	..	142
Unclassified tests	..	100
Miscellaneous samples (air, dusts, solvents, sterilizing solutions, etc.)	202	
Industrial poison tests	..	831
Unclassified tests	..	561
Solutions and Outfits	346	
Unclassified tests	..	2,786
Water samples	411	
pH	..	291
Sanitary analysis	..	141

* Of this number, 8,073 samples were submitted for chemical analysis only; the other 2,748 samples were submitted for bacteriologic and chemical analysis.

TABLE NO. 8

BLOOD AND SPINAL FLUID SPECIMENS FOR STS BY SOURCE—1939-1948

YEAR	NUMBER OF PHYSICIANS SUBMITTING SPECIMENS	NUMBER OF SPECIMENS					PERCENTAGE DISTRIBUTION				
		Total	Source				Total	Source			
			Physicians	Clinics	Hospitals	Commercial Firms		Physicians	Clinics	Hospitals	Commercial Firms
1948	707	108,336	42,407	35,591	14,916	15,422	100.0	39.1	32.9	13.8	14.2
1947	701	110,770	46,680	32,131	16,140	15,819	100.0	42.1	29.0	14.6	14.3
1946	784	121,939	46,295	32,611	19,194	23,839	100.0	37.9	26.8	15.8	19.5
1945	526	102,214	38,118	21,412	16,767	25,917	100.0	37.3	20.9	16.4	25.4
1944	504	91,249	36,406	21,608	11,281	21,954	100.0	39.9	23.7	12.3	24.1
1943	565	99,508	38,181	17,872	4,798	38,657	100.0	38.4	17.9	4.8	38.8
1942	633	153,877*	32,522	15,551	6,583	48,098	100.0	21.1	10.1	4.3	31.3
1941	650	106,251	27,563	14,551	64,137		100.0	25.9	13.7	60.4	
1940	615	63,687	21,184	13,669	28,834		100.0	33.3	21.5	45.2	
1939	595	55,514	18,961	13,145	23,408		100.0	34.2	23.7	42.1	

* Total includes 51,123 specimens from Selective Service Registrants or 33.2 per cent.

EASTERN HEALTH DISTRICT

EASTERN HEALTH DISTRICT

George A. Silver, M.D., M.P.H.

Health Officer

Acute Communicable Diseases

Measles was the outstanding communicable disease in the Eastern Health District this year, with a recorded total of 1,248 cases, as compared with 28 cases for 1947. Immune globulin, made freely available without charge to all practicing physicians by the Bureau of Laboratories was widely used. It is gratifying to note that there were no deaths from measles in the Eastern Health District in 1948. Diphtheria declined to 5 cases, as compared with 20 in the year before, and there were no deaths from diphtheria this year. Other communicable diseases also showed sharp decrease, particularly whooping cough, which dropped from 508 to 144 cases. Table No. 3 lists the cases of communicable disease reported in the Eastern Health District in 1948.

Venereal Diseases

The venereal disease service at Somerset Health Center continued active and of approximately the same volume as last year. Total visits to the clinic for 1948 numbered 12,881, as compared with 13,054 for 1947. However, there was an average of 229 new admissions per month, as compared with 170 per month for 1947. The total for new admissions during the year was 2,753. This reflected the fact that while the number of new syphilis cases diagnosed this year was just about the same as last year, there was a 33 per cent increase in new cases of gonorrhea diagnosed this year. A new children's clinic for diagnosis and treatment of congenital syphilis was opened in June, and operated successfully throughout the remainder of the year. Contact investigations by the district nursing staff resulted in the discovery and follow up of a larger proportion of contacts than ever before. Admission of Eastern Health District residents for in-patient care for venereal disease at the Baltimore Rapid Treatment Center and other institutions decreased slightly.

Tuberculosis

Tuberculosis continued to be a very heavy source of cases for home visiting and the nurses made a total of 3,555 home visits to cases of tuberculosis and contacts of such cases in the district. However, active caseloads averaged 500 each month with 21 new admissions per month, as compared with last year's 436 cases per month with 20 new admissions. The chest

X-ray screening clinic examined 5,943 persons in 1948, 560 more than in 1947. Of this number, 65 per cent were white and 35 per cent were colored. Routine pre-employment X-ray examinations for business firms and for city, state and federal offices that arranged for such examinations accounted for 41 per cent of all films taken. Women registered in the Health Department prenatal clinics accounted for 18 per cent of the X-rays taken, 16 per cent were for contacts of cases of tuberculosis, and 24 per cent were on referral by private physicians or came in of their own accord. Of the total films, 181 or 3 per cent were positive or suspicious and resulted in finding 9 new cases of tuberculosis previously unknown to the City Health Department.

School Hygiene

The Eller-Astoria Plan of school health supervision continued in operation very successfully in School No. 27. In all, 4,728 school children of the first and third grades in public and parochial schools were examined, and about 40 per cent were found to have defects. It is not possible to estimate the proportion of these defects that were corrected after reporting, because the parent rarely notifies the nurse or school health service when a defect is corrected. Because of the great prevalence of dental defects which constitute the major source of all defects in school children, it would appear that a dental care program such as is now in the process of organization would be very useful.

Other Services

There were 13,446 visits to the five child hygiene clinics in the district, or about 1,000 more visits than last year. The three prenatal clinics had a total of 3,760 visits reported, also about 1,000 more visits than in 1947. These figures indicate the increasing demand for child hygiene and prenatal services.

The Mother's Advisory Service, a mental hygiene clinic facility, had 44 new patients and continued supervision of 145 patients under the direction of Dr. Marcia Cooper, of the Johns Hopkins School of Hygiene and Public Health.

The nursing service of the Eastern Health District played an important and active part in all of the functions described in this report. Despite heavy schedules of home visiting and clinic work, there was active participation in teaching activities. The plan to stimulate and encourage young qualified staff nurses to take part in supervisory activities has been continued in 1948.

Research

The Syphilis Study, which has been going on since 1932, and the Mental Hygiene Study, which began in 1934, continued throughout the year. A

monograph by Dr. Cooper on the Eastern Health District experiences was published by the Society for Research in Child Development. Several other papers were also published on Eastern Health District experiences this year, including one on chronic illness by the Milbank Memorial Fund, and one by the Syphilis Study Group at the Johns Hopkins School of Hygiene. The nutritional deficiency study initiated by the School's Department of Biochemistry with the cooperation of the district staff was discontinued with the departure of the Professor of Biochemistry in June.

Teaching

There were 9 candidates for the Master of Public Health degree from the School of Hygiene who observed district activities and attended discussions and seminars on general problems in public health administration. In addition, several students of the School completed special studies involving the use of district data. Senior medical students of the Johns Hopkins School of Medicine attended lectures and observed activities in the district on two mornings of each quarter as part of their course in preventive medicine. There were 32 nurses, newly appointed to the staff of the City Health Department, who attended a seven-week orientation course in the district before assignment to duty in the Department. Students from the Johns Hopkins and Sinai Hospital Schools of Nursing, 17 in number, also completed a course of seven weeks training in the district during the year. Dr. Harry L. Chant, Director of the Medical Care Clinic of the Johns Hopkins Hospital, gave a series of 14 lectures on "Public Health Practice" at the Church Home and Hospital, and 6 lectures on the "Philosophy and Development of Health Services to the Public" to the freshman class of the Johns Hopkins Hospital School of Nursing. Seminars in venereal disease, mental hygiene and tuberculosis and monthly staff meetings were introduced as part of the in-service nurse training schedule.

Visitors

A number of distinguished public health workers who visited the City Health Department or the Johns Hopkins School of Hygiene were guests in the district this year. Among the countries represented were China, Ecuador, England, India, Indo-China, Korea, Norway, Palestine, Scotland Union of South Africa, Sweden, and Yugoslavia, as well as the United States.

Personnel

In May, Dr. Konstantin Sparkuhl, the Assistant District Health Officer, left to take a position as District Health Officer in Los Angeles, California.

The vacancy in this position has not been filled. In June, the Health Officer, Dr. Harry L. Chant, left to take up duties as Director of the Medical Care Clinic of the Johns Hopkins Hospital under the new Baltimore City Medical Care Program. With the appointment of Dr. George A. Silver as the new District Health Officer in September, a departure in Eastern Health District administration was made. Since 1932, when the district was organized by the Baltimore City Health Department in a cooperative arrangement with the Johns Hopkins School of Hygiene and Public Health and the Rockefeller Foundation, the District Health Officer has been acting for the city without compensation by the Health Department. This year the full time Health Officer of the district is on the City Health Department payroll, initiating the long-planned assimilation of all non-official personnel into the City Health Department organization.

Personnel

George A. Silver, M.D., M.P.H., Administrative Health Officer
Hugh P. Hughes, M.D., Health Officer
E. Ellsworth Cook, Jr., M.D., Health Officer
Winifred N. Palmer, M.S., Supervisor of Public Health Nursing
Mary I. Streckfus, Assistant Supervisor of Public Health Nursing
Gertrude Boquist, B.S., Assistant Supervisor of Public Health Nursing
Marjorie J. Kvarnes, B.S., Assistant Supervisor of Public Health Nursing
Anne Poore, B.S., Assistant Supervisor of Public Health Nursing

Public Health Nurses

Josephine Barnett, B.A.
Ruth C. Bracken, B.A.
Virginia Creswell
Theresa Endres
Freda W. Fletcher
Ellen Foster
Mildred E. Foster, B.S.
Margaret Galbreath, B.S.
Mildred L. Gambrill
Annette Houck
Gladys Johnson
Ruth E. Jones
Elizabeth L. Kephart
Juanita W. King
Mary B. Lanahan
Bettymae Miller
Grace P. Orr
Clara C. Plichta
Elizabeth Quinlin
Wilda Snyder, B.S.
Jean R. Stine, B.S.
Shirley V. Stockin, B.S.
Marie T. Taneyhill
Jeanette Thompson
Peggy S. Ward
Pearl W. Winston
Carmella Zito, B.S.

Lorraine D. Livingston, Acting Chief Clerk
Vivian C. Berman, Junior Stenographer
Dorothy Johnson, Junior Stenographer
Regina Spear, Secretary
Anna Jansky, Janitress
William Richardson, Janitor

TABLE NO. 1

RESIDENT BIRTHS, EASTERN HEALTH DISTRICT—1948

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
ALL BIRTHS	2,910	1,464	1,446
Hospital	2,458	1,364	1,094
Home	452	100	352
Out-patient delivery service	2	..	2
Private physician	285	80	205
Midwife	165	20	145

TABLE NO. 2

RESIDENT DEATHS FOR CERTAIN CAUSES AND GROUPS OF CAUSES CLASSIFIED BY COLOR—EASTERN HEALTH DISTRICT—1948

CAUSE OF DEATH	TOTAL	WHITE	COLORED
ALL CAUSES	1,366	825	541
Whooping cough	..	..	..
Meningococcus meningitis	1	..	1
Diphtheria	..	..	..
Tuberculosis, all forms	121	45	76
Syphilis	30	6	24
Influenza	1	..	1
Other infectious diseases	3	3	..
Cancer	155	109	46
Acute rheumatic fever	1	..	1
Diabetes	37	31	6
Intracranial lesions of vascular origin	75	48	27
Diseases of the heart	481	344	137
Pneumonia, all forms	52	23	29
Diarrhea and enteritis	6	2	4
Appendicitis	3	2	1
Cirrhosis of the liver	26	19	7
Nephritis	91	45	46
Puerperal causes	4	2	2
Congenital malformations	24	16	8
Diseases of early infancy	52	24	28
Suicides	10	10	..
Homicides	25	1	24
Home accidents	30	19	11
Occupational accidents	7	4	3
Automobile accidents	11	7	4
Other accidental deaths	10	3	7
All other causes	110	62	48

TABLE NO. 3

COMMUNICABLE DISEASES REPORTED IN THE EASTERN HEALTH DISTRICT—1948

DISEASE	TOTAL	WHITE	COLORED
TOTAL	5,103	1,835	3,268
Chickenpox	265	189	76
Diphtheria	5	3	2
German measles	5	4	1
Gonococcus infection	1,249	107	1,142
Influenza	6	3	3
Measles	1,248	862	386
Meningococcus meningitis	4	1	3
Mumps	461	353	108
Pneumonia, all forms	159	43	116
Poliomyelitis	2	1	1
Rheumatic fever	5	1	4
Scarlet fever	40	24	16
Syphilis	1,108	70	1,038
Tuberculosis, all forms	264	116	148
Typhoid fever	1	1	..
Whooping cough	144	32	112
All others	137	25	112

TABLE NO. 4

RESIDENTS OF THE EASTERN HEALTH DISTRICT RECORDED AS HAVING RECEIVED DIPHTHERIA TOXOID OR PERTUSSIS VACCINE INOCULATION—1948

AGE AT DATE OF INOCULATION	DIPHTHERIA TOXOID			PERTUSSIS VACCINE*		
	Total	White	Colored	Total	White	Colored
TOTAL	7,883	3,662	4,221	2,300	1,009	1,291
Under 1 year	2,628	1,566	1,062	1,794	854	940
1 year	425	161	264	259	93	166
2 years	145	42	103	106	28	78
3 years	150	51	99	60	14	46
4 years	217	92	125	41	11	30
5 years	593	285	308	21	4	17
6 years	572	268	304	11	4	7
7 years	395	169	226	4	..	4
8 years	413	206	207	1	..	1
9 years	561	211	350	..	..	..
10 years and over	1,779	608	1,171	2	1	1
Age not specified	5	3	2	1	..	1

* Pertussis vaccine administered in combination with diphtheria toxoid.

WESTERN HEALTH DISTRICT

WESTERN HEALTH DISTRICT

Alfred C. Moore, M.D.

Health Officer

Diphtheria was the most serious communicable disease problem in the district during the year with a total of 13 cases and 2 deaths reported for 1948 as compared with 41 cases and 1 death reported for the preceding year. Intensive efforts were made, as in the past years, to have every child in the district receive two doses of diphtheria toxoid in infancy and a booster dose of toxoid on first entering school.

Measles was prevalent during the year, with 1,216 cases and no death reported in the district. To prevent serious complications in children under three years of age, 549 packages of immune globulin were distributed by the district office.

Medical Care

The health resources of the district were greatly increased with the opening of the Medical Care Clinic at University Hospital to provide medical services to persons residing in west Baltimore and receiving assistance from the Department of Public Welfare. The clinic utilizes the Health Department child hygiene and laboratory services through the district office.

The premature infant nursery of University Hospital was expanded in the latter half of the year, and home investigations and home visits to premature infants were made by the Health Department public health nurses on request to the district office.

School Hygiene

A program of physical examinations of students in occupational classes of the public schools was inaugurated in the district as a new school health service. Eye testing with the use of the Massachusetts Vision Testing kit was begun in one of the public schools of the district.

Miscellaneous

Dr. Sibyl Mandell of the Bureau of Child Hygiene led a series of seminars on mental hygiene for the public health nurses of the district, and four bureau directors of the Sanitary Section gave a series of orientation talks to the district staff. Public health educational activities during the year included health talks to neighborhood organizations, informational articles

submitted to a neighborhood newspaper, the distribution of 834 Health Department publications and instruction for affiliate student nurses in public health. Senior students from the University of Maryland Medical School visited the health district to prepare their "Home Survey Reports" on selected patients.

Personnel

Alfred C. Moore, M.D., Administrative Health Officer
Gilbert E. Rudman, M.D., Medical Investigator
Anna Persch, Supervisor of Public Health Nursing
Henrietta Gintling, Supervisor of Public Health Nursing

Public Health Nurses

Mary J. Amos
Irene T. Barnhill
Alene Benson
Theresa M. Byrne
Ethelyn B. Dever
Grace W. Gorski
Charlotte K. Hoyer
Marian J. Johnson
Beulah B. McCausland
Mary H. Merva
Elizabeth A. Moore
Cecelia B. Nossell
Ruth B. Pyle
Dorothy E. Schwartz
Maude Suter
Anne H. Tennyson
Selma Ulrich
Leah Winters

Ann Frieda Gullan, Junior Stenographer
Marilyn Vein, Junior Stenographer

TABLE NO. 1

RESIDENT BIRTHS, WESTERN HEALTH DISTRICT*—1948

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
ALL BIRTHS	5,189	1,573	3,616
Hospital	3,731	1,351	2,380
Home	1,458	222	1,236
Out-patient delivery service	566	8	558
Private physician	631	193	438
Midwife	261	21	240

* Including Druid Health Center.

TABLE NO. 2

RESIDENT DEATHS FOR CERTAIN CAUSES AND GROUPS OF CAUSES CLASSIFIED BY COLOR—WESTERN HEALTH DISTRICT*—1948

CAUSE OF DEATH	TOTAL	WHITE	COLORED
ALL CAUSES	2,817	1,035	1,782
Whooping cough	..	..	..
Meningococcus meningitis	..	..	..
Diphtheria	2	2	..
Tuberculosis, all forms	265	55	210
Syphilis	73	12	61
Influenza	7	1	6
Other infectious diseases	11	6	5
Cancer	276	131	145
Acute rheumatic fever	3	1	2
Diabetes	53	21	32
Intracranial lesions of vascular origin	186	59	127
Diseases of the heart	891	406	485
Pneumonia, all forms	114	22	92
Diarrhea and enteritis	7	3	4
Appendicitis	3	2	1
Cirrhosis of the liver	46	27	19
Nephritis	247	51	196
Puerperal causes	8	1	7
Congenital malformations	17	9	8
Diseases of early infancy	123	29	94
Suicides	42	32	10
Homicides	56	8	48
Home accidents	70	30	40
Occupational accidents	10	3	7
Automobile accidents	31	7	24
Other accidental deaths	42	18	24
All other causes	234	99	135

* Including Druid Health Center.

TABLE NO. 3

COMMUNICABLE DISEASES REPORTED IN THE WESTERN HEALTH DISTRICT*—1948

DISEASE	TOTAL	WHITE	COLORED
TOTAL	8,146	1,624	6,522
Chickenpox	232	125	107
Diphtheria	13	6	7
German measles	11	4	7
Gonococcus infection	2,999	290	2,709
Influenza	12	3	9
Measles	1,216	548	668
Meningococcus meningitis	2	1	1
Mumps	343	161	182
Pneumonia, all forms	218	46	172
Poliomyelitis	6	1	5
Rheumatic fever	2	1	1
Scarlet fever	46	19	27
Syphilis	2,376	228	2,148
Tuberculosis, all forms	508	129	379
Typhoid fever	1	..	1
Whooping cough	108	43	65
All others	53	19	34

* Including Druid Health Center.

TABLE NO. 4

RESIDENTS OF THE WESTERN HEALTH DISTRICT* RECORDED AS HAVING RECEIVED DIPHTHERIA TOXOID OR PERTUSSIS VACCINE INOCULATION—1948

AGE AT DATE OF INOCULATION	DIPHTHERIA TOXOID			PERTUSSIS VACCINE†		
	Total	White	Colored	Total	White	Colored
TOTAL	8,518	2,504	6,014	3,116	821	2,295
Under 1 year	3,080	921	2,159	2,505	585	1,920
1 year	578	223	355	390	152	238
2 years	198	71	127	127	49	78
3 years	167	64	103	45	20	25
4 years	293	100	193	26	10	16
5 years	1,182	260	922	13	1	12
6 years	836	263	573	4	1	3
7 years	393	95	298	1	1	..
8 years	396	102	294	..	..	..
9 years	470	131	339	3	1	2
10 years and over	924	274	650	1	1	..
Age not specified	1	..	1	1	..	1

* Including Druid Health Center.

† Pertussis vaccine administered in combination with diphtheria toxoid.

DRUID HEALTH CENTER

DRUID HEALTH CENTER

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

Health Officer

Prior to 1948 two well baby clinics in the Druid Health Center were conducted in two public schools. For several reasons it was considered that the best interest of the mothers and the staff would be served if these clinics were moved elsewhere. Fortunately the Baltimore Housing Authority made available the use of a large room in the Gilmor Housing Project. This room provides adequate space at a time which is more suitable to everyone. The number of venereal disease clinics for children was decreased from three to two weekly so that similar clinics could be held in other areas of the city. In 1947 one of the public health nurses who had received special training was placed in charge of epidemiological investigations and follow-up services in the venereal disease clinics. Already it has become apparent that the control of these diseases has been improved. There are now twenty-five official clinic sessions held each week at the Druid Health Center as follows: Adult venereal diseases, 12, children's venereal diseases, 2, prenatal, 4, chest, 5 and well baby, 2.

The Maryland Tuberculosis Association provided a social worker to assist in our tuberculosis program, thereby making more effective our fight against this still formidable disease. A policy of notifying physicians of the results of blood tests for syphilis on patients referred to the chest clinic was inaugurated. Patients attending the chest clinic having no family physician were referred directly to the venereal disease clinic. This represents another instance of cooperation between the bureaus of the Health Department. Another example is provided by the routine taking of X-rays of all prenatal patients attending the clinic at the Center. Such patients are referred to the venereal disease clinic when evidence of positive tests for syphilis is discovered and to the chest clinic when X-ray evidence of possible tuberculosis is found. During the year monthly meetings were conducted with the Director of the Bureau of Venereal Diseases, the supervisor of public health nurses, the senior medical supervisor, the supervisor of social services and the District Health Officer. The personnel cooperated in the chest X-ray survey held in this area.

During the summer of 1947 an intensive educational campaign on the prevention of lead poisoning in children was made with the assistance of the chief of the division of industrial hygiene.

The Mental Hygiene Society of Maryland maintained its weekly clinic

at the Center during the year. The Druid Health Center worked closely with the newly formed Area Project Number Three, whose office is located in our district. As in former years student nurses from Provident Hospital were given courses as a part of their affiliation with the City Health Department. Many organizations utilized the building for meetings or to receive instruction about various phases of health. Among them were included the Monumental City Medical Society, the Maryland Dental Society, the Graduate Nurses Association, the National Negro Health Week Committee, the Boy Scouts and school children, the Baltimore Hearing Society, an Alcoholics Anonymous group and student nurses from the Maryland General Hospital, the Hospital for the Women of Maryland and Henryton Sanatorium. The State Medical Society held its annual convention during the early summer.

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

Public Health Nurses

Naomi S. Brown
Olga M. Chambers
Minnie Leah Corbin
Beatrice Daniels
Dorothy W. Davis
Margaret T. Ellis
Katie W. Fernandis
Mary E. Fitchett
Margaret S. Harper
Anita K. Henson
Ella T. Hughes
Mamie Johnson
Irene S. Kyler
Erdie LeCator
Elizabeth Lingo
Celia E. Livingston
Margaret Lockerman
Doretha C. McHardy
Vivian Pendleton
Cornelia Phillips
Agnes C. Pilgrim
Mary L. Riley
Florence E. Roberts
Elnora Robinson
Joyce Scott
Lilyan F. Slater
Jessica B. Taylor
Mathilda Young Walton
Credella F. White
Eleanor Willis

Iris E. Brown, Junior Stenographer
Vivian W. Roberts, Junior Stenographer
William B. Lucas, Janitor
Bernard A. Smith, Janitor
Ethel Clark, Janitress
William Chavis, Elevator Operator

SOUTHEASTERN HEALTH DISTRICT

SOUTHEASTERN HEALTH DISTRICT

John A. Skladowsky, M.D.

Health Officer

Only four cases of diphtheria with no death were reported in 1948 as compared with 31 cases and 1 death in 1947. Measles was unusually prevalent with 929 cases reported as compared with 22 cases in the previous year.

Mental Hygiene

On April 15 a mental hygiene program was inaugurated in the Southeastern Health District by Dr. Sibyl Mandell, Chief of the Division of Mental Hygiene, in order to make mental health a part of the general public health services offered in the district well baby clinics and for expectant mothers and the mothers of young children.

Before the program was initiated Dr. Paul V. Lemkau, psychiatrist at the Johns Hopkins School of Hygiene and Public Health, met with the district health officer, the pediatricians and other physicians serving the well baby clinics and discussed mental hygiene possibilities in relation to their work in the public health program. At the regular monthly meeting in April of the East Baltimore Medical Society, Dr. Lemkau and Dr. Huntington Williams, Commissioner of Health, outlined the new program to the members of the Society. Three special lectures on the psychiatric aspects of pediatric practice were given by Dr. Lucille Liberles, pediatrician on the staff of the Bureau of Child Hygiene, to the nursing staff of the Southeastern Health District. Dr. Mandell subsequently gave weekly group seminars and made home visits with each nurse.

Educational Activities

For the third successive year the district collaborated with the Eastern Community Council, in the mass chest X-ray survey conducted by the City Health Department and assisted by the Maryland Tuberculosis Association. The survey, held at Public School No. 47 from March 22 to April 2, spearheaded the observance of "Health Week" during which open house was held in the district quarters and appropriate articles prepared by the district supervising nurse and health officer appeared in the *East Baltimore Guide*, a community newspaper. A similar survey was conducted for the Southeastern Community Council from June 21 to 25 in Public School No. 2, Central Avenue and Stiles Street.

The Southeastern Health District actively participated in the "Community Week" celebration held in east Baltimore from December 9 to 23, particularly by observing "Health Day" on December 13 with open house in the district quarters and a public meeting at night.

The exhibit on "Baltimore Housing—Past, Present and Future" was shown in Public School No. 47 from August 5 to 15 under the auspices of the Eastern Community Council and the same exhibit was sponsored at the Canton Area Project, Ellwood Avenue and O'Donnell Street, from October 27 to November 5.

In April arrangements were made for the continuous distribution of Department public health literature at Enoch Pratt Branch Library No. 4, Ellwood Avenue and O'Donnell Street, and the library's literature in all the district prenatal and well baby clinics.

Miscellaneous Activities

In observance of public health nursing week, a special health program arranged by the school nurse was held on April 12 in Public School No. 6 where the film strip "Teacher Observation of School Children" was shown, with a talk on public health nursing activities by Miss Alice Sundberg, Assistant Director of the Bureau of Public Health Nursing. A health assembly, planned jointly by the school nurse and faculty, was held in Public School No. 230. The district staff nurses attended the Summer Day Camp Project conducted in mid-July by the City Department of Education and the Maryland State Department of Health at the Towson State Teachers College and the Institute on Nursing in Tuberculosis on October 15 at the Johns Hopkins School of Hygiene and Public Health.

Monthly staff educational conferences on review of medical and public health literature were held during the year. Undergraduate nurses in affiliate instruction in public health nursing from the Union Memorial Hospital School of Nursing and graduate nurses from the premature nursery of the Johns Hopkins Hospital visited the district for study and observation in maternity and school hygiene. Sixty-six expectant mothers registered in the prenatal clinics were given individual instruction in mothercraft. For the seventh consecutive year the East Baltimore Medical Society held monthly meetings in the district building.

Personnel

John A. Skladowsky, M.D., Administrative Health Officer
Sigmund R. Nowak, M.D., Medical Investigator
Ruth Collier, Senior Supervisor of Nurses

Public Health Nurses

Rebecca Catlin
Irene Coulter
Blanche C. Craig
Lena B. Dietzway
Mary E. Fleischmann
Julia R. Hagenbuch
Mary P. Hammett
Sylvia Miller
Lyla F. Pardoe
Virginia Pendleton
Louisa Stann Presson
Grace P. Ridgaway
Lucille P. Slavik
Mae Stark
Lillian Staub
Muriel von Schwerdtner
Edith M. Woodson
Florence Zinz

Mary K. Brocato, Junior Stenographer
Sylvia Fleischer, Junior Stenographer
Jerome N. Johnson, Janitor

TABLE NO. 1

RESIDENT BIRTHS, SOUTHEASTERN HEALTH DISTRICT—1948

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
ALL BIRTHS	2,454	2,249	205
Hospital	2,183	2,024	159
Home	271	225	46
Out-patient delivery service	..	..	..
Private physician	165	140	25
Midwife	106	85	21

TABLE NO. 2

RESIDENT DEATHS FOR CERTAIN CAUSES AND GROUPS OF CAUSES CLASSIFIED BY COLOR—SOUTHEASTERN HEALTH DISTRICT—1948

CAUSE OF DEATH	TOTAL	WHITE	COLORED
ALL CAUSES	1,016	920	96
Whooping cough	..	..	..
Meningococcus meningitis	..	..	..
Diphtheria	..	..	..
Tuberculosis, all forms	83	61	22
Syphilis	14	8	6
Influenza	..	..	..
Other infectious diseases	3	3	..
Cancer	152	141	11
Acute rheumatic fever	1	1	..
Diabetes	27	25	2
Intracranial lesions of vascular origin	45	42	3
Diseases of the heart	359	341	18
Pneumonia, all forms	28	25	3
Diarrhea and enteritis	3	3	..
Appendicitis	1	1	..
Cirrhosis of the liver	25	25	...
Nephritis	57	50	7
Puerperal causes	2	2	..
Congenital malformations	11	11	..
Diseases of early infancy	34	26	8
Suicides	11	11	..
Homicides	9	7	2
Home accidents	19	17	2
Occupational accidents	4	4	..
Automobile accidents	9	9	..
Other accidental deaths	22	19	3
All other causes	97	88	9

TABLE NO. 3

COMMUNICABLE DISEASES REPORTED IN THE SOUTHEASTERN HEALTH DISTRICT—1948

DISEASE	TOTAL	WHITE	COLORED
TOTAL	2,703	2,273	430
Chickenpox	316	299	17
Diphtheria	4	4	..
German measles	10	10	..
Gonococcus infection	342	171	171
Influenza	2	2	..
Measles	929	913	16
Meningococcus meningitis	3	3	..
Mumps	337	329	8
Pneumonia, all forms	125	88	37
Poliomyelitis	..	..	..
Rheumatic fever	..	..	..
Scarlet fever	41	40	1
Syphilis	327	150	177
Tuberculosis, all forms	198	177	21
Typhoid fever	1	1	..
Whooping cough	94	59	35
All others	34	27	7

TABLE NO. 4

RESIDENTS OF THE SOUTHEASTERN HEALTH DISTRICT RECORDED AS HAVING RECEIVED DIPHTHERIA TOXOID OR PERTUSSIS VACCINE INOCULATION—1948

AGE AT DATE OF INOCULATION	DIPHTHERIA TOXOID			PERTUSSIS VACCINE*		
	Total	White	Colored	Total	White	Colored
TOTAL	6,123	5,741	382	1,601	1,428	173
Under 1 year	1,911	1,757	154	1,352	1,210	142
1 year	250	231	19	152	137	15
2 years	63	59	4	29	26	3
3 years	71	65	6	22	18	4
4 years	145	138	7	18	17	1
5 years	561	530	31	16	11	5
6 years	649	601	48	10	7	3
7 years	368	354	14	..	..	..
8 years	483	465	18	1	1	..
9 years	522	503	19	..	..	..
10 years and over	1,099	1,038	61	1	1	..
Age not specified	1	..	1	..	..	..

* Pertussis vaccine administered in combination with diphtheria toxoid.

SYDENHAM HOSPITAL

SYDENHAM HOSPITAL

Horace L. Hodes, M.D.

Medical Director

The shortage of nursing personnel at the hospital continued during the early part of 1948 but was partially relieved toward the end of the year. A nurse recruiting program, undertaken in November and December accounted in part for this improvement.

The number of patients admitted to the hospital for diphtheria decreased from 120 in 1947 to 40 in 1948. There was an increase in admissions because of measles with 113 cases in 1948 as compared with 8 in 1947. For the fifth consecutive year a relatively large number of patients suffering from paralytic poliomyelitis were admitted to the hospital. Of the 50 persons treated in the hospital, 22 were Baltimore residents. Only two of the patients died and the majority of those who survived, recovered their muscular function to a great extent. The use of tracheotomy in the treatment of patients suffering from the bulbar type of poliomyelitis, which was initiated for the first time in the United States as a procedure at Sydenham Hospital in 1941, was continued and proved to be a life saving measure.

The effectiveness of the use of modern antibiotics in the treatment of meningitis was shown again during 1948. A total of 83 patients were treated at the hospital for some type of meningitis during the year. Thirty-two of these patients were suffering from infection with N. meningitidis (meningococci) and 18 with H. influenzae. Only one of the patients suffering with meningococcic meningitis died and only one suffering from H. influenzae type of meningitis succumbed.

Two new antibiotics were put into use at the hospital in 1948. Two of the six persons treated for typhoid fever at Sydenham Hospital during the year were given chloromycetin with remarkable results. Aureomycin has proven to be effective in the treatment of Rocky Mountain spotted fever and the two patients suffering with this disease who were treated at the hospital in 1948 recovered promptly following the administration of this drug. Aureomycin has also proven to be effective in the treatment of atypical pneumonia and has on a number of occasions been used successfully in curing infections with streptococci and staphylococci which were resistant to penicillin, streptomycin and sulfadiazine. Work was begun toward the end of the year in studies regarding the use of chloromycetin and aureomycin in the treatment of pertussis. Preliminary work carried out at the Sydenham Hospital and elsewhere indicates that these drugs

may be of use in the treatment of infants suffering from this disease but further study is needed.

In 1941 the isolation of a virus which appeared to be one of the causes of epidemic diarrhea among newborn infants was reported by J. S. Light and H. L. Hodes from Sydenham Hospital. During the latter half of 1948 additional experiments were begun to extend these observations and these experiments are now in progress. The data so far tend to confirm the earlier work.

The total number of deaths at the hospital during 1948 was 19. Four of these deaths occurred in less than twenty-four hours after admission of the patient to the hospital. The death rate, excluding those patients who died in less than twenty-four hours after admission, was 2.0 per cent as compared with 2.4 per cent in 1947 and 3.0 per cent during 1946. Of the 19 patients who died during 1948, 15 or 79 per cent were autopsied.

During 1948 an extensive survey of the management of the hospital was carried out by the Commission on Governmental Efficiency and Economy, Incorporated. Mr. Charles H. Buck, Chairman of the Board of Trustees of this organization, stated in part in a letter to Mayor Thomas D'Alesandro, Jr., which accompanied the report on the findings of the Commission, "In the Sydenham Hospital the City has a service that is unusually well operated and managed. This reflects worthwhile personnel, qualified and interested employees in supervisory and key positions; especially it results from capable administration in this municipal service. In our opinion, the City would be wise to preserve and encourage such a standard of performance."

Personnel

Horace L. Hodes, M.D., Director of Medical Research
William G. Crook, M.D., Resident Hospital Physician
Edith S. Porter, M.D., Hospital Interne
Mary V. Shearer, Superintendent of Nurses
Mary V. Gleeson, Assistant Superintendent of Nurses
Katherine L. Muhly, Educational Director
Marjorie Wagner, Director of Food Service
Agatha M. Cook, Special Supervising Nurse
Mary T. Cook, Special Supervising Nurse
Catherine E. Geppi, Supervising Nurse
Frances H. Shuford, Supervising Nurse
Pearl West, Supervising Nurse
Edwin Whittemore, Pharmacist
Helen D. Zepp, Principal Bacteriologist
Sylvia M. Lyness, Technician, Clinical Laboratory
Anna Lee Hafer, Graduate Nurse
M. Cordele Finster, Secretary-Stenographer
Edna E. Herget, Senior Clerk

Marie W. Lamley, Senior Clerk
Bertha M. Flanagan, Municipal Exchange Operator
Esther C. Haas, Municipal Exchange Operator
Lula N. Rocco, Municipal Exchange Operator
Katherine W. Fenker, Telephone Branch Operator
Margaret R. Jackson, Telephone Branch Operator
Anna M. Parks, Telephone Branch Operator
Patricia R. Wright, Junior Typist
Sylvester B. Allwell, Chief Engineer
Joseph S. Lewis, Shift Engineer
Walter R. Shepard, Shift Engineer
Spence Spry, Shift Engineer
Walter E. Thrift, Head Cook
James O. Fitzgerald, Cook
Lawrence P. Leverone, Cook
Clarence W. Schroeder, Laundry Foreman

Laundresses

Mary F. Brooks
Myrtle Davis
Ethel DePoitiers
Lynne B. Dunn
Pauline O. Hanson
Margaret Long
Nellie O. Moses
Evelyn C. Patten
Cora Perryman

Walter Fisher, Laundry Worker
Oliver Wheeler, Laundry Worker
Alice S. Montell, Housekeeper
Elizabeth G. Bonner, Seamstress
Mary Barnes, Head Hospital Worker

Hospital Workers

Charles W. Anderson
Clarence Beall
Jewell Belcher
James Bellus
Fannie Bragg
Elzephan Brooks
Edward Brunacin
May A. Cathell
Blanche I. Coggin
Catherine Coligny
Martin C. Cosgrove
Juanita Cunningham
Cleaster M. Feariby
Vivian L. Fellers
Clavella J. Gavin
Boliver Henderson
John L. Kaufman
Hattie L. Lindamood
Nathan Mishkin
Joan Pennington
David Prigodich
Beulah C. Robinson
Paul E. Ryan
LaVerne H. Segars
Michael Stroman
Edmund Sweiger
Frances Thimons
Freda Walker
Alston F. Walton
Mable Wilson
Fred H. Wockenfuss
Sadie Wylie

William C. Arrington, Steam Fireman
Milton L. Harrington, Steam Fireman

Robert F. Marks, Steam Fireman
George Nagy, Steam Fireman
Lawrence R. Kapp, Oiler
William H. Ruttinger, Oiler
Hartman G. Carter, Chauffeur
Melvin Creamer, Chauffeur
George Ilgenfritz, Chauffeur
Louis Thomas, Stock Handler
Nathaniel M. Crow, Painter
John W. Diller, Handy Man
Paul L. Franklin, Gardner and Pruner
Adam Helinski, Watchman

TABLE NO. 1
HOSPITAL CENSUS

Patients in hospital at beginning of year	33
Patients in hospital at end of year	20
Maximum number of patients in hospital at one time	46
Minimum number of patients in hospital at one time	14
Total number of admissions	748
Daily average number of patients	26.9
Average number of days stay of patients:	
Diphtheria	27.1
Whooping cough	21.7
Measles	9.3
Meningitis (all kinds)	18.0
Poliomyelitis	13.5

TABLE NO. 2

ADMISSIONS, DEATHS AND DEATHS WITHIN 24 HOURS BY COLOR AND 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	748	334	203	171	40	19	7	7	4	1	4	2	..	1	1
Abscess, brain	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Abscess, epiglottis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Abscess, peritonsillar	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchiolitis & bronchitis	12	5	5	2	..	..	..	..	..	..	..	..	..	..	..
Cellulitis	6	5	1	..	..	..	..	..	..	..	..	..	..	..	..
Cerebral accident	1	..	..	..	1	1	..	..	..	1	1	..	..	..	1
Conjunctivitis, acute	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Coronary occlusion	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Dermatitis	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhea	8	6	1	..	1	..	..	..	..	..	..	..	..	..	..
Diphtheria	40	22	10	4	4	..	..	..	..	..	..	..	..	..	..
Diphtheria carrier	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Dysentery	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Eczema	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis, etiology unknown	4	..	1	2	1	..	..	..	..	..	..	..	..	..	..
Encephalomyelitis, ? polio	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Epidermophytosis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	6	4	..	2	..	..	..	..	..	..	..	..	..	..	..
Erythema multiforme	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Fever, etiology unknown	4	3	..	1	..	..	..	..	..	..	..	..	..	..	..
Fracture	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Furunculosis	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Hepatitis	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Hypertension	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Impetigo	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Intoxication, drug	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Laryngitis, acute	5	3	..	1	1	..	..	..	..	..	..	..	..	..	..
Laryngotracheobronchitis, acute	21	15	4	2	..	..	..	..	..	..	..	..	..	..	..
Lead poisoning	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Leukemia	1	1	..	..	..	1	1	..	..	..	..	..	..	..	..
Lupus Erythematosus	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Lymphadenitis, cervical	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Lymphocytosis, infectious	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Mastoiditis, acute	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Measles	113	55	48	8	2	1	1	..	..	..	..	..	..	..	..
Measles encephalitis	7	1	..	6	..	2	1	..	1	..	..	..	..	..	..
Meningitis, etiology unknown	15	3	4	6	2	..	..	..	..	..	..	..	..	..	..
Meningitis, gonococcus	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis, influenzal	18	6	3	8	1	1	1	..	..	..	1	1	..	..	..
Meningitis, meningococcus	27	10	3	13	1	1	..	..	1	..	1	..	..	1	..
Meningococcemia	5	2	..	3	..	..	..	..	..	..	..	..	..	..	..
Meningitis, pneumococcus	7	4	1	1	1	1	1	..	..	..	1	1	..	..	..
Meningitis, staphylococcus	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis, streptococcus	2	1	1	..	..	1	..	1	..	..	..	..	..	..	..
Meningitis, tuberculous	7	1	5	..	1	4	..	4	..	..	..	..	..	..	..
Mononucleosis, infectious	17	11	2	4	..	..	..	..	..	..	..	..	..	..	..
Mumps	25	12	8	5	..	..	..	..	..	..	..	..	..	..	..

TABLE NO. 2—Continued

ADMISSIONS, DEATHS AND DEATHS WITHIN 24 HOURS BY COLOR AND 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.
Mumps meningoencephalitis	15	6	3	6	..	..	..	..	..	..	..	..	..	..	..
Nephritis	6	3	2	1	..	1	..	1	..	..	..	..	..	..	..
Neuritis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Newborn, normal	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..
Nieman-Pick's disease	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
No disease	6	1	2	2	1	..	..	..	..	..	..	..	..	..	..
Ophthalmia, gonococcus	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia, meningococcus	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Orchitis	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Osteomyelitis	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Otitis media	5	4	1	..	..	..	..	..	..	..	..	..	..	..	..
Paralysis, etiology unknown	1	..	..	1	..	1	..	..	1	..	..	..	..	..	..
Pharyngitis, acute	20	13	4	3	..	..	..	..	..	..	..	..	..	..	..
Pneumonia, atypical	4	3	1	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia, bacterial	31	10	11	10	..	1	1	..	..	..	..	..	..	..	..
Poisoning, phosphorus	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis, paralytic	50*	14	8	24	4	2	1	1	..	..	..	..	..	..	..
Poliomyelitis, nonparalytic	20	6	3	11	..	..	..	..	..	..	..	..	..	..	..
Polyneuritis, infectious	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Pregnancy	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Psychoneurosis	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Pyelitis	3	2	..	1	..	..	..	..	..	..	..	..	..	..	..
Pyoderma	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Rheumatic fever	5	..	2	2	1	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Rubella	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever	19	11	5	3	..	..	..	..	..	..	..	..	..	..	..
Septicemia	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..
Sinusitis, acute	3	2	..	1	..	..	..	..	..	..	..	..	..	..	..
Stomatitis	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis	3	1	..	..	2	..	..	..	..	..	..	..	..	..	..
Tetanus	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Thrombophlebitis	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Tonsillitis, acute	37	23	8	3	3	..	..	..	..	..	..	..	..	..	..
Tracheobronchitis, acute	6	4	1	1	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis, pulmonary	3	..	2	..	1	..	..	..	..	..	..	..	..	..	..
Tuberculosis, spine	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Tularemia	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid fever	6	..	1	..	5	..	..	..	..	..	..	..	..	..	..
Urinary tract infection	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Vaccine reaction (diph.-pert. tox.)	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Vaccine reaction (smallpox)	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Varicella	21	14	2	4	1	..	..	..	..	..	..	..	..	..	..
Varicella encephalitis	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	59	15	29	11	4	1	..	..	1	..	..	..	..	..	..

* Includes one case from another state.

TABLE NO. 3

POSTMORTEM EXAMINATIONS

TOTAL	15
Influenzal Meningitis	1
Meningococcus Meningitis	1
Leukemia	1
Whooping cough	1
Paralysis, etiology undetermined	1
Measles Encephalitis	2
Measles with acidosis	1
Tuberculous Meningitis	4
Questionable Cerebrovascular Accident	1
Pneumococcus Meningitis	1
Poliomyelitis	1

MEDICAL SECTION—PREVENTIVE

BUREAU OF COMMUNICABLE DISEASES

BUREAU OF COMMUNICABLE DISEASES

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

Acting Director

A total of 29,653 cases of communicable diseases was reported during 1948. This was an increase of 7,892 cases over the record for the preceding year and may be attributed largely to marked increases in the incidence of measles, mumps and chickenpox. Other diseases, notably diphtheria, whooping cough and scarlet fever showed decreases in the total of reported cases while meningococcus meningitis and anterior poliomyelitis had decreases of a lesser degree.

Diphtheria

There were 46 cases and 2 deaths from diphtheria reported during the year as contrasted with 142 cases and 5 deaths in 1947. The number of reported cases of diphtheria was the smallest number ever reported to the City Health Department in any year and is one less than the previous low of 47 cases reported in 1941. Of the 46 cases of diphtheria reported in the city this year, 32 were admitted to Sydenham Hospital for treatment.

It is the aim of the Health Department to have every baby born in the city of Baltimore inoculated with the protective alum-precipitated diphtheria toxoid. As a result of this campaign the number of doses of toxoid exceeded the number administered during 1947, the previous high record. A total of 43,268 children were given toxoid inoculations in 1948, of whom 23,559 received booster doses. The 1947 total was 40,379 children inoculated.

Meningococcus Meningitis

For the fifth consecutive year meningococcus meningitis showed a decline from the high total of 389 cases recorded in 1943. There were 20 cases and 2 deaths reported for this year as compared with 31 cases and 6 deaths for the previous year.

Typhoid Fever

For the first time in the history of the city typhoid fever reached the low record of 5 reported cases. There was 1 death attributed to typhoid fever. Of the 5 reported cases investigation indicated that 2 were infected by carriers in the household or in the family. Another one probably received his infection from a family carrier but since this suspected carrier died

before the investigation was started, her status could not be verified. One patient gave a history of playing in and drinking from a stream, a tributary of a stream known to be polluted. The source of infection in the fifth case has not been determined.

Two new typhoid carriers were discovered during the year. Of the 60 carriers on the Health Department list at the beginning of the year 1 died. There were 61 carriers on the list at the close of the year.

Undulant Fever and Tularemia

There were 17 cases of undulant fever recorded during the year. Fourteen of these cases gave a history of working in slaughter houses, 1 was an infection in a laboratory worker and 2 drank raw milk while on visits outside of the city. None had drunk unpasteurized milk in Baltimore. There were 6 cases of undulant fever reported in Baltimore during 1947.

Three cases of tularemia were reported during the year as compared with 4 cases during 1947. All three cases this year contracted the disease through dressing wild rabbits.

Tinea Capitis

An examination of the scalp of the children in the elementary public schools of the city, both white and colored, was begun early in the year. Prior to the closing of school for the summer vacation 15,425 children had received this examination. A total of 409 children were found to have tinea capitis, representing 2.6 per cent of the children examined. Those positive were referred to private physicians for treatment. Those who could not afford to pay for the services of a private physician were sent to one of the skin clinics.

Measles

The number of reported cases of measles was 8,943 for the year. There were two deaths, one in a two-year-old infant and one in a young adult. This was a marked increase over 1947 when 274 cases and no deaths were recorded. This outbreak of measles commenced in March, reached its peak during June, diminished during the summer months and began to rise again during November.

Other Communicable Diseases

There were 24 cases and 2 deaths from paralytic poliomyelitis reported during the year as compared with 29 cases and 4 deaths in 1947. Fewer cases of scarlet fever were reported during the year than for any year since 1918. There were recorded 341 cases, none of them fatal. The record for

whooping cough dropped from 3,247 reported cases and 10 deaths for 1947 to 604 cases and no deaths for 1948.

The outbreak of rabies among dogs reported during the years 1944 to 1947 terminated early in 1947 following the establishment of a ninety-day dog quarantine in the section of the city where the dogs were discovered. No cases of rabies in dogs were reported during 1948.

For the twentieth consecutive year no case of smallpox was reported in Baltimore. The last case of smallpox to occur in the city was reported on March 9, 1928. The preschool vaccination law, passed by the State Legislature in 1864, is rigidly enforced each year in public, private and parochial schools.

Personnel

Myron G. Tull, M.D., M.P.H., Administrative Health Officer, Acting Director
Anthony L. Rettaliata, M.D., Medical Investigator
Roscoe Z. G. Cross, M.D., Health Officer
William A. Sinton, M.D., Health Officer
Howard H. Warner, M.D., Health Officer
J. Emmett Queen, M.D., Medical Investigator
William R. Lumpkin, M.D., Medical Investigator
John P. Smith, M.D., Medical Investigator
Francis W. Traynor, M.D., Medical Investigator
Norman R. Freeman, Jr., M.D., Medical Investigator
J. Carl Myers, M.D., Medical Investigator
Alice V. Owings, Junior Administrative Officer
Marie E. Wehage, Senior Stenographer
Elaine P. Polansky, Junior Stenographer

TABLE NO. 1

REPORTED CASES AND RESIDENT DEATHS OF CERTAIN COMMUNICABLE DISEASES—1945-1948

DISEASES	1948		1947		1946		1945	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Botulism	..	..	4	1	..	..	..	..
Chickenpox	2,451	..	2,231	1	2,268	..	2,494	1
Diarrhea and enteritis								
Under two years of age	21	14	80	40	81	71	114	105
Two years and over	14	12	5	7	14	15	7	9
Diphtheria	46	2	142	5	424	19	353	19
Dysentery								
Amebic	4	..	3	..	7	1	4	1
Bacillary	21	..	5	1	15	1	11	..
Unspecified	139	..	45	..	10	1	23	3
Encephalitis lethargica	2	1	2	..	4	2	..	1
Erysipelas	7	..	7	..	8	2	13	..
German measles	94	..	49	..	498	..	295	..
Hepatitis, infectious	6	2	3	2	8	4	10	..
Influenza	54	19	104	30	136	40	225	37
Lead poisoning (non-occupational)	31	4	11	3	13	4	8	4
Leprosy	..	..	..	..	..	..	..	..
Malaria	1	..	6**	..	28*	1	14	..
Measles	8,943	2	274	..	8,136	6	206	..
Meningococcus meningitis	20	2	31	6	46	11	61	12
Mononucleosis, infectious	18	..	25	..	16	..	6	..
Mumps	3,358	..	1,015	..	338	1	1,603	..
Ornithosis (psittacosis)	..	..	..	..	..	..	..	..
Paratyphoid fever	..	..	..	..	..	..	..	..
Pellagra	1	2	1	..	..	..	1	1
Pneumonia								
Bronchopneumonia	300	152	260	195	322	182	400	264
Lobar pneumonia	407	179	284	157	369	192	516	287
Unspecified	89	14	116	15	260	11	308	15
Poliomyelitis (paralytic cases)	24	2	29	4	34	4	21	..
Rheumatic fever, acute, total	20	7	53	21	88	38	81	20
(with heart involvement)	7	4	15	20	43	35	35	11
Rocky Mountain spotted fever	1	1	5	2	1	..	3	1
Salmonella infection	1	..	3	..	..	..	1	..
Scarlet fever	341	..	446	..	806	1	2,202	1
Septic sore throat	38	..	70	2	83	3	74	6
Smallpox	..	..	..	..	..	..	..	..
Tetanus	5	3	3	2	9	5	3	..
Trachoma	..	..	..	..	..	..	..	..
Trichinosis	1	..	2	..	1	..	3	..
Tuberculosis								
Pulmonary	1,540	633	1,491	676	1,468	707	1,872	714
Other forms	41	24	57	42	56	40	53	59
Tularemia	3	..	4	..	1	..	2	..
Typhoid fever	5	1	11	..	10	1	11	1
Typhus fever	1	..	6	1	2	..	..	..
Undulant fever	17	..	6	..	..	..	1	..
Weil's disease	1	1	..	..	..	..	..	..
Whooping cough	604	..	3,247	10	1,004	2	2,172	12
Venereal diseases								
Syphilis	4,745	182	5,394	183	5,558	169	8,402	202
Gonococcic ophthalmia	8	..	9	..	22	..	33	..
Gonorrhea, other	6,017	..	5,988	1	4,025	..	4,192	1
Chancroid	118	..	188	..	140	..	90	..
Other venereal diseases	74	1	57	..	21	2	39	1

* Contracted outside continental United States.

** Five cases contracted outside continental United States.

TABLE NO. 2

CASES AND RESIDENT DEATHS OF CERTAIN DISEASES ACCORDING TO MONTHS—1948

DISEASE		TOTAL	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Typhoid fever	Cases	5	..	..	..	..	1	1	..	1	..	..	1	1
	Deaths	1	..	..	..	..	..	..	..	..	..	..	1	..
Paratyphoid fever	Cases	..	..	..	..	..	..	..	..	..	..	..	..	..
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	
Meningococcus meningitis	Cases	20	3	..	3	2	4	2	1	1	..	..	3	1
	Deaths	2	..	..	1	..	1	..	..	..	..	..	..	..
Scarlet fever	Cases	341	56	48	48	40	31	14	10	8	11	19	22	34
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	Cases	604	131	49	42	28	19	31	51	50	55	41	56	51
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	Cases	46	4	5	5	4	9	5	3	1	2	2	1	5
	Deaths	2	..	..	..	..	..	..	..	..	..	1	1	..
Tuberculosis, pulmonary	Cases	1,540	135	111	137	159	138	145	139	111	130	108	105	122
	Deaths	633	58	63	60	46	44	47	62	57	58	49	50	39
Tuberculosis, other forms	Cases	41	1	4	2	1	2	1	8	3	8	3	7	1
	Deaths	24	2	2	1	..	1	..	4	4	4	3	..	3
Influenza	Cases	54	6	8	17	6	1	1	..	2	1	5	3	4
	Deaths	19	2	5	4	1	..	..	..	..	2	..	3	2
Measles	Cases	8,943	9	33	144	570	2,251	3,062	945	201	60	59	373	1,236
	Deaths	2	..	..	..	..	..	..	2	..	..	..	..	..
Poliomyelitis (paralytic cases)	Cases	24	..	..	..	..	..	..	3	4	8	7	2	..
	Deaths	2	..	..	..	..	..	..	..	1	..	1	..	..
Encephalitis lethargica	Cases	2	..	..	..	..	..	..	..	..	..	1	..	1
	Deaths	1	..	..	..	..	..	..	..	..	..	1	..	..
German measles	Cases	94	5	6	6	6	25	12	9	1	6	4	8	6
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Chickenpox	Cases	2,451	293	463	523	292	322	174	66	15	9	11	106	177
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever	Cases	1	..	..	..	..	..	..	..	1	..	..	..	..
	Deaths	1	..	..	..	..	..	..	..	1	..	..	..	..
Bronchopneumonia	Cases	300	26	35	37	43	27	22	10	20	24	10	19	27
	Deaths	107	15	18	17	18	16	6	4	14	11	5	11	17
Lobar pneumonia	Cases	407	54	77	58	56	30	30	13	13	23	9	22	22
	Deaths	179	31	23	30	15	12	7	7	9	14	8	11	12
Pneumonia, unspecified	Cases	89	9	12	14	4	6	3	6	7	4	8	8	8
	Deaths	14	3	2	1	3	..	1	1	1	..	1	..	1

TABLE NO. 3
INOCULATION HISTORIES OF DIPHTHERIA CASES—1948

Groups	Cases without History of Previous Inoculation	Cases with Inoculation History		
		Total	Confirmed	Unconfirmed
Total Cases	30	16	6	10
Classified by Age				
Age Groups				
0–2 years	3		1	1
3–4 years	7		..	2
5–9 years	4		3	5
10–14 years	5		2	1
15 and over	11		..	1
Classified by Time Since Inoculation				
Time Since Inoculation				
0–3 months			1	..
4–11 months			..	..
1 year			..	2
2 years			..	2
3 and over			5	5
Unspecified			..	1

TABLE NO. 4
CHILDREN CLASSIFIED BY RACE AND AGE RECORDED AS HAVING RECEIVED SPECIFIED DIPHTHERIA TOXOID INOCULATION—1948

Age	Dose and Color											
	Total			Primary			Booster			Unspecified		
	Total	White	Col.	Total	White	Col.	Total	White	Col.	Total	White	Col.
All Ages	43,268	30,105	13,163	19,549	13,939	5,610	23,559	16,009	7,550	160	157	3
Under 6 months	311	264	47	302	257	45	8	6	2	1	1	..
6 months	2,179	1,724	455	2,171	1,717	454	6	5	1	2	2	..
7 months	6,238	4,283	1,955	6,229	4,278	1,951	8	4	4	1	1	..
8 months	4,142	3,291	851	4,108	3,262	846	28	23	5	6	6	..
9 months	1,898	1,390	508	1,805	1,334	471	92	55	37	1	1	..
10 months	894	625	269	750	543	207	143	81	62	1	1	..
11 months	527	356	171	408	285	123	118	70	48	1	1	..
Under 1 year	*16,189*	*11,933*	*4,256*	*15,773*	*11,676*	*4,097*	*403*	*244*	*159*	*13*	*13*	..
1 year	2,022	1,226	796	1,522	928	594	488	287	201	12	11	1
2 years	638	362	276	457	249	208	169	101	68	12	12	..
3 years	643	385	258	308	171	137	318	197	121	17	17	..
4 years	1,326	915	411	288	171	117	1,026	733	293	12	11	1
5 years	4,721	3,065	1,656	362	244	118	4,303	2,766	1,537	56	55	1
6 years	3,508	2,347	1,161	245	173	72	3,240	2,151	1,089	23	23	..
7 years	1,820	1,156	664	120	78	42	1,695	1,073	622	5	5	..
8 years	2,142	1,489	653	86	43	43	2,055	1,445	610	1	1	..
9 years	2,946	2,089	857	95	31	64	2,846	2,053	793	5	5	..
10 years	3,342	2,418	924	107	58	49	3,235	2,360	875	..	..	..
11 years	2,996	2,157	839	106	50	56	2,889	2,106	783	1	1	..
12 years	736	386	350	38	29	9	696	355	341	2	2	..
13 years	159	113	46	6	6	..	153	107	46	..	..	..
14 years	28	21	7	2	2	..	26	19	7	..	..	..
15 years and over	28	25	3	19	19	..	9	6	3	..	..	..
Age unspecified	24	18	6	15	11	4	8	6	2	1	1	..

TABLE NO. 5

CHILDREN CLASSIFIED BY RACE AND AGE RECORDED AS HAVING RECEIVED PERTUSSIS VACCINE INOCULATION*—1948

AGE AT DATE OF INOCULATION	TOTAL	WHITE	COLORED
ALL AGES	13,043	8,370	4,673
Under 6 months	145	118	27
6 months	1,392	1,001	391
7 months	4,619	2,783	1,836
8 months	2,782	1,997	785
9 months	1,235	809	426
10 months	539	353	186
11 months	293	181	112
Under 1 year	*11,005*	*7,242*	*3,763*
1 year	1,226	703	523
2 years	362	185	177
3 years	178	89	89
4 years	118	63	55
5–9 years	142	79	63
10 years and over	6	5	1
Age not specified	6	4	2

* Pertussis vaccine administered in combination with diphtheria toxoid.

BUREAU OF TUBERCULOSIS

BUREAU OF TUBERCULOSIS

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

Director

Deaths

There were 657 deaths from all forms of tuberculosis among residents of the City of Baltimore during the calendar year 1948, the smallest number on record in recent years. Of these deaths, 297 occurred among the white population now estimated at 757,000, and 360 took place among Negroes with an estimated population of 201,000. Corresponding figures for tuberculosis deaths in 1947 were a total of 718 deaths, of which 310 were in white persons and 408 in Negroes. A drop of this magnitude in total deaths in a single year is unprecedented and fully twice that expected. Negroes still contribute disproportionately to tuberculosis fatalities. About 55 per cent of all tuberculosis deaths among city residents are in Negroes who constitute 21 per cent of the city's population.

In Table No. 1 the numbers of resident deaths from tuberculosis in 1948 are classified according to race, sex and broad age groups and are then compared with the three-year average figures for 1945 to 1947 inclusive.

For the white race with a 1948 total of 297 deaths, there were 43 fewer deaths than the preceding three-year average. In white males the 232 deaths of 1948 were only 6 less than the average for the preceding three years, but the 61 deaths in white females in 1948 were 37 less than the preceding average figures. The improvement noted in males under thirty-five years of age was offset by an increase in deaths in later age groups. White females had notable decreases in the numbers of deaths in all age groups.

For Negroes with a 1948 total of 360 deaths, there were 54 fewer deaths than the preceding three-year average. In Negro males the 215 deaths of 1948 were 24 less than the average of 1945–47, the principal decline being noted under age thirty-five. In Negro females the 1948 total of 141 deaths was 30 less than the average figure offered for comparison, and although declines were noted in all age groups, the most conspicuous improvement in mortality was in women under age thirty-five.

Death Rates

The total tuberculosis death rate for Baltimore residents for 1948 was 68.6 per 100,000 population. For white residents the rate was 39.2 and for Negro residents 179.1. Comparable figures for 1947 were 75.8 per 100,000

for the total tuberculosis death rate, 41.2 for the white race and 210.3 for Negroes. The 1948 rates are the lowest known for Baltimore, both totally and for each race. In spite of the gratifying improvement in mortality among Negroes, the risk of death from tuberculosis was 4.6 times greater for the Negro than for the white resident of Baltimore in 1948.

In offering an explanation for the improved tuberculosis mortality in Baltimore, especially among Negroes, it is impossible to point to any widespread change in community conditions which would favor a decline in the death rate. Overcrowded housing conditions and the high cost of living continued to favor the spread of this chronic contagious disease among those depressed segments of the city's population where tuberculosis is most commonly encountered. Although progress was made in planning for a future increase in the number of sanatorium beds, no additional beds became available at sanatoria during 1948. In fact, waiting lists for both races were distressingly long, and repeated pressure for hospital care was the rule for every patient for whom application was made.

It seems probable that the reduction in mortality may have been influenced by the use of the antibiotic streptomycin which has been available in general hospitals, in the facilities of the Veterans Administration, and has been administered to a small number of patients in the Tuberculosis Division of the City Hospitals and the other sanatoria of Maryland in recent months.

Streptomycin in combination with bed rest is often effective in the medical treatment of fresh exudative pulmonary tuberculosis, and it is known to prevent serious extensions of the disease in tuberculous patients undergoing major thoracic surgery. It is useful in the treatment of non-pulmonary forms of tuberculosis, and affords the only hope of recovery in the highly fatal tuberculous meningitis and acute disseminated tuberculosis. Negro patients generally suffer from those clinical types of tuberculosis most suited to treatment with streptomycin. It seems probably that the use of this new agent in scattered instances has prolonged life sufficiently to account for the decreased tuberculosis mortality of 1948. On May 20 streptomycin was made available without charge to suitable cases undergoing treatment in the state sanatoria of Maryland. However, in these institutions considered by themselves, too few patients had been treated, and the period of observation before the end of 1948 was too short, to account for the decline in the number of tuberculosis deaths.

Reported Cases

During 1948 the Bureau of Tuberculosis verified and enumerated 1,581 new cases of tuberculosis considered to have public health significance either from the point of view of follow-up of the case itself or of the family

represented. There were many reports in excess of this number which on investigation were not enumerated for the following reasons: (1) Case had been reported earlier and was already registered, (2) the only evidence of lesion was an old scar or calcification of no clinical significance, (3) further clinical study showed patient to be suffering from a nontuberculous condition. Of these 1,581 new case reports, 123 were made from death certificates. The corresponding number of new cases in 1947 was 1,548 including 165 reported after death.

In Table No. 2 the racial distribution of new cases in 1948 is shown. Of the total of 1,581 case reports, 900 were for white persons and 681 for Negroes. If the new cases during the year are shown in relation to the number of deaths taking place during 1948, the following ratios of new cases to deaths result: Total, 2.4; white, 3.1; colored, 1.9.

Table No. 2 also shows that 1,540 reports were for pulmonary cases and 41 for nonpulmonary forms of tuberculosis. Of these 41 cases, Negroes contributed 26.

Among the 1,540 pulmonary cases reported, there were 1,535 for which the extent of lung involvement was ascertained at the time of report. An analysis of the number and percentage of reported cases showing minimal or advanced lesions, severe primary involvement, and acute miliary dissemination is presented in Table No. 3. In the white race 42 per cent of the 881 reported cases were minimal and these were further subdivided into 12 per cent considered active, 29 per cent inactive and 1.2 per cent showing pleural effusions due to tuberculosis. Advanced lesions of the reinfection type were recorded in about 54 per cent of the reports, severe primary tuberculosis in 3.2 per cent and acute miliary tuberculosis accounted for less than 1 per cent of the total number of reports for the white race.

For Negroes, about 25 per cent of the 654 pulmonary reports were minimal in extent at the time of report. This group was divided into nearly 10 per cent considered active, another 10 per cent thought to be inactive and 5.3 per cent displaying massive pleural effusions due to tuberculosis. Advanced lesions of the classical reinfection type accounted for about 60 per cent of all pulmonary reports, nearly 12 per cent were severe primary tuberculosis most commonly encountered in Negro children and an additional 4 per cent were due to acute disseminated tuberculosis.

The newly reported cases for each race are analyzed in Tables No. 4 and 5 to show age distribution. Tuberculosis in childhood, as observed by chest X-ray, is much more common in Negroes than in the white race. There were 33 reports for white children under age fifteen and 89 for Negroes of corresponding age. The maximum frequency of new pulmonary cases in females of both races is reached between the ages of fifteen and thirty-five. Reported cases in males outnumber those in females, but for

both races in a majority of cases discovered, the male patients were more than thirty-five years of age. Nonpulmonary tuberculosis is a greater problem in Negroes than in white persons and is not limited to childhood.

In Table No. 6 the new tuberculosis cases for 1948 are classified by race and according to the agency signing the report. In many instances tuberculosis was suspected or partly substantiated as the correct diagnosis by a physician or agency not responsible for making the final report. Thus Table No. 6 has to be explained rather fully in order to give physicians and mass X-ray surveys the credit which belongs to them in finding new cases.

As the table stands, private physicians signed the reports for 231 or 15 per cent of the new cases in 1948. One hundred eighty-eight of these patients were white and only 43 colored. General hospitals reported 415 new cases, or 26 per cent of the total, of which 182 were white and 233 Negroes. Health Department chest clinics were responsible for the reports of 567, or 36 per cent, of total cases, 291 of which were white and 276 Negroes. Baltimore City Hospitals reported 70 new cases, 30 in white persons, 40 in Negroes. Various sanatoria reported 29 new cases, other scattered agencies 49 new cases and the Tuberculosis Case-finding Service conducted by Dr. M. S. Shiling in the Bureau of Tuberculosis was responsible for the new report in 97 instances where further examination could not be secured at the time. Death certificates accounted for 123 new reports, representing nearly 8 per cent of the total; 62 in white persons, 61 in Negroes.

Of the 231 new cases reported by private physicians, 19 or 8.2 per cent, were referred because of suspicious small films taken by Dr. Shiling. Of the 415 reported by general hospitals, 47 or 11.3 per cent were originally picked up by the hospital small-film service and 5 others were first found by the case-finding small film.

Of the 567 new cases reported from the Health Department chest clinics, 256 or 45 per cent were referred to the clinics by private physicians, 97 or 17 per cent were sent in after a small film by the Department, and 9 were first discovered by small film in the Eastern Health District. An additional 9 others came to the clinics because of suspicious small films in a hospital screening clinic. Of the 70 cases reported first by Baltimore City Hospitals, 12 or 17 per cent were detected in the hospital small-film service and one by a small film taken by the Department. Of the 49 reported by other agencies in Table No. 6, 3 or 6 per cent were referred by the Department's small film surveys.

Thus in addition to the 97 new cases shown in Table No. 6 whose report was charged to case-finding surveys, there were 125 reported by other agencies originally detected in the small film service; 68 reported by other agencies were picked up originally in hospital screening clinics and 9

coming to light in the Eastern Health District screening clinic were also reported by other agencies.

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 and was overcrowded at most sessions. 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 the Eastern Health District and a small-film service at Druid Health Center, both used exclusively by apparently healthy persons, are described under "Case-Finding Projects."

At the three regular diagnostic chest clinics there were 11,495 individuals examined during 1948 as compared with 9,958 in 1947. Of the 11,495 examined, 6,560 were white and 4,935 were Negroes. Clinic attendance was greater for both races, service being given to 904 more white persons and to 633 more Negroes in 1948 than in 1947. New registrants numbered 7,626 and represented 66 per cent of those examined. The remaining 3,869, or 34 per cent, were registered prior to 1948 and required follow-up. The distribution of new registrants as to race, reason for referral and referring agency is shown in Table No. 7.

Of the 7,626 new registrants, 5,735 or 75 per cent came to the clinic for diagnosis because pulmonary disease was suspected. The remaining 1,891 or 25 per cent were apparently well but had been exposed to tuberculosis usually within their own households and consequently came to the clinics for chest X-ray service to rule out significant infection. This number of contacts does not include 930 tuberculosis contacts among 5,943 "well" persons given small film service at the Eastern Health District screening clinic.

In all, the clinics of the Bureau of Tuberculosis examined 2,881 persons as tuberculosis contacts. Corresponding figures for the last two years were 3,209 in 1946 and 2,930 in 1947. These counts do not include occasional exposed individuals known to the public health nurse who had small films at the offices of the Maryland Tuberculosis Association at 900 St. Paul Street, nor the arrangements for tuberculin-positive infants whose X-rays are made through the pediatric services of the Johns Hopkins Hospital and the University Hospital. Even allowing for these additions to contact work initiated by the public health nurse, it remains true that the effort of the City Health Department among the families of the tuberculous is not as effective as it should be and that the number of exposed persons

adequately examined is decreasing of late. Our public health nurses are overworked; their field work needs more frequent case review; the services of a special supervisor of tuberculosis nursing are gravely needed.

In Table No. 7 are shown the numbers and percentages of ill patients referred for diagnosis by various agencies. Private physicians referred 60 per cent of all white patients and 65 per cent of all Negro patients; public health nurses sent in 4 per cent of white and 6 per cent of Negroes; other Health Department clinics referred 2 per cent of white and 4 per cent of Negroes. The Department's case-finding program undertaken with the assistance of the Maryland Tuberculosis Association sent to the clinics 369 patients with X-ray evidence of lung lesion of some kind; 232 of these were white patients and 137 were Negroes. Other miscellaneous sources accounted for nearly 27 per cent of the white patients examined for diagnosis and nearly 17 per cent of Negro patients.

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 26 per cent of all white contacts but only 11 per cent of Negro contacts. Public health nurses were responsible for sending to clinics 27 per cent of white exposed persons examined and nearly 80 per cent of all those Negro contacts registered in the clinics. Other scattered and less important sources accounted for the remaining 46 per cent of white patients and 9 per cent of Negroes examined for exposure.

Collapse Therapy for Ex-sanatorium Patients

All three chest clinics held regular sessions at least twice weekly for artificial pneumothorax therapy. The service was limited to patients whose collapse therapy had been initiated elsewhere, usually in the sanatorium. During 1948 these treatments were given to 239 patients as shown in Table No. 7. Thirty-three of these were new patients and 200 were former registrants for whom treatment was continued. Six others were treated as special patients while on leave from their sanatoria. In all, 4,505 visits were paid to these treatment clinics.

Case-Finding Projects

During 1948 the Bureau of Tuberculosis continued its program of search for tuberculosis among the apparently well by free chest X-ray service. This program was ably assisted by the Maryland Tuberculosis Association which furnished all the films for both stationary and mobile units and collaborated helpfully with publicity in organizing those large groups in the community to which the mobile photofluorographic unit was taken under the direction of Dr. M. S. Shiling.

The report of the small-film service (4″ x 5″ photofluorography) is

shown in summary in Table No. 7. The Eastern Health District screening clinic took X-ray pictures of 5,943 individuals of whom 3,916 were white and 2,027 were Negroes. The largest category X-rayed were industrial employees, next the registrants of a large prenatal clinic operated by the Health Department, and third, tuberculosis contacts.

Druid chest clinic with a similar small-film stationary unit made routine chest films of 528 prenatal patients registered with the Health Department. Apparently healthy persons exposed to tuberculosis who came to Druid chest clinic for small films have been counted in the regular clinic reports. They have been enumerated under *Tuberculosis Contacts* in Table No. 7 and already discussed.

The bureau staff with the assistance of the Maryland Tuberculosis Association X-rayed 57,686 apparently well individuals with the mobile unit, using 70 mm. film. This is an increase of 34 per cent over the 43,204 persons surveyed in 1947. Of the entire group 36,896 or 64 per cent were white and 20,790 or 36 per cent were Negroes.

Twenty-six per cent of all the white persons thus X-rayed were filmed in high schools and colleges, 23 per cent were employees of public utilities, 16 per cent belonged in various community projects, 11 per cent were industrial employees, 9 per cent were department store personnel, 6 per cent were in housing projects, 5 per cent were persons attending the Better Homes Exposition and the remaining 4 per cent were office workers.

Among Negroes 48 per cent of the total X-rayed by the mobile unit were in public schools or at Morgan State College. Twenty-seven per cent had their films taken during surveys of housing projects, 18 per cent were filmed in community project surveys, 5 per cent were employees of utilities and industries, and the remaining 2 per cent were from scattered sources such as department stores and offices.

Individuals of the two races reporting for X-rays by the mobile unit were quite different in age distribution. Of the 36,896 white persons X-rayed, 7 per cent were under age 15, 78 per cent between the ages of 15 and 45, and 14 per cent were 45 years of age or older. Among the 20,790 Negroes X-rayed, 35 per cent were under age 15, 59 per cent were between the ages of 15 and 45 and 5 per cent were 45 years of age or older. Less than half of one per cent of each race failed to specify age.

Among the 57,686 X-rayed, 56,324 or 97.6 per cent were regarded as having negative chest films, while the remaining 1,362 were made up of 1,174 with chest X-ray readings of suspected disease and 188 others whose chest films were technically unsatisfactory. For the white race 97.4 of the small films were read as negative, 2.2 per cent showed suggestive evidence of chest disease, and 0.4 per cent were technically not satisfactory. For Negroes, 98.1 per cent of those X-rayed had negative readings of their

films, 1.8 per cent displayed X-ray evidence of suspected chest disease, and 0.1 per cent were technically unsatisfactory. The somewhat more favorable findings in apparently healthy Negroes are probably accounted for by the larger proportion of children X-rayed in that race. Childhood is not the period when important X-ray changes are most prevalent in the chest. It has been known for some time that the Negro community in spite of its high mortality from tuberculosis rarely discloses a commensurately higher prevalence of tuberculosis in chest X-ray morbidity surveys than the white race. This is explained by its being a more acute infection in Negroes, much less chronic in its course. Those contracting it are not usually mistaken for "well" individuals for long, while white persons not infrequently suffer little or no inconvenience from mild forms of pulmonary tuberculosis which tend to remain minimal in extent.

Of the 1,362 individuals for whom a negative reading was not given, i.e., either abnormal shadows were seen or the film was unsatisfactory, 564 had no 14″ x 17″ picture made. In 415 no large film was advised: 178 of these were instances of abnormal or enlarged heart shadows for which a special cardiac investigation was advised; 99 had presumably nontuberculous pulmonary pathology which was not important enough to make a large film essential; 126 had technically poor films but repeating them seemed unimportant, and 12 others had tuberculous shadows so obsolete in appearance that a large film was not considered necessary. Seventy-six other individuals from the total of 1,362 were previously known cases and no large film was needed because they were already under supervision or quite patently had not changed in any important way since their last 14″ x 17″ X-ray observation. For 72 others a 14″ x 17″ film was advised and had not been taken by the end of two months. From this group there were 12 whose pulmonary tuberculosis was considered definite enough for registration as new cases.

The remaining 798 individuals reported for 14″ x 17″ films and further clinical study and the classification reached was as follows:

Essentially negative for tuberculosis	490
Suspected pulmonary tuberculosis	50
Minimal pulmonary tuberculosis	193
Moderately advanced tuberculosis	47
Far advanced tuberculosis	6
Pleurisy with effusion, presumably due to tuberculosis	6
Primary tuberculosis of tracheobronchial lymph nodes	4
Acute miliary tuberculosis	1
Unsatisfactory film	1

From the above list if the suspects and negatives are omitted, there emerge 257 individuals with a positive diagnosis of tuberculosis following

the 14″ x 17″ re-take X-ray. Two hundred eight of these were white persons and 49 were Negroes. Of the 208 white cases, 40 were known before and had been counted as new cases in previous years, 37 showed such small well-healed scars that they were not considered significant, and the remaining 131 were numbered as new cases. Of these numbered cases in white persons, 106 were minimal, 22 moderately advanced, 2 far advanced and one instance of pleurisy with effusion.

Of the 49 Negroes definitely diagnosed by confirmatory studies, 7 had been registered by the Bureau of Tuberculosis in some previous year, 2 showed only old scars and 40 others were enumerated as new cases. Of the numbered cases in Negroes, 29 were minimal, 11 moderately advanced, 1 far advanced, 3 had primary tuberculosis of the tracheo-bronchial lymph nodes and 1 showed an acute miliary tuberculosis.

In summary, the mobile unit operated by the Department uncovered 12 new cases of definite tuberculosis in persons failing to get the large films advised. These were enumerated by the bureau and will be followed as cooperation permits. Confirming large films and laboratory studies led to the diagnosis and enumeration of 171 additional new cases as just described. Thus the total of new cases found among city residents by the mobile unit during 1948 stands at 183.

One of the most important features of X-ray surveys of healthy persons in the community is the education of the public in tuberculosis control. More and more people know of the high morbidity and mortality from tuberculosis in Baltimore, and a large number begin to realize that the most competent physician cannot exclude pulmonary tuberculosis in his patients unless a chest X-ray is taken. The increased attendance at the Health Department chest clinics is one indication of public response to this education. The success of the Health Loan on November 2, 1948 authorizing more tuberculosis beds at the Baltimore City Hospitals was quite probably in part due to the educational value of the case-finding program.

The 70 mm. photofluorographic X-ray units provided earlier by the City Health Department for three hospitals did varying amounts of work during the year. At the Johns Hopkins Hospital 19,213 patients were X-rayed, mainly new registrants to the dispensary. Of the total, 11,817 or 61 per cent were white, and 7,396 or 39 per cent were Negroes. Three hundred seventeen tuberculosis suspects were reported promptly on reading the project films. Collaboration between the hospital and the Bureau of Tuberculosis brought the majority of suspects back to the hospital for 14″ x 17″ X-rays and laboratory studies. At the Baltimore City Hospitals 6,713 individuals were X-rayed. Hospital employees and various ambulant patients admitted to the hospital services were the

principal classifications served. No counts were kept for race. One hundred twenty-nine tuberculosis suspects were reported, and in most instances their 14″ x 17″ films and special laboratory studies were done by the hospital. University Hospital X-rayed 10,217 individuals with its 70 mm. unit. They supply no separation for race. The patients X-rayed were dispensary registrants. Project film readings disclosed 348 persons in whom tuberculosis of the lungs was suspected. Reports were not made from these small film readings but only after the patient had accepted follow-up and a definite diagnosis had been reached in the out-patient chest clinic. It is impossible to estimate how completely these suspects accepted further study. The total number of individuals X-rayed by small-film units in these three hospitals was 36,143 as compared with 22,984 served in this way in 1947.

Hospital and Sanatorium Facilities

The past year saw no additional hospital facilities put into use for the treatment of tuberculosis. About 1,490 beds were in use throughout the year for the entire state including those in the Tuberculosis Division of the City Hospitals. There were 265 beds not in use. Of these, 120 were unheated shack accommodations for white patients at the Maryland State Sanatorium unsuitable for future use as such. Most of the other unused beds were temporarily closed for one reason or another, the lack of attendants and nurses being one of the most important. Sanatorium beds for Negroes, as in the past, were not much over half as numerous as for white patients. The following ratios compiled in 1947 for Maryland as a whole indicate the number of beds in tuberculosis institutions in this state in terms of annual deaths taking place.

	Total	*White*	*Colored*
Ratio of beds in use to tuberculosis deaths.....	1.28	1.69	0.88

It is clear from an inspection of these ratios and their comparison with the minimum standard approved by the American Trudeau Society and the U. S. Public Health Service, that of 2.5 beds per annual tuberculosis death, that Maryland's supply of beds for either race falls far below the accepted standard. It is also clear that the Negro situation is numerically much less favorable than that for white persons.

Major thoracic surgery was available for patients at the state sanatoria only after a long delay and for most such patients only by transfer to the surgical division of the City Hospitals. Toward the end of the year an acute nursing shortage reduced these surgical opportunities still further.

Several encouraging events took place during 1948 which have a bearing on the program for treatment of tuberculosis throughout the state. Dr.

Leon H. Hetherington was appointed Chief of the Division of Tuberculosis Services by the Maryland State Department of Health on October 1, 1948. He is qualified to give first-class clinical and administrative leadership to the various state sanatoria, and by the end of the year had sound plans outlined for the improvement and extension of facilities for treatment.

The full time post of Assistant Hospital Physician in Tuberculosis at the Baltimore City Hospitals was ably filled on July 1, 1948 by the appointment of Dr. Edmund G. Beacham.

On November 2, 1948 the voters of Baltimore City authorized a hospital loan which included funds for the construction of a new tuberculosis unit of 300 beds at Baltimore City Hospitals. The Maryland Tuberculosis Association played an important role in bringing the need for the loan to the attention of the public by means of a carefully planned campaign prior to Election Day. The new tuberculosis unit will replace a 140-bed unit now housed in a dilapidated frame building. It will bring the total of 280 tuberculosis beds at City Hospitals up to a new total of 440 beds.

On May 20, 1948 the Maryland State Department of Health authorized the use of the antibiotic streptomycin, free of charge,to selected patients under treatment in the state sanatoria whose disease in the judgment of the superintendent was of the clinical type likely to be benefited by its administration. While this therapeutic agent has raised false hopes in many patients whose tuberculosis is not of the type streptomycin will help, there is real benefit in its administration to a selected group. It is a real step forward to have it on hand, free of charge, for appropriate cases. Streptomycin is not yet provided free for patients under treatment in the Tuberculosis Division of the City Hospitals. This type of therapy has been advised for a good many patients there, notably those undergoing thoracic surgery, and each time the patient or some private source has had to raise the money to pay for the streptomycin.

During 1948 the various sanatoria within the state, including the Tuberculosis Division of the City Hospitals, reported the deaths of 341 residents of Baltimore City, and during the same time interval they discharged alive a total of 523 city residents. Of live discharged patients residing in the city, 362 or 69 per cent were discharged with consent, while the remaining 161 or 31 per cent failed to complete their treatment and left against medical advice. Of those leaving without permission, 93 or 58 per cent were known to have a positive sputum. The corresponding figures for 1947 were 350 live discharges with consent, representing 61 per cent of total live discharges, while the remaining 226 patients or 39 per cent failed to complete their treatment.

While the record of 1948 is better than in 1947, there is still need for a better psychological adjustment and higher patient morale in our sanatoria.

Social service workers are badly needed in all our institutions. Occupational therapy has never been introduced in the state sanatoria. On September 1, 1948 the Tuberculosis Division of Baltimore City Hospitals began employing its first occupational therapist. This kind of diversional therapy is important in any program for the treatment of chronic disease. The Maryland Tuberculosis Association has played a very helpful role in inaugurating a library service at the Maryland Tuberculosis Sanatorium, and one of their social workers gives part time to patients in the Tuberculosis Division of City Hospitals.

Nursing Service

Field service to the tuberculous and their exposed families was carried on as usual during the year by a staff of overworked public health nurses, for whom tuberculosis is only one of a number of functions in a generalized program. New nurses were hard to find and the year closed without our securing a supervisor of tuberculosis nursing. Most of the year 174 field nurses were on duty. With the 1948 population of the city estimated at 958,000 this is far too few public health nurses. At least 300 such nurses could be usefully employed. With the concentration of tuberculosis in overcrowded Negro sections of the city, a considerably larger number of Negro public health nurses ought to be working for the City Health Department. At the present time there are 40 Negro nurses doing excellent work.

Vocational Rehabilitation

Vocational rehabilitation of tuberculous patients whose lesions have become quiescent or apparently arrested was continued as a special service from the State Department of Education during 1948. During the year there were 59 new patients living in Baltimore for whom rehabilitation was undertaken; 36 white, 23 Negroes. This service is an important one and can perhaps be made available to a larger number of patients as the state sanatoria operate under Dr. Hetherington's leadership and with more adequate budgets. Most of the work done by the State Vocational Rehabilitation Division to date has been undertaken in the Tuberculosis Division of 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 fiscal year ending June 30, 1949, the sum available for Baltimore City was $57,128.00, of which $55,261.00 was available for salary assistance and the small remainder of $1,867.00 for equipment and supplies. The positions

made possible by this grant include the Director of Tuberculosis Surveys, the Assistant Hospital Physician in Tuberculosis at the City Hospitals, an occupational therapist there, and various professional and clerical positions which facilitate our work in case-finding and at our diagnostic clinics. There are vacant positions of supervisor of public health nursing in tuberculosis and medical social worker for Baltimore City Hospitals.

Conclusion

In conclusion, this is a more hopeful report than for 1947. In a biracial urban population of close to 1,000,000 people, with forty per cent of our housing substandard, and the policy of segregation operating to continue overcrowding and poverty among our Negro residents, the problem of tuberculosis control is gigantic and will never be solved by administrative public health measures alone. However, in the field of sanatorium treatment, known to be the weakest point in the specific program for tuberculosis control, we have new leadership and the outline of a sound program for the improvement and extension of services in the state sanatoria. At Baltimore City Hospitals plans are being drawn for more beds. And meanwhile there is encouragement in the potential role of new therapeutic agents in the treatment of tuberculosis, never to replace prolonged bed rest and indicated surgery, but important adjunct therapy in certain kinds of cases seeking treatment.

Personnel

Miriam E. Brailey, M.D., Dr.P.H., Director
Charlotte Silverman, M.D., Assistant Director
M. S. Shiling, M.D., Director of Tuberculosis Surveys
George C. 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
Elaine S. Cramer, M.P.H., Junior Statistician
Gertrude Cordish, Principal Clerk
Anna S. Mehring, Senior Stenographer
Shirley Worth, Senior Clerk
Shirley Gilden, Senior Clerk
Leah Kushner, Senior Clerk
Frances T. Morris, Senior Clerk
Beverly Strauss, Junior Clerk
Bernice Taylor, Junior Clerk
Rita C. Kurek, Junior Typist
Arnold C. Rifkin, Photofluorographic Machine Operator
Anthony Alexandrowicz, Photofluorographic Machine Operator

TABLE NO. 1

COMPARISON OF PRECEDING 3-YEAR AVERAGE NUMBER OF RESIDENT TUBERCULOSIS DEATHS WITH THOSE OF 1948 BY BROAD AGE-GROUPS AND ACCORDING TO RACE AND SEX

Sex and Age Group	White			Colored		
	Average for 1945–47	1948	Decrease	Average for 1945–47	1948	Decrease
Both Sexes						
Total	336	297	39	410	360	50
Under 15 years	8	2	6	30	12	18
15–34 years	73	40	33	169	141	28
35 years and over	255	255	..	211	207	4
Males						
Total	238	236	2	239	218	21
Under 15 years	4	1	3	14	5	9
15–34 years	30	17	13	63	51	12
35 years and over	204	218	14*	162	162	..
Females						
Total	98	61	37	171	142	29
Under 15 years	4	1	3	16	7	9
15–34 years	43	23	20	106	90	16
35 years and over	51	37	14	49	45	4

* Increase.

TABLE NO. 2

REPORTED TUBERCULOSIS CASES, ACCORDING TO LOCATION, EXTENT OF LESION AND RACE—1948

Location and Extent of Lesion	Total	White	Colored
Total Reported Cases	1,581	900	681
Pulmonary lesions (total)	1,540	885	655
Minimal	534	373	161
Moderately advanced	458	284	174
Far advanced	405	188	217
Severe primary lesion	104	28	76
Acute miliary or disseminated	34	8	26
Unspecified	5	4	1
Nonpulmonary lesions (total)	41	15	26
Meningitis	12	6	6
Spinal	6	2	4
Peritonitis	4	1	3
Other forms	19	6	13

TABLE NO. 3

ANALYSIS OF REPORTED CASES OF PULMONARY TUBERCULOSIS ACCORDING TO EXTENT OF PULMONARY LESION—1948

CLASSIFICATION OF LESION	TOTAL	WHITE	COLORED
Cases with extent of lesion specified	1,535	881	654
Minimal lesions: All types	534	373	161
Active	168	106	62
Inactive	320	256	64
Pleural effusion	46	11	35
Moderately and far advanced	863	472	391
Severe primary lesions	104	28	76
Acute miliary or disseminated	34	8	26
PERCENTAGE DISTRIBUTION			
Total cases with extent of lesion specified	100.0	100.0	100.0
Minimal lesions: All types	34.8	42.3	24.6
Active	10.9	12.0	9.5
Inactive	20.9	29.1	9.8
Pleural effusion	3.0	1.2	5.3
Moderately and far advanced	56.2	53.6	59.8
Severe primary lesions	6.8	3.2	11.6
Acute miliary or disseminated	2.2	0.9	4.0

TABLE NO. 4

PULMONARY AND NONPULMONARY REPORTED CASES OF TUBERCULOSIS CLASSIFIED BY RACE, SEX AND BROAD AGE GROUPS—1948

CLASSIFICATION AND AGE	WHITE			COLORED		
	Total	Male	Female	Total	Male	Female
Pulmonary lesions						
All ages	885	561	324	655	385	270
Under 15 years	33	18	15	89	47	42
15-24 years	112	45	67	140	55	85
25-34 years	166	65	101	131	63	68
35-44 years	156	97	59	108	72	36
45-54 years	176	140	36	107	80	27
55-64 years	162	135	27	48	42	6
65 years and over	80	61	19	32	26	6
Nonpulmonary lesions						
All ages	15	10	5	26	14	12
Under 15 years	5	3	2	5	4	1
15 years and over	10	7	3	21	10	11

TABLE NO. 5

PERCENTAGE DISTRIBUTION OF PULMONARY AND NONPULMONARY REPORTED CASES OF TUBERCULOSIS CLASSIFIED BY RACE, SEX AND BROAD AGE GROUPS—1948

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 years	3.7	3.2	4.6	13.6	12.2	15.6
15–24 years	12.7	8.0	20.7	21.4	14.3	31.5
25–34 years	18.8	11.6	31.2	20.0	16.4	25.2
35–44 years	17.6	17.3	18.2	16.5	18.7	13.3
45–54 years	19.9	24.9	11.1	16.3	20.8	10.0
55–64 years	18.3	24.1	8.3	7.3	10.9	2.2
65 years and over	9.0	10.9	5.9	4.9	6.7	2.2
Nonpulmonary lesions						
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years	33.3	30.0	40.0	19.2	28.6	8.3
15 years and over	66.7	70.0	60.0	80.8	71.4	91.7

TABLE NO. 6

TUBERCULOSIS CASES CLASSIFIED BY RACE AND REPORTING AGENCY—1948

Reporting Agency	Total		White		Colored	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total Cases	1,581	100.0	900	100.0	681	100.0
Private physicians	231	14.6	188	20.9	43	6.3
General hospitals	415	26.3	182	20.2	233	34.2
Health Department clinics	567	35.9	291	32.3	276	40.5
Case-finding surveys	97	6.1	91	10.1	6	0.9
Baltimore City Hospitals	70	4.4	30	3.3	40	5.9
Other sanatoria	29	1.8	25	2.8	4	0.6
Other agencies	49	3.1	31	3.5	18	2.6
Reported after death	123	7.8	62	6.9	61	9.0

TABLE NO. 7
SUMMARY OF CHEST CLINIC AND MASS X-RAY SERVICES CLASSIFIED BY RACE—1948

	TOTAL		WHITE		COLORED	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Diagnostic Service						
Clinic Registrants						
Total	11,495	100.0	6,560	100.0	4,935	100.0
New in 1948	7,626	66.3	4,668	71.2	2,958	59.9
Registered before 1948	3,869	33.7	1,892	28.8	1,977	40.1
New Registrants						
Total	7,626	100.0	4,668	100.0	2,958	100.0
Patients for diagnosis	5,735	75.2	3,828	82.0	1,907	64.5
Tuberculosis contacts	1,891	24.8	840	18.0	1,051	35.5
Source of Referral						
Patients for diagnosis						
Total	5,735	100.0	3,828	100.0	1,907	100.0
Physicians	3,561	62.1	2,317	60.5	1,244	65.2
Public health nurses	281	4.9	159	4.2	122	6.4
Health Department clinics	182	3.2	97	2.5	85	4.5
Case-finding project	369	6.4	232	6.1	137	7.2
All other	1,342	23.4	1,023	26.7	319	16.7
Tuberculosis Contacts						
Total	1,891	100.0	840	100.0	1,051	100.0
Physicians	339	17.9	221	26.3	118	11.2
Public health nurses	1,067	56.4	230	27.4	837	79.6
Health Department clinics	70	3.7	56	6.7	14	1.4
All other	415	22.0	333	39.6	82	7.8
Clinic Visits						
Total in 1948	19,670	100.0	11,605	100.0	8,065	100.0
Day sessions	10,053	51.1	6,713	57.8	3,340	41.4
Night sessions	9,617	48.9	4,892	42.2	4,725	58.6
Number of X-ray Examinations						
Total	11,995	100.0	6,891	100.0	5,104	100.0
New patients for diagnosis	5,513	45.9	3,498	50.8	2,015	39.5
New tuberculosis contacts	1,578	13.2	790	11.5	788	15.4
Repeat visits	4,904	40.9	2,603	37.7	2,301	45.1
X-ray Survey of Apparently Healthy Persons	64,157	..	40,812	..	23,345	..
Eastern Health District	5,943	..	3,916	..	2,027	..
Druid Health Center	528	..	..	..	528	..
Mobile X-ray Unit	57,686	..	36,896	..	20,790	..
Pneumothorax Service						
Total Patients	239	100.0	159	100.0	80	100.0
New patients	33	13.8	27	17.0	6	7.5
Pa ients registered prior to 1948	200	83.7	127	79.9	73	91.3
Special patients	6	2.5	5	3.1	1	1.2
Total Visits	4,505	..	3,306	..	1,199	..
Number of X-ray Examinations	423	..	282	..	141	..

BUREAU OF VENEREAL DISEASES

BUREAU OF VENEREAL DISEASES

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

Director

Early in January of this year the Bureau of Venereal Diseases moved from overcrowded quarters in the Municipal Building to adequate and pleasant quarters on the second floor at 202 Guilford Avenue.

The Assistant Director of the Bureau of Venereal Diseases resigned late in June to accept the position of Health Officer of Queen Anne's County, Maryland. It has been impossible to fill the vacancy at the small salary provided for this position.

Morbidity and Mortality

During the year 4,745 cases of syphilis, 6,025 cases of gonorrhea and 118 cases of chancroid were reported. The decline in reported syphilis from 5,394 in 1947 as shown in Table I was due almost entirely to a decline in reported primary and secondary syphilis. There was only a slight increase in reported cases of gonorrhea this year, from 5,997 in 1947.

Private physicians reported 12.9 per cent of the syphilis, 6.2 per cent of the gonorrhea and 6.8 per cent of the chancroid. It will be seen from a study of Table No. 1 that there has been a further considerable increase in the number of cases of gonorrhea reported by the city clinics, which lends support to the belief that an increasing proportion of the infected seek medical attention at these clinics where treatment with penicillin is free.

From Tables No. 2 and 3 it will be seen that there were 1,171 cases of primary and secondary syphilis reported, and 1,330 cases of early latent syphilis,* a total of 2,501 cases of infectious or potentially infectious syphilis. This is a decline of 657 cases, from 3,158 in 1947, and is consistent with a decline in reported early syphilis in the United States this year. It may be due in part to the efficiency of penicillin, and in part to an improved and accelerated control program, but it is probable that much of the decline is the natural result of greater postwar stabilization of the population and a decrease in sexual promiscuity. A similar world-wide decline was noted after World War I, and in the Scandinavian Countries declines have followed outbreaks with considerable regularity since reporting began in 1877.

Reports of 151 cases of congenital syphilis were received, of which 43

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* Syphilis of less than 2 years' duration.

were in infants under 1 year of age. It has been noted by the U. S. Public Health Service that the anticipated control of congenital syphilis in the United States has not materialized in spite of premarital and prenatal blood test legislation, the rate per 1,000 population having remained at approximately 0.09 since 1944 after a decline from 0.133 beginning in 1941.

As shown in Table No. 4, resident deaths from syphilis numbered 182.

Epidemiology and Case Holding

The Bureau of Venereal Diseases investigated a total of 7,076 contacts of patients with syphilis and gonorrhea as identified in the Health Department venereal disease clinics, and as reported by other clinics and medical agencies within and outside the City of Baltimore. The results of these investigations are shown in Tables Nos. 5 and 6.

Results of the contact investigations made for the Health Department venereal disease clinics, the Baltimore Rapid Treatment Center and the Armed Services, the three chief sources of contact reports, are summarized in the following table:

SUMMARY OF CONTACT INVESTIGATIONS FOR CERTAIN AGENCIES—1948

Agency Which Reported Contacts	Total	Not Found		Examination Not Completed		Previously Known		Examination Completed	
	No.	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	7,076	3,313	46.7	1,506	21.2	804	11.4	1,453	20.7
City Clinics	5,136	2,221	42.3	1,139	22.2	680	13.2	1,096	21.3
Rapid Treatment Center	499	291	58.4	74	14.8	43	8.6	91	18.2
Armed Services	374	278	74.3	44	11.8	12	3.2	40	10.7
All Other Agencies	1,067	523	49.0	249	23.3	69	6.5	226	21.2

The policy has recently been adopted in the Health Department venereal disease clinics of including in the contact investigation statistics all admitted exposures during the longest possible incubation period of the disease and subsequent to its onset, whether or not the contact can be identified in any way. This tends to indicate, more accurately, the potential contact investigation load. It also accounts for the relatively large number of contacts who could not be found. The Armed Forces also follow this policy to a considerable degree, but many of the contacts of men in the Armed Forces cannot be found even though names and addresses are given. Either the names and addresses are false, or the contact moves frequently without leaving a forwarding address, or the address given is that of the tavern or night club where the patient and contact met, but not where the contact can be found or traced.

The Baltimore Rapid Treatment Center has been very successful in its attempt to identify contacts not already identified by the medical agencies which refer the original cases to the Center. The personnel at the Center have several days in which to discuss the matter with the patient and gain his confidence. Only those contacts are reported to the Health Department, however, which are sufficiently well identified to seem to be worth investigation. This is true, also, of contacts reported to the Health Department by other agencies than the Armed Services. These differences in procedure account for much of the variation in the proportion of contacts not found.

The investigation of all contacts reported to the Health Department or identified in the Health Department venereal disease clinics is carried on by a staff of seven public health nurses, four on a full time and three on a part time basis, in the Bureau of Public Health Nursing, two full time male social workers 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, specially trained in venereal disease control procedures, assigned to the Bureau of Venereal Diseases, full time, by the Bureau of Public Health Nursing.

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. Those contacts who fail to submit to examination are reported to the Baltimore City Health Department. During the year, 1,184 patients were interviewed and 880 of them named 1,183 contacts. Of these, 640 or 54.1 per cent were examined and 336 or 52.5 per cent of those examined were found to have a venereal disease.

No data are available as to contact investigation by other agencies, none of which employ field investigators in venereal disease. No doubt some contacts respond to letters from these agencies, and to the urging of the original patients themselves, to report for medical examination. Many of the contacts identified by these agencies are reported to the Health Department for investigation, the results of which are included in the data in Table No. 6.

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 generalized public health nursing service. Most of the delinquent patients followed by these nurses are registered in the Health Department venereal disease clinics, but some are followed at the request of private physicians and other medical agencies. During

the year 8,938 visits were made for the investigation of contacts and for the follow-up of delinquent patients by these nurses and the two social workers.

The Clinics

Health Department venereal disease clinics for adult patients were operated at three locations to a total of eighteen sessions a week. In June, weekly venereal disease clinics for children were opened at the Calvert Street Clinic and at the Somerset Health Center. A clinic for children has been operated at the Druid Health Center for many years. Thus, there are now venereal disease clinics for children at all three venereal disease clinic locations, and this service is available for white children, at the Calvert Street Clinic, for the first time.

A public health nurse, with special training in venereal disease control procedures, was assigned by the Bureau of Public Health Nursing to full time duty in the venereal disease clinic at the Druid Health Center. Three additional nurses were assigned to this clinic on a part time basis. All of the Health Department venereal disease clinics, therefore, now have local nursing supervision, and all of the clinic sessions are attended by public health nurses or social workers who interview patients for case finding and case holding purposes.

A tickler system was installed at the Druid Health Center this year. This system is now used in all of the Health Department venereal disease clinics, for the more prompt and efficient detection of delinquency, and for the more effective follow-up of both contacts and delinquent patients.

The Health Department venereal disease clinics reported 11,510 admissions during the year, of which 4,636 were for gonorrhea, 2,483 for syphilis, 91 for other venereal diseases, 2,674 of persons found not to be infected and 1,626 in whom the diagnosis was not completed. Of those in the last group, 699 were treated as for gonorrhea because they were alleged contacts, mostly female, of patients known to have gonorrhea. The disease is often very difficult to detect in women and it is general practice to treat female contacts whether or not the diagnosis of gonorrhea is made.

The Johns Hopkins Hospital clinic reported 1,285 admissions of which 260 were for gonorrhea, 760 for syphilis, 57 for other venereal diseases, 169 of persons found not to be infected and 39 in whom the diagnosis was not completed.

Thus at least 12,795 persons were admitted to the venereal disease clinics in the city. The Health Department venereal disease clinics reported 66,131 patient visits and the Johns Hopkins Hospital reported 18,395 patient visits, a total of 84,526, as shown in Table No. 7. This is a decrease of 8,203 visits from the 92,729 reported in 1947. Most of this decrease,

7,359 visits, was in visits to the Health Department clinics. Part of it is due to the closing of the penicillin clinic for gonorrhea in August, part of it to the fact that post-treatment observation for gonorrhea was abandoned early in the year, and part to the decline in admissions for early syphilis.

Venereal diseases are treated in the outpatient departments of six Baltimore hospitals to a total of thirty-nine sessions a week. Most of these patients are treated in urologic, gynecologic, dermatologic and children's clinics rather than in venereal disease clinics *per se*. Data as to the number of admissions to these clinics are available only from Medicine I of the Johns Hopkins Hospital, but it is believed that the number of admissions to the remainder is relatively small. The total number of morbidity reports received from the other five of these hospitals was 311 for syphilis, 26 for gonorrhea and 5 for chancroid, and it may be assumed that most of these reports relate to infections seen in the out-patient departments of these hospitals.

Penicillin Clinic

With the advent of procaine penicillin in oil upon the therapeutic scene, it became possible to cure most gonococcal infections with a single treatment. It thus became unnecessary to continue the operation of the special penicillin clinic at the Calvert Street clinic since all patients could be treated at the regular sessions of all of the Health Department venereal disease clinics. Accordingly, the penicillin clinic was closed on the second day of August. Up to that date, a total of 3,588 patients had been treated at this clinic during the year.

As the result of studies made at the penicillin clinic on 216 patients, and of studies reported by the Johns Hopkins Hospital, it was eventually decided to give a single dose of 75,000 units of procaine penicillin in the treatment of gonorrhea at the regular clinic sessions. The Health Department has continued the policy, adopted last year, of omitting tests for cure of gonorrhea after penicillin therapy. Patients are instructed to return to the clinic only if symptoms of infection persist, and to report for a blood test for syphilis four months after treatment for gonorrhea, unless they are already known to have syphilis and are under treatment or observation for that disease.

Baltimore Rapid Treatment Center

During this fourth year of its operation, the Baltimore Rapid Treatment Center, a division of the Baltimore City Hospitals, admitted 1,565 patients for the treatment of venereal disease, as shown in Table No. 8. Of these, 1,391 were residents of Baltimore, 173 were residents of the counties of Maryland and 1 was a resident of another state. The Health Department

venereal disease clinics referred 1,055 of the patients to the Center, the county health departments referred 110, private physicians referred 52 and other clinics and medical agencies referred 348.

Table No. 8 shows that 763 or 48.8 per cent of the patients admitted to the Center had primary or secondary syphilis. Pregnancy complicated by syphilis accounted for 418 or 26.7 per cent of the admissions, and 224 or 53.6 per cent of these were primary, secondary or early latent syphilis, so that many congenital infections must have been prevented.

This year, for the first time, patients were accepted for the treatment of lymphogranuloma venereum with aureomycin and of granuloma inguinale with streptomycin or aureomycin. There were 4 patients admitted with lymphogranuloma venereum and 74 with granuloma inguinale. Patients with neurosyphilis who were not paretic or did not have optic atrophy and were not psychotic were also admitted this year and there were 13 of these.

Females numbered 933 or 59.6 per cent of the total admissions, and 1,406 or 89.8 per cent of the patients were colored.

There were 197 fewer patients admitted to the Center in 1948 than in 1947 and 421 fewer than in the peak year of 1946. This was largely due to the decrease in admissions to the referring agencies for early syphilis.

Late in June, the treatment schedules were revised, the routine dose of penicillin being increased from 2.4 million to 4.8 million units given in 4 days instead of 8 days, and the injections given every 2 hours instead of every 3 hours. Pregnant women with syphilis are given the same total dose, and the treatment interval is the same as for other patients with syphilis, but the treatment is given over a period of 8 days. Mapharsen and bismuth were discontinued. This change in treatment procedure has cut the daily census in half.

On the first of July, the U. S. Public Health Service withdrew the Medical Officer in Charge of the Rapid Treatment Center because of a shortage of medical personnel in the Service. Two physicians have been employed since that time, each on a half-time basis. One of these is a Research Fellow at the Johns Hopkins Hospital. Dr. R. C. V. Robinson, Senior Medical Supervisor at the Calvert Street clinic, was appointed Consultant at the Rapid Treatment Center when the change in medical staff was made. The new arrangement has proved quite satisfactory.

The Johns Hopkins Hospital, through Medicine I, has cooperated in the operation of the Rapid Treatment Center in the pre-treatment and post-treatment evaluation of patients with neurosyphilis and in the post-treatment evaluation of the treatment of granuloma inguinale with aureomycin.

The Rapid Treatment Center does not admit children under 12 years of

age, but the Pediatric Service at the Baltimore City Hospitals does accept them. The Health Department venereal disease clinics referred 17 children to the Pediatric Service during the year for the treatment of congenital syphilis. One of the patients was a white female, five were colored males and eleven were colored females.

City Ordinance No. 217

City Ordinance No. 217 and City Health Department Regulation 1 under this ordinance were invoked in 45 instances of failure of persons with infectious syphilis to take treatment. Twenty-eight of the 45 persons were colored males, 16 were colored females and 1 was a white female.

In 18 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. Two patients were allowed to return to the clinics for treatment. There were 7 others who went to the Rapid Treatment Center or returned to the clinics for treatment after summonses or warrants had been issued by the police magistrates, but before the date of the court hearing; but it was necessary to bring 7 patients into court. The police magistrates allowed 2 patients to return to the Health Department venereal disease clinics for treatment, with suspension of the fine. The other 5 were fined, the fines being suspended when all of the patients agreed to go immediately to the Rapid Treatment Center. Thus, 34 of the 45 patients were returned to treatment. The remaining 11 could not be found.

Since the adoption of Regulation 1 on August 24, 1945, it has been invoked in 110 cases, of which 31 could not be found and 26 had to be brought into court. Of the 110 patients, 96 were colored, 14 were white, 68 were males and 42 were females. Seven of the eight police courts in the City of Baltimore have issued summonses or warrants and have tried patients under this ordinance. In no instance has a police magistrate found the patient not guilty or dismissed the case without action. The Baltimore City Police Department has been most cooperative in providing transportation from the court to the Rapid Treatment Center for those patients who have elected to go to the Center after their cases have been tried.

Staff Training

Two 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. One of these resigned at the termination of the basic six-months training period and the other had not completed his first six-months training at the end of the year. To date,

sixteen Negro physicians from the Health Department venereal disease clinics have received these appointments, and twelve of these have completed a full year of training.

Five City Health Department nurses received two weeks' training in intravenous and intramuscular techniques at Medicine I of the Johns Hopkins Hospital. Thirteen additional nurses were trained in these techniques at the Druid Health Center. This brings to 63 the total number of nurses trained to give treatment since the program was begun in January, 1944. A training center was set up at the Calvert Street clinic late this year, in addition to the one which has been operating at the Druid Health Center, so that in the future all nurses to be instructed will receive their training at one of these Health Department venereal disease clinics.

The Director of the Bureau of Venereal Diseases conducted two series of six lectures on the venereal diseases for two groups of public health nurses in the Bureau of Public Health Nursing. This completes a series of 24 lectures which have been given to these nurses.

Baltimore Venereal Disease Council

The Baltimore Venereal Disease Council held three meetings during the year. The Council has held 28 regular meetings since it was organized in December, 1942. Composed of representatives of eleven agencies which are concerned with venereal disease control, it continues to serve as an effective forum for the discussion of venereal disease problems. The Council was particularly active in promoting the establishment of the Baltimore Rapid Treatment Center and the Protective Service of the Baltimore City Department of Public Welfare, and has continuously given these agencies its support during the several years of their operation.

The Armed Forces

The Director of the Bureau of Venereal Diseases continued to serve as a member of the Civilian Advisory Board of the Armed Forces Disciplinary Control Board, and attended the monthly meetings throughout the year.

The bureau continued to investigate contacts reported by the Armed Services.

The U. S. Public Health Service, in cooperation with the Selective Service System and the Armed Forces, has developed a complicated scheme for the accumulation and analysis of data pertaining to the examination and treatment of selectees and enlistees, whether accepted or rejected, who are found to have a venereal disease on preliminary examination at the induction stations. The bureau is endeavoring to supply the requested information so far as its facilities will permit.

Personnel

Nels A. Nelson, M.D., M.P.H., Director
Albert L. Laforest, M.D., Senior Medical Supervisor
Raymond C. V. Robinson, M.D., Senior Medical Supervisor
Ernest W. Shervington, M.D., Senior Medical Supervisor
Louis E. Harmon, M.D., Medical Supervisor
J. Douglass Shepperd, 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
Charles T. Woodland, M.D., Health Officer
Ralph J. Young, M.D., Health Officer

Clinic Physicians

Maurice L. Adams, M.D.
Townsend W. Anderson, M.D.
Moses L. Barksdale, M.D.
George Phillip Brown, M.D.
Charles R. Campbell, M.D.
James D. Carr, M.D.
Simon H. Carter, Jr., M.D.
Morris M. Cohen, M.D.
John Collinson, M.D.
James P. Grant, Jr., M.D.
Thomas W. Harris, Jr., M.D.
Richard H. Hunt, M.D.
R. Donald Jandorf, M.D.
William Atwell Jones, M.D.
Renold B. Lighston, Jr., M.D.
Morris J. Lipnik, M.D.
Robert McDaniel, M.D.
Israel P. Meranski, M.D.
George H. Pendleton, M.D.
E. Thornton Pfeil, Jr., M.D.
William G. Polk, M.D.
Leroy James Young, M.D.

Osborne B. Dixon, Senior Social Worker
William P. Duffy, Senior Social Worker
Mattie May Gwynn, Junior Administrative Officer
Maisie W. Burton, Senior Stenographer
Yetta Glick, Senior Stenographer
Beatrice Kravetz, Senior Stenographer
Elinor S. Baim, Junior Stenographer
Grace Hawes, Junior Stenographer
Thelma V. Owens, Junior Stenographer
Anne S. Elliott, Senior Clerk
Strelsa J. Gorham, Senior Clerk
Daisy B. Johnson, Senior Clerk
James P. Lynch, Senior Clerk
Ethel B. U. Bynum, Clinic Clerk
Gladys R. Levinson, Clinic Clerk
Leo M. White, Clinic Clerk
Mary E. Wilson, Clinic Clerk
Virginia Thompson, Junior Typist
Lizzie Mae Lee, Janitress
Dorothy Chapple, Janitress

TABLE NO. 1

REPORTED CASES OF VENEREAL DISEASE, ACCORDING TO SOURCE OF REPORT—1944-1948

SOURCE OF REPORT	SYPHILIS					GONORRHEA					CHANCROID				
	1948	1947	1946	1945	1944*	1948	1947	1946	1945	1944	1948	1947	1946	1945	1944
TOTAL	4,745	5,394	5,558	8,402	10,972	6,025	5,997	4,047	4,192	2,930	118	188	140	90	117
Private Physicians	612	815	1,024	3,520	4,197	371	420	753	1,313	744	8	12	19	14	1
City Health Department Clinics	2,445	2,465	2,647	2,334	2,875	4,544	3,952	2,658	1,703	1,082	52	58	66	54	69
Other Medical Agencies	1,688	2,114	1,887	2,548	3,900	1,110	1,625	636	1,176	1,104	58	118	55	22	47

* 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—1948

COLOR AND SEX OF PATIENTS	SYPHILIS						GONORRHEA	CHANCROID
	Total	Primary and Secondary	Early Latent	Late and Late Latent	Congenital	Stage not stated		
TOTAL	4,745	1,171	1,330	1,959	151	134	6,025	118
White	786	256	160	305	24	41	1,243	33
Male	489	184	83	192	8	22	1,044	30
Female	297	72	77	113	16	19	199	3
Colored	3,959	915	1,170	1,654	127	93	4,782	85
Male	1,813	533	419	741	54	66	4,117	72
Female	2,146	382	751	913	73	27	665	13

TABLE NO. 3

REPORTED CASES OF CERTAIN VENEREAL DISEASES, ACCORDING TO COLOR, SEX AND AGE OF PATIENT—1948

AGE	TOTAL	WHITE			COLORED		
		Total	Male	Female	Total	Male	Female
CONGENITAL SYPHILIS							
All Ages	151	24	8	16	127	54	73
Under 1 year	43	5	1	4	38	21	17
1–9 years	28	5	1	4	23	12	11
10–19 years	33	3	2	1	30	6	24
20 years and over	47	11	4	7	36	15	21
ACQUIRED SYPHILIS							
All Ages	4,594	762	481	281	3,832	1,759	2,073
Under 15 years	50	3	2	1	47	9	38
15–19 years	517	44	21	23	473	116	357
20–24 years	1,164	157	88	69	1,007	442	565
25–29 years	868	113	64	49	755	352	403
30–34 years	593	79	48	31	514	241	273
35–39 years	478	99	65	34	379	198	181
40–44 years	278	84	51	33	194	111	83
45–49 years	226	44	35	9	182	106	76
50 years and over	409	134	104	30	275	180	95
Age unspecified	11	5	3	2	6	4	2
GONORRHEA							
All Ages	6,025	1,243	1,044	199	4,782	4,117	665
Under 15 years	118	15	1	14	103	29	74
15–19 years	987	121	88	33	866	633	233
20–24 years	2,513	478	404	74	2,035	1,814	221
25–29 years	1,378	307	260	47	1,071	988	83
30–34 years	525	129	114	15	396	365	31
35–39 years	254	75	68	7	179	163	16
40–44 years	116	53	47	6	63	60	3
45–49 years	59	23	20	3	36	35	1
50 years and over	38	18	18	..	20	19	1
Age unspecified	37	24	24	..	13	11	2

TABLE NO. 4

RESIDENT DEATHS ATTRIBUTABLE TO SYPHILIS, BY CAUSE OF DEATH AND COLOR—1944-1948

	1948			1947			1946			1945			1944		
	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored
Total	182	72	110	183	64	119	169	62	107	202	76	126	183	59	124
Syphilis in infants under 1 year of age	5	1	4	8	2	6	10	2	8	11	5	6	13	2	11
General paralysis of the insane	40	9	31	39	4	35	44	15	29	54	15	39	32	5	27
Tabes dorsalis	4	1	3	4	4	..	..	..	..	4	3	1	4	3	1
Aneurysm of the aorta	78	34	44	61	25	36	54	22	32	71	23	48	50	17	33
Other forms of syphilis	55	27	28	71	29	42	61	23	38	62	30	32	84	32	52

TABLE NO. 5

RESULTS OF INVESTIGATION OF CONTACTS OF CITY CLINIC PATIENTS, BY COLOR AND SEX OF CONTACT AND DISEASE—1948

Color and Sex of Contact, and Disease in Patient	Total Contacts Named*	Previously Known	Not Found*	Found: Not Examined	Contacts Examined				Infections Discovered**			
					Total Examined	Infected with Homologous Disease	Not Infected with Homologous Disease	Examination Not Completed***	Total Infections Discovered	Primary and Secondary Syphilis	All Other Syphilis	Gonorrhea
Total	5,136	680	2,221	642	1,593	366	730	497	430	74	121	235
Total Syphilis	2,108	389	657	180	882	151	614	117	181	68	83	30
White												
Male	123	27	42	10	44	8	28	8	9	4	4	1
Female	128	23	70	3	32	10	18	4	12	9	1	2
Colored												
Male	1,181	187	225	123	646	72	503	71	83	28	44	11
Female	676	152	320	44	160	61	65	34	77	27	34	16
Total Gonorrhea	3,028	291	1,564	462	711	205	116	380	249	6	38	205
White												
Male	134	53	57	9	15	2	9	4	3	..	1	2
Female	483	34	323	30	96	32	7	56	35	1	2	32
Colored												
Male	292	117	63	39	73	19	28	23	24	2	3	19
Female	2,119	87	1,121	384	527	152	72	297	187	3	32	152

* Includes all contacts even though names and addresses are unknown.

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

*** Of these, 369 were treated as presumed to have gonorrhea.

TABLE NO. 6

RESULTS OF INVESTIGATION OF CONTACTS REFERRED BY OTHER AGENCIES, BY COLOR AND SEX OF CONTACT AND DISEASE—1948

Color and Sex of Contact, and Disease in Patient	Total Contacts Named*	Previously Known	Not Found*	Found: Not Examined	Contacts Examined				Infections Discovered**			
					Total Examined	Infected with Homologous Disease	Not Infected with Homologous Disease	Examination Not Completed***	Total Infections Discovered	Primary and Secondary Syphilis	All Other Syphilis	Gonorrhea
Total	1,940	124	1,092	231	493	110	247	136	134	28	59	47
Total Syphilis	1,272	102	657	118	395	77	211	107	91	25	52	14
White												
Male	54	5	32	2	15	5	7	3	5	3	2	..
Female	147	17	96	6	28	7	10	11	8	5	2	1
Colored												
Male	578	41	267	77	193	35	99	59	41	7	28	6
Female	493	39	262	33	159	30	95	34	37	10	20	7
Total Gonorrhea	668	22	435	113	98	33	36	29	43	3	7	33
White												
Male	10	..	6	2	2	..	2	..	2	2	..	..
Female	292	12	226	15	39	16	15	8	16	..	..	16
Colored												
Male	45	3	14	16	12	2	9	1	3	..	1	2
Female	321	7	189	80	45	15	10	20	22	1	6	15

* Includes all contacts even though names and addresses are unknown.

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

*** Of these, 21 were treated as presumed to have gonorrhea.

TABLE NO. 7

ADMISSIONS TO VENEREAL DISEASE CLINICS BY DISEASE, AND VISITS BY COLOR AND SEX—1948

DISEASE	CITY CLINICS			OTHER CLINICS*		
	ADMISSIONS					
	Total Admissions	Treatment Status on Admission		Total Admissions	Treatment Status on Admission	
		No Previous Treatment	Previous Treatment		No Previous Treatment	Previous Treatment
TOTAL	11,510	10,341	1,169	1,285	864	421
Total Syphilis	2,483	1,460	1,023	760	414	346
Primary and secondary	785	628	157	122	96	26
Early Latent	896	535	361	89	52	37
Late latent and Late	738	261	477	492	230	262
Congenital	64	36	28	55	35	20
Stage not stated	..	..	..	2	1	1
Gonorrhea	4,636	4,593	43	260	214	46
Presumptive of Gonorrhea**	699	690	9	3	3	..
Chancroid	53	52	1	23	19	4
Lymphogranuloma venereum	5	3	2	13	11	2
Granuloma Inguinale	33	21	12	21	8	13
Not Infected with V.D.	2,674	2,673	1	169	169	..
Diagnosis not completed	927	849	78	36	26	10
RACE AND SEX	VISITS					
TOTAL	66,131			18,395		
White						
Male	5,351			969		
Female	4,255			972		
Colored						
Male	32,860			6,654		
Female	23,665			9,800		

* The Johns Hopkins Hospital, Medicine 1; the only other clinic reporting.

** Contacts of patients with gonorrhea; diagnosis not completed, but treated for gonorrhea.

TABLE NO. 8

ADMISSIONS TO BALTIMORE RAPID TREATMENT CENTER FOR VENEREAL DISEASE—1948

Referring Agency	Total	Color and Sex				Principal Diagnosis on Admission*						Pregnancy and Syphilis†	Residence		
		White		Colored		Syphilis					Other V.D.**				
		Male	Female	Male	Female	Total Syphilis	Primary	Secondary	Early Latent	All other Syphilis			City of Baltimore	Counties of Maryland	Out of State
Total	1,565	85	74	547	859	1,478	234	529	481	234	87	418	1,391	173	1
City Clinics	1,055	65	38	442	510	1,023	202	395	324	102	32	187	1,037	18	..
Calvert Street	223	65	38	53	67	217	51	81	70	15	6	28	216	7	..
Druid Health Center	589	..	..	283	306	572	105	233	172	62	17	102	581	8	..
Somerset Health Center	243	..	..	106	137	234	46	81	82	25	9	57	240	3	..
Other Agencies	510	20	36	105	349	455	32	134	157	132	55	231	354	155	1
County Health Departments	110	6	14	37	53	109	14	37	43	15	1	41	1	109	..
Baltimore City Hospitals	27	1	..	10	16	16	2	3	6	5	11	10	26	1	..
Johns Hopkins Hospital	178	6	6	38	128	145	7	54	51	33	33	50	159	19	..
University Hospital	127	1	3	7	116	123	2	23	33	65	4	100	125	2	..
Other Agencies	16	..	5	4	7	12	2	5	2	3	4	5	13	2	1
Private Physicians	52	6	8	9	29	50	5	12	22	11	2	25	30	22	..

* Syphilis, if present, in all cases of multiple infection, unless admission specifically requested for some other venereal disease.

** Includes 4 not V.D., 2 reactions to treatment and 1 diagnostic problem not conclusively solved.

† Included with "Syphilis" under "Principal Diagnosis on Admission."

BUREAU OF CHILD HYGIENE

BUREAU OF CHILD HYGIENE

M. Alexander Novey, M.D.

Director

The guidance and education of parents in the proper methods of mother and child care beginning with the onset of pregnancy and continuing through infancy and childhood is one of the prime functions of the Bureau of Child Hygiene. Attention must be focused on the physical, emotional, mental and social growth of children and upon their relationship to the family and the community in the present changing social, economic and scientific era.

Infant Mortality

Infant mortality is still a most sensitive index of the sanitary and health conditions of a community. Waste of life at the beginning is essentially a public health problem. The resident infant mortality rate for Baltimore in 1938 was 51.7 per 1,000 live births and it is gratifying to report a rate of 28.7 for the year 1948. A comparison of the rate reported for 1948 with the rate of a decade ago shows a decrease of 44 per cent.

Continuing efforts are being made to bring about a still further reduction in the infant mortality rate with the greatest emphasis being placed at the present time in the field of infants born prematurely. The transportation of premature infants through the cooperative services of the City Health Department and the City Fire Department has continued satisfactorily and 81 premature infants were transported to various hospitals in the city during 1948. At the present time there are 10 premature infant carriers equipped with oxygen and heat in active use in this service. Home investigations are made by the public health nurses prior to the discharge of premature infants from the hospital and follow-up visits are made to these infants in the home. The director of the bureau participated as in previous years in the postgraduate training program in the care of premature infants conducted for nurses by the Johns Hopkins Hospital.

Education

Members of the bureau staff were invited on many occasions during the year to speak to medical, nursing and lay groups on public health topics. Consultation was held throughout the year with a number of hospitals in the city in connection with their maternity and newborn services. The role of "Dr. Ashley" was continued by the director of the bureau each week throughout the year in the "Keeping Well" radio drama broadcasts over

station WFBR. In addition, the director of the bureau participated in much of the radio publicity of the Maryland Rheumatic Fever and Heart Association. He served as a member of the Board of Directors and of the Medical Advisory Board of this organization, as a member of the Board of Directors of the Children's Fresh Air Society of Baltimore and as a member of the Technical Advisory Committee for the Maryland Study of Child Health Services of the American Academy of Pediatrics. Physicians and nurses from many parts of the United States and many foreign countries including China, India, Finland, South Africa and Canada studied the activities of the bureau during the year.

Well Baby Clinics

On January 1 the eighth transfer of clinics of the Babies Milk Fund Association to the City Health Department was made effective. The two clinics transferred to the bureau with 4 sessions each week were located at Twenty-seventh Street and Huntington Avenue and 447 East Twenty-fifth Street. The remaining 3 clinics with 5 sessions each week still conducted by the Babies Milk Fund Association will be taken over on January 1, 1949, completing the transfer of these well baby clinics which began on March 1, 1941.

The well baby clinic conducted at Public School No. 140 was discontinued in February and the well baby clinic conducted at the Douglass High School and at Public School No. 104 were moved to the Gilmor Housing Project, the former in May and the latter in September.

Well baby clinics were operated at 39 locations during the year with a total of 77 sessions each week. The total number of visits made to the well baby clinics was 56,590 in 1948 as compared with 55,615 in 1947 including special visits made to the clinics by children who were not registered as clinic patients. The bureau continued to cooperate with the Division of Nutrition in the distribution of the informational cards on the care and feeding of infants and children. Vaccinations against smallpox were given to 6,917 children in Department well baby clinics. A total of 56 well babies was referred to the Health Department well baby clinics from the two Medical Care Clinics operating through the Medical Care Section of the Health Department. Fifty of these infants were referred to the Health Department from the University of Maryland and 6 from the Johns Hopkins Medical Care Clinic.

Home Visiting Service

There were 21,566 Records of Child Under Six Years assigned to the Bureau of Public Health Nursing for neonatal home visits and delivery of the *Notification of Birth Registration.*

The treatment service for ophthalmia neonatorum available to those parents who are unable to afford the care of a private physician or on request of a physician operated satisfactorily throughout the year. All of the field nurses in the Health Department participated in the investigation and treatment of these cases of sore eyes in newborn infants with penicillin solution of the strength of 1,000 units per cubic centimeter. This Department service is available on a twenty-four-hour basis including weekends and holidays.

REPORTED CASES OF OPHTHALMIA NEONATORUM—1948

Cases reported and investigated by Health Department	206
Cases assigned for nursing care	195
Total visits by public health nurses	800
Cases sent to Sydenham Hospital for treatment	0
Cases sent to other hospitals for treatment	1

Diphtheria Prevention

There were 21,323 six months greeting cards urging diphtheria toxoid inoculation sent by the bureau for the Commissioner of Health to resident infants. The visits by public health nurses formerly made to infants who reached eight months of age and had not received the preventive toxoid inoculation were changed to visits at ten months of age at which time the parents were urged to protect the child against diphtheria. A total of 24,700 home visits was made by public health nurses for diphtheria prevention follow-up. Physicians in private practice reported to the Health Department that 11,909 children were given the toxoid inoculations, as compared with 12,582 in 1947. In the well baby clinics including the Babies Milk Fund Association clinics, preventive toxoid inoculations were given to 10,158 children in 1948.

Class A Family Homes

The licensing of Class A Family Homes jointly by the City Health Department and the State Department of Public Welfare begun on April 22, 1947 continued satisfactorily during the year. Four hundred and fifteen such licenses were issued in 1948. Homes were referred for licensure by 12 organizations approved by the State Department of Public Welfare as child-placing agencies. These licenses were issued by the Health Department after a thorough inspection of the foster homes was made by the Sanitary Section of the Health Department.

Day Nurseries, Nursery Schools and Child-Caring Institutions

Forty-three day nurseries and nursery schools, 37 white and 6 colored, were licensed during the year, 3 representing new licenses. Seven licenses

were discontinued during the year, 6 white and 1 colored. Excluding the months of June, July and August, the average monthly enrollment was 266 children in the day nurseries and 1,390 in the nursery schools. The average daily attendance except for the summer months was 197 children in the day nurseries and 1,127 children in the nursery schools.

In 1948 there were 518 cases of communicable diseases in day nurseries and nursery schools as compared with 369 cases in 1947. These consisted for the most part of measles, mumps and chickenpox. At the request of 7 child-caring institutions in Baltimore licensed by the State Department of Public Welfare medical and sanitary inspections were made.

Mental Hygiene

The mental hygiene program initiated in February, 1947, was continued during 1948 with certain changes and modifications. Seminars for public health nurses in the Eastern Health District were continued on a monthly basis. Ten weekly seminars were held with the nurses of the Southeastern Health District with whom home visits were also made. As an introduction to their seminars the nurses attended three hours of lecture given by a psychiatrically oriented pediatrician on the staff of the Bureau of Child Hygiene who is in charge of several of the well baby clinics. The well baby clinic physicians of the district were briefly oriented in regard to the program by Dr. Paul Lemkau. After the ten basic seminars, follow-up seminars were continued on a monthly basis. This pattern was also followed in the Western Health District, the Druid Health Center, the Southern Health District, the Southwestern Health District, the Northern Health District, the Northwestern Health District and the Northeastern Health District. The program is so planned that by June, 1949, all districts will have been completely covered and every public health nurse and supervisor in the Department with the exception of a few nurses recently assigned to the Bureau of Public Health Nursing, will have attended a series of basic seminars.

Community education was continued through lectures, discussion groups, radio and the showing of motion pictures. Both lay and professional groups were involved in this activity. The Chief of the Division visited various schools and clinics in the city as well as some of the state and private mental hospitals.

The "Outline of Mental Hygiene in Maternal and Preschool Child Health For Public Health Nurses" was published in the January-February issue of the *Baltimore Health News* and met with a very satisfactory response from within and without the United States.

Maternity Hygiene

There were 22,083 resident births reported in 1948 as compared with 23,992 in 1947. The number of hospital deliveries for the year was 89.0 per cent of the total number of deliveries in the city, as compared with 87.7 per cent in 1947. The percentage of births reported by midwives was 2.2 in 1948 as compared with 2.1 in 1947. There were 16 midwives who delivered one or more babies in the city during 1948, 6 of whom were white and 10 colored.

Maternal Mortality

The resident maternal mortality rate was 1.1 per 1,000 live births. The rate for white mothers was 0.9 and 1.5 for colored mothers. The Physicians' Conference on Maternal Mortality continued to be held each month throughout the year except August as a part of the activities of the Joint Committee on Maternal Mortality appointed annually by the President of the Baltimore City Medical Society and the Commissioner of Health. Physicians practicing in the city in this specialized field are strongly convinced that these conferences have played a large part in the decreased maternal mortality rate which the Health Department has been able to report in recent years. The Commissioner of Health has served as Chairman of the Joint Committee on Maternal Mortality and the director of the bureau has served as Secretary of the Physicians Conference on Maternal Mortality and in addition the director of the bureau is a member of the Committee on Maternal and Child Welfare of the Medical and Chirurgical Faculty of Maryland set up for the purpose of studying maternal deaths occurring in the counties of Maryland.

X-ray Examinations

There were 565 chest X-ray examinations made at the Druid Health Center of patients attending the City Health Department prenatal clinics and 679 such examinations were made in the Eastern Health District. X-ray examinations of the chests of expectant mothers is now practically a routine procedure for all pregnant women given prenatal care by private physicians or in hospital and Health Department clinics. X-ray pelvimetry is being done with increasing frequency throughout the city in selected cases requiring this type of examination.

Rh Blood Typing

The blood of all pregnant women attending City Health Department prenatal clinics in 1948 was examined for the Rh factor. This type of examination is available to every expectant mother in the city. The

Baltimore Rh Typing Laboratory made 10,467 blood examinations for the Rh factor in 1948 on the blood of pregnant women, fathers and children.

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 per week. There were 1,025 patients delivered at the Baltimore City Hospitals who received prenatal care at these clinics as compared with 1,045 in 1947 and 382 prenatal cases referred by midwives to Health Department clinics during the year who were scheduled to be delivered at home under the care of the midwife. Of the 1,111 patients registered for delivery at the Baltimore City Hospitals 107 were white and 1,004 were colored patients and 326 were primipara and 785 were multipara. Of those patients referred to the Health Department clinics by midwives 23 were white and 359 were colored patients and 92 were primipara and 290 were multipara. As in previous years all of the facilities of the prenatal clinics were made available to the patients of midwives and hospital delivery was arranged for those patients showing abnormalities contraindicating their delivery at home. No new license has been issued to a midwife to practice in Baltimore since December 3, 1936.

Maternal Deaths

One patient registered at the Health Department prenatal clinics as a planned midwife delivery in the home died at the Baltimore City Hospitals. This death was due to a maternal cause and was considered by the Physicians' Conference on Maternal Mortality to be a preventable death. The maternal mortality rate for the entire clinic group delivered at the Baltimore City Hospitals was 1.0 per 1,000 as compared with a rate of 1.9 recorded for 1947.

The history of the midwife case registered in the Health Department clinic is as follows:

Maternal Death

1. Health Department Registration No. M1710; Ruptured Uterus.

Age 38, colored, multipara (para 6-0-2-5), serologic test for syphilis positive, Rh positive, pelvis normal, estimated date of confinement March 7, 1948. She was treated for syphilis in 1944, 1945, and 1946 during the last three pregnancies. It was planned for the patient to be delivered at home by a midwife. She was admitted to the hospital at 11:45 A.M. on April 7 with ruptured membranes and in early labor. Her previous pregnancies have been uncomplicated except for two spontaneous abortions. Her first visit to the prenatal clinic for this pregnancy was on February 26 which was followed by two subsequent visits on March 4 and March 11. At these visits her blood pressure was normal and urinalysis was negative except for a two plus sugar on March 4. The physical examination revealed no abnormalities. The blood pressure on admission to the hospital was 168/100. The cervix was thick, 3 cms. dilated, the vertex was level with the spines and the fetal heart tones could not be heard. The blood pressure leveled off at 140/90 and remained at about this figure throughout her labor. Labor progressed without analgesia and at 9:00 P.M. the caput was in sight. The patient was transferred to the delivery table at this time and it was noted that she was cold and clammy. After a total labor of twelve hours and fifteen minutes

she delivered spontaneously at 9:12 P.M. without anesthesia of a dead infant weighing 3,430 grams. Two minutes following delivery the patient began to bleed profusely with the placenta still undelivered. The blood loss was estimated at 1,000 cc. within the next few minutes. Bleeding continued in spite of uterine massage and five minutes following the delivery the blood pressure could not be obtained. Oxygen by mask and intravenous glucose were begun. By 9:25 P.M. morphine grains ¼ had been given and plasma was started. The blood pressure was now obtainable at 30/0. Preparations were made to explore the uterus and at 9:45 P.M. the patient was catheterized and 85 cc. of clear urine was obtained. Four minutes later the placenta was removed. The vagina was found to be full of clotted blood. The placenta was completely adherent on the anterior wall of the uterus and necessitated separation. Following removal of the placenta, intramuscular pitocin was given. Inspection of the cervix revealed no laceration at this time. Bleeding continued however and a second examination of the cervix and uterine cavity showed no rupture of the organ. The uterus and vagina were packed with six yards of gauze two inches in width. By this time the blood loss was estimated at 2,000 cc. and transfusion of citrated blood was begun about 10:15 P.M. At 10:40 P.M. the blood pressure was 82/68. The response of the patient was good after 1,000 cc. of plasma, 2,000 cc. of citrated blood and 1,000 cc. of glucose had been given. At 2:00 A.M. her pressure was 146/100 and her general condition was good. The total period of shock had been about one hour and a half. At 1:20 P.M. on April 8 the patient was in good condition and the uterine and vaginal pack was removed in the patient's bed. This was approximately seventeen hours following delivery. The pack was slowly withdrawn five minutes following the administration of one ampule of pitocin intramuscularly. As the last part of the pack was removed there was a sudden free hemorrhage and the patient's vascular system again collapsed. In spite of treatment for shock including more whole blood the patient expired at 2:40 P.M. Postmortem examination revealed a laceration approximately 2½ cms. in length through the lower uterine segment on the right side which extended into the broad ligament. A completely ruptured uterine vein protruded into this defect.

Maternity Hospitals

At the close of the year seventeen maternity hospital licenses were in force, all of which were relicenses. One license was held in abeyance. A total of 18 maternity hospitals was inspected during the year.

Personnel

On August 19 Dr. Elizabeth Woodward resigned from the bureau as Administrative Health Officer. Resignations as clinic contract physicians were received from Dr. Hania W. Ehlers on March 31, Dr. Frances E. M. Read on August 27 and Dr. Clewell Howell on December 31. The new clinic contract physicians employed during the year were Dr. Joseph C. Wich on January 2, Dr. Ruth W. Baldwin on April 1, Dr. George Brown on April 5, Dr. Aaron Harris on August 30 and Dr. Lee M. Howard on August 30. Miss Grace Volmar, Nursing Supervisor, was assigned to the bureau on November 22 as a specialized nursing supervisor in the fields of maternal and child care.

Personnel

M. Alexander Novey, M.D., Director
Sibyl Mandell, Ph.D., Chief, Division of Mental Hygiene
J. W. V. Clift, M.D., Health Officer
W. Allen Deckert, M.D., Health Officer
Walter E. Grempler, M.D., Health Officer
Lucille Liberles, M.D., Health Officer
I. A. Siegel, M.D., Health Officer
Ruth W. Baldwin, M.D., Clinic Physician

McDonald M. Bando, M.D., Clinic Physician
Walter P. Block, M.D., Clinic Physician
Helen Bowie, M.D., Clinic Physician
George Brown, M.D., Clinic Physician
Alfred B. Dixon, M.D., Clinic Physician
Solon A. Dodds, M.D., Clinic Physician
Aaron Harris, M.D., Clinic Physician
Mary L. Hayleck, M.D., Clinic Physician
Lee Howard, 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 H. Morrison, M.D., Clinic Physician
William Gaston Polk, M.D., Clinic Physician
Alma S. Rothholz, M.D., Clinic Physician
William Earl Weeks, M.D., Clinic Physician
Henry Lyman Whittle, M.D., Clinic Physician
Joseph C. Wich, M.D., Clinic Physician
Gustav H. Woltereck, M.D., Clinic Physician
Yetta Appel, Senior Stenographer
Caroline Kaufmann, Senior Stenographer
Mary E. Bonomo, Senior Clerk
Golda Hyman, Senior Clerk
Lillian Marley, Senior Clerk
Janie Olver, Junior Stenographer

TABLE NO. 1
REPORT OF WELL BABY CLINICS

Clinic	Children on Register Jan. 1, 1948		New Children Registered during 1948		Total Children Registered during 1948		Children on Register Dec. 31, 1948		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	6,326	9,293	6,017	297	12,343	9,590	7,552	10,661	33,878	16,398	39,895	16,695
White												
Total White Clinics	2,732	2,477	2,101	179	4,833	2,656	3,324	2,054	12,732	9,042	14,833	9,221
Clinic #11	77	87	24	6	101	93	101	93	264	160	288	166
Clinic #12	11	103	15	2	26	105	26	105	147	71	162	73
Clinic #13	7	4	6	3	13	7	13	7	19	28	25	31
Clinic #14	94	135	68	6	162	141	162	143	546	425	614	431
Clinic #15	30	174	47	5	86	179	86	179	511	266	558	271
Clinic #16	44	78	35	1	79	79	80	79	565	449	600	450
Clinic #22	123	85	71	..	194	85	94	88	417	327	488	327
Clinic #23	73	8	76	..	149	8	72	15	267	128	343	128
Clinic #41	153	238	94	3	247	241	212	76	607	135	701	138
Clinic #42	251	250	153	12	404	262	313	204	728	356	881	368
Clinic #43	142	..	82	3	224	3	126	..	413	202	495	205
Clinic #45	137	61	87	6	224	67	123	48	427	441	514	447
Clinic #47	99	94	53	1	152	95	132	49	295	139	348	140
Clinic #49	156	69	101	4	257	73	176	3	525	337	626	341
Clinic #51	95	68	143	..	238	68	98	38	926	374	1,069	374
Clinic #53	40	66	28	1	68	67	38	49	197	145	225	146
Clinic #55	129	26	56	1	185	27	183	..	787	520	843	521
Clinic #56	48	27	38	2	86	29	43	33	135	142	173	144
Clinic #57	139	177	115	5	254	182	144	130	620	661	735	666
Clinic #58	40	54	31	1	71	55	45	53	165	179	196	180
Clinic #62	137	133	91	2	228	135	153	116	616	482	707	484
Clinic #63	186	210	118	14	304	224	200	208	813	715	931	729
Clinic #64	110	88	63	6	173	94	94	91	401	292	464	298
Clinic #65	48	105	37	2	85	107	42	126	284	416	321	418
Clinic #72	71	7	54	2	125	9	77	2	419	377	473	379
Clinic #82	66	85	84	10	150	95	59	86	451	407	535	417
Clinic #83*	..	..	239	61	239	61	42	11	678	461	917	522
Clinic #92	148	10	46	10	194	20	189	2	291	239	337	249
Clinic #93	69	35	46	10	115	45	111	15	218	168	264	178
Colored												
Total Colored Clinics	3,594	6,816	3,916	118	7,510	6,934	4,228	8,607	21,146	7,356	25,062	7,474
Clinic #11	309	400	39	3	348	403	352	405	772	305	811	308
Clinic #12	93	305	35	3	128	308	129	308	955	258	990	261
Clinic #13	91	264	105	8	196	272	197	272	843	424	948	432
Clinic #15	58	340	22	1	80	341	80	342	894	345	916	346
Clinic #16	58	413	73	3	131	416	131	416	1,366	569	1,439	572
Clinic #17	174	519	217	8	391	527	390	528	1,547	757	1,764	765
Clinic #23	280	190	346	3	626	193	310	165	1,286	419	1,632	422
Clinic #24	231	202	280	1	511	203	216	238	1,237	508	1,517	509
Clinic #25**	113	129	7	..	120	129	..	..	46	13	53	13
Clinic #26	138	137	130	3	268	140	130	151	558	149	688	152
Clinic #31	194	418	244	3	438	421	202	629	1,092	283	1,336	286
Clinic #32	209	458	297	..	506	458	241	683	1,330	300	1,627	390
Clinic #33	463	707	496	3	959	710	508	1,162	1,809	504	2,305	507
Clinic #34	123	321	100	1	223	322	107	437	512	123	612	124
Clinic #35	309	640	415	7	724	647	359	835	1,967	538	2,382	545
Clinic #36	254	875	456	..	710	875	226	1,343	2,201	637	2,657	637
Clinic #46	96	15	101	4	197	19	140	3	522	173	623	177
Clinic #48	102	69	84	3	186	72	140	65	466	140	550	143
Clinic #52	87	133	56	2	143	135	94	125	255	176	311	178
Clinic #54	66	82	48	2	114	84	67	94	223	98	271	100
Clinic #59	146	199	175	10	321	209	128	394	646	303	821	313
Clinic #83*	..	..	190	50	190	50	81	12	619	244	809	294

*Clinic opened January, 1948.
**Clinic discontinued Feb. 16, 1948.

TABLE NO. 2

REPORT OF CLASS A FAMILY HOMES (BOARDING HOMES), DAY NURSERIES AND NURSERY SCHOOLS—1948

LICENSES AND AGENCY	CLASS A FAMILY HOMES	DAY NURSERIES AND NURSERY SCHOOLS		
	Total	Total	White	Colored
Referred for licensing	305			
Baltimore County Welfare Board	4			
Baptist Children's Aid Society of Maryland	5			
Board of Child Care	2			
Board of Public Welfare, Washington, D. C.	1			
Catholic Charities	53			
Children's Aid Society of Baltimore County	1			
Children's Home of Baltimore	1			
Church Mission of Help	11			
Department of Public Welfare				
Children's Division	154			
Protective Services for Children	11			
Family and Children's Society	45			
Jewish Family and Children's Bureau	11			
Maryland Children's Aid Society	6			
Referred to Sanitary Section	297			
Total licensed, December 31, 1948		43	37	6
Maximum capacity, December 31, 1948		1,531	1,363	168
New licenses issued	415	3	3	..
Licenses refused	10	3	2	1
Licenses renewed		40	34	6
Licenses discontinued		7	6	1

TABLE NO. 3

SUMMARY OF CASES OF COMMUNICABLE DISEASE IN LICENSED DAY NURSERIES AND NURSERY SCHOOLS TOGETHER WITH AVERAGE MONTHLY ENROLLMENT AND AVERAGE DAILY ATTENDANCE IN 1948

ENROLLMENT AND DISEASE	DAY NURSERIES			NURSERY SCHOOLS		
	Total	White	Colored	Total	White	Colored
Average monthly enrollment						
September 1-May 31	266	220	46	1,390	1,248	142
June 1-August 31	236	191	45	728	625	103
Average daily attendance						
September 1-May 31	197	162	35	1,127	1,017	110
June 1-August 31	188	152	36	572	496	76
Communicable diseases	69	63	6	449	397	52
Chickenpox	17	17	..	101	96	5
German measles	1	1	..	33	19	14
Impetigo	..	..	..	1	1	..
Measles	29	24	5	147	132	15
Mumps	21	20	1	161	143	18
Scarlet fever	..	..	..	5	5	..
Scarletina	..	..	..	1	1	..
Whooping cough	1	1	..	..	..	..

TABLE NO. 4
REPORT OF PRENATAL CLINICS*

CASES AND VISITS	GRAND TOTAL	ALL CLINICS		DRUID HEALTH CENTER	914 W. 36TH STREET	SOUTH BALTO. GENERAL HOSPITAL		CHERRY HILL	SOUTHEASTERN HEALTH DISTRICT		SOMERSET HEALTH CENTER	WOMEN'S HOSPITAL	EASTERN HEALTH DISTRICT	
		Wh.	Col.	Col.	White	Wh.	Col.	Col.	Wh.	Col.	Colored	White	Wh.	Col.
Cases carried over from 1947	286	46	240	126	4	13	21	18	17	9	32	8	4	34
New cases admitted	1,116	107	1,009	412	9	21	72	63	50	42	183	13	14	237
Transferred from other clinics	131	5	126	9	2	1	1	3	1	5	56	1	..	52
Total case load	1,533	158	1,375	547	15	35	94	84	68	56	271	22	18	323
DISCHARGED CASES														
Total	1,210	108	1,102	414	14	22	77	65	49	53	213	13	10	280
Not pregnant	14	..	14	4	..	..	..	2	..	..	2	..	..	6
Delivered in hospitals**	1,025	99	926	392	11	21	72	58	47	44	150	11	9	210
Delivered at home	23	2	21	6	1	..	3	2	1	1	5	..	..	4
Transferred	17	2	15	8	..	..	1	1	1	..	2	1	..	3
Transferred to other clinics	131	5	126	4	2	1	1	2	..	8	54	1	1	57
Cases carried over to Jan. 1949	323	50	273	133	1	13	17	19	19	3	58	9	8	43
CLINIC VISITS														
Total	8,153	774	7,379	3,245	85	138	494	395	379	245	1,216	100	72	1784
Antepartum														
First Visits	1,116	107	1,009	412	9	21	72	63	50	42	183	13	14	237
Revisits	5,600	584	5,016	2,256	69	112	370	279	273	157	781	76	54	1173
Special Visits	9	..	9	8	..	..	..	..	..	..	1	..	..	..
Postpartum														
Registered	626	35	591	209	4	1	29	28	23	29	105	5	2	191
Unregistered	163	15	148	84	..	2	2	..	9	2	28	3	1	32
Infants														
Registered	514	25	489	201	3	1	19	24	18	14	99	3	..	132
Unregistered	125	8	117	75	..	1	2	1	6	1	19	..	1	19
ANALYSIS OF NEW CASES														
Duration of Pregnancy														
Not pregnant	5	..	5	..	..	..	..	2	..	..	..	..	..	3
Under 12 weeks	42	4	38	17	..	..	3	6	3	2	5	..	1	5
12 to 23 weeks	362	41	321	143	2	12	24	24	17	9	52	7	3	69
24 to 27 weeks	329	35	294	108	6	4	30	22	19	13	48	1	5	73
28 to 31 weeks	165	13	152	58	1	3	8	1	5	7	31	1	3	47
32 to 35 weeks	133	6	127	50	..	1	4	7	1	9	37	3	1	20
36 weeks & over	63	6	57	26	..	1	3	..	3	2	8	1	1	18
Undetermined	17	2	15	10	..	..	..	1	2	..	2	..	..	2

* Not including Midwife Cases (see Table No. 5).
** Baltimore City Hospitals.

TABLE NO. 5
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		Cherry Hill	Southeastern Health District		Somerset Health Center	Women's Hospital	Eastern Health District	
		Wh.	Col.	Col.	White	Wh.	Col.	Col.	Wh.	Col.	Colored	White	Wh.	Col.
Cases carried over from 1947	125	16	109	32	2	2	4	..	7	5	18	4	1	50
New cases admitted	385	23	362	141	..	..	..	..	14	10	84	4	5	127
Transferred from other clinics	39	2	37	1	..	..	..	..	1	1	22	..	1	13
Total case load	549	41	508	174	2	2	4	..	22	16	124	8	7	190
Discharged Cases														
Total	455	30	425	141	1	2	4	..	13	11	114	7	7	155
Not pregnant	9	1	8	3	..	..	..	..	..	..	3	..	1	2
Delivered by midwife	253	21	232	80	..	2	4	..	10	7	62	5	4	79
Transferred	154	6	148	58	1	..	..	..	2	4	36	2	1	50
Transferred to other clinics	39	2	37	..	..	..	..	..	1	..	13	..	1	24
Cases carried over to Jan. '49	94	11	83	33	1	..	..	..	9	5	10	1	..	35
Clinic Visits														
Total	1,976	92	1,884	717	2	..	..	..	58	41	426	14	18	700
Antepartum														
First Visits	385	23	362	141	..	..	..	..	14	10	84	4	5	127
Revisits	1,228	62	1,166	459	2	..	..	..	40	23	248	7	13	436
Postpartum														
Registered	185	4	181	54	..	..	..	..	2	4	50	2	..	73
Unregistered	11	..	11	5	..	..	..	..	..	1	..	..	..	5
Infants														
Registered	156	3	153	53	..	..	..	..	2	2	44	1	..	54
Unregistered	11	..	11	5	..	..	..	..	..	1	..	..	..	5
Analysis of New Cases														
Duration of Pregnancy														
Not pregnant	3	..	3	1	..	..	..	..	..	..	1	..	..	1
Under 12 weeks	6	1	5	2	..	..	..	..	1	..	2	..	..	1
12-23 weeks	43	2	41	26	..	..	..	..	2	..	5	..	..	10
24-27 weeks	71	6	65	23		..	..	..	4	..	12	..	2	30
28-31 weeks	75	4	71	25	..	..	..	..	4	3	13	..	..	30
32-35 weeks	102	3	99	39	..	..	..	..	..	3	26	3	..	31
36 weeks & over	77	5	72	22	..	..	..	..	1	4	24	1	3	22
Undetermined	8	2	6	3	..	..	..	..	2	..	1	..	..	2

TABLE NO. 6

ANALYSIS OF PHYSICAL EXAMINATIONS ON REGISTRATION AT PRENATAL CLINICS

FINDINGS	NUMBER			PERCENTAGE DISTRIBUTION		
	Total	White	Colored	Total	White	Colored
REGISTERED FOR DELIVERY AT HOSPITALS*						
Primipara	326	23	303	29.3	21.5	30.2
Multipara	785	84	701	70.7	78.5	69.8
PELVIS						
Normal	933	98	835	84.0	91.5	83.2
Borderline	131	3	128	11.8	2.8	12.7
Contracted	25	2	23	2.2	1.9	2.3
Funnel	12	2	10	1.1	1.9	1.0
Not determined	10	2	8	0.9	1.9	0.8
SEROLOGIC TEST FOR SYPHILIS						
Negative	969	104	865	87.2	97.2	86.2
Positive	138	3	135	12.4	2.8	13.4
Not taken	4	..	4	0.4	..	0.4
OTHER FINDINGS						
Toxemia	129	9	120	11.6	8.4	12.0
Heart Murmur	113	4	109	10.2	3.7	10.9
Rh FACTOR						
Negative	105	18	87	9.5	16.8	8.7
Positive	991	87	904	89.2	81.3	90.0
Not taken	15	2	13	1.3	1.9	1.3
REGISTERED FOR DELIVERY BY MIDWIFE						
Primipara	92	6	86	24.1	26.1	24.0
Multipara	290	17	273	75.9	73.9	76.0
PELVIS						
Normal	340	20	320	89.0	86.9	89.2
Borderline	31	2	29	8.1	8.7	8.1
Contracted	4	..	4	1.1	..	1.1
Funnel	3	..	3	0.7	..	0.8
Not determined	4	1	3	1.1	4.4	0.8
SEROLOGIC TEST FOR SYPHILIS						
Negative	337	23	314	88.2	100.0	87.5
Positive	45	..	45	11.8	..	12.5
Not taken	..	..	..	..	..	..
OTHER FINDINGS						
Toxemia	52	2	50	13.6	8.7	13.9
Heart Murmur	44	1	43	11.5	4.4	12.0
Rh FACTOR						
Negative	29	4	25	7.6	17.4	7.0
Positive	338	17	321	88.5	73.9	89.4
Not taken	15	2	13	3.9	8.7	3.6

* Baltimore City Hospitals.

BUREAU OF SCHOOL HYGIENE

BUREAU OF SCHOOL HYGIENE

Henry F. Buettner, M.D.

Director

The large increase in the birth rate during recent years resulted in an augmented enrollment of pupils in public elementary and parochial schools; for the year 1948 the enrollment was over 105,000. Nurse-teacher conferences in the classrooms in which the health of each pupil was reviewed brought the teacher more intimately into the health program and was of benefit to all concerned.

In cooperation with the School of Hygiene and Public Health of the Johns Hopkins University, a hearing study in third grade public school children was begun in October. Two portable soundproof booths for audiometric testing were constructed so that each could be easily disassembled and moved to another school. The plan is to test about five thousand third grade pupils in forty-two schools, to follow up and treat over a five-year period six hundred to eight hundred pupils who show any hearing impairment and to retest as many of the original five thousand as are available in the schools at the end of five years. Third grade pupils were selected because five years hence these pupils will be approaching puberty at which age there is some natural regression of lymphoid tissue at the orifices of the eustachian tubes which has a bearing on the acuteness of hearing. The study aims to show the incidence of impaired hearing in children at age eight years, the incidence of hearing impairment occurring between the ages of eight and thirteen, the degree of spontaneous improvement in hearing occurring at puberty, the advantages of treatment during a five-year period, the cost of such a program and other associated observations and data. Reliable statistics and recommendations formulated at the completion of this study, which are nowhere available at this time, will be of great value to all health and education administrators.

Boys between the ages of eleven and sixteen years who are not doing well in academic studies in school or who for one reason or another are maladjusted are transferred to Highwood Public School No. 300 in Catonsville. This school is maintained by the Baltimore Department of Education as a day school for about sixty boys. They arrive at 9:00 A.M. and devote part of the day to academic subjects but most of the time is spent in handling farm animals and farm equipment. A hot meal is served at noon, and at 3:00 P.M. they return to their homes in the city. All of the boys whose parents consented were given two doses of tetanus toxoid, since

soil with which they are much in contact is contaminated with tetanus bacilli. Minor injuries frequently occur while handling farm equipment and this active immunization is very desirable as it is well known that cases of tetanus which are much easier to prevent than cure have been due to what were considered trivial injuries.

Communicable Diseases in School Children

The most prevalent communicable disease among school children during the year was measles with 4,410 cases as compared with 66 cases in 1947. Chickenpox increased from 1,126 cases in 1947 to 1,583 cases in 1948. Scarlet fever decreased slightly from 212 cases the previous year to 197 cases but the largest decrease for communicable diseases for the year was whooping cough which declined from 776 cases in 1947 to 205 cases in 1948. Diphtheria which had reached the peak of 128 cases in 1946 and decreased to 29 cases in 1947 decreased further in 1948 with only 9 cases. Poliomyelitis decreased from 11 cases in the previous year to 5 cases, and there were 4 cases of meningococcus meningitis, the same number as in the previous year.

Although there was a decided drop in the number of diphtheria cases in children of school age, the effort to insure that every school child has had a booster dose of diphtheria toxoid was continued during the year. A letter urging the administration of toxoid by the family physician or the signature of the parent requesting its administration by the school physician was sent to the parents of all pupils whose record did not show they had received this additional protection. A total of 16,670 diphtheria toxoid inoculations were administered to school children and 802 to preschool children in the school clinics. There were 507 school children and 234 preschool children vaccinated against smallpox during the year by the school physicians.

Eye and Ear Clinics

A total of 640 school children made 1,549 visits to the eye clinic maintained by the Department. Of this number, 576 were given mydriatics and 520 had their eyes refracted. In the ear clinic, 769 patients made 1,493 visits. There were 1,361 audiometric tests given and 224 radium treatments administered. Radium shrinks the lymphoid tissue at the orifices of the eustachian tubes and thus improves hearing, especially among younger children.

Personnel

Henry F. Buettner, M.D., Director
Norman R. Freeman, M.D., Medical Investigator
E. E. Cook, Jr., M.D., Medical Investigator
M. L. Breitstein, 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	29,059	14,111	7,425	6,259	1,264
Number of pupils with defects	12,051	5,530	3,772	2,164	585
Throat—Tonsils	5,026	2,468	1,305	1,046	207
Nose—Adenoids	2,373	1,129	868	241	35
Mouth—Teeth	6,258	3,187	1,454	1,311	306
Eyes	1,109	405	455	123	126
Orthopedic Deformities	48	30	15	2	1
Heart	216	86	78	42	10
Hernia	167	50	92	14	11
Malnutrition	494	115	290	39	50

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	1,557	1,093	52	393	19
Other operations	125	76	15	16	18
Teeth	2,007	682	752	498	75
Eyes refracted and glasses obtained	829	513	152	153	11
Eyes refracted and glasses not necessary	93	44	29	20	..
Skin eruption	398	94	249	54	1
Pediculosis	965	795	6	164	..
Children treated for minor ailments, accidents and emergencies	816	487	203	101	25
Children sent to dispensaries	47	5	39	3	..

TABLE NO. 3

REPORT OF INOCULATIONS GIVEN IN SCHOOLS

	Total	Public Elementary Schools		Parochial Schools	
		White	Colored	White	Colored
Diphtheria inoculations					
Preschool child	802	487	257	52	6
School child	16,670	7,852	4,717	3,508	593
Smallpox vaccination					
Preschool child	234	174	17	5	38
School child	507	135	304	48	20

DIVISION OF DENTAL CLINICS

DIVISION OF DENTAL CLINICS

Morris Cramer, D.D.S.

Supervisor

At the close of 1948 only five of the sixteen dental clinics located in the public schools were in operation; the remaining eleven clinics have not been reopened due to lack of adequate salaries to secure professional personnel for this work.

The five clinics were operated by a part time supervisor and one part time Negro dentist. During the year 1,391 children were examined and given dental treatments consisting mainly of extractions, with some sedative fillings and prophylaxis. Because of the very limited staff only pupils who were suffering with toothaches were treated and parents of those needing considerable dental care were urged to take them to their family dentists or to the clinic at the Dental School of the University of Maryland.

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

Patients registered at clinics	1,391
Visits to clinics	1,627
Prophylactic treatments given	520
Teeth filled	455
Temporary teeth extracted	1,990
Permanent teeth extracted	937
Cases discharged	1,407

The Committee on Medical Care of the Maryland State Planning Commission has recommended that a dental care program be inaugurated in Baltimore City with a proposed constructive program of dental hygiene in the public and parochial schools. The program provides in the first year for the examination of all kindergarten and first grade children together with all necessary treatment for those whose parents request such care. It also recommends that fifteen part time dentists be employed the first year together with a full time dental director. The following year a similar program would be carried on and in addition those children in the first and second grade who had received treatment the year before would be examined and offered such dental treatment as might be required. The program would be continued by the addition of all new entrants to school each year and the groups previously examined would be given the required maintenance care annually. In successive steps each year the program

would necessarily have to be expanded and additional personnel added until all children in the elementary schools have been covered.

Since the proposed dental care program in the first year will be limited to children in kindergarten and first grades only, some type of emergency care program will be necessary in order to give relief to those indigent pupils from all grades in the elementary schools who are suffering with toothache.

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 1948

	New Patients	Visits	Prophylaxis	Amalgam	Cement	Gutta Percha	Treatments	Cabo-Eugonol	Emergency	Extraction of Permanent Teeth	Extraction of Temporary Teeth	Completed and Discharged
Total.....	1,391	1,627	520	317	133	..	75	5	62	937	1,990	1,407
January.....	161	184	51	22	15	..	7	..	6	107	229	161
February.....	171	194	80	24	32	..	10	..	3	89	259	175
March.....	171	198	62	27	22	..	8	5	..	127	240	175
April.....	205	242	79	27	9	..	12	..	10	145	294	202
May.....	159	197	62	25	13	..	8	..	8	117	234	170
October.....	154	182	51	125	5	..	11	..	16	96	231	159
November.....	212	249	80	35	22	..	10	..	11	147	289	206
December.....	158	181	55	32	15	..	9	..	8	109	214	159

BUREAU OF PUBLIC HEALTH NURSING

BUREAU OF PUBLIC HEALTH NURSING

Jane B. Laib, R.N.

Director

Since the year 1943 the City Service Commission has granted permission to employ registered nurses as "Emergency Employees" and it was not until January, 1948 that the qualifications for Public Health Nurse Group II were revised so that nurses holding temporary employment might be given a permanent status. Forty-seven emergency employees presented their credentials to the City Service Commission and were certified for permanent employment in March of this year.

The City Service Commission also held a promotional test in order that members of the staff who had completed an academic year of study in public health nursing at an accredited university or college might have their classification changed to Public Health Nurse Group I. Nine of the ten nurses who took the examination passed and their classification was changed. The entire group were in the salary range for their new position so that no increase was involved.

For the first time in several years there has been a full staff of nurses in the bureau. Provision was made for six new public health nursing positions in the budget for 1948 and for the transfer of one nurse from the Babies Milk Fund Association. This addition in personnel made it possible to relieve some of the public health nurses of excessively large caseloads and we believe resulted in improved quality of service in certain areas of the city. Forty-one registered nurses were appointed to fill seven new positions and thirty-three vacancies due to resignations, and one vacancy due to disability retirement.

Since the beginning of the year the nurses have assisted the Director of the Bureau of Communicable Diseases, the Director of the Bureau of School Hygiene and the District Health Officers in conducting a systematic Wood's light survey in the elementary public and parochial schools to determine the number of children having tinea capitis in order to get them under medical supervision and to help in measures to prevent the spread of the disease. In those schools where more than five cases were discovered every child was examined; in other schools where less than five cases were found certain classrooms were examined. Twenty-five schools were visited and 4,850 children examined. One hundred and twenty-eight cases were diagnosed of which sixty-five were previously known.

In the spring measles was prevalent and with the opening of schools in

the autumn, cases steadily increased, necessitating 19,845 home visits. In many cases immune serum globulin was given as well as instructions to the mother for the care of the patient and protection of susceptible household contacts.

There were 21,566 records of newborn babies assigned for home visits by public health nurses. In connection with these home visits the importance of having the children receive diphtheria toxoid at the age of six months was stressed. Much time was also spent by the nurses in interpreting the need for protective inoculation against smallpox and diphtheria for older children. Instruction was also given the parent for the protection of children against whooping cough. A total number of 16,585 home visits was made to cases of tuberculosis carried as a part of the public health nursing caseloads and for related epidemiological investigations. Each nurse carries an average of twenty cases. Child contacts of these cases were patch tested in their homes and this plan proved a time saving technique for both the family and the clinic physician as only those cases found to have a positive reaction were referred to the clinic for chest X-ray.

Conferences and seminars were conducted by Dr. Sibyl Mandell, Chief of the Division of Mental Hygiene and it is believed assisted in improving the approach of the nurses in helping to solve health problems in the homes.

The teaching program included classes in nutrition, attendance at special lectures and meetings of public health significance, and regular group conferences with supervisors and with several bureau directors.

The reorganization of some phases of the venereal disease control program called for more public health nurses to be assigned to the venereal disease clinics, so that they could relieve the physician of some of his routine procedures and could devote more time to contact investigation and follow-up of delinquent patients.

As a part of the Bureau of Public Health Nursing efforts to improve the effectiveness of the public health nursing services, special instruction was given in venereal diseases by Dr. Nels A. Nelson, Director of the Bureau of Venereal Diseases. Tuberculosis cases were periodically reviewed with the nurses jointly by the supervisors, the health officers, and Dr. Miriam E. Brailey and Dr. Charlotte Silverman of the Bureau of Tuberculosis.

Because of the acute shortage of nurses at Sydenham Hospital and inasmuch as communicable disease work is one of the important field services carried in the bureau, the public health nurses were asked to volunteer their services so that patients suffering with communicable diseases could be hospitalized and have nursing care. From September 7 until December 31 a total of 10 public health nurses volunteered; two for six weeks each and eight for two months each. They were assigned to duty on the various eight hour shifts and rotated with the regular nursing personnel of the hospital.

The policy was established to have all new appointees spend at least two months at Sydenham Hospital.

Three nurses were granted leave of absence without pay in order to take postgraduate courses in public health. One nurse enrolled at the University of Pennsylvania under the G. I. Bill of Rights to complete her work for the B.S. degree. The assistant director of the bureau and one public health nurse were granted stipends from federal funds. The assistant director enrolled at the Johns Hopkins School of Hygiene and Public Health for her master's degree in public health, and the other nurse will complete a year's academic postgraduate work at Catholic University.

A total of forty-five nurses were introduced to the public health nursing duties throughout the year. Thirty-seven nurses were assigned to the Eastern Health District for the seven-week orientation course and eight to the Western Health District.

Personnel

Jane B. Laib, Director
Alice M. Sundberg, B.A., Assistant Director
M. Alice Caron, Supervisor of Public Health Nursing
Marie Dandridge, B.S., 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, B.S., Supervisor of Public Health Nursing
Grace Volmar, B.S., Supervisor of Public Health Nursing

Public Health Nurses

Marianne P. Aiau
Mary C. Bacon
Pauline K. Benfer
Grace Berger
Katherine M. Brady
Marie V. Buckless
Helen J. Buffington
Altha Busch
Mary B. Carr
Doris C. Carter
Elevian Carter
Sarah V. Case
Ophelia S. T. Coleman
Elizabeth W. Cooper
Evelyn Cortez
E. Murray Cox
Grace C. Crawford
Stella DeWitt
Alice E. Diver
Ruth F. Eckman, B.A.
Edna Faith
Marianne Fetsch
Rose M. Fields
Ethel V. Finneyfrock
Virgie M. Finneyfrock
Helen H. Galloway
Geneva N. Gartside
Mary A. Goldberg
Doris McLean Gowans
Elise Graff
Virginia M. Gray, B.S.
Ruth N. Guyton
Marian J. Hagan
Rose M. Hoffman
Constance Jacobs
Mary F. Jenkins
K. Ruth Jones
Eudora M. Kefauver
Lillian A. Kemp
Edna B. Kenney

Margaret S. King
Elsa C. Kittel
Clara A. Kushto
Bess C. Lang
Rose B. McDonnell
Margaret D. Miller
Frieda W. Moore
Winifred F. Moore
Margaret E. Neubauer
Katherine E. Nutto
Laura C. Phillips
Roberta S. Pinckard
Mary L. Reynolds
Helen M. Ries
Doris J. Rodenhiser
Carolyn M. Shaffer
Helen B. Sharpe
Ruth Stoneham
Marion E. Stromberg
Mary B. Tewell
Birdie M. Thearle
Violet B. Weber
Patricia Webster
Helen L. Wells
Alva Williams
Edna Yates

Grace S. Eyler, Senior Stenographer
Frances L. Schwartz, Senior Stenographer

TABLE NO. 1

SUMMARY OF FIELD VISITS OF PUBLIC HEALTH NURSES—1948

SERVICE AND TYPE OF VISIT	ENTIRE CITY			EASTERN HEALTH DISTRICT		WESTERN HEALTH DISTRICT		DRUID HEALTH CENTER	SOUTH-EASTERN HEALTH DISTRICT		SOUTHERN HEALTH DISTRICT		SOUTH-WESTERN HEALTH DISTRICT		NORTH-WESTERN HEALTH DISTRICT		NORTHERN HEALTH DISTRICT		NORTH-EASTERN HEALTH DISTRICT	
	Total	White	Colored	White	Colored	White	Colored	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
All Field Visits	164,768	101,430	63,338	12,258	21,964	9,688	5,526	20,817	13,393	1,930	12,136	4,643	16,254	2,099	14,162	2,555	11,486	3,062	12,053	742
Maternity Hygiene	17,090	3,555	13,535	2,360	7,665	220	710	3,525	760	310	70	635	20	145	10	135	95	290	20	120
Infant Health Supervision	65,190	44,955	20,235	4,420	5,600	4,755	1,850	7,035	6,090	570	4,685	1,615	6,165	1,085	6,560	1,005	6,175	1,215	6,105	260
Preschool Health Supervision	19,670	10,765	8,905	1,090	1,620	1,055	1,045	4,100	1,285	150	1,765	630	3,420	365	790	725	500	195	860	75
School Health Supervision	10,865	10,040	825	465	245	240	50	100	450	25	1,290	160	3,135	25	2,610	25	1,115	175	735	20
Tuberculosis	16,585	8,115	8,470	1,240	2,315	1,115	770	2,745	1,625	380	1,105	810	1,220	210	510	385	680	740	620	115
Venereal Disease	4,693	595	4,098	48	1,569	323	466	1,267	88	265	46	253	9	59	12	45	46	107	23	67
Acute Communicable Disease	26,210	20,690	5,520	2,240	2,065	1,685	530	1,625	2,715	160	2,865	485	1,935	190	3,260	205	2,570	205	3,420	55
Other Morbidity	4,150	2,510	1,640	365	860	245	100	380	330	60	295	45	350	15	385	25	295	135	245	20
All Others	315	205	110	30	25	50	5	40	50	10	15	10	..	5	25	5	10	..	25	10
Effective Visits	137,940	85,154	52,786	9,529	18,375	7,454	4,488	17,265	10,828	1,433	10,266	3,839	14,659	1,883	12,621	2,384	9,650	2,538	10,147	581
Maternity Hygiene	13,625	2,580	11,045	1,590	6,215	150	500	3,130	665	235	60	465	20	120	5	115	75	180	15	85
Infant Health Supervision	51,710	34,740	16,970	3,315	4,965	3,345	1,470	5,775	4,525	425	3,435	1,295	5,270	950	5,400	925	4,785	970	4,665	195
Preschool Health Supervision	16,190	8,935	7,255	790	1,310	850	885	3,150	990	115	1,495	555	3,000	350	705	675	395	165	710	50
School Health Supervision	10,185	9,415	770	365	215	225	45	90	350	25	1,235	150	3,035	25	2,455	25	1,045	175	705	20
Tuberculosis	13,145	6,505	6,640	970	1,820	795	590	2,035	1,280	270	930	650	1,105	180	440	375	525	625	460	95
Venereal Disease	3,595	374	3,221	29	1,070	194	398	1,165	53	153	36	199	9	53	11	44	30	88	12	51
Acute Communicable Disease	25,265	20,005	5,260	2,115	1,975	1,615	500	1,530	2,595	145	2,780	470	1,875	185	3,195	195	2,505	205	3,325	55
Other Morbidity	3,970	2,435	1,535	330	785	235	100	360	330	55	285	45	345	15	385	25	285	130	240	20
All Others	255	165	90	25	20	45	..	30	40	10	10	10	..	5	25	5	5	..	15	10
Maternity Hygiene Service																				
All visits	17,090	3,555	13,535	2,360	7,665	220	710	3,525	760	310	70	635	20	145	10	135	95	290	20	120
Health Department clinic case																				
Antepartum	3,630	480	3,150	135	1,560	85	125	585	150	115	30	325	10	115	5	100	50	160	15	65
Postpartum	2,440	165	2,275	75	1,685	15	55	285	65	70	10	135	..	..	..	15	..	10	..	20
Other clinic case																				
Antepartum	2,865	745	2,120	685	1,640	20	215	240	10	10	20	5	5	5	..	..	5	5	..	..
Postpartum	4,690	1,190	3,500	695	1,330	30	105	2,020	440	40	...	..	5	..	..	..	20	5	..	..
Home visit, not seen	2,890	885	2,005	685	1,110	70	190	305	95	75	10	155	..	25	5	15	20	105	..	25
Visit in behalf of case	575	90	485	85	340	..	20	90	..	..	..	15	..	..	..	5	..	5	5	10
Infant Health Supervision Service																				
All visits	65,190	44,955	20,235	4,420	5,600	4,755	1,850	7,035	6,090	570	4,685	1,615	6,165	1,085	6,560	1,005	6,175	1,215	6,105	260
Home visit, neonatal	22,320	15,285	7,035	1,560	1,840	1,410	460	3,070	2,190	245	1,520	450	1,720	270	2,225	270	2,150	335	2,510	95
Home visit, premature infant	140	40	100	15	50	..	20	25	..	..	5	..	..	5	5	..	5	..	10	..
Home visit, clinic infant	11,055	3,740	7,315	590	2,425	745	845	2,180	465	50	405	535	975	550	280	430	235	285	45	15
Home visit, other case	140	110	30	15	30	10	..	..	20	..	5	..	5	..	30	..	20	..	5	..
Home visit, diphtheria prevention	18,055	15,565	2,490	1,135	620	1,180	145	500	1,850	130	1,500	310	2,570	125	2,860	225	2,375	350	2,095	85
Home visit, not seen	12,145	9,365	2,780	875	480	1,405	370	1,035	1,485	145	1,190	295	850	130	960	75	1,230	190	1,370	60
Visit in behalf of case	1,335	850	485	230	155	5	10	225	80	..	60	25	45	5	200	5	160	55	70	5

TABLE NO. 1—Continued
SUMMARY OF FIELD VISITS OF PUBLIC HEALTH NURSES—1948

SERVICE AND TYPE OF VISIT	ENTIRE CITY			EASTERN HEALTH DISTRICT		WESTERN HEALTH DISTRICT		DRUID HEALTH CENTER	SOUTH-EASTERN HEALTH DISTRICT		SOUTHERN HEALTH DISTRICT		SOUTH-WESTERN HEALTH DISTRICT		NORTH-WESTERN HEALTH DISTRICT		NORTHERN HEALTH DISTRICT		NORTH-EASTERN HEALTH DISTRICT	
	Total	White	Colored	White	Colored	White	Colored	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
Preschool Health Supervision Service																				
All visits	19,670	10,765	8,905	1,090	1,620	1,055	1,045	4,100	1,285	150	1,765	630	3,420	365	790	725	500	195	860	75
Health Department clinic case	10,385	4,010	6,375	370	1,120	370	750	3,040	290	30	490	365	1,880	310	425	645	105	100	80	15
Other case	235	215	20	25	10	5	5	..	25	..	60	5	25	..	25	..	45	..	5	..
Home visit, diphtheria prevention	5,570	4,710	860	395	180	475	130	110	675	85	945	185	1,095	40	255	30	245	65	625	35
Home visit, not seen	3,200	1,715	1,485	285	240	190	160	870	280	35	260	75	415	15	80	45	65	25	140	20
Visit in behalf of case	280	115	165	15	70	15	..	80	15	..	10	..	5	..	5	5	40	5	10	5
School Health Supervision Service																				
All visits	10,865	10,040	825	465	245	240	50	100	450	25	1,290	160	3,135	25	2,610	25	1,115	175	735	20
Home visit, correction of physical defect	6,710	6,205	505	265	135	115	25	65	265	20	895	55	2,320	10	1,200	10	525	165	620	20
Home visit, other	3,475	3,210	265	100	80	110	20	25	85	5	340	95	715	15	1,255	15	520	10	85	..
Home visit, not seen	615	575	40	90	20	10	5	5	100	..	55	10	100	..	130	..	60	..	30	..
Visit in behalf of case	65	50	15	10	10	5	..	5	..	..	..	..	..	..	25	..	10	..	..	..
Tuberculosis Service																				
All visits	16,585	8,115	8,470	1,240	2,315	1,115	770	2,745	1,625	380	1,105	810	1,220	210	510	385	680	740	620	115
Pulmonary case																				
Presanatorium	5,165	2,350	2,815	310	570	350	265	1,085	590	130	335	335	210	50	175	120	170	240	210	20
Postsanatorium	3,575	2,350	1,225	305	325	235	70	360	320	40	350	40	640	45	140	115	195	205	165	25
Childhood type																				
Presanatorium	535	125	410	35	110	..	50	140	10	10	30	50	25	10	20	5	..	15	5	20
Postsanatorium	120	35	85	5	30	10	10	30	10	10	5	5	..	..	..	..	..	..	5	..
Suspect	1,170	530	640	40	195	115	70	110	140	50	40	65	20	25	45	55	85	60	45	10
Contact, living case	1,550	765	785	215	355	40	50	85	160	20	80	100	170	45	55	80	30	45	15	5
Contact, dead case	910	325	585	55	225	45	60	175	45	10	80	45	35	5	5	..	45	50	15	15
Home visit, other	120	25	95	5	10	..	15	50	5	..	10	10	5	..	..	..	..	10	..	..
Home visit, not seen	2,785	1,380	1,405	205	370	305	175	485	315	100	160	140	115	25	65	10	115	90	100	10
Visit in behalf of case	655	230	425	65	125	15	5	225	30	10	15	20	..	5	5	..	40	25	60	10
Venereal Disease Service																				
All visits	4,693	595	4,098	48	1,569	323	466	1,267	88	265	46	253	9	59	12	45	46	107	23	67
Syphilis																				
Congenital service	1,087	78	1,009	3	197	32	137	416	9	83	18	69	1	25	2	10	10	39	3	33
Delinquent patient follow-up	1,422	116	1,306	13	544	61	150	479	16	13	7	57	3	16	6	24	9	18	1	5
Epidemiological investigation	904	128	776	7	246	68	101	256	20	50	10	64	5	12	3	10	9	25	6	12
Gonorrhea																				
Delinquent patient follow-up	61	4	57	1	33	1	4	6	2	2	..	7	..	..	..	..	..	4	..	1
Epidemiological investigation	121	48	73	5	50	32	6	8	6	5	1	2	..	..	..	..	2	2	2	..

Home visit, not seen	1,083	206	877	13	499	127	68	102	33	112	9	54	..	6	1	1	13	19	10	16
Visit in behalf of case	15	15	..	6	..	2	..	..	2	..	1	..	..	..	..	..	3	..	1	..
Acute Communicable Disease Service																				
All visits	26,210	20,690	5,520	2,240	2,065	1,685	530	1,625	2,715	160	2,865	485	1,935	190	3,260	205	2,570	205	3,420	55
Home visit, reported case																				
Chickenpox	180	150	30	20	20	5	..	5	..	..	40	5	15	..	60	..	..	..	10	..
Mumps	105	80	25	5	20	5	..	5	10	..	25	..	..	..	25	..	10	..	..	..
Measles	17,535	14,725	2,810	1,770	935	1,020	235	1,045	2,020	15	1,880	165	1,340	140	2,060	120	1,840	120	2,795	35
Whooping cough	1,895	805	1,090	100	505	120	100	145	165	110	60	135	100	15	115	30	45	30	100	20
Scarlet fever	730	605	125	55	35	65	5	40	105	5	100	5	50	5	75	10	75	10	80	..
Other	120	75	45	10	45	5	..	10	5	..	10	..	20	..	5	..	10	..	10	..
Home visit, suspect																				
Chickenpox	315	315	..	5	..	15	..	..	30	..	20	..	75	..	85	..	80	..	5	..
Measles	1,350	1,170	180	45	45	45	15	50	105	5	290	35	195	10	265	5	140	15	85	..
Whooping cough	275	200	75	5	35	30	5	..	25	5	30	10	50	10	35	10	10	..	15	..
Mumps	275	275	..	..	..	10	..	..	20	..	10	..	..	..	190	..	35	..	10	..
Scarlet fever	55	45	10	5	..	..	..	10	..	..	10	..	5	..	15	..	10	..	..	..
Other	25	25	..	..	..	5	..	..	..	..	..	..	..	..	20	..	..	..	..	..
Home visit, contact																				
Measles	750	695	55	5	..	5	5	35	10	..	130	10	10	..	215	5	120	..	200	..
Other	75	45	30	..	10	..	..	5	..	..	15	15	..	..	10	..	15	..	5	..
Home visit, immunization																				
Measles	210	115	95	20	45	15	5	15	10	..	40	5	10	5	..	5	20	15	..	..
Diphtheria	855	350	505	45	270	130	60	60	20	5	60	85	..	..	20	10	75	15	..	..
Diphtheria and whooping cough	220	120	100	..	5	120	65	30	..	..	..	..	..	..	..	..	..	..	..	..
Other	20	20	..	..	..	5	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Home visit, typhoid fever culture	225	160	65	20	..	..	..	65	70	..	45	..	5	..	..	..	15	..	5	..
Follow-up cases	50	30	20	5	5	15	5	10	..	..	..	..	..	..	..	..	5	..	5	..
Home visit, not seen	850	645	205	120	65	70	30	65	120	15	85	15	55	5	45	10	60	..	90	..
Visit in behalf of case	95	40	55	5	25	..	..	30	..	..	..	..	5	..	20	..	5	..	5	..
Other Morbidity Service																				
All visits	4,150	2,510	1,640	365	860	245	100	380	330	60	295	45	350	15	385	25	295	135	245	20
Sore eye case	800	350	450	45	110	130	60	160	85	20	40	15	15	15	10	10	5	55	20	5
Infant	330	95	235	65	200	10	5	5	15	20	..	5	..	..	..	..	..	..	5	..
Preschool child	385	100	285	45	260	..	10	5	5	..	10	5	30	..	..	..	5	..	5	5
School child	1,730	1,515	215	100	105	..	5	20	195	5	220	..	285	..	345	10	205	65	165	5
Adult	720	370	350	70	110	95	20	170	30	10	15	20	15	..	30	5	70	10	45	5
Mental hygiene	5	5	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Home visit, not seen	140	75	65	35	55	10	..	5	..	..	10	..	5	..	..	..	10	5	5	..
Visit in behalf of case	40	..	40	..	20	..	..	15	..	5	..	..	..	..	..	..	..	..	..	..
All Other Services																				
All visits	315	205	110	30	25	50	5	40	50	10	15	10	..	5	25	5	10	..	25	10
Sanitary investigation	25	10	15	5	5	..	..	10	..	..	..	..	..	..	..	..	..	..	5	..
Vital statistics investigation	35	30	5	..	..	5	..	5	15	..	10	..	..	..	..	..	..	..	..	..
Other visits	195	125	70	20	15	40	..	15	25	10	..	10	..	5	25	5	5	..	10	10
Home visit, not seen	55	40	15	5	5	5	5	5	10	..	5	..	..	..	..	..	5	..	10	..
Visit in behalf of case	5	..	5	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..

MEDICAL CARE SECTION

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

Director

The year 1948 was a year of satisfactory progress for the Medical Care Program of Baltimore City. The Medical Care Section, established in May, 1947, but without a director until the following September, started the year 1948 with only one person, the director, as staff and with initial planning not yet completed. No actual medical care had been supplied to anyone. At the end of the year, in contrast, two large Medical Care Clinics had been established to which had been referred a total of 9,330 individuals, 3,543 of whom had registered and were fully eligible to receive medical services under the program. Some slight indication of the volume of medical services is shown by the number of prescriptions, 3,872, written and paid for under the program by the end of the year.

During the first five months of the year planning and promotional activities initiated in the previous year were continued. A system of basic records and record keeping was evolved in which mechanical methods, wherever applicable, were used, so as to expedite processing, avoid some chances of error and conserve clerical time as much as possible. Administrative and working procedures, not only for the Medical Care Section, but also to some extent for the Medical Care Clinics, were set up and described in detail so that when the program was put into operation all organizations and persons concerned had a fairly clear understanding of how each was to function in the program. To this careful planning of the first director of the Medical Care Section was due much of the smoothness and comparatively frictionless operation of the program when it was actually put into effect.

Unfortunately, Dr. Wendell R. Ames, the first director of the Medical Care Section found it necessary to resign because of compelling personal and physical reasons. His resignation took effect June 1. On the following day he was succeeded by Dr. J. Wilfrid Davis, formerly Director of the Bureau of Communicable Diseases, who had had the opportunity of working with Dr. Ames several weeks previous to the change in directors.

On June 15, in the office of Mayor Thomas D'Alesandro, Jr., contracts* for the establishment and operation of two Medical Care Clinics, one at the University of Maryland Hospital and the other at the John Hopkins Hos-

* The text of one of the basic medical care contracts is to be found in the Appendix of this ANNUAL REPORT.

pital, were formally signed by the Commissioner of Health and representatives of the hospitals. The two contracts, identical in principle, were drawn up in close accordance with the plan for organized medical care for welfare clients prepared by the Maryland State Planning Commission's Committee to Study the Medical Care Needs of Baltimore City.

Under the contracts it was stipulated that a total of at least 14,000 public assistance clients would be assigned to the two Medical Care Clinics during the year and that the clinics would render such medical care services as were set forth under the plan. Of the total number, 4,000 public assistance clients would be assigned to University Hospital Medical Care Clinic and 10,000 clients would be assigned to the Johns Hopkins Hospital Medical Care Clinic.

Immediately following the signing of the contracts preparation for the establishment of the two Medical Care Clinics was carried out with all dispatch compatible with thoroughness. Quarters for the new clinics were secured and staff was assembled. Great care was used by the hospitals in the selection of Medical Care Clinic directors. Dr. Henry W. D. Holljes, a well trained clinician, headed the University Hospital Medical Care Clinic. Dr. Harry L. Chant, an experienced clinician and public health administrator, formerly Health Officer of the Eastern Health District, was secured as Director of the Johns Hopkins Hospital Medical Care Clinic. The clinic directors secured the services of practicing physicians in the neighborhood to render the necessary home and office care as stipulated under the plan.

The first persons to receive care under the new Baltimore City Medical Care Program registered at the Johns Hopkins Hospital on the morning of August 2. Exactly one week later, August 9, the Medical Care Clinic at University Hospital registered the first persons to receive care at that clinic. Since then the two Medical Care Clinics have steadily advanced.

Personnel

J. Wilfrid Davis, M.D., M.P.H., Director
Lillian J. Dudderar, Secretary-Stenographer
Louise D. Rosenberger, Senior Clark
Marian Kramer, Statistical Clerk
Marie V. Ludwig, Key Punch Operator

SANITARY SECTION

SANITARY SECTION

Personnel

Wilmer H. Schulze, Phar.D., Director
Margaret McDonough, Senior Stenographer
Katherine Losey, Senior Clerk
Jennie G. Moore, Senior Clerk
George Boteler, Municipal Exchange Operator

SANITARY SECTION

Wilmer H. Schulze, Phar.D.

Director

The appointment of Mr. William Sallow, Chief of the Division of Rodent Control, and Miss Eleanor L. McKnight, Chief of the Division of Nutrition, to fill existing vacancies, made possible the strengthening of the programs of these two important activities. Provision of additional staff for the Bureau of Food Control afforded means for an increase of effort in improving cleanliness and sanitation in the large number of food dispensing places in the city. Extensive new building programs created a need for enlargement of the plumbing inspection staff and approval for this additional personnel was granted by the Board of Estimates. Because of a significant turnover in the inspection staff an in-service training course for all new personnel was given toward the close of the year.

Housing Law Enforcement

Thirty-three blocks containing 1,335 dwelling units in five of the areas previously selected by the Housing Law Enforcement Committee were inspected and notices were sent containing orders to comply with the provisions of the City Housing Code. This work compares with 23 blocks consisting of 730 dwelling units inspected in 1947. Since the inauguration of the enforcement program late in 1945, 58 blocks with 2,202 dwelling units have been started toward making actual improvements, and 32 blocks with 1,119 dwelling units have been completed with the exception of a few scattered problem cases. The year 1948 can be considered as the second full year of enforcement on a block unit basis following trial experiments of this character in 1945 and 1946. During the year a more comprehensive inspection schedule form was put into use and with the cooperation of the Statistical Section procedures for coding this information for punch card tabulation were begun.

The Housing Court completed its first year of activity on July 23, 1948, and the value of such a special court in connection with the enforcement of city ordinances pertaining to housing and sanitation was demonstrated. Functioning on a city-wide basis, 1,596 cases were heard by the court during this first year. Of this number the City Health Department presented 227 cases, while 24 cases originated in the Bureau of Building Inspection or the Fire Department. The largest number of cases (1,345) was brought to the court by the newly organized Police Sanitation Squad for insanitary en-

vironmental conditions. During this period of one year's activity this group of police officers obtained the correction of 18,119 sanitation violations without the need of resorting to court action.

Many inquiries regarding the Housing Law Enforcement Program were received from other cities, and a number of persons visited Baltimore to observe the enforcement operations. In order to meet this need and to make available in concise form the story of the development of the enforcement program, an article was prepared by the Commissioner of Health and the Director of the Sanitary Section and printed in the December, 1948 issue of the *Baltimore Health News* under the title, "Housing Law Enforcement And The City Health Department's Attack On Slums."

Rodent Control Coordinating Committee

A course in rodent control for pest control operators was given by the Coordinating Committee with the assistance of the Division of Adult Education of the City Department of Education. The course started on February 10, and consisted of nine weekly sessions including lectures and demonstrations. The sessions were well attended and information was given so there would be a mutual understanding of practical methods in effective rodent control.

As the result of a study of possible sanitary methods of refuse disposal in the public markets, the Coordinating Committee recommended the use of special equipment (Dempster Dumpster) for the collection and removal of refuse materials. With the cooperation of the City Comptroller, arrangements were made for the purchase of the necessary equipment by the City Bureau of Sanitation. All market stall operators were notified that the equipment would be put in place in the markets for their use and their cooperation was solicited toward a long needed improvement in sanitary methods of refuse disposal. The equipment was made available for use toward the close of the year and a marked improvement in sanitation was achieved. This is the first major step toward the control of rat infestation in the markets.

In keeping with the recommendations of the Coordinating Committee, the Division of Rodent Control began functioning primarily on a permanent control basis by the application of the fundamental principles of depriving the rat of food and a home on a block unit basis. During the year this type of program was begun in four areas consisting of 33 blocks.

Miscellaneous Activities

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

1. Permission was granted for the processing and distribution of homo-

genized (vitamin D) milk under a regulation adopted by the Commissioner of Health on April 9, 1948.

2. Amendment of Plumbing Regulations Nos. 21, 22 and 48, so as to be applicable to the construction of stadia in connection with the possibilities of freezing in plumbing systems during winter months.

3. Holding of a two-day conference on rat control as part of a nation-wide program of the National Committee on Rat Control appointed by the Honorable J. A. Krug, Secretary of the Interior. Baltimore served as a demonstration city in effective rat control methods for areas including the states of Maryland, Delaware, Pennsylvania, West Virginia, and the District of Columbia.

4. Investigation of 14 rat bite cases followed by effective measures for rat elimination in each instance.

5. Arrangement for obtaining from the Department of Municipal and Zoning Appeals copies of decisions on applications for changes in the number of families permissible in multiple-family dwellings.

6. Cooperation with the Board of Liquor License Commissioners in matters related to sanitation in taverns.

7. Successful legal proceedings against the management of a small industrial plant for failure to provide sanitary factilities for employees.

8. Cooperation in the study of 17 cases of undulant fever, 14 of which occurred in persons who had worked in slaughtering establishments.

9. Investigation of the home environment in connection with 31 confirmed and 11 probable cases of lead poisoning in children, 4 of which were fatal.

10. A meeting of the Gas Reference Committee for the purpose of arranging for the revision of present specifications for domestic types of gas-fired appliances.

11. The issuance of 3,703 plumbing permits for the removal of yard toilets (frost-proof hoppers) as compared with 1,194 permits issued in 1947.

12. Inspection and testing of nine domestic garbage grinders with the Sewerage Engineer prior to granting permission for installation in Baltimore City. Since the approval of Ordinance No. 871, on May 16, 1947, plumbing permits have been issued for the installation of 136 of these machines.

13. Recommendation after study of the polluted condition of the Western Run, that steps be taken at the earliest possible date to eliminate the discharge of sewage into this stream.

14. Cooperation with the Department of Public Works in planning for an improved weed control program including the need for improving present ordinances related to weeds on privately owned properties.

15. Continued enforcement of the Psittacosis Ordinance in connection with four ships entering the harbor with one or more psittacine birds as reported by the U. S. Quarantine Station at Curtis Bay.

16. Cooperation with the Department of Recreation and Parks in connection with plans for the modernization of certain swimming pools in public parks.

17. Inspection of the operations in the construction of the Liberty Road-Montebello water tunnel with the Commissioner of Health and other representatives of the City Health Department and the Bureau of Water Supply.

18. Sanitary inspections of nursing homes and hospitals in connection with the licensing of such institutions in the city by the State Department of Health.

19. Participation with the Commissioner of Health in meetings of the Building Code Revision Committee.

In addition to regular services the staff was active in educational programs through means of the press, the radio, and by talks and demonstrations to various groups and individuals.

BUREAU OF MILK CONTROL

BUREAU OF MILK CONTROL

Ivan M. Marty

Director

From the public health viewpoint the Bureau of Milk Control's most important accomplishment of the year was the progress made in furtherance of a completely tight control of the pasteurization of the city milk supply. Effective systems for checking pasteurization efficiency by phosphatase tests were firmly established in all of the commercial milk plants. A record number of 5,611 city-wide random samples of pasteurized milk were phosphatase tested in the City Health Department Bureau of Laboratories, and in only two instances was improper pasteurization indicated. It is of interest that in one of the two instances the faulty pasteurization was reported to the Bureau of Milk Control by the milk plant involved before the Health Department laboratory had received the sample and it is gratifying that in neither case did any of the milk represented by the improperly pasteurized samples leave the milk plants.

For the first time in the city's history the entire milk supply was pasteurized when on May 1 the last remaining certified raw milk farm discontinued operations.

Many important and often expensive alterations were incorporated in the design, construction and installation of pasteurization equipment in order to place additional safeguards around the pasteurization of the milk supply. Much time and energy were consumed by staff members in redesigning existing milk handling equipment and developing entirely new devices for improving the efficiency of milk plant operations. Some of the features thus developed have been utilized by leading dairy equipment manufacturers and have been recommended by milk control officials in other cities.

A trend stimulated by the bureau during 1947 toward improvement of the construction of milk and ice cream plants and dairy farm buildings continued to gain momentum. Greater over-all improvements were achieved in 1948 than in any previous year on record.

Milk Plant Regulation 62-C governing homogenized (vitamin D) milk and Milk Plant Regulation 35 governing caps were adopted by the Commissioner of Health on April 9 in order to permit the sale of homogenized milk fortified with vitamin D. The sale of this type of milk, permission for which had been requested by the ten chief milk pasteurization plants in Baltimore, was begun on April 15.

Increases in the price of milk in July and September raised the con-

sumer's price to a record high of twenty-two cents per quart. Increases in the price paid to the producers followed the same pattern breaking all records at $6.10 per hundredweight.

Educational Activities

The seventeenth annual Sanitary Milk Production Contest in which 280 agricultural students from 13 rural high schools participated was won again by the Thurmont High School, Frederick County, Maryland, winner in 1947. Since 1932 when the first contest was held nearly 6,000 prospective dairy farmers have been trained in the City Health Department methods for the production and handling of milk in preparation for the competition. Some of the participants in the 1948 contest are sons of leading milk producers who themselves competed in the initial contest. The splendid spirit of cooperation which exists today between the Baltimore milk producers and the City Health Department and which is largely responsible for the high quality of the city milk supply is to an appreciable extent the result of relationships achieved through the seventeen yearly contests.

As in previous years the city milk pasteurization plants have contributed a bronze and mahogany plaque which will be presented to the winning school by the Mayor of Baltimore at the next annual meeting of the Maryland Cooperative Milk Producers, Incorporated. Other high schools which competed for this year's trophy finished in the following order: Emmitsburg, Frederick County; Dublin, Harford County; Stewartstown, York County (Pennsylvania); Delta, York County (Pennsylvania); Sparks, Baltimore County; Frederick, Frederick County; Glenville, York County (Pennsylvania); New Freedom, York County (Pennsylvania); Damascus, Montgomery County; Lisbon, Howard County; Jarrettsville, Harford County; and Middletown, Frederick County.

The night school courses of instruction for milk plant employees which were so successful in the training of wartime replacements in pasteurization plants were intensified in order to establish firmly in the minds of plant workers the significance of milk plant sanitation and personal hygiene in relation to the public health. Numerous lectures, illustrated with posters, lantern slides and movies, often accompanied by tours through pasteurization plants were given by staff members to various civic organizations and groups of students, nurses and farmers.

The series of monthly letters from the bureau director to the farmers who produce the city's milk supply which has been published in the *Maryland Farmer* since June, 1947 was continued throughout the year. The messages which reach most of the Baltimore producers continually emphasize milk sanitation and the need for closer cooperation with the Health Department. The texts of applicable letters dealing with milk sanitation were reprinted in the "Milky Way" a monthly publication of

the Rochester Dairy Cooperative, Rochester, Minnesota, which is circulated among the company's 4,000 or more milk producers. In this way, Baltimore milk production methods are brought to the attention of the producers of this city's oldest manufacturing cream and emergency milk supply.

Cooperating in the furtherance of milk sanitation and public health, bureau staff members participated in meetings of the following groups: Baltimore Conference of Food, Drug and Sanitary Officials; University of Maryland Dairy Technology Conference; Dairy Technology Society of Baltimore and District of Columbia; Johns Hopkins School of Hygiene and Public Health; Maryland State Department of Health; U. S. Public Health Service; International Association of Milk Sanitarians; Maryland Cooperative Milk Producers, Incorporated; Inter-State Milk Producers Association; Farm Credit Administration of Baltimore; Farm Bureau; Maryland State Grange; County Agricultural Agents; Maryland State Department of Education; and Veterans Administration.

Dairy Farm Inspection

Again as in 1947 increased production and decreased consumption of milk in the Baltimore area reduced the amount of out-of-state emergency milk that was brought into the city in order to meet local demands. From the peak of 12,000,000 gallons in 1944 the amount of this type of milk imported annually has been reduced as follows:

1945—10,000,000 gallons
1946— 9,000,000 gallons
1947— 5,700,000 gallons
1948— 4,700,000 gallons

This record is gratifying to the bureau inasmuch as it has been proven that as the amount of emergency milk used decreases the sanitary quality of the city milk supply improves.

A survey toward the end of the year of the 2,593 permitted dairy farms disclosed the following facts: Approximately 20 per cent of the buildings are in complete compliance with the City Health Department *Specifications for Dairy Houses and Milking Stables*, enforcement of which was begun in 1940 and discontinued at the outbreak of World War II; nearly 30 per cent are within 75 to 100 per cent of full compliance; 20 per cent are within 50 per cent of compliance; 12 per cent are under construction in order to comply and on approximately 20 per cent of the farms no effort has been made to meet the specifications.

The survey also established the facts that approximately 45 per cent of the farms, an increase of 16 per cent over 1947, are equipped with approved

water heaters and wash vats, a requirement also established in 1940 but waived during the war; and that the percentage of farms equipped with mechanical refrigeration increased from 80 per cent in 1947 to 85 per cent in 1948.

Although the number of dairy farm permits issued barely exceeded the number of such permits cancelled, this fact is nevertheless comforting inasmuch as 1947 was the only other year since 1939 in which the number of permits issued exceeded the number of cancellations. A reduction occurred in the number of holders of manufacturing dairy farm permits. The chief contributing factor responsible for the reduction was the transfer of a large block of farms located in western Maryland to a West Virginia manufacturing plant situated in closer proximity to the farms.

An encouraging spirit of cooperation was noted between the milk transportation agencies and the Bureau of Milk Control in the improvement of the conveyances used in the transportation of milk from the farms to the milk plants and in the operation of truck lines according to specified schedules. Many heretofore open and canvas covered trucks were replaced with closed body trucks and a genuine effort to facilitate the receiving of milk at the plants and to reduce the period of transit by maintaining routine schedules was clearly evident.

Pasteurization Plant Inspection

The owners of two milk pasteurization plants appeared for warning hearings before the Commissioner of Health in connection with charges of pasteurization violations. The program of rigid supervision of pasteurization equipment and temperature controls was continued with an average of approximately thirty inspections being made at each milk plant per month.

Two ice cream manufacturers that previously had not pasteurized the ice cream mix on the premises where the ice cream is frozen as required by Health Department regulation of all new permit holders, were persuaded to install pasteurization equipment, thereby reducing to eleven the number of nonpasteurizing plants. During the past ten years the number of such plants has decreased from twenty-six to eleven while the number of pasteurizing ice cream plants has increased from fifteen to twenty-one. Plans and specifications for four new ice cream plants were approved and construction under Bureau of Milk Control supervision was begun. An unusually large number of ice cream novelties were introduced, thereby necessitating many special studies of new equipment and manufacturing methods.

Personnel

Ivan M. Marty, Director
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
Viron Van Williams, Sanitarian
Philip H. Strauss, Inspector—Food
Marie R. Huppman, Senior Stenographer
Lillian R. Wolman, Senior Stenographer

TABLE NO. 1

SUMMARY OF ACTIVITIES OF THE DAIRY FARM DIVISION
1948 AND 1947

Area of Baltimore milkshed ..... 2,600 square miles (approximate)
Active shippers 2,593

Activities	1948	1947
Inspections		
Total	5,065	4,806
Routine dairy farms	1,357	1,029
Special dairy farms	3,035	2,934
Applications	431	580
Receiving and by-products plants	217	238
Cream plants	25	25
Other Activities		
Violation notices issued	1,079	1,044
Gallons of milk examined	350	75,150
Gallons of milk condemned	192	1,324
Permits issued	265	309
Permits cancelled	261	311
Producers' cans examined	7,536	4,958
Suspensions of Permits		
Total	19	25
Department	..	5
Field	19	20

TABLE NO. 2

SUMMARY OF INSPECTIONS OF CITY MILK PLANTS—1948 AND 1947

Type of Plant	Inspections	Average Number of Inspections per Month per Plant	Correction Notices Issued
Milk plants			
1948	4,582	27.82	780
1947	5,010	29.62	814
Ice cream plants pasteurizing on premises			
1948	1,018	4.28	781
1947	1,105	4.79	753
Ice cream plants buying pasteurized ingredients			
1948	504	3.24	282
1947	643	3.97	310

TABLE NO. 3

SUMMARY OF MILK AND MILK PRODUCT SAMPLES COLLECTED—1948 AND 1947

Type of Sample	1948	1947
All Samples	9,136	9,145
Milk	7,604	7,369
Cream	349	403
Ice cream	609	941
Ice cream mix, evaporated and condensed milk	24	34
Empty bottles	227	216
Water samples	16	37
Miscellaneous samples	127	145
Dairy product cans inspected	8,792	3,022

BUREAU OF FOOD CONTROL

BUREAU OF FOOD CONTROL

Ferdinand A. Korff, B.S.

Director

The inspection and supervision of the food supply of the city was accelerated during the year with an increase in the number of sanitarians assigned to the bureau. Five additional sanitarians brought the total to eleven assigned for the inspection of more than 10,000 food establishments in the city. The additional sanitarians were appointed on an emergency basis and there were many replacements. A Negro inspector was assigned to areas frequented by people of this race. An additional senior stenographer and a senior clerk were also appointed.

Emphasis was placed on retail food establishments where first consideration was given to the appearance and general cleanliness. The necessity for the food industry to maintain their establishments continually in a clean and acceptable condition at all times was forcibly impressed upon owners and operators of restaurants and soda fountains and similar food outlets by various methods. A continuation of the procedure of urging and demanding corrections was carried out through educational and cooperative efforts by means of Departmental hearings at which time relocation and replacement of equipment were directed. The cooperation of restaurant associations, retail druggist groups and official agencies, particularly the Board of Liquor License Commissioners for Baltimore City, was secured.

The effectiveness of this educational and cooperative procedure together with appeals made to citizen groups to direct attention to the Health Department of any undesirable conditions observed, could not be measured statistically. However, from spot surveys and statements obtained from unbiased individuals, there were indications that the appearance of food establishments did improve during the year.

Food Handler Training

More than 14,000 professional food handlers in the city have received instruction by representatives of the bureau during the past seven years. Two types of instruction were given in 1948 to the various groups with over 1,700 persons reached. The causes and prevention of food poisoning were discussed with the more intelligent groups and the habits of insects, rodents and bacteria were presented to the average food handler. The following table shows the number of persons and groups given the instruction.

YEAR	NUMBER OF GROUPS	NUMBER OF PERSONS
1948	41	1,717
1947	56	2,611
1946	38	2,305
1945	53	1,728
1944	118	3,625
1943	58	1,901
1942	29	600
TOTAL	393	14,487

Equipment Studies

Surveys and daily visits to the food establishments in the city continued to impress forcibly the need for equipment that could readily and easily be cleaned, in addition to the continued activities in food handler training. Recommendations were made, wherever a change of ownership occurred or a new business was established, that the equipment must be located away from walls and off the floor or sealed to floor and walls before permits were issued. The moving of equipment also extended to telephone booths. These equipment studies and recommendations will prevent to a great extent the occurrence of filthy, dirty and unesthetic food establishments in the future.

Violations

During the year there were 210 condemnations of food involving 87,687 pounds as compared with 168 condemnations in 1947 consisting of 164,884 pounds. There was an increase in the number of complaints received, from 625 in 1947 to 720 in 1948. This is a relatively small number of complaints from citizens against over 10,000 food establishments. There were eight prosecutions obtained in the magistrate's courts at which time fines from $1.00 to $200.00 were assessed. A recapitulation of three of the cases follows:

1. Following a series of inspections and warnings dating back three months involving nuisances, and rodent and insect infestation of a grocery store on West Lexington Street and the finding of dried fruit infested with insects and rodent excreta, fines of $25.00, $25.00, $100.00, and $100.00 and costs were imposed for each of four separate offenses. Testimony was given by sanitarians of the bureau for nuisance violations and by the Chief of the Division of Chemistry for having in possession impure food. An appeal was taken to the Criminal Court where the fines were reduced to $1.00, consideration being given to the amount of money necessary to be spent in order to correct the rodent entrances into the store.
2. Routine inspection of a restaurant on Pennsylvania Avenue revealed an open sewer line, evidence of rodents and general filthy conditions. Following reinspection and a hearing from which no corrections were obtained, a fine of $25.00 and costs was imposed by the Housing Court Magistrate.

3. After several inspections of a grocery store on Arydale Avenue with no evidence of improvement, a summons was issued for failing to eliminate a nuisance consisting of improper garbage disposal and general insanitary conditions. The case was postponed twice pending further inspection. After the second postponement the insanitary conditions had been corrected and the case was dismissed.

More than 15 suspensions of liquor licenses were ordered by the Board of Liquor License Commissioners for Baltimore City following testimony given by representatives of the bureau in instances of insanitary conditions and negligence in washing, rinsing and disinfecting glasses. Hearings held within the bureau totaled 314 in 1948 as compared with 216 in 1947. In practically every instance the hearings resulted in quick corrections being made, including the installing of three-compartment wash troughs for food utensil washing, rinsing and disinfecting, the removal of potentially hazardous hopper-type outdoor toilets, rodent-proofing and relocating of equipment for ease of cleaning. Several establishments were advised to be closed pending corrections and the closing times were from several days to weeks.

Food Establishment Inspection

Retail Food Establishments

There was an increase in the number of inspections of retail establishments from 4,801 in 1947 to 11,625 in 1948. The inspections were concentrated in heavily populated areas, the center of the city and in the neighborhood shopping sections. An attempt was made to decentralize the inspection by assigning an inspector to one organized health district, having the inspector operate under the supervision of the district health officer; but with the small number of inspectors, it was deemed advisable to carry out this procedure temporarily in one district only, continuing the decentralized procedure after the permanent appointment of more sanitarians. Again this year no attempt was made to visit all of the retail food establishments in the city, but concentration of effort was made on those that were known to be in need of inspection. The following table gives the percentage of retail food establishments found entirely satisfactory on the basis of visits by the inspectors.

PERCENTAGE OF RETAIL FOOD ESTABLISHMENTS FOUND TOTALLY SATISFACTORY UPON INSPECTION, 1937-1948

Year	Percentage of Establishments	Year	Percentage of Establishments
1948	34.2	1942	53.4
1947	40.2	1941	61.2
1946	50.8	1940	60.1
1945	41.5	1939	49.8
1944	58.4	1938	58.4
1943	55.1	1937	57.1

The marked decrease in the percentage of entirely satisfactory retail food establishments in 1948 is due primarily to the concentration of activities and rating of restaurants in specific and congested areas, the insistence upon meticulousness in restaurant and soda fountains and the finding of undesirable conditions by the additional inspectors assigned to the bureau during the year.

Operators of chain stores in the city were again urged to maintain supervision over units of their organizations. Four additional organizations began this procedure in the city during the year, making a total of 11 organizations with from 3 to 150 units in the city that maintained supervision over their own groups in 1948. The saving to the city by this activity is estimated at about $28,000.

In order to maintain constant supervision one sanitarian was assigned for Saturday inspections. This made the procedure of unannounced inspections, on which so much depends, more effective.

Food utensils in taverns, restaurants, drug store soda fountains and other eating and drinking establishments were swabbed in instances where there were indications that the wash, rinse and disinfect procedure was not being carried out. The results of this swabbing, although it does not give the conditions on a city-wide basis, are shown below:

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
1948	1,587	551	34.7	286	18.0	114	7.3	343	21.6	293	18.4
1947	659	248	37.4	122	18.5	32	4.5	117	17.7	140	21.2
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

A study of substitutes for chlorine as a disinfecting chemical reinforces the findings of previous years, that these were not as effective as the cheaper bleaches, resulting in the discontinuance of the use of a large quantity of the quaternary preparations. It appears that the hardness of the city water or the lack of consistency in bottles of the preparation may be the causes of the inefficiency of the quaternaries.

Wholesale Food Establishments

As a part of their routine duties, three inspectors made 677 inspection visits to wholesale food establishments. Emphasis was placed on the elim-

ination of rodent and insect harborage in these establishments. Large quantities of canned food including baby food, cereals and jarred and bottled food were condemned because of defiling by insets and rodents and being contaminated during floods and fires in other localities. Pest control operators' activities were checked and the installing of stored food on movable platforms and away from walls was insisted upon.

Manufacturing Food Establishments

Bakeries in this group of 600 establishments were inspected regularly during the year. Additional personnel toward the end of the year caused the increase in the number of inspections of manufacturing food establishments from 1,074 in 1947 to 1,530 in 1948. Over 275 samples of food from bakeries and candy manufacturing plants showed that there was a marked decrease in the amount of rodent hairs, insect fragments and other miscellaneous material in the samples obtained as compared with previous years. Hearings of persistent violators resulted in corrections being made promptly following specific instructions.

Institutions and Miscellaneous Establishments

The routine inspection of food departments in hospitals, homes for convalescents and industrial cafeterias was continued. The state licensing of hospitals and similar institutions required such inspection to be made and gradual improvements were obtained, particularly in rodent proofing of the kitchen and food storage room as well as facilities for washing, rinsing and disinfecting food utensils. Nurses and food handling personnel of a number of such institutions were given instruction in groups.

Special Activities

Supplementing the routine inspection and regulatory activities in retail, wholesale, manufacturing food establishments and institution food departments, additional activities were engaged in as follows:

1. A study of the use of compressed air pumps in connection with the dispensing of beer indicated that this alcoholic beverage could readily be contaminated with undesirable odors and materials from cellars where the compressor intake is located. Since filters cannot correct this situation, the elimination of the compressors entirely and the substitution of a compressed gas such as carbon dioxide is preferred.
2. The bureau participated in the Sanitary Section in-service training course and a workshop project for employees of the Department of Education public school cafeterias.
3. A search for the cause of mild digestive disturbances among consumers of soda fountain beverages particularly after the installation

of new equipment led to the finding that minute traces of copper, far below the toxic level, dissolved in carbonated water imparted a repulsive taste to beverages and caused the slight nausea.

4. An intensive study of the sanitary conditions under which caterers operated following several outbreaks of food poisoning, pointed to the need for regulations controlling this type of food preparation, at present a weak point in the control of food in the city.
5. Assistance was given in the study leading to an improved method of garbage collection and disposal in the city markets.
6. The correction of undesirable conditions in poultry killing within a city-owned market was secured.
7. Warnings were issued on the hazard of boric acid poisoning particularly in the accidental substitution of this chemical in infant feeding formulas.
8. Visits were made to a number of taverns with representatives of the Grand Jury.
9. Cooperative enforcement of the law forbidding the sale of wild rabbits in the city with representatives of the Maryland State Game and Inland Fish Commissioner resulted in the condemnation of two large batches of rabbits.
10. Dangers in the promiscuous use of new insecticides such as Chlordane, piperonyl butoxide, some chlorinated hydrocarbons and the use of fogs in place of the aerosols were pointed out.

Food Poisoning

Reports of alleged outbreaks of food poisoning necessitated 19 investigations. Of the 19 instances investigated 8 were found to have been caused by food. A resumé of the findings of these investigations follows:

Outbreak No. 1. From two-and-one-half to twelve hours after the noon meal at a local hospital, 24 persons were made ill. More than 240 persons at this meal ate the same food with the exception of the corn. None of the corn was available for laboratory examination.

Outbreak No. 2. Eighteen persons were made ill following a party served by a caterer. The time of onset plus the symptoms of cramps, diarrhea and slight nausea indicated an infection of the food by organisms of the salmonella group.

Outbreak No. 3. Within four hours after eating potato salad purchased from a delicatessen shop, 4 persons were made ill with vomiting and diarrhea. No report was received of others who purchased this food from the same food store where several hundred pounds of the salad were sold. A salmonella infection was suggested in view of the excessive hand contact of this food and the time of onset of the illnesses.

Outbreak No. 4. After eating a custard cake purchased from a small bakery 5 persons in one family became ill with vomiting within four hours.

Samples of food obtained showed the absence of organisms of the food poisoning groups. However, swabbings of hands of the baker showed the presence of a staphylococcus, and handwashing facilities were lacking in the bakery.

Outbreak No. 5. Salmon salad served in a local hospital cafeteria was thought to be the cause of the gripping cramps and diarrhea of 40 to 50 doctors. Questioning of food handlers revealed that the counter girl had had diarrhea on the day previous to the general outbreak. No food was available for laboratory examination.

Outbreak No. 6. Of over 200 persons attending a wedding, 20 persons became ill after eating a meal which included potato salad. The foods were prepared by a caterer and the illnesses, vomiting primarily, indicated a staphylococcus infection. Samples of the food, on laboratory examination, showed the presence of organisms of this type. Excessive handling of the food during preparation was the possible cause.

Outbreak No. 7. Forty or more persons attending a catered Jewish Bar Mitzvah were made ill with symptoms of vomiting and malaise. A staphylococcus infection was indicated and confirmed by laboratory examination of the fish cakes. Further questioning revealed that complete heating of the product and proper refrigerating were far from satisfactory.

Outbreak No. 8. More than 48 persons attending a double wedding were made ill after eating fish cakes and various other foods prepared by a local caterer. There were indications of insufficient cooking of the fish cakes. No samples of the food were available for laboratory analysis.

A summary of the investigations of alleged food poisoning outbreaks since 1927 follows:

SUMMARY OF INVESTIGATIONS OF FOOD POISONING OUTBREAKS, 1927-1948

Period	Investigations		Outbreaks Established		
	Number	Persons Involved	Number	Persons Ill	Public Eating Establishments Involved
1944-1948	105	973	21	697	6
1948	19	223	8	199	..
1947	23	163	3	103	..
1946	29	191	4	121	3
1945	15	67	2	10	..
1944	19	330	4	264	3
1939-1943	132	946	24	458	9
1934-1938	147	881	20	513	8
1927-1933	47	958	10	913	5

Food-Borne Diseases

There were three cases of tularemia reported in the city. In these instances wild rabbits had been handled and were obtained from private sources, not through sale in the city. Attempts were made to import Australian quick-frozen wild rabbits into the city but were ordered discontinued.

Thirteen cases of undulant fever were reported, not all of which gave a history of either drinking unpasteurized milk or actually engaging in the handling of diseased animals. Some of the persons affected, however, worked in close proximity to meat packing activities, a finding which gave impetus to a search for more information concerning the control of this infection. Several cases of tuberculosis among food handlers were investigated in cooperation with the Bureau of Tuberculosis. All of these persons were removed from handling food. Contacts of cases of diphtheria also were removed from the handling of food on instruction from the Bureau of Communicable Diseases. One typhoid fever carrier previously listed was removed from handling food after changing employment.

Division of Nutrition

During 1948 the activities of the Division of Nutrition were interrupted. The division chief who resigned in February was not replaced until September. Active nutrition programs were practically at a standstill during the interim.

During the month of January 111 persons attending Department clinics were seen in 19 clinic sessions. One class in community nutrition was taught to 7 student nurses at the Western Health District.

Between September and the end of the year, the new division chief spent considerable time acquainting herself with the City Health Department and other agencies of the city engaged in nutrition education activities. Direct service included conferences with patients in the prenatal clinics in the Eastern Health District and the Druid Health Center. Future plans include conferences with the patients in other Health Department clinics such as well baby and tuberculosis sessions, with emphasis on the adequacy of the food intake as well as the economical purchasing of food.

Two classes in public health nutrition were given to 13 student nurses who were doing field work in the Western Health District. A talk on the nutritional needs of children reached 20 members of the Maryland Camping Association.

Consultant services were rendered to a nutrition institute conducted by an insurance company for their nurses in this area, several teachers who were planning nutrition units in their classes, nursery schools regarding their food service, an obstetrical clinic in a local hospital to evaluate nutrition materials being used, a home for delinquent girls which requested their menus analyzed for adequacy, and personnel within the City Health Department to assist with program plans.

As a means of cooperating with other Baltimore agencies interested in nutrition, the nutritionist was a member of the following committees: Nutrition Advisory Committee, Baltimore Chapter, American Red Cross;

Nutrition Education Committee, Baltimore Department of Education; Baltimore Low Cost Budget Committee; and the Baltimore Nutrition Committee. The nutritionist served as an associate editor for the Bulletin of the Maryland Dietetic Association and as chairman of the Health Education Committee of the Maryland Home Economics Association.

With the cooperation of the Bureau of Health Information, a nutrition exhibit was planned and prepared for display at the Independent Grocers and Meat Dealers Association Food Show in the Fifth Regiment Armory. The same exhibit was also displayed in one of the Enoch Pratt Branch Libraries. An estimated 35,000 persons saw this exhibit.

Approximately 500 pieces of educational materials were distributed during the part of 1948 when there was a nutritionist in the division. During the fall considerable time was spent in preparing new nutrition materials. These included a pamphlet on family nutrition, nutrition history forms and other materials.

Personnel

Ferdinand A. Korff, Director
Eleanor L. McKnight, Chief, Division of Nutrition
Jacque G. Ayd, Sanitarian
Maurice E. Baker, Sanitarian
James H. Edwards, Sanitarian
Benjamin Ginsberg, Sanitarian
Bernard J. Lingeman, Sanitarian
William K. Marsh, Jr., Sanitarian
John J. Neunan, Sanitarian
Edgar W. Rinehimer, Sanitarian
Fredda L. Staehle, Sanitarian
Elmer J. Walker, Sanitarian
Etta Levin, Senior Stenographer
Cordelia S. Neary, Senior Stenographer
Gladys M. Daniel, Senior Clerk

TABLE NO. 1

INSPECTIONS OF RETAIL, WHOLESALE AND MANUFACTURING AND MISCELLANEOUS FOOD ESTABLISHMENTS, 1948 AND 1947

INSPECTIONS AND ACTIVITIES	1948	1947
Total Inspections—All Establishments	18,601	14,069
RETAIL ESTABLISHMENTS		
Inspections	11,625	4,801
Initial inspections	4,805	526
Special inspections	3,810	3,315
Reinspections	3,010	1,060
Activities		
Violation notices issued	279	5
Number of condemnations of food	122	55
Hearings within bureau	296	180
Samples of food obtained for examination	1,717	843
Field tests by inspectors	1,325	926
Complaints received and investigated	768	648
Prosecutions	8	12
MANUFACTURING ESTABLISHMENTS		
Inspections	1,530	1,074
Activities		
Violation notices issued	8	5
Number of condemnations of food	8	23
Hearings within bureau	13	16
Samples of food obtained for examination	278	354
Prosecutions	0	4
WHOLESALE ESTABLISHMENTS		
Inspections	677	972
Activities		
Violation notices issued	9	2
Number of condemnations of food	80	90
Hearings within bureau	5	20
Samples of food obtained for examination	55	112
MARKET STALLS AND MISCELLANEOUS ESTABLISHMENTS		
Inspections	6,015	7,221
Market stalls	3,271	5,464
Institutions	339	512
Miscellaneous	1,405	1,247

TABLE NO. 2

POUNDS OF FOOD CONDEMNED IN WHOLESALE, MANUFACTURING AND RETAIL FOOD ESTABLISHMENTS, 1948 AND 1947

Type of Food	Total	Found by Inspections	Requested for Decision
1948			
All Types of Food	87,687	7,612	72,640
Wholesale Food Establishments			
All types of food	80,252	1,547	71,273
Vegetables and fruit	55,234	..	55,234
Meats	320	..	320
Seafood	8,273	..	8,273
Poultry and game	78	78	..
Groceries, canned and bottled goods	3,736	749	2,987
Baking supplies, nuts and candies	5,179	720	4,459
Manufacturing Food Establishments			
All types of food	4,099	4,099	..
Vegetables and fruit	..	..	..
Groceries, canned and bottled goods	3,230	3,230	..
Baking supplies, nuts and candies	869	869	..
Retail Food Establishments			
All types of food	3,336	1,966	1,367
Vegetables and fruit	23	23	..
Meats	406	406	..
Seafood	45	45	..
Groceries, canned and bottled goods	771	772	..
Baking supplies, nuts and candies	1,596	250	1,340*
Milk and dairy products	486	465	21
Poultry and game	5	5	..
1947			
All Types of Food	164,884	69,132	95,752
Wholesale Food Establishments			
All types of food	155,240	62,187	93,053
Vegetables and fruit	40,630	90	40,540
Meats	804	84	720
Seafood	5,819	298	5,521
Poultry and game	..	..	..
Groceries, canned and bottled goods	43,283	4,432	38,851
Baking supplies, nuts and candies	64,705	57,283	7,421
Manufacturing Food Establishments			
All types of food	5,414	5,315	100
Vegetables and fruit	..	..	..
Seafood	..	..	..
Groceries, canned and bottled goods	10	10	..
Baking supplies, nuts and candies	5,594	5,495	100
Retail Food Establishments			
All types of food	4,229	1,630	2,599
Vegetables and fruit	24	24	..
Meats	69	69	..
Seafood	42	42	..
Groceries, canned and bottled goods	24	24	..
Baking supplies, nuts and candies	3,933	1,334	2,599**
Milk and dairy products	133	133	..
Poultry and game	4	4	..

* Includes 50 pounds damaged at fires.

** Includes 2,599 pounds damaged at fires.

TABLE NO. 3

DISTRIBUTION OF INSPECTIONS OF WHOLESALE AND MANUFACTURING FOOD ESTABLISHMENTS ACCORDING TO TYPE OF ESTABLISHMENT, 1948 AND 1947

TYPE OF ESTABLISHMENT	NUMBER OF ESTABLISHMENTS IN CITY 1948	NUMBER OF INSPECTIONS	
		1948	1947
Total	5,090	6,328	9,269
Wholesale and distributing establishments	674	302	972
Hucksters and loaded trucks	400*	1	27
Commission merchant houses	132	23	72
Wholesale groceries and warehouses	54	140	36
Candy jobbing houses	50	42	46
Wharves	3	3	60
Butter and egg distributing and breaking plants	14	13	17
Auction houses	10	13	133
Cold storage houses	5	7	14
Railroad terminals	6	60	12
Manufacturing food establishments	916	1,350	1,074
Bakeries	413	896	721
Poultry killing—wholesale and retail	228	89	109
Candy manufacturing plants	65	123	93
Oyster packing plants	40	16	10
Soft drink bottling plants	29	37	17
Pickling plants	22	29	14
Canning plants	16	32	15
Salad manufacturing plants	18	13	44
Noodle and potato chip plants	10	22	3
Cod fish cake manufacturing plants	6	7	8
Extract bottling plants	40	44	22
Ice cream cone plants	3	1	1
Caterers and sandwich manufacturing plants	26	41	7
Market stalls	2,400	3,271	5,464
Other (homes, hospitals, etc.)	1,100	1,744	1,759

* Approximate figure.

BUREAU OF MEAT INSPECTION

BUREAU OF MEAT INSPECTION

William Brenner, D.V.S.

Director

During the month of March on complaint of a licensee, an investigation was conducted in reference to a number of persons manufacturing sausage without inspection as required by the Meat Inspection Law of Baltimore City. Nine persons were required to obtain licenses and meet the inspection requirements; six were ordered to discontinue immediately and warned that continuance would subject them to prosecution under the law. At a later period of the year four additional operators applied for inspection and were granted licenses to operate. The additional places taken over fell within the eastern section of the city, thus greatly increasing the work of the inspector on this route.

The slaughtering of cattle reacting to Bang's disease and tuberculosis was continued under municipal inspection upon authorization of the federal and state agencies. In addition, services in the examination of animals for disease were rendered to: The U. S. Experimental Station, Beltsville, Maryland, and the U. S. Tubercular Eradication Bureau, where cattle were examined; examination of swine for state institutions including Spring Grove State Hospital, Laurel Training School and the Maryland Training School for Girls; swine at a private institution, the Sheppard Pratt Hospital; reinspection of meat products from sources outside of the state for the Railway Express Company; supervision of meat products and meat food products prepared for state institutions; and the Bureau of Communicable Diseases in the examination of dogs for rabies.

During the past five years the bureau has been and is still understaffed in its quota allowance of veterinarians. The inability to secure veterinarians is due to the fact that experienced veterinarians find a more lucrative field in private practice than confining their activities to a salary basis. A serious question to be considered at the present time is the problem of whether there will be an ample number graduating from school in the near future to fill the various positions opened in the federal, state and municipal agencies. Because of the inability to fill the existing vacancies for the position of veterinarian and in order to keep up the standard of slaughterhouse inspections, three meat inspectors have been trained to fill in on slaughter work when occasions demand.

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

NATURE OF SERVICE	1947	1948
Inspection service provided to establishments	165	174
Inspection service provided to out-of-state shippers	30	20
Inspection service inaugurated at establishments	9	15
Supervision maintained over federal establishments	11	13
Establishments discontinuing business	8	6
Establishments changing classification	12	..

Personnel

William Brenner, D.V.S., Director
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
Eddie P. Yager, D.V.M., Veterinarian

Inspectors—Meat

Matthew N. Bean
Elmer Frederick
Henry A. Miller
Thomas J. Morris
Philip A. Ottenritter
Charles A. Ray
Ernest H. Smith
Adolph Staub
Lawrence Stettmeier
Adolph Wobbeking, Jr.

Marie E. Cerney, Senior Stenographer

TABLE NO. 1

LIVESTOCK INSPECTED, CONDEMNATION OF ANIMALS, PRIMAL AND EDIBLE PARTS

YEAR	CATTLE			CALVES			SHEEP			SWINE			GOATS		
		Condemned			Condemned			Condemned			Condemned			Condemned	
	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts
1948.....	31,867	102	2,344	88,001	22	215	43,740	3	3,198	97,511	154	30,782	155	..	..
1947.....	34,624	127	2,277	96,582	51	555	52,984	10	3,883	93,409	169	26,609	107	..	..
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	203	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	59,727	10	..	..
1940.....	27,572	96	2,457	91,825	90	731	95,067	70	3,391	143,235	262	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	..	..

TABLE NO. 2

POUNDS OF MEAT CONDEMNED ON REINSPECTION

YEAR	TOTAL	PORK	BEEF	MUTTON	VEAL	MEAT PRODUCTS	MIXED PRODUCTS
1948.....	7,706	4,566	387	..	215	1,369	1,169
1947.....	19,673	3,417	1,064	53	96	5,319	9,724
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	603	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

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)	816,223	..
Meat products (smoked)	3,716,728	600,108
Meat food products (fresh)	1,273,808	404,100
Meat food products (smoked)	4,365,938	524,925
Meat food products (cooked)	1,249,019	161,505
Meat food products (boiled)	546,412	187,515
Lard	656,955	468,856
Lard Compound	29,210	..
Total pounds	12,654,293	2,347,009

BUREAU OF ENVIRONMENTAL HYGIENE

BUREAU OF ENVIRONMENTAL HYGIENE

George W. Schucker, B.E.

Director

Major advances in environmental sanitation in the home, the place of employment and the community were accomplished during the year. The work of the Housing Law Enforcement Committee in the rehabilitation of slums was expanded to include 33 new blocks. "Rodent control is environmental control" became the slogan and philosophy of the rat control program under the guidance of the Rodent Control Coordinating Committee. The Police Sanitation Squad consisting of 20 patrolmen did a remarkable job in eliminating dilapidated fences, hazardous yard toilets and nuisances on the exterior of dwellings in the areas they covered. The Housing Court and its handling of cases involving violations of ordinances pertaining to housing and sanitation was an inspiration to everyone connected with or interested in environmental sanitation. All of the above activities received widespread support by the public and the press, attracted numerous visitors from out of the city, and resulted in a number of feature articles in publications having national circulation.

Industrial Hygiene

The major activities were the study and control of hazardous health conditions in industries and the review of applications and plans for industrial buildings. In making 833 improvements in industries employing 5,697 persons, it was necessary to resort to court action in only three instances. Surveys were conducted in 83 plants employing 1,905 persons. The street asphalt paving industry was studied in connection with free silica exposures to the workers and atmospheric pollution caused by the lack of dust control equipment. Investigations of the unusually high incidence of lead poisoning in children disclosed that the problem is directly associated with the lower social and economic group. Of the 17 cases of undulant fever occurring in Baltimore, 13 were employed in slaughter houses. Information on industrial hygiene topics was disseminated through conferences, exhibits, radio and the press. Visitors from foreign countries included two from India and one each from China, Holland and Johannesburg, Union of South Africa.

Lead

Significant exposures to lead dust occurred in ceramic, metal fabrication, chemical and paint plants. Since these exposures caused cases of lead

poisoning, prompt action was taken to install proper mechanical ventilation at the operations to control the dust sources. The installation of this type of control proved to be of value in reducing the dust concentration 50 times in a plant where lead bronze tablets were sanded. An unusual lead exposure was controlled by altering the method of handling long sheets of paper coated with oxide which are used in hospital equipment for electrical recording of physiological functions.

There were 31 confirmed and 11 probable lead poisoning cases in children. Four of these were fatal. Investigations of the environments disclosed that all were in rented property and two-thirds had scaling paint which flaked readily from the surfaces. One of the local newspapers carried a feature story on this subject in an effort to familiarize parents with the cause of this disease.

Chrome

A mortality study conducted by the chrome industry disclosed that exposure to chrome dust appears to be conducive to the development of cancer of the lung. Compensation cases were heard before the Medical Board of the State Industrial Accident Commission but as yet a decision has not been made. Great strides are being made to improve the working environment in the Baltimore plant which is probably one of the largest producers in the country. Previous studies of the old conditions indicated that by application of modern techniques dust concentrations could be lowered appreciably.

Mercury Vapor

One of three studies made in laboratories showed that a serious exposure to mercury vapor was present and this exposure became much worse when the room was being cleaned. Fortunately, prompt action was taken to dilute the vapor concentrations and the cleaning proceeded without incidence. At the end of the day approximately twelve pounds of mercury were reclaimed from the floor and table tops.

Volatile Solvents

Carbon tetrachloride vapors caused several persons to become ill in a carton factory where it was being used as a solvent in the paste to dissolve the waxed surfaces of the cardboard boxes. The use of this mixture was discontinued. Two workers in a clothing factory became nauseated from drinking water from a fountain refrigerated with methyl chloride. An internal leak permitted the gas to become dissolved in the water. The defective unit was taken out of service. A study of a degreaser disclosed that trichloroethylene vapors were adequately controlled after a lateral exhaust system was installed.

Carbon Monoxide

A study made of the use of Diesel engines in the construction of a water tunnel showed that practically no toxic or irritating gases were present in the engine exhaust gases if the engine was in good repair, the fuel-air ratio was on the lean side and the proper type of fuel was used. One engine in particular emitted irritating gases and carbon monoxide when a furnace oil was inadvertently used. Complaints disappeared entirely without changing anything on the engine except the fuel. Of the 37 garages installing mechanical exhaust ventilation systems in compliance with recommendations only two did not desire to do so initially. In one instance subsequent carbon monoxide tests convinced the owner that ventilation was needed; and in the other it was necessary to have systems for carbon monoxide and spray painting installed upon court order. Gas-fired melt pots on linotype machines were successfully ventilated in compliance with recommendations incorporated in the approval of a building erected for a printing establishment. Seven nonfatal cases of carbon monoxide asphyxiation occurred in an apartment house due to coal gas from a defective furnace.

Selenium

No apparent health hazard existed from brief and infrequent exposures to selenium dioxide which escaped into the air from furnaces used for making stainless steel. The study disclosed that a peak exposure lasted for only several minutes every few weeks and the workers seemed to be unaffected.

Atmospheric Pollution

Numerous complaints from residents were found to be justified when investigations were made of dust coming from asphalt street paving plants. Dust studies also showed that the workers were exposed to potential silica hazards. Inquiries to a number of state and local industrial hygiene units revealed that suitable exhaust ventilating systems were available and several of the Baltimore plants are making installations before the next paving season.

Radiation

Several studies of X-ray machines used in health clinics disclosed that the operators were exposed to insignificant radiation hazards when normal precautions were taken in operating the machines. However, a study of exposure to clinic workers using radium revealed hazardous intensities from gamma radiation and alpha particles before care was exercised in handling the material.

Noise

The use of newly acquired instruments proved valuable in evaluating complaints on noise. Of the three complaints investigated two were unjustified but in the third instance the measured sound level from operating a defective clothes pressing machine left no doubt as to validity of the complaint as a nuisance. Repair of the machine eliminated the excessive noise.

Undulant Fever

An unusually high incidence of brucellosis cases occurred among workers engaged in various occupations in slaughter houses. Since the disease is most difficult to control after it appears throughout slaughterhouses, it seems that an effective program should be concentrated on the foci of infection of the affected animals and conditions on the farms.

Miscellaneous Activities

1. At the request of the Examining Board for the Licensing of Professional Engineers questions were submitted on fundamental industrial hygiene practices.
2. Conferences were held on the advisability of air sterilization with glycol compounds in a utility company and the treatment of lead poisoning with BAL in a hospital.
3. Two staff members of a university consulted with the Division of Industrial Hygiene on problems pertaining to industrial waste disposal. Eight graduate students from a university were instructed in the use of industrial hygiene field equipment.
4. The Chief of the Division of Industrial Hygiene served as Chairman of the Washington-Baltimore Section of the American Industrial Hygiene Association, and was appointed a member on the Threshold Limit Committee of the American Conference of Governmental Industrial Hygienists.

Gas Appliance Ordinance

To expedite the enforcement of the Gas Appliance Ordinance a meeting of the Gas Reference Committee was held to consider, among other topics, a simplified registration method for certifying gas-fired appliances which involves the manufacturers, the American Gas Association and the City Health Department.

Other activities in the enforcement of the gas appliance ordinance are shown in the accompanying tables.

GAS APPLIANCE ORDINANCE—ENFORCEMENT ACTIVITIES

ACTIVITIES	1948	1947
Inspections	16	92
Violations	3	20
Detentions of unapproved appliances	1	52
Hearings of violations	..	5
Gas appliances registered	1208	1182
Gas fitters registered	114	52

GAS APPLIANCE DEALERS

LICENSES ISSUED	1948	1947
TOTAL	366	464
New	14	35
Renewal	352	429

Community Sanitation

The increasing number of complaints concerning environmental conditions necessitated placing primary emphasis on complaint investigation. In cooperation with the U. S. Public Health Service, all watering points for interstate carriers were inspected. The sampling of city water, inspection and sampling of swimming pools, posting of polluted streams and investigation of convalescent homes and day nurseries were continued.

Water Supplies

The sanitary quality of the city water supply was evaluated through analyses of 1,537 samples collected from consumers' taps throughout the distribution system within the city limits and two fixed stations outside the city. The percentage of 10 ml. portions confirmed for coliform organisms was 0.75 as compared with 0.85 for 1947. Other water supplies inspected and sampled included semi-public and public springs and wells and commercially bottled waters.

The U. S. Public Health Service assisted in the inspection of vessel watering points, and this assistance made possible for the first time inspection of every pier in the city supplying water to the vessels. Deficiencies noted in watering practices are being brought to the attention of the operators of the piers and a period of time allowed for their correction beyond which the Baltimore City Health Department will not recommend inclusion of the unsatisfactory piers in the general certification by the U. S. Public Health Service of the Port of Baltimore as a vessel watering point. Inspections were also made of watering points for air and land

carriers and reports furnished the U. S. Public Health Service. A conference on watering point sanitation was held in August with representatives of the railroads operating in Maryland and city, state and federal health agencies, and it is hoped the conference will result in the railroads' taking greater interest in this phase of their operations.

Sewage Disposal and Stream Pollution

Rather detailed inspection was made of two streams, Western Run, which was the source of annoying odors to Mt. Washington residents, and the stream flowing from Eastern Avenue and Vail Street to the vicinity of Newgate Street and Newkirk Street. Both of these streams are very heavily polluted and in each case builders desiring to discharge sanitary sewage to these streams from proposed developments were informed that temporary use of the stream for sewage could be permitted only if a septic tank and chlorinator were installed to treat sewage from the development prior to discharge to the stream. The heavy pollution of Western Run has been occasioned by the installation of bleeders to the stream from the now heavily overcharged sanitary sewer installed by the original developer of the Mt. Washington area. Due to the intensity of the pollution in this stream and its proximity to populated areas, the Commissioner of Health has recommended to the Director of Public Works that installation of the intercepting sewer along this stream be undertaken at the earliest possible date. Extension of the sewer along Vail Street has also been recommended. Inspections of other streams were continued and signs warning the public of stream pollution are now maintained at 74 locations.

Investigation of reports of sewage backing up into cellars in the 2300 block Edmondson Avenue during storms disclosed that this block and the 2301 block Arunah Avenue were served by a private combination sewer discharging to the storm water system. The Bureau of Sewers agreed to place manholes on this sewer and incorporate it into the sanitary system if storm water were removed. The Health Department obtained removal of the storm connections to the private drain and certified the removal to the Bureau of Sewers for their action. Other activities in connection with sewage disposal included study of a sewage disposal system for a large athletic field, obtaining a more satisfactory method of disposal of sewage from a trailer camp and a discussion with the Baltimore County Health Department as to means of providing a temporary alleviation of conditions in an area along the Washington Boulevard on both sides of the city line where cesspools have proved unsatisfactory and the cost of extension of sanitary sewers is prohibitive.

Swimming Pools

Both indoor and outdoor swimming pools were inspected periodically and samples of water obtained for bacteriologic analyses. Close attention to the public park swimming pools was continued during their 1948 operating season. While the sanitary quality of pool water in these pools as a group did not meet currently accepted standards, their close approach to the standards with complete lack of equipment is highly commendable. The operation of the privately owned swimming pools was in general satisfactory, although instances of failure to maintain proper chlorine residuals indicate the necessity for somewhat closer supervision of the operation of several pools. Near the end of the year representatives of the City Health Department participated in conferences on rebuilding and modernizing the pools with representatives of the Department of Recreation and Parks and consulting engineering firms.

Defective Drainage

An unusual number of defective drainage conditions were brought to the attention of the Health Department during 1948. The majority of these conditions resulted from past or present building operations and included such cases as blocking of natural drainage courses by fills, failure to continue alleys to other streets or alleys or to provide storm drains, the construction of private drains crossing other property without plumbing permits or creation of easements, cutting off existing drains and other analogous practices. In some cases, where the construction was current, it was possible to obtain correction through the Building Inspection Engineer, but in many cases such correction as was possible fell upon property owners who had not created the condition.

Complaint Investigations

Complaints dealing with problems in community sanitation totaled 7,618 for the year 1948. Proper investigation of this volume of complaints was beyond the capacity of the sanitarians assigned to this work. In order to give proper attention to those complaints of health significance, it was necessary to forego investigations of nuisances which appeared to be of a minor and transitory character. Rather than carry this latter type of complaint in pending files, a number of such complaints were cancelled when it was found that they could not be investigated within a reasonable period of time.

Miscellaneous Activities

1. Under the provisions of Ordinance No. 97, approved December 1, 1947, plans and specifications for signboards involved in cases before the

Board of Zoning Appeals are forwarded to the Health Department for review and recommendations.

2. Four vessels arriving in Baltimore with psittacine birds aboard were visited and four such birds were delivered to the Health Department for destruction.

3. All theatres in the city were visited and sanitary deficiencies found were brought to the attention of the managers.

4. Investigation of mosquito nuisances were made in several areas, the most extensive of which was in the Brooklyn area. The mud flats of the Patapsco River would require a cooperative treatment program by the city and adjoining counties and airplane spraying with DDT would probably be necessary. Reclaiming of the swamp land is the only permanent solution and the area would appear to offer a fertile field for such measures as a sanitary fill.

5. The director served as president of the Baltimore Conference of Dairy, Food, Drug and Sanitary Officials, and moderated a symposium on sanitation at the Central Atlantic States Conference of Dairy, Food, Drug and Sanitary Officials.

Housing

Significant progress in slum rehabilitation on a block basis by the enforcement of existing ordinances pertaining to health and sanitation was made during the year by the inclusion of 33 new blocks in the program, bringing the number of blocks being rehabilitated to 61. This work, under guidance of the Housing Law Enforcement Committee, continued to receive widespread support and acclaim. In connection with this program and other activities of the division 10,424 investigations were made and 1,879 dwelling units were improved to conform with the housing code. The educational program carried on to interest the public in the housing problem, its relation to health and the Health Department's activities in this field reached 5,950 persons through illustrated talks and field trips through blighted areas and included illustrated talks to the National Association of Home Builders at their annual convention in Chicago and to the Policy Committee of the National Association of Real Estate Boards in Washington, D. C.

Houses Unfit for Human Habitation

Due to the continued housing shortage it was still impractical to post and vacate dwellings other than those where extremely insanitary and hazardous conditions existed. In one instance an extremely hazardous property occupied by a father, mother and eight children, who were re-

ceiving assistance from the Department of Public Welfare, was vacated after eight months, during which time there were repeated hearings in the Housing Court and then only after the Director of the Department of Public Welfare assisted the family to purchase another house in the same block. Despite this and similar difficulties 104 dwelling structures were posted and vacated as unfit for human habitation as compared with 132 for 1947. A total of 110 previously vacated structures were approved for occupancy following extensive repairs and at the end of the year 132 properties remained vacant as the result of Health Department vacate orders.

Rooming Houses and Lodging Houses

Applications for housing permits to operate rooming houses, lodging houses and hotels totaled 804 as compared with 882 in 1947. As a result of inspections 766 housing permits were issued as compared with 1,162 for 1947, which included a carry-over of applications from the previous year. No applications for permits were pending at the close of 1948. It was necessary to post and vacate 7 structures operated as rooming houses as unfit for human habitation as compared with 5 for 1947.

Housing Rehabilitation

The program of slum rehabilitation under the guidance of the Housing Law Enforcement Committee was expanded to include 33 new blocks containing 1,028 properties with a total of 1,263 dwelling units in the Sharp, Urban, Mt. Clare, Peabody and Franklin Areas. Since the inception of the program in 1945 a total of 61 blocks containing 2,266 dwelling units have been included. In twenty-six of the blocks, rehabilitation of the dwelling units in accordance with Health Department notices was complete. This brings the number of rehabilitated blocks containing 1,119 dwelling units to 32, leaving 29 blocks with 513 active cases at the end of the year. It was necessary to post and vacate 7 properties as unfit for human habitation in the blocks covered as compared with 20 in 1947.

The program continued to attract nationwide interest and indorsement and brought visitors of interested groups from all over the country. It was rather unfortunate that some of this interest was an attempt by certain national groups to present the program under the misleading name of "The Baltimore Plan," as a solution to the housing shortage and slums and to use it in an attempt to defeat public housing legislation. The housing law enforcement program does not increase the housing supply and certainly is not the complete answer to the complex problem of slums and blight. However, it is definitely another tool which can be used along with public housing and redevelopment to attack the problem.

Legal Procedure

The Housing Court established in July, 1947 to hear all cases involving violations of ordinances pertaining to housing and sanitation more than lived up to the expectations of its backers in eliminating long delays and unsatisfactory action formerly experienced in the police magistrate courts. The court and its presiding magistrate, Judge Harry S. Kruger, attracted wide local, national and international interest for the fair and impartial decisions rendered in cases involving both tenants and property owners. In 205 instances it was necessary to have summonses issued for failure to correct unhealthful conditions, of which 164 were for owners, 35 for tenants and six for rooming house operators. Of this total, 141 defendants were found guilty and assessed fines totaling $1,910. It is important to note that in practically every instance where "not guilty" verdicts were rendered all corrections called for by Health Department notices were accomplished prior to the dismissal of the defendant.

Miscellaneous Activities

1. In cooperation with the Bureau of Building Inspection 974 sets of plans for new dwellings and conversion of structures to multiple family dwellings were reviewed for possible violations of the housing code and 178 were disapproved as submitted.

2. As the result of inspections of multiple family structures 348 possible zoning violations were called to the attention of the Zoning Enforcement Officer and in 78 instances occupancy was in violation of the zoning ordinance.

3. The Division of Housing participated in the exhibit "Baltimore Housing—Past, Present and Future" at the Peale Museum April 9 to July 15 by preparing an exhibit illustrating the housing law enforcement program. This exhibit later went on a tour of schools and community centers and it is estimated that it was viewed by 15,000 persons while on tour.

4. Cooperation was given the Bureau of Child Hygiene in making 399 inspections of Class A Family Homes.

5. The chief of the division served on committees of the Citizens Planning and Housing Association; as consultant to the Advertising Club of Baltimore, the Baltimore Breakfast Group, the Adult Book Service of the Board of Education, the Junior League and the Maryland Committee on Group Day Care of Children on community projects; participated in a panel discussion sponsored by the Association for Childhood Education and the Child Study Association of Baltimore; and appeared on radio and television broadcasts of the Better Baltimore Committee and Junior Association of Commerce.

6. Photography continued to play a very important part in the enforcement of the housing code and in this connection and in cooperation with other bureaus and departments 1,209 negatives were developed as compared to 1,555 for 1947.

Plumbing

Due to the enormous expansion in building of all character following the war, which reached a peak in 1948, it was physically impossible for the clerical and inspection forces to keep up with the volume of work. This condition was called to the attention of the Commissioner of Health and by him to the Board of Estimates. Authorization for the employment of four additional senior inspectors of plumbing and one senior clerk was received in June. However, due to the inadequate salary range for the inspection positions as compared with income from other activities for plumbers, only one application was received. In spite of the extreme shortage of personnel the only instance of violation of the plumbing code in veterans' houses coming to the attention of the Health Department involved a builder who connected areaway drains to the sanitary sewer after the plumbing work was completed and inspected. Following conferences attended by the City Solicitor, the builder and the Commissioner of Health and his representatives the improper work was corrected by a registered plumber under a permit from the Health Department. Two minor changes were made in the Rules and Regulations Governing Plumbing and Drainage Work following conferences with the Department of Recreation and Parks, the Bureau of Building Inspection, the City Solicitor's office, and the consulting engineers on the proposed stadium. Plumbing permits were issued for the removal of 3,703 frost proof and hazardous yard hopper-type toilets during the year. There were 3,955 properties connected to the sanitary sewerage system in 1948 making a total of 181,418 connections in the city.

Rodent Control

Mr. Charles M. Kenealy resigned as Chief of the Division of Rodent Control on January 14 due to his health. Mr. William Sallow was selected as acting chief and following a competitive examination was appointed Chief of the Division of Rodent Control on July 23, 1948.

Environmental Control

Emphasis in rodent control was placed on controlling the environmental factors which make it possible for rats to exist in the community. The program applied on a block basis necessitates a premises-to-premises survey to determine the location and degree of infestation and the contributing causes and is followed by notices to eliminate rats, to correct insanitary

conditions and to accomplish rat proofing measures. By the end of the year, four areas comprising 33 blocks were in various stages of completion. The practice of distributing poisoned bait in large areas of the city was discontinued during the year and in its place the procedure of poisoning focal points of infestation was instituted, resulting in a considerable saving of money to the city. It is felt that a permanent reduction in the rat population was accomplished during the year by the combined progress of the housing law enforcement program, the environmental rodent control program and the excellent work of the police sanitation squad on a block basis.

Rodent Control Coordinating Committee

The Rodent Control Coordinating Committee consisting of representatives of the Johns Hopkins School of Hygiene and Public Health, the Department of Public Works, the Police Department and the City Health Department continued to play an important part in the development of a comprehensive rodent control program. The Committee sponsored a course in rodent control for the pest control operators of the city. Representatives of the Johns Hopkins School of Hygiene and Public Health, the Fish and Wildlife Service of the Department of the Interior, the National Association of Pest Control Operators, the Maryland Association of Pest Control Operators and the City Health Department participated in the instruction. In cooperation with the Fish and Wildlife Service of the Department of the Interior, the Committee and the City Health Department participated in the National Urban Rat Control Program by acting as a demonstration city and by holding a two-day conference and demonstration on rat control on April 8–9, 1948. Health and sanitation officials from Maryland, Virginia and West Virginia, representing approximately 20 cities of over 10,000 population, as well as representatives from interested trade organizations and industries attended the meeting. The conference and demonstration which had as its theme "Rodent Control Is Environmental Control" stimulated widespread interest resulting in inquiries from such localities as Rome, Italy, Northern Rhodesia, Aukland, New Zealand and a number of cities in this country. It also stimulated articles in several publications such as *Pathfinder Magazine*, *News Week* and *Sanitation Newsletter* of Joseph E. Seagram & Sons, Incorporated.

Following a study and report on the insanitary condition and rat infestation of the public markets by a subcommittee of the Coordinating Committee, the findings were taken up with the Comptroller's Office and the Bureau of Sanitation. The report recommended that first priority be given to solving insanitary, inadequate and expensive methods of garbage and trash disposal and collection employed at the markets and suggested the further study by the city of the feasibility of employing special bulk-

type refuse containers and truck-mounted hoist units (Dempster Dumpster equipment) for handling the refuse disposal problem. On the recommendation of the Committee, the Comptroller authorized a study by the Dempster Dumpster personnel which resulted in the Bureau of Sanitation purchasing market refuse containers and truck-mounted hoist units for handling the containers. These containers were installed in the public markets in the latter part of the year and the insanitary conditions in the market areas due to garbage and refuse in the streets practically disappeared.

Rat-borne Disease

Several investigations were made during the year in cooperation with the Bureau of Communicable Diseases in connection with suspected cases of endemic typhus. In each instance live rats were trapped and submitted to the Bureau of Laboratories for complement fixation tests for the presence of endemic typhus antibodies. No rats trapped during the year gave positive tests. Fourteen rat bite cases came to the attention of the City Health Department during the year. In each instance a prompt investigation was made to determine the nature and cause of the rat infestation and prompt action was taken to eliminate the infestation and its causes in order to prevent a recurrence.

Personnel

George W. Schucker, B. E., Director
Charles E. Couchman, Chief, Division of Industrial Hygiene
George O. Motry, Chief, Division of Community Sanitation
G. Yates Cook, Chief, Division of Housing
Carroll H. Reynolds, Chief, Division of Plumbing
William Sallow, Chief, Division of Rodent Control

Sanitarians

Leon Amernick
Ellsworth J. Andrews
William O. Armstrong, III
Sidney L. Berlin
E. Shirley Biddison
John F. Block
Charles H. Borcherding, Jr.
Lee S. Bowers
John H. Braunlein, Jr.
John A. Childs
Elbert H. Cohen
Hyman K. Cohen
T. Evans Fernandis, Jr.
Milton P. Friedmann
William M. Gardner
Frank S. Gordon
Albert J. Grossman
Morton Guth
Harold E. Hackman
Floyd B. Hughlett, Jr.
William H. Hunter
Kirk K. Kingston
John O. Long
James M. Lumpkin
Felix H. Pretsch
Albert Pruss
Ethel Y. Rice
Wellington S. Ross
C. Edward Sachs
Edward H. Vail

Hiram Abiff Burkhardt, Senior Inspector-Plumbing
Charles B. Creighton, Senior Inspector-Plumbing
Joshua L. Norris, Senior Inspector-Plumbing
Joseph P. Reynolds, Senior Inspector-Plumbing
Walter Underwood, Senior Inspector-Plumbing
John H. Pike, Inspector-Plumbing
Henry G. Rausch, Inspector-Plumbing
Benjamin F. Schwarzmann, Inspector-Plumbing
Howard R. Coggins, Inspector-Food
Jacob G. Vogtmann, Principal Clerk
Irma E. Wehn, Principal Clerk
Joseph B. Finnan, Senior Clerk
Kathryn S. Hoff, Senior Clerk
Sadie J. Ingrilli, Senior Clerk
Mildred M. King, Senior Clerk
Donald A. Stockley, Senior Clerk
James A. Williams, Senior Clerk
Selma Aebli, Senior Stenographer
Mary L. Rentz, Senior Stenographer
Selma B. Sladek, Senior Stenographer
Elizabeth M. Truxal, Senior Stenographer
Sylvia Karlyn Bowers, Junior Stenographer
May A. Hiltz, Junior Stenographer
Mary E. Longo, Junior Stenographer
Ruth Tischler, Junior Stenographer
Vera N. Maciolek, Junior Typist
John F. Sadler, Supervisor-Rodent Control
John W. Biden, Heavy Duty Laborer
Attilio J. Castagnoli, Jr., Heavy Duty Laborer
Calvin D. DeFord, Heavy Duty Laborer
George W. Bruchey, Worker-Rodent Control
Louis Washington, Worker-Rodent Control

TABLE NO. 1

HEALTH AND ACCIDENT HAZARDS ELIMINATED IN INDUSTRIAL PLANTS

TYPE OF IMPROVEMENT	NUMBER	POPULATION
TOTAL	833	5,697
Health-Occupational Hazards		
Atmospheric pollution	17	425
Exposure to toxic materials controlled by:		
Installation of local exhaust system	19	143
Installation of general exhaust system	32	133
Operations changed	3	77
Segregation	2	6
Installation of approved venting	6	12
Installation of draft-hood	3	9
Lighting provided or improved:		
Artificial	84	421
Natural	83	415
Ventilation provided or improved:		
Natural	83	415
Sanitation		
Drinking facilities provided or improved	88	805
Industrial waste disposal provided or improved	18	400
Insanitary premises improved	5	145
Insect, vermin and rodent control instituted	2	20
Personal storage facilities provided	1	26
Toilet facilities provided or improved	94	762
Washing facilities provided or improved	87	563
Accident Hazards		
Good housekeeping instituted	2	25
Interior painted or cleaned	1	50
Obstructed passageways cleared	1	15
Other Improvements		
New building	119	415
New equipment	83	415

TABLE NO. 2

DETAILED STUDIES MADE

Industries	Number of Studies	Dusts		Gases		Vapors			Radiation		Others			
		Lead	Selenium	Carbon Monoxide	Halides	Trichloroethylene	Mercury	Carbon Tetrachloride	X-ray	Gamma	Gasoline	Temperature	Noise	Ventilation
All industries studied	39	7	1	6	3	4	5	1	4	1	1	1	2	3
Automotive	3	..	..	1	..	..	..	..	..	..	1	..	..	1
Chemical	3	1	..	..	..	..	1	..	1	..	..	..	..	..
Enamel manufacture	2	2	..	..	..	..	..	..	..	..	..	..	..	..
Hospital	4	1	..	..	..	..	3	..	..	..	..	..	..	..
Metal goods	10	3	1	1	..	4	..	..	..	..	..	..	..	1
Mining	2	..	..	2	..	..	..	..	..	..	..	..	..	..
Clothing	4	..	..	..	2	..	..	..	..	..	..	1	1	..
Others—less than two plants	11	..	..	2	1	..	1	1	3	1	..	..	1	1

TABLE NO. 3

INDUSTRIAL BUILDING APPLICATIONS AND PLANS REVIEWED FOR OCCUPATIONAL HAZARDS AND SANITATION

Proposed Use of Building	Applications and Plans				Special Recommendations						Consultations
	Number Reviewed	Disapproved or Abandoned	Approved		Ventilation			Sanitation		Other	
			Without Recommendations	With Recommendations	Mechanical			Industrial Waste Disposal	Personal Service Conveniences	Recommendations	
					Local	General	Natural				
All types	324	9	79	236	26	28	2	7	5	18	324
Automotive—repair	37	1	..	36	10	26	..	..	..	..	42
Chemical processing	20	3	1	16	1	..	..	1	..	..	20
Dry cleaning service	5	..	..	5	..	..	1	2	..	..	5
Electrical equipment	15	2	2	11	2	..	..	2	..	1	15
Foundry	4	..	..	4	..	1	1	..	..	..	4
Laundry service	7	2	..	5	..	..	..	..	..	..	7
Metal goods fabrication	24	..	..	24	7	1	..	..	1	..	24
Office and mercantile	22	..	..	22	..	..	..	..	2	..	22
Petroleum	6	..	2	4	..	..	..	..	..	..	4
Printing and allied work	4	..	1	3	..	..	..	..	..	..	4
Tailoring shops	5	..	..	5	..	..	..	..	..	..	5
Transportation	10	..	..	10	..	..	..	..	2	4	10
Warehousing and storage	134	..	70	64	1	..	..	..	..	10	129
Woodworking	7	..	..	7	5	..	..	..	..	2	7
Others (less than 3 of 1 type)	24	1	3	20	..	..	..	2	..	1	24

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	Sulfur Dioxide	Aliphatic Hydrocarbons	Aromatic Hydrocarbons	Halogenated Hydrocarbons	Petroleum Products	Varnish	Chromium	Lead	Zinc	Others	Acids	Alkalis	Oils	Radiant Energy	Skin Irritants	Illumination	Ventilation								
All plants surveyed	75	1512	2	7	6	9	35	1	15	2	4	19	1	2	2	1	2	3	9	5	2	2	1	2							
Advertising	2	158	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Automotive—repair	29	423	..	..	..	7	28	..	6	1	..	9	..	..	..	..	..	..	..	2	..	..	1	2							
Automotive—storage	2	40	..	..	..	..	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..							
Brick, clay, cement & asphalt products mfg	3	414	1	3	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..							
Clothing manufacturing	1	18	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Dry cleaning	8	72	..	..	..	..	3	..	2	..	2	7	..	..	..	..	..	2	6	1	..	1	..	..							
Electrical apparatus manufacturing	2	7	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..							
Electroplating	1	2	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	1	..	..							
Foundry	2	14	1	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	2	..	..	..	..	..							
Laundries	2	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Metal goods fabrication	9	148	..	1	..	2	1	..	3	1	..	..	..	..	..	..	..	..	2	1	2	..	..	..							
Petroleum processing	1	66	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	1	1	..	..	..	..							
Printing and allied trades	1	22	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Upholstery & bedding manufacturing	1	26	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Woodworking	3	70	..	..	3	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..							
Wrecking and junk	1	8	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Others	7	60	..	7	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..							

TABLE NO. 5

ACUTE CASES OF CARBON MONOXIDE POISONING (ILLUMINATING GAS), 1928-1948

YEAR	TOTAL CASES	SUICIDES AND ATTEMPTED SUICIDES	ACCIDENTS
1948	159	112	47
1947	137	89	38
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

TABLE NO. 6

NONFATAL AND FATAL ACCIDENTS FROM ILLUMINATING GAS AND DEFECTIVE APPLIANCES FROM 1930-1948

YEAR	TOTAL	ACCIDENTS FROM UNBURNED GAS		ACCIDENTS FROM INCOMPLETE COMBUSTION OF GASES		DEFECTIVE APPLIANCES CAUSING ACCIDENTS
		Nonfatal	Fatal	Nonfatal	Fatal	
1948	47	32	8	7	..	7
1947	38	18	8	9	3	8
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	..	3
1940	72	45	6	19	2	5
1939	125	32	9	83	1	7
1938	48	30	12	6	..	..
1937	43	31	11	1	..	1
1936	155	131	22	2	..	..
1935	50	33	17	..	..	1
1934	54	41	13	..	..	3
1933	57	36	21	..	..	2
1932	71	36	29	5	1	6
1931	59	36	20	3	..	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	
	1948	1947	1948	1947
TOTAL	7,618	6,779	4,600	2,192
Complaints				
Ashes and garbage	430	539	12	61
Building defects	537	319	109	16
Choked sewers	93	89	64	44
Dead animals	1	3	5	10
Defective drainage	393	382	102	37
Defective heating equipment	56	61	6	14
Defective plumbing	733	746	52	26
Defective toilet facilities	921	878	36	7
Fowls and animals	281	325	35	12
Grass and weeds	525	330	212	165
Insanitary conditions	1,770	1,429	340	138
Insects	158	180	14	23
Miscellaneous	126	110	160	40
Privies and cesspools	34	49	12	12
Rats	372	551	85	758
Water in cellar	1,188	788	145	21
Special Investigations				
Child care and convalescent homes	..	..	27	82
City dumps and sanitary fills	..	..	211	149
Color tests	..	..	570	456
Environmental survey inspections	..	..	34	9
Motion picture houses	..	..	144	57
Pet shops	..	..	1	1
Private dumps	..	..	46	8
Rat surveys	..	..	9	17
Rat resurveys	..	..	..	2
Schools	..	..	83	3
Trailer camps	..	..	..	2
Watering points—carriers	..	..	80	22
Water sampling	..	..	2,006	..

TABLE NO. 8

COMPLAINT, PATROL AND SPECIAL INSPECTIONS

TYPE OF INSPECTION	1948	1947
TOTAL	19,473	17,219
Complaint	8,388	8,962
Patrol and special	4,600	2,192
Reinspection	6,485	6,065

TABLE NO. 9
COMPLAINTS

ACTION TAKEN	1948	1947
Handled by inspectors	7,440	7,329
Referred direct to other bureaus or departments	178	59
Investigated and referred to other bureaus or departments	831	728
Investigated and referred to police for follow-up	348	1,812
Notices to abate nuisances	2,589	3,563
Hearings for failure to comply with notices	215	270
Summonses issued for failure to comply with notices	21	23
DISPOSITION		
TOTAL	7,909	7,379
Abatement by inspector	3,097	2,814
Cancelled (withdrawn or corrected before inspection)	3,309	3,048
Conditions of no health significance	494	607
Direct reference to other bureaus or departments	178	59
Investigated and referred to other bureaus or departments	831	851
Reported abated by police	286	1,112

TABLE NO. 10
DWELLING INSPECTIONS

	1948	1947
HOUSING LAW ENFORCEMENT AREAS		
Number of blocks inspected	33	26
Total properties inspected	1,028	650
Total dwelling units	1,203	837
White	113	108
Negro	1,128	716
Vacant	22	13
Notices issued: To owners	997	689
To vacate premises or dwelling unit	7	9
To tenants	1,319	693
Owner notice disposition: Complied with	909	343
Pending	513	418
COMPLAINT INVESTIGATION		
Total complaints investigated	256	236
Total dwelling units	687	601
White	323	249
Negro	364	352
Notices issued: To owners	252	234
To vacate premises or dwelling unit	97	123
To tenants	276	287
Owner notice disposition: Complied with	268	272
Pending	173	244

TABLE NO. 11

HANDLING OF DWELLING INSPECTIONS

ACTION TAKEN	1948	1947
Notices issued		
To owners	1,654	933
To tenants	1,595	980
To vacate premises or dwelling unit	104	132
Notice disposition		
Complied with	1,177	615
Housing permits issued	766	1,162
Housing permit applications disapproved	133	188
Hearings for failure to comply with notices	141	88
Summonses issued for failure to comply with notices	205	119
Cases tried in the Criminal Court	8	9
DISPOSITION		
No violations found	65	34
Dwelling units improved	1,879	1,303
Dwellings vacated	96	132
Dwellings demolished	12	26

TABLE NO. 12

HOUSING INSPECTIONS

TYPE OF INSPECTION	1948	1947
TOTAL	10,424	6,255
Dwellings	1,275	952
Rooming houses	810	916
Reinspections	7,940	4,256
Class A Family Homes (Child care)	399	131

TABLE NO. 13

METHODS OF SEWAGE DISPOSAL

METHOD OF DISPOSAL	TOTAL TO DECEMBER 1948	NEW CONNECTIONS	DISCONNECTED
Connections to sanitary sewers	181,418	3,955	..
Private drains to sanitary sewers	15,139	2	..
Connections to storm water outlets	13,661	386	..
Privies	..	..	47
Cesspools	..	..	262

TABLE NO. 14

PERMITS, PLUMBING INSPECTIONS AND PLUMBING FIXTURES INSTALLED

GROUP	1948	1947
Total permits issued	18,303	16,494
Permits for sanitary sewer connections	3,552	4,963
Permits for plumbing installations	13,752	11,531
Inspections of plumbing	22,228	19,850
Plumbing fixtures installed	41,424	26,857
Bathtubs	6,744	4,111
Miscellaneous	1,919	1,522
Sinks	7,119	4,323
Slophoppers	43	39
Urinals	347	249
Wash basins	8,854	5,884
Water closets	11,974	7,742
Wash trays	4,604	2,987

TABLE NO. 15

CROSS CONNECTIONS PREVENTED OR CORRECTED

TYPE	1948	1947
TOTAL	2,078	2,099
Frost-proof hoppers	1,364	941
Drinking fountain	2	2
Bar and soda fountain	3	2
Bathtub	320	457
Water closet	11	34
Wash basin	355	619
Dish washer	..	4
Glass washer	..	..
Cellar drainer	1	4
Industrial	..	4
Compressor	2	3
Wash tray	19	28
Air conditioning unit	..	1
Washing machine	..	..
Steam table	1	..

STATISTICAL SECTION

STATISTICAL SECTION

STATISTICAL SECTION

W. Thurber Fales, Sc.D.

Director

The Statistical Section continued the statistical services to the other bureaus of the Health Department, particularly in the development of statistical programs for the Bureau of Tuberculosis and Bureau of Venereal Diseases. Under the guidance of the Statistical Section a record and statistical program was worked out in connection with the establishment of the plan for medical care to recipients of public assistance in the Department of Public Welfare. The immediate organization and execution of the program was done by Miss Martha Eaton who was appointed head statistician in the Medical Care Section in June.

The section continued to assist the Bureau of Research and Statistics of the City Department of Education in the study of future school enrollment. The section also furnished information on health and social conditions in the city and selected areas to various agencies and individuals in connection with special studies.

A temporary appointment of Director of the Bureau of Vital Records was given to Mr. Sidney M. Norton on May 3, 1948. Mr. Norton came to Baltimore from the Health Department in New York City where he had been a member of the vital statistics staff for the last ten years. On December 1, 1948 Mr. Matthew Taback was appointed as Director of the Bureau of Biostatistics.

The director of the section was named a member of the U. S. delegation to the Sixth International Decennial Conference for the Revision of the International Lists of Diseases and Causes of Death which was held in Paris, France, April 26–29, 1948. He, also, attended the third session of the Expert Committee on Health Statistics of the World Health Organization held at Geneva, Switzerland May 4–9, 1948 following the International Conference. At the annual meeting of the American Statistical Association in Cleveland in December the director participated in a round table discussion of morbidity surveys and also presented a report "A Vital Statistician Puts Census Tracts to Work" before the Committee on Census Enumeration Areas in which he discussed the reason for census tracts in the work of the Health Department in Baltimore.

Bureau of Biostatistics

With the appointment of Mr. Matthew Taback as Director of the Bureau of Biostatistics in December plans were made to improve the coordination of the various statistical functions of the Bureau of Biostatistics.

The bureau was responsible for the preparation of weekly reports of births, deaths and reported cases of communicable diseases. In addition to monthly reports of vital statistics and communicable diseases, reports of preventive inoculations of diphtheria toxoid and whooping cough vaccine were prepared monthly for the Bureau of Communicable Diseases and the District Health Officers, and reports of food control inspections were prepared monthly for the Bureau of Food Control. During the first six months the bureau prepared or reviewed all statistical tabulations appearing in the ANNUAL REPORT of the Department for 1947.

As a special service to the Division for Juvenile Causes of the Supreme Bench of Baltimore City, the bureau again prepared a tabulation of the cases heard by this court. This service represents an interesting example of interdepartmental cooperation whereby the statistical facilities of a large municipal department are put at the disposal of a branch of government having only occasional need for such service.

Personnel

W. Thurber Fales, Sc.D., Director
Matthew L. Taback, M.A., Director, Bureau of Biostatistics
Margaret E. Amspacher, Senior Statistical Clerk
Elizabeth V. Steman, Senior Statistical Clerk
Myrtle Baker, Statistical Clerk
Ruth Gees, Statistical Clerk
George F. Richardson, Tabulating Equipment Operator
Concetta M. Battaglia, Senior Stenographer
Clark K. Miller, Junior Draftsman
Helen Boesche, Key Punch Operator
Anna Greengold, Key Punch Operator
Alice L. Jones, Key Punch Operator
Gloria O'Toole, Key Punch Operator
Ida M. Padgett, Key Punch Operator
George Rodgers, Messenger

BUREAU OF VITAL RECORDS

BUREAU OF VITAL RECORDS

Sidney M. Norton, B.S.

Director

The bureau underwent an administrative reorganization in May with the appointment of the new director, formerly Chief of the Division of Records of the New York City Health Department. Within the bureau were created technical units dealing with primary birth registration, primary death registration, delayed registration of birth and with correction of birth and death records. A nontechnical unit (administrative) was established, the main function of which centers around the activities dealing with the issuance of transcripts of vital records and with general office administration. Supervisors were assigned for each unit.

Every effort was made to obtain the continued cooperation of private physicians and hospital superintendents in order to improve the accuracy and quality of birth and death registration. Funeral directors played an important part in completing the personal particulars on death certificates. By arrangement with the Chief Medical Examiner, funeral directors were asked to complete the personal particulars on medical examiner death certificates in those cases where such information was not known to the medical examiner's office. Public health nurses delivered the Notification of Birth Registration and the Request For Correction of Birth Record to the parents of newborn children. This procedure is an important one in the program to assure accurate birth registration.

In 1948, there were 45,621 transcripts of records issued as compared with 39,985 during the previous year. There was an increase of nearly 5,000 transcripts of birth over the number issued in 1947. This has been due to the overwhelming demand for such records by veterans for increased family subsistence allowances and for entrance into trade and technical schools under the G. I. Bill. There were 1,387 Search Certificates (No Record Statements) issued, 5,896 Statement of Age Cards and 678 death verification cards. Official and private agencies received a total of 5,612 verifications of birth and 396 verifications of death. There were 204 certificates placed on file by delayed registration and 95 unreported births were registered by parents with the cooperation of physicians and other attendants. The latter births refer to those of children under six years of age whose birth records were not filed with the bureau. There was a total of 4,507 interviews for correction, delayed registration and replacement of birth records; 479 birth certificates were replaced on the basis of legal adoption

and 180 received similar handling on the basis of legitimation in accordance with the provisions of the Annotated Code.

Following are some of the major activities of the bureau in 1948:

1. The use of the verification of death card was discontinued. First introduced during the "bank holiday" in 1932, the card was primarily intended to help low income families who had to transfer a small bank account because of the death of the depositor. Such cards have since been issued indiscriminately. The continued abuse of the death verification card resulted in a recommendation by the director that the card be discontinued and this recommendation was approved by the Commissioner of Health on October 21.

2. The recommendation by the National Office of Vital Statistics that all registration agencies adopt a similar form to be used for furnishing recognized official agencies with information appearing on birth certificates resulted in the introduction of the "Agency Application for Confidential Verification of Birth" form. This form was specifically designed to meet the needs of official and private agencies.

3. In connection with the repatriation program involving the return to this country for burial of the disinterred remains of World War II deceased, the Department policy heretofore had been to urge funeral directors to discourage such requests, but it had come to our frequent attention that if we could have a regulation prohibiting the opening of such caskets it would facilitate the carrying out of this policy. On December 11, the Commissioner of Health approved the following regulation submitted by the director: "The opening of a casket containing the disinterred remains of any person, dead from any cause and shipped into the City of Baltimore for burial, is hereby forbidden unless such opening shall be ordered by a court of competent jurisdiction."

4. An Attorney General's opinion was secured relating to a correction to be made on a birth certificate on the basis of a legal change of name. Prior to this time, it was necessary for a parent to have his decree for legal change of name amended to include the names of all minor children who were not mentioned in the original order; no change would be made on a child's birth record without such amended notice. The Attorney General expressed the opinion that henceforth it would be proper to change the surname of the minor child on his birth certificate where the father's name had been changed legally, provided that the documents substantiating such change are recorded. An affidavit by the parent, together with a certified copy of the court order is now sufficient evidence for correcting the birth certificate of a child to accord to the name acquired by legal change.

Division of Morgue and Public Cemetery

The location of the Public Cemetery was changed from the Cherry Hill section to an eight and one-half acre tract in the Curtis Bay area not far from the U. S. Quarantine Station. Three acres were leveled, fenced and plotted. The burial of unidentified bodies in the new cemetery began in November.

Personnel

Sidney M. Norton, B.S., Director
Irving J. Hurwitz, Junior Administrative Officer
Ida S. Blum, Principal Clerk
James G. McLaughlin, Principal Clerk
Mary A. Hohrein, Senior Clerk
A. Walter Just, Senior Clerk
Rosalie Krause, Senior Clerk
Josephine A. Roemer, Senior Clerk
Linda D. Whitney, Senior Clerk
Ruth Wolk, Senior Clerk
Zelda Bender, Junior Stenographer
Ruth C. Krebs, Junior Stenographer
Frieda Meizlish, Junior Stenographer
Irene H. Fradin, Clerk-Typist
Dorothy Hartman, Clerk-Typist
Mary Regina Gill, Junior Clerk
Concetta Fedeli, Junior Typist
Mollie Rubin, Junior Typist
Rona G. Sodden, Junior Typist
John P. Boyle, Chauffeur
James H. Carter, Chauffeur
Clarence L. Disney, Park Caretaker

TABLE NO. 1

ACTIVITIES OF DIVISION OF THE MORGUE AND PUBLIC CEMETERY—1948

	Total	White		Colored	
		Male	Female	Male	Female
BODIES DELIVERED TO ANATOMICAL BOARD					
All bodies	809*	268	153	248	120
Stillbirths	381*	113	90	105	53
Under 1 year	222	76	49	53	44
Other children	1	..	1	..	..
Adults	205	79	13	90	23
BODIES BURIED IN PUBLIC CEMETERY					
All bodies	13	7	2	4	..
Still births	..	..	..	..	..
Under 1 year	..	..	..	..	..
Other children	..	..	..	..	..
Adults	13	7	2	4	..
BODIES RECEIVED AT MORGUE					
All bodies	1,784	759	230	526	264
Stillbirths	47†	9	9	10	14
Under 1 year	115†	27	20	41	27
Other children	68	24	10	23	11
Adults	1,554	699	191	452	212

* Included with colored male stillbirths are 1 Chinese and 1 American Indian; and with total stillbirths and all bodies are 4 male, 2 female—color undetermined, 2 white, 4 colored—sex undetermined and 5 sex and color undetermined.

† Included are 5 stillbirths—sex and color undetermined.

VITAL STATISTICS TABLES

VITAL STATISTICS TABLES
1948

TABLE NO. 1

ESTIMATED POPULATIONS AND RECORDED DEATH RATES: TOTAL, WHITE, COLORED, BALTIMORE—1930-1948

YEAR	ESTIMATED POPULATION AS OF JULY 1			DEATH RATES PER 1,000 POPULATION		
	Total	White	Colored	Total	White	Colored
1948	958,000	757,000	201,000	12.01	11.64	13.40
1947	947,000	753,000	194,000	12.15	11.77	13.59
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	963,000	764,000	199,000	13.43	12.95	15.25
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

MARRIAGES, RECORDED AND RESIDENT BIRTHS AND DEATHS BY RACE AND CORRESPONDING RATES PER 1,000 POPULATION—1935-1948

YEAR	NUMBER			RATE		
	Total	White	Colored	Total	White	Colored
MARRIAGES RECORDED						
1948	15,639	11,782	3,857	16.3	15.6	19.2
1947	17,718	13,495	4,223	18.7	17.9	21.8
1946	21,445	16,340	5,105	23.1	21.8	28.0
1945	16,206	12,308	3,898	17.4	16.5	21.4
1944	15,818	11,542	4,276	16.9	15.3	23.6
1943	17,171	12,383	4,788	17.8	16.2	24.1
1942	19,595	15,167	4,428	20.9	20.1	24.4
1941	15,966	12,256	3,710	18.4	17.6	22.1
1940	11,305	8,658	2,647	13.1	12.5	15.8
1939	8,501	6,569	1,932	9.9	9.5	11.7
1938	8,521	6,578	1,943	10.0	9.6	12.0
1937	8,849	6,763	2,086	10.5	9.9	13.0
1936	8,134	6,208	1,926	9.7	9.1	12.2
1935	7,254	5,695	1,559	8.7	8.4	10.0
BIRTHS						
RESIDENT						
1948	22,083	15,414	6,669	23.1	20.4	32.2
1947	23,992	17,799	6,193	25.3	23.6	31.9
1946	21,111	15,805	5,306	22.7	21.1	29.1
1945	17,848	13,308	4,540	19.2	17.8	24.9
1944	18,830	14,021	4,809	20.1	18.5	26.6
1943	21,054	16,077	4,977	21.9	21.0	25.0
1942	19,720	15,076	4,644	21.2	20.1	25.6
1941	15,995	11,886	4,109	18.5	17.0	24.4
1940	13,712	10,105	3,607	15.9	14.6	21.6
1939	12,525	9,211	3,314	14.6	13.3	20.1
1938	13,208	9,892	3,316	15.5	14.4	20.4
1937	12,516	9,370	3,146	14.8	13.7	19.7
1936	11,801	8,956	2,845	14.1	13.1	18.1
1935	12,332	9,363	2,969	14.8	13.8	19.2
RECORDED						
1948	28,898	21,680	7,218	30.2	28.6	35.9
1947	31,215	24,536	6,679	33.0	32.6	34.4
1946	27,412	21,649	5,763	29.5	28.9	31.7
1945	22,936	18,025	4,911	24.7	24.1	27.0
1944	23,696	18,627	5,069	25.3	24.6	28.0
1943	25,934	20,649	5,285	26.9	27.0	26.5
1942	24,144	19,224	4,920	25.8	25.5	27.1
1941	19,406	14,992	4,414	22.4	21.5	25.3
1940	16,478	12,582	3,896	19.2	18.1	23.3
1939	14,887	11,350	3,537	17.4	16.4	21.5
1938	15,275	11,763	3,512	18.0	17.1	21.6
1937	14,272	10,921	3,351	16.9	16.0	21.0
1936	13,277	10,272	3,005	15.8	15.1	19.1
1935	13,641	10,521	3,120	16.4	15.5	20.1

TABLE NO. 2—Continued
MARRIAGES, RECORDED AND RESIDENT BIRTHS AND DEATHS BY RACE AND CORRESPONDING RATES PER 1,000 POPULATION—1935-1948

YEAR	NUMBER			RATE		
	Total	White	Colored	Total	White	Colored
DEATHS						
RESIDENT						
1948	11,097	8,201	2,896	11.6	10.8	14.4
1947	11,011	8,232	2,779	11.6	10.9	14.3
1946	10,798	8,061	2,737	11.6	10.8	15.0
1945	11,358	8,481	2,877	12.2	11.3	15.8
1944	11,544	8,552	2,992	12.3	11.3	16.5
1943	12,530	9,315	3,215	13.0	12.2	16.2
1942	11,347	8,397	2,950	12.1	11.1	16.2
1941	11,160	8,132	3,028	12.9	11.7	18.0
1940	11,096	8,243	2,853	12.9	11.9	17.1
1939	10,386	7,907	2,479	12.1	11.4	15.0
1938	10,618	8,034	2,584	12.5	11.7	15.9
1937	11,244	8,415	2,829	13.3	12.3	17.7
1936	11,058	8,134	2,924	13.2	11.9	18.6
1935	10,707	7,917	2,790	12.8	11.7	18.0
RECORDED						
1948	11,509	8,815	2,694	12.0	11.6	13.4
1947	11,502	8,865	2,637	12.1	11.8	13.6
1946	11,195	8,633	2,562	12.0	11.5	14.1
1945	11,674	9,015	2,659	12.5	12.1	14.6
1944	11,907	9,090	2,817	12.7	12.0	15.6
1943	12,929	9,895	3,034	13.4	12.9	15.2
1942	11,803	8,976	2,827	12.6	11.9	15.5
1941	11,609	8,700	2,909	13.4	12.7	17.3
1940	11,557	8,782	2,775	13.4	12.7	16.6
1939	10,879	8,374	2,505	12.7	12.1	15.2
1938	11,091	8,509	2,582	13.0	12.4	15.9
1937	11,790	8,958	2,832	14.0	13.1	17.7
1936	11,516	8,612	2,904	13.7	12.6	18.4
1935	11,149	8,352	2,797	13.4	12.3	18.0

TABLE NO. 3

MONTHLY DISTRIBUTION OF RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO COLOR AND SEX—1948

MONTH	LIVE BIRTH							STILLBIRTH						
		White			Colored*				White			Colored		
	Total	Total	Male	Female	Total	Male	Female	Total**	Male	Female	Unknown	Male	Female	Unknown
Total	22,083	15,414	7,978	7,436	6,669	3,399	3,270	571	168	135	13	138	95	10
January	1,967	1,377	712	665	590	300	290	53	10	19	1	12	10	1
February	1,836	1,310	665	645	526	259	267	46	13	7	2	11	10	3
March	1,886	1,346	696	650	540	279	261	61	22	9	1	15	12	..
April	1,751	1,260	667	593	491	251	240	49	19	11	2	12	5	..
May	1,708	1,149	598	551	559	286	273	34	9	8	..	8	4	2
June	1,572	1,103	574	529	469	240	229	43	11	11	2	10	8	..
July	1,912	1,325	654	671	587	293	294	48	13	18	..	12	4	..
August	1,953	1,321	685	636	632	305	327	46	14	12	1	11	5	1
September	1,892	1,325	711	614	567	290	277	64	25	9	..	15	13	..
October	1,986	1,390	736	654	596	320	276	53	15	16	1	10	10	1
November	1,770	1,228	606	622	542	287	255	31	8	5	1	11	5	1
December	1,850	1,280	674	606	570	289	281	43	9	10	2	11	9	1

* Included in colored live births are: Chinese: 8 male, 9 female
Filipino: 2 male, 2 female
Egyptian: 1 male

** Included in stillbirth totals are 12 sex or color unknown.

TABLE NO. 4

RECORDED AND RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO ATTENDANCE, HOSPITALIZATION, TERM AND PLURALITY—1948

Place of Birth, Attendance, Term and Plurality	Recorded			Resident		
	Total	White	Colored	Total	White	Colored
Live Births						
Total	28,898	21,680	7,218	22,083	15,414	6,669
Physician	28,256	21,541	6,715	21,436	15,273	6,163
Home	2,543	983	1,560	2,539	981	1,558
Hospital	25,713	20,558	5,155	18,897	14,292	4,605
Midwife	638	137	501	643	139	504
Other	4	2	2	4	2	2
Born in hospital	25,713	20,558	5,155	18,897	14,292	4,605
40 weeks or more	23,430	18,905	4,525	17,184	13,134	4,050
36-39 weeks	1,337	969	368	976	661	315
28-35 weeks	612	407	205	474	286	188
Less than 28 weeks	86	58	28	73	48	25
Unspecified	248	219	29	190	163	27
Born at home	3,185	1,122	2,063	3,186	1,122	2,064
40 weeks or more	2,736	986	1,750	2,743	990	1,753
36-39 weeks	276	63	213	273	62	211
28-35 weeks	90	32	58	88	31	57
Less than 28 weeks	16	7	9	16	7	9
Unspecified	67	34	33	66	32	34
Stillbirths						
Total	701	426	275	571	316	255
Physician	649	413	236	520	303	217
Home	98	36	62	95	35	60
Hospital	551	377	174	425	268	157
Midwife	2	..	2	2	..	2
Medical examiner	50	13	37	49	13	36
Plural Births						
Sets of twins	331	221	110	261	165	96
Both born alive	308	207	101	241	152	89
One born alive, 1 stillborn	16	8	8	14	8	6
Both stillborn	7	6	1	6	5	1
Sets of triplets						
All born alive	1	..	1	1	..	1

TABLE NO. 5

RESIDENT DEATHS CLASSIFIED BY COLOR, SEX AND AGE AND DISTRIBUTED BY COLOR AND AGE BY MONTHS—1948

Age	Grand Total	Entire Year						Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
		White			Colored			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	Male	Female	Total	Male	Female																								
Total, All ages	11,097	8,201	4,530	3,671	2,896	1,643	1,253	805	268	767	257	740	281	698	239	687	223	650	208	613	238	680	260	564	208	653	230	629	221	715	263
Under one month	479	295	182	113	184	111	73	24	16	24	14	34	15	26	10	18	13	27	15	22	24	19	19	24	12	32	15	21	16	24	15
1 to 2 months	69	41	20	21	28	20	8	2	1	3	4	5	2	6	1	3	4	4	..	2	2	2	2	2	2	4	2	6	2	2	6
3 to 11 months	85	48	26	22	37	23	14	2	7	6	4	6	2	2	2	9	3	5	1	4	1	3	3	3	2	2	2	1	4	5	6
Total under 1 year	633	384	228	156	249	154	95	28	24	33	22	45	19	34	13	30	20	36	16	28	27	24	24	29	16	38	19	28	22	31	27
1 year	32	16	13	3	16	10	6	1	1	2	2	2	..	1	1	3	1	1	2	2	3	2	3	2	1	..	2	..	..	..	..
Total under 2 years	665	400	241	159	265	164	101	29	25	35	24	47	19	35	14	33	21	37	18	30	30	26	27	31	17	38	21	28	22	31	27
2 to 4 years	57	30	17	13	27	16	11	3	3	3	2	3	2	2	1	3	..	1	2	4	3	4	4	3	3	2	2	1	3	1	2
Total under 5 years	722	430	258	172	292	180	112	32	28	38	26	50	21	37	15	36	21	38	20	34	33	30	31	34	20	40	23	29	25	32	29
5 to 9 years	51	30	20	10	21	9	12	3	2	2	2	3	1	1	2	3	..	3	..	1	6	5	..	5	1	2	2	..	3	2	2
10 to 14 years	37	19	16	3	18	12	6	1	2	2	2	1	3	1	4	..	1	3	..	4	1	5	..	1	2	..	1	1	1	..	1
15 to 19 years	92	45	28	17	47	22	25	6	10	1	2	3	1	3	4	5	2	4	6	7	5	2	3	3	4	7	5	3	3	1	2
20 to 24 years	153	77	50	27	76	35	41	7	8	5	10	10	9	4	7	4	4	7	6	6	6	7	5	11	5	5	4	7	5	4	7
25 to 29 years	216	102	54	48	114	58	56	8	6	9	10	9	14	5	7	10	13	15	6	11	11	11	8	8	11	6	12	3	5	7	11
30 to 34 years	236	106	61	45	130	63	67	13	10	11	8	8	14	6	11	4	15	11	10	10	12	6	11	9	12	11	8	9	11	8	8
35 to 39 years	354	166	98	68	188	107	81	15	16	18	14	13	21	15	13	15	20	12	13	9	17	16	12	12	25	18	10	10	13	13	14
40 to 44 years	474	275	169	106	199	118	81	31	15	23	16	23	19	14	22	28	14	20	12	20	16	32	22	21	11	22	20	23	17	18	15
45 to 49 years	681	412	260	152	269	165	104	30	24	38	24	34	32	57	20	37	19	36	18	31	17	26	19	21	24	29	21	42	27	31	24
50 to 54 years	904	557	381	176	347	209	138	62	31	47	33	53	36	55	26	37	20	41	22	32	29	50	42	34	22	53	29	34	26	59	31
55 to 59 years	1,047	752	511	241	295	168	127	82	26	66	24	71	35	62	26	67	27	41	28	68	16	72	21	53	13	56	26	58	19	56	34
60 to 64 years	1,157	903	568	335	254	150	104	89	28	76	30	69	22	67	20	89	21	68	11	68	18	84	23	63	21	77	19	70	18	83	23
65 to 69 years	1,272	1,037	582	455	235	123	112	100	18	102	16	97	15	85	24	74	19	87	26	89	17	88	25	68	12	77	25	74	17	96	21
70 to 74 years	1,258	1,069	549	520	189	120	69	99	17	104	16	91	14	105	18	80	14	95	12	75	20	77	18	76	9	82	11	94	13	91	27
75 to 79 years	1,063	955	448	507	108	57	51	100	14	85	8	84	13	80	9	83	6	74	12	68	5	75	8	63	8	78	8	81	10	84	7
80 to 84 years	762	698	278	420	64	30	34	71	8	68	9	76	7	48	4	53	4	62	6	45	5	54	4	46	6	48	1	48	5	79	5
85 to 89 years	421	396	144	252	25	8	17	35	3	46	3	33	2	38	4	46	1	24	..	22	1	33	4	25	2	34	3	25	1	35	1
90 to 94 years	163	147	50	97	16	6	10	18	1	23	3	8	1	13	1	15	1	7	..	11	2	5	4	9	..	7	1	15	1	16	1
95 to 99 years	28	23	5	18	5	1	4	3	..	3	..	4	1	2	2	..	..	2	..	2	..	2	..	1	..	1	1	3	1	..	..
100 years and over	6	2	..	2	4	2	2	..	1	..	1	..	..	..	..	1	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..

TABLE NO. 6

RECORDED AND RESIDENT DEATHS IN INSTITUTIONS BY COLOR—1948

INSTITUTION	RECORDED			RESIDENT		
	Total	White	Colored	Total	White	Colored
Total deaths	11,509	8,815	2,694	11,097	8,201	2,896
Deaths in hospitals and institutions	6,842	5,179	1,663	6,323	4,488	1,835
Baltimore City Hospitals*	877	517	360	777	449	328
Sydenham Hospital	19	11	8	15	7	8
Other Baltimore hospitals	5,148	3,932	1,216	3,957	2,848	1,109
Hospitals in Maryland counties	..	..	..	25	21	4
Hospitals in other states	..	..	..	59	50	9
Tuberculosis hospitals*	..	..	..	232	84	148
Mental hospitals	16	16	..	306	229	77
Federal hospitals	177	154	23	328	233	95
Other institutions	605	549	56	624	567	57
Deaths at home	4,667	3,636	1,031	4,774	3,713	1,061

* 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—1948

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
	All Causes	T	633	186	220	73	69	47	38	52	55	64	47	50	52	55	48	45	57	50	58
		W	384	127	117	51	41	26	22	28	33	45	34	30	36	28	24	29	38	28	31
		C	249	59	103	22	28	21	16	24	22	19	13	20	16	27	24	16	19	22	27
12	Tetanus	C	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
24b	Pyemia	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
30f	Congenital syphilis	W	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
		C	4	2	..	1	1	..	..	1	..	..	1	..	..	..	..	..	..	2	..
33b	Influenza without respiratory complications specified	W	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..
		C	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
54a	Glioma	W	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..
54b	Other and unspecified cancers of the brain and central nervous system	C	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
56e	Nonmalignant tumors unspecified or of organs other than ovary, uterus, other female genital organs, brain and other parts of the central nervous system	W	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
		C	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
64	Diseases of the thymus gland	W	2	..	..	..	1	1	..	..	..	1	..	..	1	..	..	..	..	..	..
		C	3	..	..	..	1	2	..	..	..	..	..	..	..	..	1	..	..	2	..
65b	Other diseases of the adrenal glands (except Addison's disease) not specified as tuberculosis	C	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
66b	Other general diseases and avitaminoses	W	2	..	..	..	..	..	2	..	..	..	..	1	..	..	1	..	..	..	..
73d	Other and unspecified anemias (except splenic)	W	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..
74a	Leukemias	W	2	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	1
		C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
81a	Simple meningitis	W	2	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..
		C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..
84a	Mental deficiency	W	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
85	Epilepsy	C	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..
87e	Other diseases of the nervous system	W	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
92b	Diseases of the mitral valve (whether or not specified as rheumatic)	W	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..
95c	Other diseases of the heart, not specified as rheumatic	C	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..
96	Aneurysm (except of the heart and aorta)	W	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
101	Diseases of the lymphatic system	W	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..
104a	Diseases of the nasal fossae	W	8	..	..	..	4	4	..	1	..	..	2	3	..	..	..	..	..	..	2
		C	6	..	..	..	3	3	..	..	..	1	..	1	..	..	..	1	..	1	2
104b	Diseases of the accessory sinuses	W	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
106a	Bronchitis, acute	W	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
		C	3	..	..	..	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—1948

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	C	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..
107	Bronchopneumonia (including capillary bronchitis)	W	18	..	3	..	6	5	4	..	5	3	2	3	..	..	..	3	..	1	1
		C	23	2	4	4	6	5	2	3	5	..	3	3	1	..	3	1	..	..	4
108	Lobar pneumonia	W	3	..	..	..	..	3	..	..	1	..	..	1	1	..	..	..	..	..	..
		C	2	..	..	..	1	1	..	..	1	..	1	..	..	..	..	..	..	..	..
109a	Pneumonia (unspecified)	C	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
110a	Empyema	W	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
111a	Hemorrhagic infarction and thrombosis of the lungs	W	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
111c	Chronic and unspecified congestion of the lungs	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
114e	Other and unspecified diseases of the respiratory system	W	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
119a	Diarrhea and enteritis	W	9	..	..	4	3	..	2	..	..	..	..	2	1	1	1	1	3	..	..
		C	5	..	..	2	1	2	..	1	..	..	..	1	..	1	1	1	..	..	..
122b	Intestinal obstruction	C	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
123	Other diseases of the intestines	W	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
		C	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
130	Acute nephritis	W	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
152	Phlegmon and acute abscess	W	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
153	Other diseases of the skin and cellular tissue	W	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
157a	Congenital hydrocephalus	W	12	3	..	4	3	1	1	1	..	..	2	..	1	2	..	1	2	1	2
		C	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
157b	Spina bifida and meningocele	W	3	..	1	2	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..
157d	Other congenital malformations of the central nervous system	W	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
157e	Congenital malformations of the heart	W	31	4	14	4	7	1	1	2	2	6	2	1	3	2	4	1	4	2	2
		C	9	2	4	1	1	1	..	1	1	1	..	..	..	1	..	1	..	1	3
157g	Congenital malformations of the digestive system	W	12	2	6	1	1	1	1	2	1	3	..	..	3	..	2	..	..	..	1
		C	4	..	2	1	1	..	..	2	1	..	..	..	..	1	..	..	..	..	..
157h	Congenital malformations of the genito-urinary system	W	2	..	1	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
157m	Other and unspecified congenital malformation	W	6	2	3	..	..	..	1	1	..	..	1	..	..	..	..	2	..	2	..
158	Congenital debility (cause not stated)	W	5	2	..	2	..	1	..	..	..	..	1	..	..	1	1	..	1	..	1
		C	5	..	2	..	2	..	1	..	..	..	..	1	1	..	..	..	2	..	1
159	Premature birth (cause not stated)	W	148	69	57	17	5	..	..	12	13	17	16	9	13	11	9	12	14	11	11
		C	105	33	62	6	3	1	..	8	4	11	4	11	11	13	10	6	11	9	7
160a	Intracranial or spinal hemorrhage	W	32	12	18	1	1	..	..	1	1	5	2	3	4	2	1	5	2	3	3
		C	18	3	13	2	..	..	..	1	2	2	..	1	..	3	2	2	1	1	3
160c	Other injuries at birth	W	15	12	2	1	..	..	..	3	..	1	..	1	3	1	2	..	3	1	..
		C	5	5	..	..	..	..	..	..	..	..	1	..	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—1948

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
161a	Asphyxia (cause not specified), atelectasis	W	28	13	9	3	1	1	1	3	1	2	1	3	3	4	..	3	3	2	3
		C	17	8	8	1	..	..	..	..	2	..	2	1	1	3	1	1	2	1	3
161b	Infection of the umbilicus; pemphigus and other infections (non-syphilitic)	W	2	..	1	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..
161c	Other diseases peculiar to the first year of life	W	7	3	2	1	1	..	..	1	1	..	..	..	1	..	..	..	2	..	2
		C	11	3	6	1	..	..	1	1	2	1	..	..	1	1	1	1	1	1	1
168	Homicide by means other than fire-arms, cutting or piercing instruments	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
179	Acute accidental poisoning by solids or liquids	W	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
180	Conflagration	W	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
		C	2	..	..	..	1	..	1	1	..	..	..	..	..	..	..	1	..	..	..
182a	Accidental mechanical suffocation	W	6	..	..	1	2	3	..	..	1	2	1	..	1	..	..	..	1	..	
		C	8	..	..	2	3	2	1	1	1	2	..	..	1	..	..	..	2	1	
191	Excessive heat	C	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	3	..	..	..	..	1	2	..	1	..	..	..	..	..	1	..	..	..	1
200a	Ill-defined cause of death	C	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
200c	Found dead (cause unknown)	W	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..

TABLE NO. 8
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																					
		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	75-79Years	80-84 Years	85 Years and Over
	All Causes	11,097	W	8,201	M	4,530	228	13	6	7	4	20	16	28	50	54	61	98	169	260	381	511	568	582	549	448	278	199
					F	3,671	156	3	5	5	3	10	3	17	27	48	45	68	106	152	176	241	335	445	520	507	420	369
			C	2,896	M	1,643	154	10	8	4	4	9	12	22	35	58	63	107	118	165	209	168	150	123	120	57	30	17
					F	1,253	95	6	6	4	1	12	6	25	41	56	67	81	81	104	138	127	104	112	69	51	34	33
I	Infectious and parasitic diseases	907	W	417	M	316	2	2	...	1	...	1	1	...	4	7	11	13	33	41	51	47	35	28	20	12	6	1
					F	101	1	...	3	...	...	1	...	5	5	10	8	7	9	10	5	6	9	2	8	6	4	2
			C	490	M	307	4	1	1	1	...	1	2	4	11	20	23	39	36	41	44	24	25	12	12	4	2	....
					F	183	2	1	...	...	1	2	3	18	23	28	27	18	14	12	13	9	5	5	1	1	....	....
1	Typhoid fever	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	....	....
6	Meningococcus meningitis	2	W	1	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....	....
			C	1	M	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	....	....
10	Diphtheria	2	W	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	....	....
					F	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....	....
12	Tetanus	3	W	1	M	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....	....
			C	2	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	....	....
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....	....
13-22	Tuberculosis, all forms	657	W	297	M	236	...	...	...	1	...	...	...	...	3	5	9	13	27	33	41	35	21	21	12	11	3	1
					F	61	...	...	1	...	...	...	...	3	4	9	7	4	8	7	4	3	2	1	4	2	1	1
			C	360	M	218	...	1	1	1	...	1	1	4	10	20	17	34	27	33	25	14	11	9	6	2	1	....
					F	142	...	1	...	...	1	2	3	17	22	27	24	16	7	4	9	4	3	2	...	...	....	....
13	Tuberculosis of the respiratory system	633	W	287	M	229	...	...	...	...	...	...	...	...	2	5	9	13	25	32	41	35	21	20	11	11	3	1
					F	58	...	...	1	...	...	...	...	3	4	9	6	4	7	7	4	3	1	1	4	2	1	1
			C	346	M	212	...	1	1	...	...	1	...	4	10	18	17	34	26	33	24	14	11	9	6	2	1	....
					F	134	...	...	...	...	1	2	2	17	22	26	23	14	6	4	9	4	2	2	...	...	....	....

14	Tuberculosis of the meninges and central nervous system	7	W	2	M	2	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
			C	5	M	2	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
16	Tuberculosis of the vertebral column	9	W	4	M	4	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	1	...	...	...	...
			C	5	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	1	...	...	...	...	...
17	Tuberculosis of the bones and joints (except vertebral column)	2	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
			C	1	M	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Tuberculosis of the lymphatic system	2	C	2	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
20	Tuberculosis of the genito-urinary system	2	W	2	F	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...
21a	Tuberculosis of the adrenal glands	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
21b	Tuberculosis of other organs	1	C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
24a	Septicemia (non-puerperal)	2	W	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24b	Pyemia	1	W	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Syphilis, all forms	182	W	72	M	52	1	...	...	...	...	...	...	...	...	...	1	...	3	4	7	11	11	5	7	1	1	...
					F	20	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	2	4	1	4	3	1	1
			C	110	M	79	3	...	...	...	...	...	...	...	...	...	6	5	8	8	16	10	13	3	6	...	1	...
					F	31	1	...	...	...	...	...	...	...	1	...	2	1	6	7	3	5	2	3	...	...	...	...
30a	Locomotor ataxia (tabes dorsalis)	4	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
			C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...
30b	Syphilis: general paralysis of the insane	40	W	9	M	8	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	2	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
			C	31	M	23	...	...	...	...	...	...	...	...	...	...	2	...	4	4	3	2	4	1	2	...	1	...
					F	8	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	1	1	...	...	...	...
30c	Syphilis: other syphilis of the central nervous system	10	W	7	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
					F	6	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	1	1	1	...
			C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...
30d	Syphilis: aneurysm of the aorta	78	W	34	M	27	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	8	5	3	4	1	1	...
					F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	1	...	1
			C	44	M	27	...	...	...	...	...	...	...	...	...	...	3	2	2	1	6	4	3	2	4	...	...	...
					F	17	...	...	...	...	...	...	...	...	...	...	1	1	3	5	2	2	1	2	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																								
		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 Years and Over
30e	Syphilis: other syphilis of the circulatory system	21	W	6	M	4											1				1	1	1		1						
					F	2																	1			1					
			C	15	M	14												1		1	4	3	5								
					F	1											1														
30f	Syphilis: congenital	5	W	1	M	1	1																								
			C	4	M	3	3																								
					F	1	1																								
30g	Syphilis: other and unspecified forms	24	W	14	M	10													1		2		3	1	3						
					F	4														1		1	1			1					
			C	10	M	6											1	1	1	2	1										
					F	4									1				2			1									
32a	Weil's disease	1	W	1	M	1										1															
32a	Infectious hepatitis	2	W	1	F	1										1															
			C	1	F	1										1															
33a	Influenza with respiratory complication specified	12	W	2	M	2														1		1									
			C	10	M	5														3		1									
					F	5											1	1		1					1	1					
33b	Influenza, without respiratory complication specified	7	W	5	M	3	1	1																			1				
					F	2																					2				
			C	2	M	2	1																			1					
35	Measles	2	W	2	F	2			1						1																
36	Acute poliomyelitis and polioencephalitis	2	W	1	M	1							1																		
			C	1	F	1								1																	
37b	Sequelae of encephalitis lethargica	1	W	1	F	1								1																	

37c	*Encephalitis lethargica*	*1*	*C*	*1*	*M*	*1*	...	...	...	...	...	...	...	...	...	...	...	...	*1*	...	...	...	...	...	...	...	...	...
39c	Rocky Mountain spotted fever	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
41	Hydatid disease	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
43	Mycoses	4	W	3	F	3	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
44a	Lymphopatha venereum	1	C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
44b	Lymphogranulomatosis (Hodgkin's disease)	22	W	22	M	14	...	...	...	...	...	...	...	...	1	1	1	...	1	3	2	1	1	2	...	...	1	...
					F	8	...	...	...	...	...	...	...	1	...	...	...	1	1	1	...	1	2	...	...	1	...	...
II	Cancer and other tumors	1,494	W	1,245	M	625	1	...	2	2	...	4	1	1	3	4	3	9	15	35	55	88	104	87	94	66	40	11
					F	620	1	...	1	1	...	...	...	1	...	7	11	22	32	54	53	55	71	91	86	65	41	28
			C	249	M	124	2	1	1	...	...	1	1	2	1	2	2	2	5	17	14	23	18	8	13	7	4	...
					F	125	...	...	1	...	...	...	1	...	3	6	7	10	9	18	16	23	8	15	2	4	1	1
45–55	Cancer and other malignant tumors	1,463	W	614	M	614	...	...	2	2	...	3	...	1	2	4	3	8	14	35	53	87	104	87	93	65	40	11
					F	613	1	...	1	1	...	...	...	1	...	6	11	21	32	54	51	55	71	90	85	65	40	28
			C	117	M	117	1	...	1	...	...	...	1	2	1	2	2	2	3	17	14	23	18	7	12	7	4	...
					F	119	...	...	1	...	...	...	1	...	3	5	7	9	8	16	16	23	8	15	1	4	1	1
45a	Cancer of the lip	3	W	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...
45b	Cancer of the tongue	9	W	7	M	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	2	1	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
45c	Cancer of the mouth	3	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
45d	Cancer of the jaw bone	4	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
45f	Cancer of the pharynx	13	W	11	M	10	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	2	3	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
46a	Cancer of the esophagus	31	W	25	M	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	6	3	6	2	2	1
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
			C	6	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	1	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																					
		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 Years and Over
46b	Cancer of the stomach	152	W	118	M	75	...	...	...	...	...	...	...	...	...	...	...	1	...	4	6	13	15	12	10	9	3	2
					F	43	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	3	4	12	10	4	2	2
			C	34	M	23	...	...	...	...	...	...	...	...	...	...	1	...	1	4	2	5	4	2	4	...	...	...
					F	11	...	...	...	...	...	...	...	...	...	...	1	...	...	2	1	2	...	3	...	2	...	...
46d	Cancer of the rectum and anus	87	W	76	M	46	...	...	...	...	...	...	...	...	...	...	...	...	1	2	4	2	8	8	10	9	2	...
					F	30	...	...	...	...	...	...	...	...	...	1	...	1	...	2	1	1	3	7	6	5	2	1
			C	11	M	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	...	...	...	...
					F	7	...	...	...	...	...	...	...	...	1	...	...	...	1	2	...	...	...	...	1	2	...	...
46e	Cancer of the intestines (except duodenum and rectum)	171	W	154	M	57	...	...	...	...	...	...	...	...	...	...	...	...	...	5	7	8	11	7	9	5	4	1
					F	97	...	...	...	...	...	...	...	...	...	1	3	1	4	3	4	9	11	16	12	15	12	6
			C	17	M	9	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	3	1	1	...	1	...	...
					F	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	3	...	...	1	...
46f	Cancer of the liver and biliary passages	67	W	57	M	26	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	10	3	...	5	2	2	1
					F	31	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	2	8	4	5	4	2	1
			C	10	M	8	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2	...	...	1	...	2	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...
46g	Cancer of the pancreas	58	W	49	M	26	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	6	4	5	4	1	2	...
					F	23	...	...	...	...	...	...	...	...	...	...	1	1	2	3	...	4	2	3	5	1	1	...
			C	9	M	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	1	...	1	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
46h	Cancer of the mesentery and peritoneum	11	W	10	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	3	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	1	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
46m	Cancer of unspecified digestive organs	10	W	8	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	1	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...

47a	Cancer of the larynx	21	W	19	M	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	1	4	1	2	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
47c	Cancer of the bronchus	53	W	45	M	38	...	...	...	...	...	...	...	...	...	...	1	2	5	2	5	7	3	5	6	2	...	...
					F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	3	2	...	...	1	...
			C	8	M	7	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	1	1	1	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
47d	Cancer of the lung	105	W	89	M	78	...	...	...	...	...	...	...	...	...	...	...	1	3	8	13	10	17	11	10	3	2	...
					F	11	...	...	...	...	...	...	...	...	...	...	...	...	1	3	1	2	2	...	1	1	...	...
			C	16	M	12	...	...	...	...	...	...	...	1	...	...	...	1	1	3	1	1	2	1	...	...	1	...
					F	4	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1	1	...	...	...	...
47e	Cancer of the pleura	2	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...
47f	Cancer of the mediastinum and unspecified sites of respiratory system	4	W	4	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...
48a	Cancer of the cervix (of uterus)	64	W	44	F	44	...	...	...	...	...	...	...	...	...	...	1	3	6	7	10	4	7	5	...	1	...	...
			C	20	F	20	...	...	...	...	...	...	...	...	...	2	2	2	3	4	...	5	...	2	...	...	...	...
48b	Other cancer of the uterus	70	W	50	F	50	...	...	...	...	...	...	...	...	...	1	...	...	3	6	2	5	7	7	7	6	3	3
			C	20	F	20	...	...	...	...	...	...	...	...	...	...	1	2	3	2	2	5	2	3	...	...	...	...
49a	Cancer of the ovary	52	W	45	F	45	...	...	...	...	...	...	...	...	...	2	1	4	1	5	4	4	4	7	6	5	...	2
			C	7	F	7	...	...	...	...	...	...	1	...	...	...	...	1	...	...	3	2	...	...	...	...	...	...
49d	Cancer of the vulva	6	W	6	F	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	...
50	Cancer of the breast	154	W	134	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
					F	32	...	...	...	...	...	...	...	...	...	...	3	7	11	15	16	9	12	13	15	17	5	9
			C	20	F	20	...	...	...	...	...	...	...	...	...	1	2	1	...	6	4	4	...	2	...	...	...	...
51b	Cancer of the prostate	84	W	70	M	70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	11	12	12	14	13	4
			C	14	M	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	2	5	1	...
51c	Cancer of the testes	1	W	1	M	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
51d	Cancer of the penis	7	C	7	M	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	2	...	2	...	...	...

TABLE NO. 8—Continued
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52a	Cancer of the kidney	30	W	26	M	15				1								1		4	2	2	3	2	1		
					F	11														2		2	1	3	2			
			C	4	M	2																					
					F	2																1	1					1
52b	Cancer of the bladder	47	W	45	M	29										1		2				4	7	4	4	6		1
					F	16																3		2	4	1	4	2
			C	2	F	2																	1	1				
52c	Cancer of urinary organs, site other than kidney or bladder	1	W	1	M	1											1										
53	Cancer of the skin (except vulva and scrotum)	15	W	14	M	9																	2	2	1	1	2	1
					F	5																	1		1		1	2
			C	1	F	1																	1					
54a	Glioma	13	W	13	M	7			2			1							1	1	2							
					F	6	1										1	1			2		1					
54b	Other and unspecified cancers of the brain and central nervous system	24	W	19	M	13						1			1	1	1		2	2	2	2	1				
					F	6				1					1	1				1		1		1			
			C	5	M	3	1		1																		
					F	2			1						1	1											
55a	Cancer of the adrenal glands	2	W	2	M	2																					
55b	Cancer of bones (except jaw bone and accessory sinuses)	14	W	12	M	6								1	1						2						
					F	6														1		1	1	2	1	1		
			C	2	M	2							1		1											1	
55c	Cancer of the thyroid gland	5	W	5	M	4														1	1			2			
					F	1												1									
55d	Cancer of the nasal cavity and accessory sinuses	5	W	3	M	1														1				1			
					F	2																				1	
			C	2	M	1															1						
					F	1																					

55e	Cancer of other and unspecified organs	65	W	56	M	31	...	...	...	1	...	1	...	...	1	2	...	...	1	...	2	7	3	2	5	3	3	...
					F	25	...	...	1	...	...	...	...	1	...	...	...	1	2	...	1	4	2	3	5	3	2	...
			C	9	M	4	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	2	...	...	...	...	...	...
					F	5	...	...	...	...	...	...	...	...	2	...	...	1	...	...	1	...	1	...	...	...	...	...
56a	Nonmalignant tumors of the ovary	1	W	1	F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
56b	Nonmalignant tumors of uterus	6	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
			C	5	F	5	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	1	...	...	...
56c	Nonmalignant tumors of other female genital organs	1	C	1	F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
56d	Nonmalignant tumors of brain and other parts of the central nervous system	5	W	4	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	1	...	...	...
			C	1	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
56e	Nonmalignant tumors of other and unspecified organs	13	W	10	M	5	1	...	...	...	...	1	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...
					F	5	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	1	...	1	...
			C	3	M	3	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
57d	Tumors of the brain and other parts of the central nervous system, nature unspecified	2	W	2	M	2	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
57e	Tumors of other and unspecified organs, nature unspecified	3	C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...
III	Rheumatism, diseases of nutrition and of the endocrine glands, other general diseases and avitaminoses	381	W	313	M	101	2	...	...	...	...	...	...	...	...	...	1	3	1	5	8	16	19	16	19	7	3	1
					F	212	2	...	...	1	...	...	...	1	...	...	...	1	4	6	7	25	31	44	39	25	22	4
			C	68	M	24	3	1	1	...	...	1	...	...	...	...	...	...	...	4	3	2	3	4	...	1	1	...
					F	44	1	...	1	...	...	...	1	1	...	...	...	1	1	4	8	5	9	7	3	...	...	2
58d	Other acute rheumatic heart diseases	4	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
			C	1	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58e	Other forms of acute rheumatic fever	3	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
			C	2	M	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
59a	Rheumatoid arthritis	2	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...

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59b	Other chronic articular rheumatism	7	W	6	M	2																1		1			
					F	4								1								1		1	1		
			C	1	M	1																1					
61	Diabetes mellitus	333	W	280	M	88											1	1		4	7	16	16	15	18	6	3	1
					F	192												1	2	6	5	23	28	42	37	24	21	3
			C	53	M	15														4	3	2	2	3		1		
					F	38			1				1					1	1	2	8	5	7	7	3			2
63b	Exophthalmic goiter	11	W	7	M	2																2					
					F	5													1		1	1	1	1				
			C	4	F	4														2			2					
63c	Myxedema and cretinism	2	W	2	M	1													1								
					F	1																1					
63d	Other diseases of the thyroid glands	1	W	1	F	1																					1
64	Diseases of the thymus gland	6	W	2	M	1	1																				
					F	1	1																				
			C	4	M	4	3		1																		
65a	Addison's disease (not specified as tuberculous)	1	W	1	F	1																1					
65b	Other diseases of the adrenal glands	4	W	3	M	2														1			1				
					F	1																	1				
			C	1	F	1	1																				
66b	Other general diseases	5	W	5	M	2	1											1									
					F	3	1												1					1			
69	Pellagra (except alcoholic)	2	W	1	M	1																			1		
			C	1	M	1																				1	

IV	*Diseases of the blood and blood-forming organs*	*76*	W	*62*	*M*	*33*	*1*	...	*1*	*1*	...	*3*	*2*	*1*	...	...	...	*2*	*3*	*2*	*2*	*2*	*2*	*6*	*2*	*3*	...	...
					F	*29*	*2*	...	...	...	*1*	*1*	...	*2*	...	*2*	*1*	...	*1*	*1*	...	*1*	*2*	*7*	*3*	*3*	*1*	*1*
			C	*14*	*M*	*9*	*1*	...	...	...	...	...	...	...	...	...	...	...	*3*	*1*	*2*	...	*1*	...	*1*	...	...	...
					F	*5*	...	...	...	...	...	...	...	...	*1*	...	...	...	*1*	*1*	...	...	*1*	*1*	...	...	...	...
72b	Hemophilia	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
73a	Pernicious anemia	8	W	7	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	1	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
73d	Other and unspecified anemias	7	W	5	M	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
					F	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
			C	2	F	2	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
74a	Leukemia	51	W	43	M	22	1	...	1	...	...	2	1	1	...	...	...	2	1	1	...	2	2	5	1	2	...	...
					F	21	1	...	...	...	...	1	...	2	...	2	1	...	1	1	...	1	2	5	1	1	1	1
			C	8	M	8	1	...	...	...	...	...	...	...	...	...	...	...	2	1	2	...	1	...	1	...	...	...
74b	Aleukemias	3	W	3	M	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
					F	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75a	Splenic anemia	1	C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
75b	Splenomegaly (of undetermined nature)	3	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
75c	Other diseases of the spleen	2	W	1	M	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
V	Chronic poisoning and intoxication	39	W	20	M	16	...	1	...	...	...	...	...	...	...	...	...	2	4	1	3	2	2	1	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1	...	...	...	...	...	...
			C	19	M	14	...	1	2	...	...	...	...	...	2	1	1	1	1	2	...	2	1	...	...	...	...	...
					F	5	...	...	...	...	...	...	...	...	...	...	1	...	2	1	1	...	...	...	...	...	...	...
77c	Acute alcoholism	28	W	14	M	12	...	...	...	...	...	...	...	...	...	...	...	2	2	1	3	2	1	1	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
			C	14	M	11	...	...	...	...	...	...	...	...	2	1	1	1	1	2	...	2	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...
77d	Chronic alcoholism	6	W	4	M	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...
			C	2	F	2	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
77e	Other and unspecified alcoholism	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																					
		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 Years and Over
78b	Lead poisoning, not specified as occupational	4	W	1	M	1		1																			
			C	3	M	3		1	2																		
VI	Diseases of the nervous system and sense organs	814	W	598	M	270	2			1		5	1	4	2	3	5	3	6	9	16	14	36	39	49	38	19	18
					F	328	2						1			3	5	3	8	1	18	19	32	48	53	47	50	38
			C	216	M	97	1							1		1		8	12	5	13	21	12	10	9	2		2
					F	119	1					1				2	3	17	8	22	12	12	14	10	6	5	4	2
80a	Intracranial abscess	2	W	1	M	1															1							
			C	1	M	1																1						
80b	Other encephalitis (nonepidemic)	3	W	3	M	3								1				1			1							
81a	Simple meningitis	14	W	9	M	5	1			1		1			1									1				
					F	4	1										1				1			1				
			C	5	M	2												1	1									
					F	3	1									1	1											
81b	Acute cerebrospinal meningitis (not due to meningococcus)	1	W	1	F	1																1						
82	Diseases of the spinal cord (except locomotor ataxia and disseminated sclerosis)	15	W	12	M	7												1	1		1		3		1			
					F	5											1						1	2		1		
			C	3	M	1																1						
					F	2												1		1								
83a	Cerebral hemorrhage or effusion (excluding birth injuries.	624	W	448	M	189							1	1	3	2	1	5	6	13	11	24	29	33	30	16	14
					F	259						1			1	3	1	7		14	15	26	37	48	39	36	31
			C	176	M	71									1		4	8	4	11	14	10	9	7	2		1
					F	105									1	1	14	7	21	11	12	12	9	6	5	4	2
			W	70	M	41														2		2	8	6	10	7	3	3

83b	Cerebral embolism and thrombosis	83	W	70	M	41														2		2	8	6	10	7	3	3
					F	29													1		1	2	1	3	4	4	9	4
			C	13	M	11													1	1	1	3	2		2			1
					F	2											1	1										
83c	Cerebral softening	2	W	1	F	1																						1
			C	1	F	1													1									
83d	Hemiplegia and other paralysis of unspecified origin	22	W	17	M	8																1		1	4	1		1
					F	9																	1	2		2	3	1
			C	5	M	3												1				1		1				
					F	2												1					1					
84a	Mental deficiency (except general paralysis of the insane)	3	W	2	M	1						1																
					F	1	1																					
			C	1	M	1													1									
84b	Schizophrenia (dementia praecox)	3	W	1	F	1																1						
			C	2	M	2												1	1									
84d	Other mental diseases	2	W	1	F	1										1												
			C	1	F	1															1							
85	Epilepsy	11	W	8	M	6						3	1	1			1											
					F	2										1				1								
			C	3	M	3	1							1				1										
87c	Paralysis agitans (except result of encephalitis)	4	W	4	M	2																		1	1			
					F	2																		1	1			
87d	Disseminated sclerosis	13	W	11	M	1																	1					
					F	10												2			2		1	1		1	2	1
			C	2	M	1															1							
					F	1																	1					
87e	Other diseases of the nervous system	9	W	6	M	4	1							1			1			1								
					F	2																	1	1				
			C	3	M	1																1						
					F	2						1												1				
88	Diseases of the organs of vision	1	W	1	M	1																		1				
89a	Otitis and other diseases of the ear	2	W	2	M	1											1											
					F	1																	1					

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																				
		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 Years and Over
VII	Diseases of the circulatory system	4,247	W	3,460	M	1,958	1	1	...	...	...	...	...	5	7	11	8	18	56	101	157	248	263	292	278	233	158	121
					F	1,502	2	...	...	...	...	...	...	1	3	6	4	11	25	37	53	92	132	192	245	265	224	210
			C	787	M	442	...	...	...	...	...	...	...	...	1	8	8	10	22	44	71	62	64	53	50	25	15	9
					F	345	1	1	...	...	...	...	...	3	2	4	4	10	20	28	50	42	41	46	34	26	18	15
90–95	Diseases of the heart	4,033	W	3,286	M	1,872	...	...	...	...	...	...	...	5	7	11	8	17	54	100	151	243	260	281	273	223	137	102
					F	1,414	1	...	...	...	...	...	...	1	2	5	4	10	23	37	53	90	130	186	232	250	203	187
			C	747	M	416	...	...	...	...	...	...	...	...	1	6	8	8	22	43	70	57	60	50	47	25	12	7
					F	331	1	1	...	...	...	...	...	3	2	4	4	10	20	28	49	39	37	45	33	25	17	13
90b	Pericarditis (except acute or chronic rheumatic)	4	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
			C	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...
91a	Bacterial endocarditis (acute, subacute or unspecified)	9	W	4	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	1	...	...	...	...
			C	5	M	2	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	...
91b	Other acute or subacute endocarditis	2	C	2	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
92a	Diseases of the aortic valve (without mention of diseases of mitral valve or rheumatic fever)	31	W	18	M	11	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	2	2	2	1	...	...
					F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	1	2	1	...
			C	13	M	8	...	...	...	...	...	...	...	...	...	1	...	...	...	1	4	1	1	...	...	...	...	...
					F	5	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	2	...
92b	Diseases of the mitral valve (whether or not specified as rheumatic)	103	W	80	M	37	...	...	...	...	...	...	...	2	3	2	...	2	...	2	4	5	2	3	3	6	1	2
					F	43	1	...	...	...	...	...	...	1	...	1	1	...	6	2	4	6	5	3	3	3	5	2
			C	23	M	12	...	...	...	...	...	...	...	...	...	...	1	...	2	2	2	2	2	1	...	...	...	...
					F	11	...	...	...	...	...	...	...	2	...	1	1	...	...	1	2	1	...	1	...	1	1	...

92c	Diseases of other and unspecified valves and chronic endocarditis, specified as rheumatic	9	W	6	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	1	...	...	...
			C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...
92d	Diseases of other and unspecified valves and chronic endocarditis, not specified as rheumatic	52	W	35	M	16	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	4	2	2	2	3	1
					F	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	3	7	2	4
			C	17	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	1	...	1	...	1
					F	11	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	2	2	...	...	...	1
92e	Endocarditis (not specified as acute, chronic, or rheumatic, 45 years of age and over)	13	W	9	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
					F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	1	1	...	...	1
			C	4	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...
93a	Acute myocarditis (except rheumatic)	6	W	4	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
93b	Myocarditis (not specified as acute, chronic, or rheumatic, under 45 years of age)	1	C	1	F	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
93c	Chronic myocarditis and myocardial degeneration, specified as rheumatic	44	W	36	M	13	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	3	2	1	...	1	2	1
					F	23	...	...	...	...	...	...	...	...	...	1	...	1	2	1	3	2	3	1	3	1	3	2
			C	8	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1	...	1	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	1	...	...
93d	Chronic myocarditis and myocardial degeneration, not specified as rheumatic	2,511	W	2,016	M	1,006	...	...	...	...	...	...	...	...	1	2	2	2	13	18	46	111	125	171	173	156	101	85
					F	1,010	...	...	...	...	...	...	...	...	...	2	...	3	6	15	25	50	89	140	173	198	162	147
			C	495	M	262	...	...	...	...	...	...	...	...	...	1	2	3	11	22	36	39	39	36	38	17	12	6
					F	233	...	...	...	...	...	...	...	...	...	...	2	5	14	19	33	31	26	34	30	19	11	9
93e	Other myocarditis (not specified as acute, chronic or rheumatic)	90	W	50	M	28	...	...	...	...	...	...	...	...	...	...	...	...	1	1	5	5	4	4	3	...	2	3
					F	22	...	...	...	...	...	...	...	...	...	1	...	...	1	2	1	...	2	3	1	1	2	8
			C	40	M	23	...	...	...	...	...	...	...	...	...	...	3	...	2	4	4	2	3	2	2	1	...	...
					F	17	...	...	...	...	...	...	...	...	...	1	...	1	3	1	2	1	1	3	...	2	1	1
94a	Diseases of the coronary arteries	986	W	892	M	677	...	...	...	...	...	...	...	1	2	4	4	10	33	66	86	107	111	91	82	52	23	5
					F	215	...	...	...	...	...	...	...	...	...	...	1	1	4	10	13	25	22	28	41	31	23	16
			C	94	M	72	...	...	...	...	...	...	...	...	...	1	2	5	4	8	15	9	11	7	5	5	...	...
					F	22	...	...	...	...	...	...	...	...	...	1	...	2	...	3	4	2	6	1	2	...	...	1
94b	Angina pectoris	12	W	12	M	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	1	3	1	1	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																					
		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 Years and Over
95a	Functional diseases of the heart (without mention of organic lesion)	2	W	1	M	1															1						
			C	1	M	1																1					
95b	Other diseases of the heart, specified as rheumatic	59	W	50	M	23								1	1	1	2	3	4	5	1	3				1	1
					F	27								1		1	4	4	4	4	2	3	3		1		
			C	9	M	3													2	1							
					F	6								1	1	1	1		1				1				
95c	Other diseases of the heart, not specified as rheumatic	99	W	72	M	38								1		2	1		3	2	3	6	3	4	3	3	3	4
					F	34											1	1		1		1	4	4	5	6	5	6
			C	27	M	15									1	1			2		7	1	1	2	1	1		
					F	12	1													1	1		2	2	1	1		1
96	Aneurysm (except of the heart and aorta)	16	W	12	M	7	1								1				1	1			1			2		
					F	5														1				1				
			C	4	M	1										1												
					F	3																3						
97	Arteriosclerosis (except coronary or renal sclerosis)	162	W	137	M	69															5	2	2	8	4	9	21	18
					F	68																	1	6	8	11	20	22
			C	25	M	17															1	5	3	3	3		3	
					F	8																	3	1		1		2
98	Gangrene	5	W	3	M	2																		1				1
					F	1																			1			
			C	2	M	2														1								1
99	Other diseases of the arteries	6	W	5	M	1														1						1	1	1
					F	4																						
			C	1	M	1																	1					
100a	Varices	1	W	1	F	1										1												

100b	Other diseases of the veins	7	W	5	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...
			C	2	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
101	Diseases of the lymphatic system	3	W	3	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
102	High blood pressure (idiopathic)	14	W	8	M	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...
					F	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	2	...	...
			C	6	M	4	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...	...	...	1
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
VIII	Diseases of the respiratory system	474	W	290	M	159	18	2	3	1	...	...	...	...	2	...	4	2	5	9	16	20	21	17	15	15	3	6
					F	131	17	...	...	...	1	2	...	1	2	3	2	4	4	4	9	11	8	13	5	11	17	17
			C	184	M	108	20	1	...	1	...	2	2	1	4	3	2	10	9	12	15	7	4	7	5	1	2	...
					F	76	16	1	1	1	...	1	...	...	2	2	6	4	4	9	9	3	5	4	2	2	...	4
104a	Diseases of the nasal fossae	19	W	11	M	10	7	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	8	M	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	4	2	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
104b	Diseases of the accessory sinuses	4	W	3	M	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
106a	Bronchitis, acute	8	W	5	M	4	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
			C	3	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
106b	Bronchitis, chronic	15	W	15	M	11	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2	1	3	1	1	1	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	2
106c	Bronchitis, unspecified	3	C	3	M	2	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
107–109	Pneumonia, all forms	345	W	196	M	99	7	...	1	...	...	...	...	...	1	...	1	1	1	7	12	11	13	14	10	11	3	6
					F	97	14	...	...	...	1	1	...	1	2	...	1	4	3	4	5	6	7	9	4	9	14	12
			C	149	M	88	15	1	...	...	...	1	1	1	4	1	1	9	8	7	12	7	4	7	5	1	2	...
					F	61	11	1	1	1	...	...	...	...	2	1	5	3	2	8	9	3	5	3	1	1	...	4

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																								
		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 Years and Over
107	Bronchopneumonia (including capillary bronchitis)	152	W	97	M	46	7	...	1	...	...	...	...	...	...	...	1	...	...	1	5	5	5	6	2	7	2	4
					F	51	11	...	...	...	1	...	...	...	1	...	...	...	1	...	2	3	6	4	1	3	10	8
			C	55	M	28	13	...	...	...	...	...	...	...	2	...	...	2	1	1	3	...	2	2	...	1	1	...
					F	27	10	...	...	...	...	...	...	...	2	1	1	1	...	1	...	3	2	2	...	...	...	4
108	Lobar pneumonia	179	W	88	M	46	...	...	...	...	...	...	...	...	1	...	...	1	1	5	6	6	7	5	7	4	1	2
					F	42	3	...	...	...	...	1	...	1	1	...	1	4	1	4	3	3	...	4	3	5	4	4
			C	91	M	60	2	1	...	...	...	2	1	1	2	1	1	7	7	6	9	7	2	5	5	...	1	...
					F	31	...	1	...	1	...	...	...	...	...	...	4	2	2	7	9	...	3	1	1	...	...	...
109	Pneumonia (unspecified)	14	W	11	M	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	3	1	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	1	...	...
			C	3	F	3	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
110a	Empyema	8	W	8	M	6	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	1	...	...	1	1	...	...
					F	2	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
110b	Other and unspecified forms of pleurisy	12	W	9	M	5	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	1	1	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1
			C	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...
111a	Hemorrhagic infarction and thrombosis of the lungs	8	W	5	M	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...
			C	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
111b	Acute edema of the lungs	12	W	11	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	...
					F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	1	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
111c	Chronic and unspecified [illegible]		W	6	M	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

111c	*Chronic and unspecified congestion of the lungs*	8	W	*6*	M	*3*											1				1				1			
					F	*3*	1					1									1							
			C	2	M	1												1										
					F	1																		1				
112	Asthma	14	W	10	M	5													1		1	1	1	1				
					F	5										2					1		1					1
			C	4	M	3										1				1	1							
					F	1										1												
113	Pulmonary emphysema	6	W	5	M	4																3	1					
					F	1																		1				
			C	1	M	1															1							
114a	Silicosis	1	W	1	M	1																			1			
114c	Gangrene of lung	1	W	1	F	1																					1	
114d	Abscess of lung	5	W	3	M	2													1					1				
					F	1																		1				
			C	2	M	2											1			1								
114e	Other and unspecified diseases of the respiratory system	5	W	1	M	1	1																					
			C	4	M	3							1			1				1								
					F	1						1																
IX	Diseases of the digestive system	421	W	343	M	210	4	2			2	1	2	1	1	1	2	10	12	22	32	27	24	26	21	11	5	4
					F	133	6	1		1					1		3	5	8	15	7	7	17	16	14	13	9	10
			C	78	M	53	6	2							1	3		3	4	10	4	6	2	6	2	1	1	2
					F	25	1					2			1	1	1	2	7	1	1	4	2	2				
115c	Diseases of the pharynx and tonsils	9	W	4	M	3					1		1									1						
					F	1		1																				
			C	5	M	3										1			1	1								
					F	2						2																
116	Diseases of the esophagus	3	W	2	M	2															1				1			
			C	1	M	1														1								
117a	Ulcer of the stomach	35	W	31	M	27													2	1	4	4	4	6	4	1	1	
					F	4																			2	1		1
			C	4	M	3														1		1		1				
					F	1																1						

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																											
		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 Years and Over
117b	Ulcer of the duodenum	21	W	20	M	13												1	1	2	1	1	2	3	1			1
					F	7																1	2	2		1	1	
			C	1	F	1													1									
118	Other diseases of the stomach (except cancer)	4	W	3	M	2															1			1				
					F	1														1						1		
			C	1	F	1																						
119a	Diarrhea and enteritis, under 2 years of age	14	W	9	M	4	4																					
					F	5	5																					
			C	5	M	4	4																					
					F	1	1																					
120a	Diarrhea and enteritis, 2 years of age and over	5	W	3	M	1										1										1	1
					F	2																						
			C	2	M	1												1						1				
					F	1																						
120b	Ulceration of the intestines, 2 years of age and over (except duodenum)	7	W	5	M	3								1				1						1				
					F	2									1					1								
			C	2	M	2									1			1										
121	Appendicitis	11	W	9	M	4							1		1						1			1				
					F	5				1											1			1	1		1	
			C	2	F	2													1				1					
122a	Hernia	39	W	31	M	13													1		1	1	2	2	3	3		3
					F	18														1			6	4	1	1	2	
			C	8	M	6		1										1		1		1	1	1		1		1
					F	2																						

122b	Intestinal obstruction	27	W	20	M	9	...	...	...	...	...	1	...	...	...	...	1	2	...	1	...	1	1	1	...	1	...	...
					F	11	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	3	1	2	1	1
			C	7	M	5	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...
					F	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
123	Other diseases of the intestines	20	W	16	M	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	2	1	1	1	...
					F	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	3	1	...	...
			C	4	M	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
124a	Cirrhosis of the liver, with mention of alcoholism	39	W	36	M	28	...	...	...	...	...	...	...	...	...	...	...	1	1	9	4	7	4	2	...	...	...	...
					F	8	...	...	...	...	...	...	...	...	...	...	2	...	1	4	...	...	...	...	...	1	...	...
			C	3	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...
124b	Cirrhosis of the liver, without mention of alcoholism	124	W	99	M	65	...	...	...	...	...	...	...	...	...	...	...	4	3	9	16	9	6	4	10	3	...	1
					F	34	...	...	...	...	...	...	...	...	...	...	1	4	5	7	4	2	5	...	4	1	1	...
			C	25	M	17	...	...	...	...	...	...	...	...	...	...	...	1	3	4	2	3	1	2	1	...	...	...
					F	8	...	...	...	...	...	...	...	...	...	...	...	1	3	...	1	2	...	1	...	...	...	...
125a	Acute yellow atrophy of the liver (non-puerperal)	5	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
			C	2	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
125b	Other diseases of the liver	7	W	5	M	5	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	...	1	...	...	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
126	Biliary calculi	15	W	15	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	1	1	...
					F	9	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	3	2	...	...	1	...
127a	Cholecystitis (without mention of biliary calculus)	12	W	12	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	1
					F	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1	2	...	2
127b	Other diseases of the gallbladder and biliary ducts	10	W	9	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
					F	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	1	1
			C	1	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
128	Diseases of the pancreas (except diabetes mellitus)	9	W	7	M	6	...	2	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
			C	2	F	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
129	Peritonitis (cause not stated)	5	W	4	M	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																				
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X	Diseases of the genito-urinary system	869	W	536	M	275	...	...	...	...	...	1	1	2	3	1	4	7	9	9	9	22	30	38	39	43	31	26
					F	261	1	...	...	...	...	...	...	...	2	5	4	4	6	10	15	14	22	29	46	47	27	29
			C	333	M	155	...	...	...	...	...	1	...	4	1	3	3	8	6	8	22	16	18	22	19	15	5	4
					F	178	...	...	...	...	...	1	...	1	...	6	6	11	12	7	25	25	16	21	18	12	9	8
130–132	Nephritis, all forms	785	W	475	M	235	...	...	...	...	...	1	1	2	3	1	4	5	9	7	9	22	27	30	33	34	28	19
					F	240	1	...	...	...	...	...	...	...	1	4	3	2	5	8	14	13	21	26	42	45	27	28
			C	310	M	142	...	...	...	...	...	1	...	3	1	2	3	7	6	8	21	16	14	21	18	12	5	4
					F	168	...	...	...	...	...	1	...	1	...	4	5	10	9	6	25	24	16	21	17	12	9	8
130	Acute nephritis	14	W	8	M	5	...	...	...	...	...	1	1	...	2	...	...	...	...	1	...	...	...	...	...	...	...	....
					F	3	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	....
			C	6	M	4	...	...	...	...	...	1	...	1	...	...	1	...	...	...	1	...	...	...	...	...	...	....
					F	2	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	....
131a	Arteriosclerotic kidney	643	W	391	M	194	...	...	...	...	...	...	...	...	1	...	2	1	7	4	7	18	23	27	26	33	28	17
					F	197	...	...	...	...	...	...	...	...	...	...	2	1	4	2	9	9	19	19	38	41	27	26
			C	252	M	114	...	...	...	...	...	...	...	1	...	...	1	3	5	4	16	15	14	21	15	11	5	3
					F	138	...	...	...	...	...	...	...	...	...	1	2	6	5	6	19	23	16	20	14	11	8	7
131b	Other chronic nephritis	22	W	71	M	33	...	...	...	...	...	...	...	2	...	1	2	3	2	2	1	4	4	3	6	1	....	2
					F	38	...	...	...	...	...	...	...	...	1	3	1	1	1	5	5	3	2	7	3	4	....	2
			C	51	M	23	...	...	...	...	...	...	...	1	1	2	1	4	1	4	3	1	...	...	3	1	....	1
					F	28	...	...	...	...	...	1	...	...	...	3	3	3	4	...	6	1	...	1	3	1	1	1
132	Nephritis, unspecified (10 years of age and over)	6	W	5	M	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	....
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	....
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	....
133a	Pyelitis, pyelonephritis and pyelocystitis	16	W	12	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	....	1
					F	8	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	2	...	2	....	1
			C	4	F	4	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	...	...	...	....
133b	*Other diseases of the kidneys and ureters*	8	W	6	M	3	...	...	...	...	...	...	...	...	1	...	1	...	1	1	...	...	1	...	...	...	...	....
					F	3																						

133b	*Other diseases of the kidneys and ureters*	*8*	*W*	*6*	*M*	*3*	...	...	...	...	...	...	...	...	...	...	...	*1*	...	*1*	...	...	*1*	...	...	...	...	...
					F	*3*	...	...	...	...	...	...	...	...	*1*	*1*	...	...	...	*1*	...	...	...	...	...	...	...	...
			C	2	M	2	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...
134a	Calculi of the kidneys and ureters	8	W	5	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
					F	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	3	...	...	...
			C	3	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
134b	Calculi of the bladder	1	C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
135a	Cystitis	3	W	2	M	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
135b	Other diseases of the urinary bladder	2	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
136a	Stricture of the urethra	4	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
			C	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
137a	Hypertrophy of the prostate	33	W	27	M	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4	4	9	3	5
			C	6	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	2	...	...
137b	Other diseases of the prostate	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
139a	Diseases of the ovaries, fallopian tubes, and parametria	6	W	3	F	3	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...
			C	3	F	3	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...	...	...	...	...	...
139b	Diseases of the uterus	2	W	2	F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
XI	Diseases of pregnancy, childbirth and the puerperium	24	W	14	F	14	...	...	...	...	...	...	...	1	3	5	2	3	...	...	...	...	...	...	...	...	...	...
			C	10	F	10	...	...	...	...	...	...	...	...	2	3	2	3	...	...	...	...	...	...	...	...	...	...
140b	Abortion, spontaneous, therapeutic or unspecified, with mention of septicemia (except pyelitis)	1	C	1	F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
140c	Abortion, self-induced, with mention of infection	2	W	1	F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
141f	Abortion (induced for nontherapeutic reasons by persons other than the woman herself)	1	W	1	F	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																								
		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 Years and Over
142b	Ectopic gestation (without mention of infection)	1	W	1	F	1												1												
144a	Eclampsia of pregnancy	2	W	1	F	1								1																
			C	1	F	1									1															
144c	Acute yellow atrophy of liver (during pregnancy)	1	C	1	F	1												1												
144d	Other toxemias of pregnancy	1	W	1	F	1										1														
146a	Placenta praevia (with childbirth)	1	W	1	F	1										1														
146b	Premature separation of placenta (with childbirth)	1	W	1	F	1									1															
146c	Other and unspecified hemorrhages of childbirth and the puerperium	1	C	1	F	1											1													
147b	General or local puerperal infection (except pyelitis)	3	W	3	F	3									1	1	1													
147d	Puerperal embolism and sudden death	2	W	1	F	1										1														
			C	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	1	F	1												1												
			C	2	F	2										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	W	1	F	1											1													

XII	Diseases of the skin and cellular tissue	15	W	9	M	4	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...
					F	5	1	...	...	...	...	...	...	...	...	1	...	...	1	2	...	...	...	...	...	...	...	...
			C	6	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
					F	4	...	...	...	...	...	...	1	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...
152	Phlegmon and acute abscess	3	W	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
153	Other diseases of the skin and cellular tissue	12	W	7	M	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	1	...	...	1	2	...	...	...	...	...	...	...	...
			C	5	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
					F	4	...	...	...	...	...	...	1	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...
XIII	Diseases of the bones and organs of movement	10	W	6	M	3	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
			C	4	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
					F	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
154b	Chronic or unspecified osteomyelitis and periostitis	2	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
155	Other diseases of the bones (except tuberculosis)	4	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
156a	Diseases of the joints (except tuberculosis and rheumatism)	1	C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
156b	Diseases of other and unspecified organs of movement	3	W	2	M	2	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XIV	Congenital malformations	107	W	85	M	52	41	4	...	...	...	2	1	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...
					F	33	26	1	...	...	1	2	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...
			C	22	M	16	11	1	2	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	6	3	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

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157a	Congenital hydrocephalus	20	W	16	M	10	7	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	6	5	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	4	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
157b	Spina bifida and meningocele	3	W	3	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
157d	Other congenital malformations of the central nervous system	2	W	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
157e	Congenital malformations of the heart	54	W	42	M	26	20	1	...	...	...	2	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...
					F	16	11	...	...	...	...	2	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...
			C	12	M	11	8	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
157f	Other congenital malformations of the cardiovascular system	1	W	1	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
157g	Congenital malformations of the digestive system	18	W	13	M	10	9	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	5	M	3	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
157h	Congenital malformations of the genito-urinary system	2	W	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
157m	Other and unspecified congenital malformations	7	W	7	M	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	4	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XV	Diseases peculiar to the first year of life	398	W	237	M	150	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	87	87	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	161	M	97	97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	64	64	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

158	Congenital debility (cause not stated)	10	W	5	M	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	5	M	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
159	Premature birth (cause not stated)	253	W	148	M	92	92	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	56	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	105	M	62	62	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	43	43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
160a	Intracranial or spinal hemorrhage (birth injury)	50	W	32	M	21	21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	11	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	18	M	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
160c	Other injuries at birth	20	W	15	M	8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	5	M	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161a	Asphyxia (cause not specified), atelectasis	45	W	28	M	18	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	17	M	12	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161b	Infection of the umbilicus; pemphigus and other infections (nonsyphilitic)	2	W	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161c	Other specified diseases peculiar to the first year of life	18	W	7	M	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	11	M	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XVI	Senility	15	W	14	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	1
					F	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	3
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
162b	Senility, without mention of senile dementia	15	W	14	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	1
					F	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	3
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
XVII	Violent or accidental deaths	795	W	543	M	347	5	1	...	1	2	3	7	13	26	24	23	29	25	23	32	24	29	31	11	19	10	9
					F	196	7	1	1	2	...	4	2	4	10	6	4	8	6	11	8	9	9	13	20	23	22	26
			C	252	M	192	8	2	1	2	4	3	6	9	14	17	24	26	20	20	20	5	2	1	7	1	...	...
					F	60	6	2	2	2	...	4	...	2	7	4	8	5	3	1	2	3	3	...	2	1	2	1

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

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163-164	Suicide	152	W	138	M	98								3	6	6	7	8	11	11	9	7	8	14	2	5	1	
					F	40								1	3	5	1	7	2	9	5	1	2		3	1		
			C	14	M	13											1	4	2	3	2				1			
					F	1								1														
163b	Suicide by barbituric acid and derivatives	10	W	10	M	6									2				3		1							
					F	4												2		1	1							
163h	Suicide by illuminating gas	55	W	51	M	26								1		2	2	2	2		5	2	4	4		2		
					F	25								1	2	2	1	3	1	7	3	1	2		1	1		
			C	4	M	4											1	1		1	1							
163m	Suicide by motor-vehicle exhaust gas	2	W	2	M	1									1													
					F	1														1								
164a	Suicide by hanging or strangulation	27	W	24	M	20										1			1	5		3	1	5	1	2	1	
					F	4									1	1		1	1									
			C	3	M	3												2		1								
164b	Suicide by drowning	5	W	4	M	4													1	1	1			1				
			C	1	F	1								1														
164c	Suicide by firearms and explosives	31	W	29	M	28								2	3	3	3	5	4	1	2	1	1	3				
					F	1												1										
			C	2	M	2												1	1									
164d	Suicide by cutting or piercing instruments	3	W	2	M	1																1						
					F	1															1							
			C	1	M	1														1								
164e	Suicide by jumping from high places	18	W	15	M	11											2		1	3			2	1	1	1		
					F	4										2					2							
			C	3	M	3													1		1				1			

164g	Suicide by other or unspecified means	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
165–168	Homicide	112	W	25	M	20	...	...	...	...	...	...	...	...	...	3	4	5	1	2	2	...	2	1	...	...	...	...
					F	5	1	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	87	M	68	...	...	...	...	...	...	2	3	10	11	11	14	7	6	3	1	...	...	...	...	...	...
					F	19	...	...	...	...	...	...	...	...	6	2	7	1	1	...	...	...	2	...	...	...	...	...
166	Homicide by firearms	49	W	8	M	7	...	...	...	...	...	...	...	...	...	3	2	1	...	1	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	41	M	33	...	...	...	...	...	...	1	...	6	7	6	5	2	2	3	1	...	...	...	...	...	...
					F	8	...	...	...	...	...	...	...	...	3	...	5	...	...	...	...	...	...	...	...	...	...	...
167	Homicide by cutting or piercing instruments	40	W	5	M	3	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...	...	...
					F	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	35	M	28	...	...	...	...	...	...	1	2	3	3	5	7	3	4	...	...	...	...	...	...	...	...
					F	7	...	...	...	...	...	...	...	...	3	...	1	1	1	...	...	...	1	...	...	...	...	...
168	Homicide by other means	23	W	12	M	10	...	...	...	...	...	...	...	...	...	...	...	4	1	1	2	...	1	1	...	...	...	...
					F	2	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	11	M	7	...	...	...	...	...	...	...	1	1	1	...	2	2	...	...	...	...	...	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	1	...	...	...	...	...
169–195	Accidental deaths	530	W	380	M	229	5	1	...	1	2	3	7	10	20	15	12	16	13	10	21	17	19	16	9	14	9	9
					F	151	6	1	1	2	...	4	1	2	5	1	3	1	4	2	3	8	7	13	17	22	22	26
			C	150	M	110	8	2	1	2	4	3	4	6	3	6	12	8	11	11	15	4	2	1	6	1	...	...
					F	40	6	2	2	2	...	4	...	1	1	2	1	4	2	1	2	3	1	...	2	1	2	1
169	Railway accidents (except collisions with motor vehicles)	6	W	5	M	5	...	...	...	...	...	...	...	...	...	1	1	1	...	1	1	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
170a	Collisions between automobiles and trains	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
170c	Automobile accidents (except collisions with trains or streetcars)	127	W	94	M	64	...	...	...	1	1	...	1	4	12	6	5	2	7	1	3	6	4	6	2	1	2	...
					F	30	...	...	1	1	...	3	...	2	5	1	1	...	1	1	1	1	2	4	3	1	2	...
			C	33	M	26	...	...	...	1	2	...	2	...	1	3	2	3	1	3	2	2	1	1	1	1	...	...
					F	7	...	...	...	1	...	...	...	1	1	1	...	1	1	1	...	...	...	...	...	...	...	...
170d	Motorcycle accidents (except collisions with automobiles)	3	W	2	M	2	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...
					F																							
			C	1	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F																							
171a	Streetcar accidents (except collisions with trains or motor vehicles)	7	W	7	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...
					F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	...	...	...	...	...

TABLE NO. 8—Continued
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																					
		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 Years and Over
172	Water-transport accidents	13	W	13	M	12								1		1		3	1	1	4		1					
					F	1							1															
173	Air-transport accidents	3	W	3	M	3									2			1										
175c	Other agricultural accidents	1	C	1	M	1															1							
176	Other accidents involving machinery	3	C	3	M	3											1		1		1							
178a	Accidental absorption of illuminating gas	9	W	8	M	6												2			1	1	1	1				
					F	2													1						1			
			C	1	M	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												
179x	Acute accidental poisoning by other and unspecified substances	4	W	2	M	2	1										1											
			C	2	M	1		1																				
					F	1		1																				
180	Conflagration	35	W	9	M	7	1					1	1									2						
					F	2													2									
			C	26	M	14	1	1		1	1	1			1	2		2	1	1	1	1						
					F	12	1		2			2					1	1	1		2	1				1		
181	Accidental burns (except conflagration)	25	W	11	M	5									2		1	1				1						
					F	6						1										3		1		1		
			C	14	M	7					1						1	1		3	1							
					F	7				1		2						2					1				1	

182a	Accidental mechanical suffocation (in bed)	13	W	6	M	3	3																										
					F	3	3																										
			C	7	M	5	5																										
					F	2	2																										
182b	All other accidental mechanical suffocation	2	W	1	F	1				1																							
			C	1	M	1	1																										
183	Accidental drowning	48	W	19	M	19						1	3	3	1		1	1	2	1	2	2	2										
			C	29	M	28						1	2	6	1		5	1	3	2	5		1		1								
					F	1																			1								
184	Accidental injury by firearms	6	W	5	M	5								1	1		1			1	1												
			C	1	M	1			1																								
185	Accidental injury by cutting or piercing instruments	2	C	2	M	2												1	1														
186a	Accidental injury by fall	181	W	165	M	70		1			1	1	2	1		3		3	1	2	6	5	5	5	5	13	7	9					
					F	95											2	1			1	2	3	7	13	20	20	26					
			C	16	M	11						1					2		1	2	1				4								
					F	5																2			1		1	1					
186b	Accidental injury by crushing	4	W	3	M	3														1	1	1											
			C	1	M	1												1															
188	Injury by animals (not specified as venomous or occurring in the course of agricultural and forestry operations)	1	W	1	M	1																1											
190	Excessive cold	2	C	2	M	2												1			1												
191	Excessive heat	6	W	4	M	3																	1	2									
					F	1														1													
			C	2	M	1															1												
					F	1	1																										
193	Accidents due to electric currents (except lightning)	6	W	6	M	5									1		1	1			1		1										
					F	1																	1										
195b	Accidents due to medical or surgical intervention except preventive immunization, inoculation, or vaccination	1	W	1	M	1										1																	
195c	Lack of care of the new-born	1	W	1	F	1	1																										

TABLE NO. 8—Concluded
RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE—1948

International List No.	Cause of Death	Totals					Age Groups																						
		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 Years and Over
195d	Obstruction, suffocation or puncture by ingested objects	8	W	3	F	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	5	M	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
					F	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
195e	Other and unspecified accidents	7	W	6	M	5	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	1	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
198	Legal execution	1	C	1	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
XVIII	Ill-defined and unknown causes	11	W	9	M	5	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	1	...	1
					F	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...
			C	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
200a	Ill-defined cause	5	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
					F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
			C	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
200b	Found dead (cause unknown)	4	W	4	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
					F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
200c	Unknown or unspecified cause	2	W	2	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTE—Deaths by color, include the following non-Negro race:
Tuberculosis of the respiratory system—1 male Chinese, 17 years of age; 1 male Chinese, 50 years of age; 1 female Chinese, 53 years of age; 1 female Japanese, 30 years of age.
Influenza without respiratory complications specified—1 male Chinese, 79 years of age.
Cancer of nasal cavity and accessory sinuses—1 male Chinese, 79 years of age.
Nonmalignant tumors of other and unspecified organs—1 male Chinese, 7 years of age.
Diabetes mellitus—1 male Chinese, 47 years of age.
Cerebral hemorrhage or effusion (excluding birth injuries)—1 male Chinese, 59 years of age.
Chronic myocarditis and myocardial degeneration, not specfied as rheumatic—1 male Hindu, 55 years of age; 1 male Chinese, 57 years of age.
Diseases of the coronary arteries—1 male Chinese, 65 years of age.
Lobar pneumonia—1 male Filipino, 54 years of age; 1 male Chinese, 66 years of age.
Arteriosclerotic kidney—1 male Chinese, 40 years of age.
Suicide by jumping from high places—1 male West Indian, 73 years of age.

TABLE NO. 9

RECORDED AND RESIDENT DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN CAUSES AND GROUPS OF CAUSES, CLASSIFIED BY COLOR—1948

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	11,509	8,815	2,694	12.0	11.6	13.4	11,097	8,201	2,866	11.6	10.8	14.4
Typhoid fever (1)	4	3	1	0.4	0.4	0.5	1	1	..	0.1	0.1	..
Scarlet fever (8)	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough (9)	1	1	..	0.1	0.1	..	..	..	..	..	..	..
Diphtheria (10)	2	2	..	0.2	0.3	..	2	2	..	0.2	0.3	..
Erysipelas (11)	..	..	..	..	..	..	..	..	..	..	..	..
Tetanus (12)	3	1	2	0.3	0.1	1.0	3	1	2	0.3	0.1	1.0
Tuberculosis, all forms (13–22)	371	177	194	38.7	23.4	96.5	657	297	360	68.6	39.2	179.1
Pulmonary tuberculosis (13)	*341*	*163*	*178*	*35.6*	*21.5*	*88.5*	*633*	*287*	*346*	*66.1*	*37.9*	*172.1*
Gonococcus infection (25)	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery (27)	..	..	..	..	..	..	..	..	..	..	..	..
Malaria (28)	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis (30)	135	62	73	14.1	8.2	36.3	182	72	110	19.0	9.5	54.7
Influenza (33)	20	8	12	2.1	1.1	6.0	19	7	12	2.0	0.9	6.0
Smallpox (34)	..	..	..	..	..	..	..	..	..	..	..	..
Measles (35)	3	3	..	0.3	0.4	..	2	2	..	0.2	0.3	..
Typhus fever (39a, b)	..	..	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever (39c)	7	6	1	0.7	0.8	0.5	1	1	..	0.1	0.1	..
Other infectious diseases	52	40	6	5.4	6.1	3.0	40	34	6	4.2	4.5	3.0
Meningococcus meningitis (6)	*4*	*3*	*1*	*0.4*	*0.4*	*0.5*	*2*	*1*	*1*	*0.2*	*0.1*	*0.5*
Acute poliomyelitis (36)	*2*	*1*	*1*	*0.2*	*0.1*	*0.5*	*2*	*1*	*1*	*0.2*	*0.1*	*0.5*
Epidemic encephalitis (37)	*1*	..	*1*	*0.1*	..	*0.5*	*1*	..	*1*	*0.1*	..	*0.5*
Cancer (45–55)	1,663	1,421	242	173.6	187.7	120.4	1,463	1,227	236	152.7	162.1	117.4
Non-malignant tumors (56, 57)	52	40	12	5.4	5.3	6.0	31	18	13	3.2	2.4	6.5
Acute rheumatic fever (58)	11	7	4	1.1	0.9	2.0	7	4	3	0.7	0.5	1.5
Chronic rheumatism, gout (59, 60)	10	8	2	1.0	1.1	1.0	9	7	2	0.9	0.9	1.0
Diabetes (61)	354	298	56	36.9	39.4	27.9	333	280	53	34.7	37.0	26.4
Alcoholism, acute and chronic (77)	35	20	15	3.7	2 6	7.5	35	19	16	3.7	2.5	8.0
Avitaminosis, other general diseases and chronic poisonings (62–76, 78, 79)	141	112	29	14.7	14.8	14.4	112	85	27	11.7	11.2	13.4
Simple meningitis and spinal cord diseases (81, 82)	43	35	8	4.5	4.6	4.0	30	22	8	3.1	2.9	4.0
Intracranial lesions of vascular origin (83)	724	541	183	75.6	71.5	91.0	731	536	195	76.3	70.8	97.0
Other diseases of the nervous system and sense organs (80, 84–89)	56	47	9	5.8	6.2	4.5	53	40	13	5.5	5.3	6.5

* Except that death rates for all causes are per 1,000 population and for puerperal causes are per 1,000 live births.

Arteriosclerotic kidney—1 male Chinese, 40 years of age.
Suicide by jumping from high places—1 male West Indian, 73 years of age.

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—1948

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)	4,075	3,340	735	425.4	441.2	365.7	4,033	3,286	747	421.0	434.1	371.6
Other diseases of the circulatory system (96-103)	206	180	26	21.5	23.8	12.9	214	174	40	22.3	23.0	19.9
Arteriosclerosis (97)	*144*	*132*	*12*	*15.0*	*17.4*	*6.0*	*162*	*137*	*25*	*16.9*	*18.1*	*12.4*
Bronchitis (106)	28	23	5	2.9	3.0	2.5	26	20	6	2.7	2.6	3.0
Pneumonia, all forms (107-109)	356	203	153	37.2	26.8	76.1	345	196	149	36.0	25.9	74.1
Bronchopneumonia (107)	*168*	*101*	*67*	*10.6*	*13.3*	*28.3*	*152*	*97*	*55*	*15.9*	*12.8*	*27.4*
Lobar pneumonia (108)	*182*	*90*	*92*	*19.0*	*11.9*	*45.8*	*179*	*88*	*91*	*18.7*	*11.6*	*45.3*
Other respiratory diseases (except tuberculosis) (104-105, 110-114)	110	78	32	11.5	10.3	15.9	103	74	29	10.7	9.8	14.4
Diarrhea and enteritis (119,120)	35	25	10	3.7	3.3	5.0	26	17	9	2.7	2.2	4.5
Diarrhea and enteritis under 2 years of age (119)	*21*	*14*	*7*	*2.2*	*1.8*	*3.5*	*14*	*9*	*5*	*1.5*	*1.2*	*2.5*
Appendicitis (121)	19	16	3	2.0	2.1	1.5	11	9	2	1.1	1.2	1.0
Hernia, intestinal obstruction (122)	75	58	17	7.8	7.7	8.5	66	51	15	6.9	6.7	7.5
Cirrhosis of the liver (124)	171	146	25	17.8	19.3	12.4	163	135	28	17.0	17.8	13.9
Other diseases of the liver and biliary passages (125-127)	61	56	5	6.4	7.4	2.5	49	44	5	5.1	5.8	2.5
Other digestive diseases (115-118, 123, 128, 129)	126	108	18	13.1	14.3	8.9	106	87	19	11.1	11.5	9.5
Nephritis, all forms (130-132)	799	493	306	83.4	65.1	152.2	785	475	310	81.9	62.7	154.2
Other diseases of the urinary and genital systems (133-139)	116	90	26	12.1	11.9	12.9	84	61	23	8.8	8.1	11.4
Puerperal causes (140-150)	27	17	10	0.9	0.8	1.4	24	14	10	1.1	0.9	1.5
Puerperal septicemia (140, 142a, 147)	*8*	*5*	*3*	*0.3*	*0.2*	*0.4*	*8*	*5*	*3*	*0.4*	*0.3*	*0.4*
Puerperal toxemias (141a, c, 144, 148)	*6*	*3*	*3*	*0.2*	*0.1*	*0.4*	*5*	*2*	*3*	*0.2*	*0.1*	*0.4*
Diseases of the skin and bones (151-156)	29	17	12	3.0	2.2	6.0	25	15	10	2.6	2.0	5.0
Congenital malformations (157)	208	180	28	22.7	23.8	13.9	107	85	22	11.2	11.2	10.9
Diseases of early infancy (158-161)	511	337	174	53.3	44.5	86.6	398	237	161	41.5	31.3	80.1
Senility (162)	14	13	1	1.5	1.7	0.5	15	14	1	1.6	1.8	0.5
Suicides (163, 164)	152	140	16	16.9	19.3	8.0	152	138	14	15.9	18.2	7.0
Homicides (165, 168)	116	26	90	12.1	3.4	44.8	112	25	87	11.7	3.3	43.3
Violent and accidental deaths (169-198)	568	417	151	59.3	55.1	75.1	531	380	151	55.4	50.2	75.1
Home accidents	*245*	*181*	*64*	*25.6*	*23.9*	*31.8*	*232*	*169*	*63*	*24.2*	*22.3*	*31.3*
Occupational accidents	*51*	*39*	*12*	*5.3*	*5.1*	*6.0*	*50*	*37*	*13*	*5.2*	*4.9*	*6.5*
Automobile accidents (170)	*148*	*113*	*35*	*15.4*	*14.9*	*17.4*	*131*	*97*	*34*	*13.7*	*13.8*	*16.9*
Other public accidents	*121*	*83*	*38*	*12.6*	*11.0*	*18.9*	*117*	*77*	*40*	*12.2*	*10.2*	*19.9*
Other Violent deaths (196-198)	*3*	*1*	*2*	*0.3*	*0.1*	*1.0*	*1*	..	*1*	*0.1*		*0.5*
Cause not known or ill-defined (199, 200)	10	8	2	1.0	1.1	1.0	11	9	2	1.1	1.2	1.0

* 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—1948

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*	8,815	2,692	7,433	2,532	1,013	135	369	27	629	329	139	35	8,201	2,896
	I—Infectious and Parasitic Diseases														
1	Typhoid fever	3	1	1	..	2	1	..	..	..	..	..	..	1	..
6	Meningococcus meningitis	3	1	1	1	2	..	..	..	..	..	..	..	1	1
9	Whooping cough	1	..	..	..	1	..	..	..	..	..	..	..	..	..
10	Diphtheria	2	..	2	..	..	..	..	..	..	..	..	..	2	..
12	Tetanus	1	2	1	2	..	..	..	..	..	..	..	..	1	2
13	Tuberculosis of the respiratory system	163	178	149	171	12	7	2	..	121	167	17	8	287	346
14	Tuberculosis of the meninges and central nervous system	5	8	2	5	2	2	1	1	..	..	..	..	2	5
16	Tuberculosis of the vertebral column	4	4	4	4	..	..	..	..	..	1	..	..	4	5
17	Tuberculosis of the bones and joints (except vertebral column)	1	..	1	..	..	..	..	..	..	1	..	..	1	1
19	Tuberculosis of the lymphatic system	..	2	..	2	..	..	..	..	..	..	..	..	..	2
20	Tuberculosis of the genito-urinary system	3	..	2	..	..	..	1	..	..	..	..	..	2	..
21a	Tuberculosis of the adrenal glands	1	..	1	..	..	..	..	..	..	..	..	..	1	..
21b	Tuberculosis of other organs	..	2	..	1	..	1	..	..	..	..	..	..	..	1
24a	Septicemia (nonpuerperal)	3	..	2	..	1	..	..	..	..	..	..	..	2	..
24b	Pyemia	1	..	1	..	..	..	..	..	..	..	..	..	1	..
30a	Locomotor ataxia (tabes dorsalis)	1	2	1	2	..	..	..	..	..	..	..	1	1	3
30b	General paralysis of the insane	1	..	1	..	..	..	..	..	7	30	1	1	9	31
30c	Other syphilis of the central nervous system	6	4	5	3	1	..	..	1	2	..	..	..	7	3
30d	Aneurysm of the aorta	38	44	30	41	7	1	1	2	3	2	1	1	34	44
30e	Other syphilis of the circulatory system	7	13	6	13	..	..	1	..	..	1	..	1	6	15
30f	Congenital syphilis	1	4	1	4	..	..	..	..	..	..	..	..	1	4
30g	Other and unspecified forms of syphilis	8	6	8	6	..	..	..	..	5	3	1	1	14	10
32a	Infectious hepatitis	1	1	1	1	..	..	..	..	..	..	..	..	1	1
32a	Weil's disease	1	..	1	..	..	..	..	..	..	..	..	..	1	..
33a	Influenza with respiratory complications specified	3	10	2	10	1	..	..	..	..	..	..	..	2	10
33b	Influenza without respiratory complications specified	5	2	4	2	1	..	..	..	..	..	1	..	5	2
35	Measles	3	..	2	..	1	..	..	..	..	..	..	..	2	..
36	Acute poliomyelitis and acute polioencephalitis	1	1	1	1	..	..	..	..	..	..	..	..	1	1
37b	Sequelae of encephalitis lethargica	2	..	1	..	1	..	..	..	..	..	..	..	1	..
37c	Encephalitis lethargica, unqualified	..	1	..	1	..	..	..	..	..	..	..	..	..	1
39c	Rocky Mountain spotted fever	6	1	1	..	4	1	1	..	..	..	..	..	1	..
41	Hydatid disease	1	..	1	..	..	..	..	..	..	..	..	..	1	..
42	Trichinosis	1	..	..	..	1	..	..	..	..	..	..	..	..	..
43	Mycoses	4	1	3	1	1	..	..	..	..	..	..	..	3	1
44a	Venereal diseases (except gonorrhea and syphilis)	..	1	..	1	..	..	..	..	..	..	..	..	..	1
44b	Lymphogranulomatosis (Hodgkin's disease)	28	..	21	..	4	..	3	..	1	..	..	..	22	..

*There were no deaths from causes not listed in this table.

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE
BALTIMORE—1948

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														
	Cancer of the buccal cavity and pharynx														
45a	Lip	4	..	3	..	..	..	1	..	..	..	..	..	3	..
45b	Tongue	8	2	6	2	..	..	2	..	1	..	..	..	7	2
45c	Mouth	3	1	2	1	1	..	..	..	..	..	..	..	2	1
45d	Jaw bone	2	2	2	2	..	..	..	..	..	..	..	..	2	2
45f	Pharynx	18	3	10	2	7	..	1	1	1	..	..	..	11	2
	Cancer of the digestive organs and peritoneum														
46a	Esophagus	26	7	22	5	2	..	2	2	2	1	1	..	25	6
46b	Stomach	130	37	108	32	9	5	13	..	7	2	3	..	118	34
46d	Rectum and anus	83	10	69	9	11	1	3	..	7	2	..	..	76	11
46e	Intestines (except duodenum and rectum)	181	16	147	16	28	..	6	..	6	1	1	..	154	17
46f	Liver and biliary passages	61	10	54	9	6	1	1	..	2	1	1	..	57	10
46g	Pancreas	55	8	47	8	6	..	2	..	2	..	..	1	49	9
46h	Mesentery and peritoneum	13	2	9	..	3	1	1	1	1	1	..	..	10	1
46m	Other and unspecified sites	7	2	7	2	..	..	..	..	1	..	..	..	8	2
	Cancer of the respiratory system														
47a	Larynx	20	1	18	1	2	..	..	..	1	1	..	..	19	2
47c	Bronchus	56	7	43	7	9	..	4	..	2	1	..	..	45	8
47d	Lung	105	18	84	14	8	3	13	1	3	1	2	1	89	16
47e	Pleura	1	..	1	..	..	..	..	..	1	..	..	..	2	..
47f	Mediastinum and unspecified sites	5	..	4	..	1	..	..	..	..	..	..	..	4	..
	Cancer of the uterus														
48a	Cervix	50	19	44	18	3	1	3	..	..	1	..	1	44	20
48b	Other and unspecified sites	54	20	46	20	7	..	1	..	4	..	..	..	50	20
	Cancer of other female genital organs														
49a	Ovary	50	6	42	6	5	..	3	..	2	1	1	..	45	7
49c	Vagina	1	..	..	..	1	..	..	..	..	..	..	..	..	..
49d	Vulva	7	..	6	..	1	..	..	..	..	..	..	..	6	..
50	Cancer of the breast	144	22	130	20	9	2	5	..	3	..	1	..	134	20
	Cancer of male genital organs														
51b	Prostate	76	13	63	12	8	1	5	..	6	1	1	1	70	14
51c	Testes	2	..	1	..	1	..	..	..	..	..	..	..	1	..
51d	Penis	1	6	..	6	..	..	1	..	..	1	..	..	..	7
	Cancer of the urinary organs (male and female)														
52a	Kidney	36	3	25	3	7	..	4	..	1	1	..	..	26	4
52b	Bladder	57	6	41	2	10	3	6	1	3	..	1	..	45	2
52c	Other and unspecified sites	1	..	1	..	..	..	..	..	..	..	..	..	1	..
53	Cancer of the skin (except vulva and scrotum)	17	1	12	1	2	..	3	..	1	..	1	..	14	1
54a	Glioma	23	..	13	..	4	..	6	..	..	..	..	..	13	..
54b	Other and unspecified cancers of the brain and central nervous system	25	6	15	5	9	1	1	..	3	..	1	..	19	5

	Cancer of the other and unspecified organs															
55a	Adrenal glands	1	..	..	..	1	..	..	..	2	..	..	..	2	..	
55b	Bone (except jaw bone and accessory sinuses)	14	3	11	2	3	..	..	1	1	..	..	..	12	2	
55c	Thyroid gland	7	..	3	..	4	..	..	..	..	..	2	..	5	..	
55d	Nasal cavity and accessory sinuses	5	2	3	2	1	..	1	..	..	..	..	..	3	2	
55e	Other and unspecified organs	72	9	53	8	12	1	7	..	2	1	1	..	56	9	
	Nonmalignant tumors															
56a	Ovary	2	..	1	..	..	..	1	..	..	..	..	..	1	..	
56b	Uterus	3	5	1	5	2	..	..	..	..	..	..	..	1	5	
56c	Other female genital organs	..	1	..	1	..	..	..	..	..	..	..	..	..	1	
56d	Brain and other parts of the central nervous system	16	1	4	1	7	..	5	..	..	..	..	..	4	1	
56e	Other and unspecified organs	16	3	9	3	3	..	4	..	..	..	1	..	10	3	
	Tumors of unspecified nature															
57d	Brain and other parts of the central nervous system	3	..	2	..	1	..	..	..	..	..	..	..	2	..	
57e	Other and unspecified organs	..	2	..	2	..	..	..	..	..	1	..	..	..	3	
	III—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, Other General Diseases and Avitaminoses															
	Acute rheumatic fever															
58a	Acute rheumatic pericarditis	1	..	..	..	1	..	..	..	..	..	..	..	..	..	
58b	Acute rheumatic endocarditis	..	1	..	..	..	1	..	..	..	..	..	..	..	..	
58d	Other acute rheumatic heart diseases	5	1	2	1	2	..	1	..	1	..	..	..	3	1	
58e	Other forms of acute rheumatic fever	1	2	1	2	..	..	..	..	..	..	..	..	1	2	
	Chronic rheumatism and other rheumatic diseases															
59a	Rheumatoid arthritis	1	1	1	1	..	..	..	..	..	..	..	..	1	1	
59b	Other chronic articular rheumatism	7	1	6	1	1	..	..	..	..	..	..	..	6	1	
61	Diabetes mellitus	298	56	264	52	25	4	9	..	12	1	4	..	280	53	
	Diseases of the thyroid and parathyroid glands															
63b	Exophthalmic goiter	10	4	7	4	1	..	2	..	..	..	..	..	7	4	
63c	Myxedema and cretinism	2	..	1	..	1	..	..	..	1	..	..	..	2	..	
63d	Other diseases of the thyroid glands	2	..	1	..	..	..	1	..	..	..	..	..	1	..	
64	Diseases of the thymus glands	2	4	2	4	..	..	..	..	..	..	..	..	2	4	
65a	Addison's disease (not specified as tuberculous)	1	..	1	..	..	..	..	..	..	..	..	..	1	..	
65b	Other diseases of the adrenal glands	3	1	3	1	..	..	..	..	..	..	..	..	3	1	
66b	Other general diseases	5	..	5	..	..	..	..	..	..	..	..	..	5	..	
69	Pellagra (except alcoholic)	1	1	1	1	..	..	..	..	..	..	..	..	1	1	
71	Other avitaminoses	1	..	..	..	1	..	..	..	..	..	..	..	..	..	
	IV—Diseases of the Blood and Blood-Forming Organs															
72b	Hemophilia	1	..	1	..	..	..	..	..	..	..	..	..	1	..	
	Anemias (except splenic anemia)															
73a	Pernicious anemia	7	1	7	1	..	..	..	..	..	..	..	..	7	1	
73d	Other and unspecified anemias	5	2	5	2	..	..	..	..	..	..	..	..	5	2	
74a	Leukemias	64	8	43	7	14	1	7	..	..	..	..	1	43	8	
74b	Aleukemias	3	..	3	..	..	..	..	..	..	..	..	..	3	..	
75a	Splenic anemia	..	1	..	1	..	..	..	..	..	..	..	..	..	1	
75b	Splenomegaly (undetermined nature)	2	1	2	1	..	..	..	..	..	..	..	..	2	1	
75c	Other diseases of the spleen	1	2	1	1	..	1	..	..	..	..	..	..	1	1	
76d	Other diseases of the blood and blood-forming organs	..	1	..	..	..	1	..	..	..	..	..	..	..	..	
	V—Chronic Poisoning and Intoxication															
77c	Acute alcoholism	14	13	13	13	..	..	1	..	1	..	..	1	14	14	
77d	Chronic alcoholism	5	2	4	2	1	..	..	..	..	..	..	..	4	2	
77e	Other and unspecified alcoholism	1	..	1	..	..	..	..	..	..	..	..	..	1	..	
78a	Lead poisoning specified as occupational	1	..	..	..	1	..	..	..	..	..	..	..	..	..	
78b	Lead poisoning not specified as occupational	1	3	1	3	..	..	..	..	..	..	..	..	1	3	

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE
BALTIMORE—1948

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														
	Encephalitis (non-epidemic)														
80a	Intracranial abscess	1	1	1	1	..	..	..	..	..	..	..	..	1	1
80b	Other encephalitis, nonepidemic	2	..	1	..	1	..	..	..	2	..	..	..	3	..
	Meningitis (not due to meningococcus)														
81a	Simple meningitis	15	5	9	4	5	1	1	..	..	1	..	..	9	5
81b	Acute cerebrospinal meningitis	1	..	1	..	..	..	..	..	..	..	..	..	1	..
82	Diseases of the spinal cord (except locomotor ataxia and disseminated sclerosis)	19	3	12	3	5	..	2	..	..	..	..	..	12	3
83a	Cerebral hemorrhage or effusion (excluding birth injury)	445	169	400	167	39	1	6	1	40	7	8	2	448	176
83b	Cerebral embolism and thrombosis	78	9	65	9	9	..	4	..	4	2	1	2	70	13
83c	Cerebral softening	2	1	1	1	1	..	..	..	..	..	..	..	1	1
83d	Hemiplegia and other paralysis of unspecified origin	16	4	16	4	..	..	..	..	1	1	..	..	17	5
84a	Mental deficiency	3	..	2	..	1	..	..	..	..	1	..	..	2	1
84b	Schizophrenia (dementia praecox)	2	..	1	..	..	..	1	..	..	2	..	..	1	2
84d	Other mental diseases (except general paralysis of the insane)	1	..	..	..	1	..	..	..	..	1	1	..	1	1
85	Epilepsy	7	3	5	3	2	..	..	..	3	..	..	..	8	3
87c	Paralysis agitans (except result of encephalitis)	5	1	4	..	1	1	..	..	..	..	..	..	4	..
87d	Disseminated sclerosis	11	1	10	1	1	..	..	..	1	1	..	..	11	2
87e	Other diseases of the nervous system	10	3	6	1	3	2	1	..	..	2	..	..	6	3
88	Diseases of the organs of vision	2	..	1	..	..	..	1	..	..	..	..	..	1	..
89a	Otitis and other diseases of the ear	3	..	2	..	1	..	..	..	..	..	..	..	2	..
	VII—Diseases of the Circulatory System														
90b	Pericarditis, except acute and chronic rheumatic pericarditis	2	4	1	3	1	..	..	1	..	..	..	..	1	3
	Acute endocarditis (except rheumatic)														
91a	Bacterial endocarditis	4	5	4	5	..	..	..	..	..	..	..	..	4	5
91b	Other acute or subacute endocarditis	..	2	..	2	..	..	..	..	..	..	..	..	..	2
	Chronic affections of the valves and endocardium														
92a	Diseases of the aortic valve	20	12	17	12	1	..	2	..	1	1	..	..	18	13
92b	Diseases of the mitral valve	81	20	70	20	10	..	1	..	7	3	3	..	80	23
92c	Diseases of other and unspecified valves and chronic endocarditis specified as rheumatic	8	3	6	3	2	..	..	..	..	..	..	..	6	3
92d	Diseases of other and unspecified valves and chronic endocarditis not specified as rheumatic	36	17	34	17	1	..	1	..	1	..	..	..	35	17
92e	Endocarditis (not specified as acute, chronic or rheumatic, 45 years of age and over)	9	4	9	4	..	..	..	..	..	..	..	..	9	4

	Diseases of the myocardium														
93a	Acute myocarditis (except rheumatic)	4	2	4	2	..	..	..	..	..	..	..	..	4	2
93b	Myocarditis (not specified as acute, chronic, or rheumatic, under 45 years of age)	1	1	..	1	..	..	1	..	..	..	..	..	..	1
93c	Chronic myocarditis (rheumatic)	36	9	35	8	1	1	..	..	1	..	..	..	36	8
93d	Chronic myocarditis (non-rheumatic)	2,044	494	1,885	479	140	13	19	2	117	15	14	1	2,016	495
93e	Other myocarditis	49	40	48	39	..	1	1	..	1	..	1	1	50	40
94a	Diseases of the coronary arteries	904	89	809	86	72	3	23	..	58	7	25	1	892	94
94b	Angina pectoris	10	..	10	..	..	..	..	..	1	..	1	..	12	..
	Other diseases of the heart														
95a	Functional diseases of the heart	1	..	1	..	..	..	..	..	..	..	..	1	1	1
95b	Other diseases of the heart (rheumatic)	59	11	47	9	10	2	2	..	3	..	..	..	50	9
95c	Other diseases of the heart (non-rheumatic)	72	22	63	22	7	..	2	..	7	5	2	..	72	27
96	Aneurysm (except of the heart and aorta)	16	3	12	3	2	..	2	..	..	1	..	..	12	4
97	Arteriosclerosis	132	12	126	11	6	1	..	..	10	14	1	..	137	25
98	Gangrene	3	2	3	2	..	..	..	..	..	..	..	..	3	2
99	Other diseases of the arteries	7	1	5	1	1	..	1	..	..	..	..	..	5	1
100a	Varices	1	..	1	..	..	..	..	..	..	..	..	..	1	..
100b	Other diseases of the veins	8	2	5	2	1	..	2	..	..	..	..	..	5	2
101	Diseases of the lymphatic system	3	..	3	..	..	..	..	..	..	..	..	..	3	..
102	High blood pressure (idiopathic)	10	6	8	5	2	1	..	..	..	1	..	..	8	6
	VIII—DISEASES OF THE RESPIRATORY SYSTEM														
104a	Diseases of the nasal fossae	12	10	11	8	1	2	..	..	..	..	..	..	11	8
104b	Diseases of the accessory sinuses	3	1	3	1	..	..	..	..	..	..	..	..	3	1
	Bronchitis														
106a	Acute	6	3	5	3	1	..	..	..	..	..	..	..	5	3
106b	Chronic	17	..	13	..	3	..	1	..	2	..	..	..	15	..
106c	Unspecified	..	2	..	2	..	..	..	..	..	..	..	1	..	3
107	Bronchopneumonia	101	57	85	55	14	2	2	..	9	..	3	..	97	55
108	Lobar pneumonia	90	92	77	88	13	3	..	1	11	2	..	1	88	91
109	Pneumonia, unspecified	12	4	10	3	2	1	..	..	1	..	..	..	11	3
	Pleurisy (not specified as tuberculous)														
110a	Empyema	10	..	8	..	2	..	..	..	..	..	..	..	8	..
110b	Other and unspecified forms of pleurisy	10	4	9	3	1	1	..	..	..	..	..	..	9	3
111a	Hemorrhagic infarction and thrombosis of the lung	4	2	3	2	..	..	1	..	2	1	..	..	5	3
111b	Acute edema of the lung	12	1	11	1	..	..	1	..	..	..	..	..	11	1
111c	Chronic and unspecified congestion of the lung	5	2	5	2	..	..	..	..	1	..	..	..	6	2
112	Asthma	11	4	9	3	1	1	1	..	1	1	..	..	10	4
113	Pulmonary emphysema	4	..	4	..	..	..	..	..	..	1	1	..	5	1
114a	Silicosis	1	..	1	..	..	..	..	..	..	..	..	..	1	..
114c	Gangrene of lung	1	..	1	..	..	..	..	..	..	..	..	..	1	..
114d	Abscess of lung	4	4	3	2	1	2	..	..	..	..	..	..	3	2
114e	Other and unspecified diseases of the respiratory system	1	4	1	4	..	..	..	..	..	..	..	..	1	4
	IX—DISEASES OF THE DIGESTIVE SYSTEM														
115c	Diseases of the pharynx and tonsils	4	5	4	5	..	..	..	..	..	..	..	..	4	5
116	Diseases of the esophagus	2	1	2	1	..	..	..	..	..	..	..	..	2	1
117a	Ulcer of stomach	37	4	30	4	6	..	1	..	1	..	..	..	31	4
117b	Ulcer of duodenum	24	2	19	1	3	1	2	..	1	..	..	..	20	1
118	Other diseases of the stomach	3	1	2	1	1	..	..	..	..	..	1	..	3	1
119	Diarrhea and enteritis (under two years of age)	14	7	9	5	3	2	2	..	..	..	..	..	9	5

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE

BALTIMORE—1948

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.*														
120	Diarrhea and enteritis (two years of age and over)	11	3	8	3	3	..	..	..	..	1	..	..	8	4
121	Appendicitis	16	3	7	2	9	1	..	..	1	..	1	..	9	2
122a	Hernia	33	11	28	8	3	3	2	..	2	..	1	..	31	8
122b	Intestinal obstruction	25	6	17	6	4	..	4	..	3	1	..	..	20	7
123	Other diseases of the intestine	20	4	15	4	4	..	1	..	1	..	..	..	16	4
	Cirrhosis of the liver														
124a	With mention of alcoholism	38	3	32	3	3	..	3	..	4	..	..	..	36	3
124b	Without mention of alcoholism	108	22	84	22	17	..	7	..	13	3	2	..	99	25
125a	Acute yellow atrophy of the liver	6	2	3	2	2	..	1	..	..	..	..	..	3	2
125b	Other diseases of the liver	7	2	4	2	3	..	..	..	..	..	1	..	5	2
126	Biliary calculi	19	..	14	..	3	..	2	..	1	..	..	..	15	..
127a	Cholecystitis (without mention of biliary calculus)	12	..	12	..	..	..	..	..	..	..	..	..	12	..
127b	Other diseases of the gallbladder and biliary ducts	12	1	9	1	3	..	..	..	..	..	..	..	9	1
128	Diseases of the pancreas	16	1	7	1	3	..	6	..	..	1	..	..	7	2
129	Peritonitis (cause not stated)	2	..	2	..	..	..	..	..	2	1	..	..	4	1
	X—Diseases of the Genito-urinary System														
130	Acute nephritis	8	4	7	4	1	..	..	..	1	2	..	..	8	6
	Chronic nephritis														
131a	Arteriosclerotic kidney	398	251	365	246	29	3	4	2	25	5	1	1	391	252
131b	Other chronic nephritis	82	50	69	47	11	3	2	..	2	4	..	..	71	51
132	Nephritis, unspecified (10 years of age and over)	5	1	4	1	1	..	..	..	1	..	..	..	5	1
133a	Pyelitis, pyelonephritis and pyelocystitis	18	4	12	4	4	..	2	..	..	..	..	..	12	4
133b	Other diseases of the kidneys and ureters	11	2	6	2	1	..	4	..	..	..	..	..	6	2
134a	Calculi of the kidneys and ureters	12	4	5	3	4	..	3	1	..	..	..	..	5	3
134b	Calculi of the bladder	..	1	..	1	..	..	..	..	..	..	..	..	..	1
135a	Cystitis	3	2	2	1	1	1	..	..	..	..	..	..	2	1
135b	Other diseases of the bladder	2	1	1	1	1	..	..	..	..	..	..	..	1	1
136a	Stricture of the urethra	2	2	2	2	..	..	..	..	..	..	..	..	2	2
137a	Hypertrophy of the prostate	35	7	27	4	7	3	1	..	..	2	..	..	27	6
137b	Other diseases of the prostate	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	Diseases of the female genital organs														
139a	Ovaries, fallopian tubes and parametria	3	3	3	3	..	..	..	..	..	..	..	..	3	3
139b	Uterus	3	..	2	..	1	..	..	..	..	..	..	..	2	..
	XI—Diseases of Pregnancy, Childbirth and the Puerperium														
140b	Abortion (spontaneous, therapeutic or of unspecified origin) with mention of infection other than pyelitis	..	1	..	1	..	..	..	..	..	..	..	..	..	1
140c	Self-induced abortion with mention of infection	1	1	1	1	..	..	..	..	..	..	..	..	1	1

141f	Abortion (induced for nontherapeutic reasons by persons other than the woman herself	1	..	1	..	..	..	..	..	..	..	..	..	1	..
142b	Ectopic gestation without mention of infection	1	1	1	..	..	1	..	..	..	..	..	..	1	..
144a	Eclampsia of pregnancy	1	1	1	1	..	..	..	..	..	..	..	..	1	1
144b	Albuminuria and nephritis of pregnancy	1	..	..	..	1	..	..	..	..	..	..	..	..	..
144c	Acute yellow atrophy of liver (during pregnancy)	..	1	..	1	..	..	..	..	..	..	..	..	..	1
144d	Other toxemias of pregnancy	1	..	1	..	..	..	..	..	..	..	..	..	1	..
145	Other diseases and accidents of pregnancy (death before delivery)	1	..	..	..	1	..	..	..	..	..	..	..	..	..
146a	Placenta praevia (with childbirth)	1	..	1	..	..	..	..	..	..	..	..	..	1	..
146b	Premature separation of placenta (with childbirth)	1	..	1	..	..	..	..	..	..	..	..	..	1	..
146c	Other and unspecified hemorrhages of childbirth and the puerperium	..	1	..	1	..	..	..	..	..	..	..	..	..	1
	Infection during childbirth and the puerperium														
147b	General or local puerperal infection (except pyelitis)	3	..	3	..	..	..	..	..	..	..	..	..	3	..
147d	Puerperal embolism and sudden death	1	1	1	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	1	2	1	2	..	..	..	..	..	..	..	..	1	2
149b	Other specified conditions of childbirth	2	..	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	4	1	2	1	2	..	..	..	..	..	..	..	2	1
153	Other diseases of the skin and cellular tissue	8	6	6	5	1	1	1	..	1	..	..	..	7	5
	XIII—Diseases of the Bones and Organs of Movement														
154b	Osteomyelitis and periostitis, chronic or unspecified	2	1	1	1	1	..	..	..	..	..	..	..	1	1
155	Other diseases of the bones (except tuberculosis)	1	1	1	1	..	..	..	..	2	..	..	..	3	1
156a	Diseases of the joints (except tuberculosis and rheumatism)	..	1	..	1	..	..	..	..	..	..	..	..	..	1
156b	Diseases of other and unspecified organs of movement	2	2	2	1	..	1	..	..	..	..	..	..	2	1
	XIV—Congenital Malformations														
157a	Congenital hydrocephalus	22	4	15	4	6	..	1	..	1	..	..	..	16	4
157b	Spina bifida and meningocele	5	..	3	..	2	..	..	..	..	..	..	..	3	..
157d	Other congenital malformations of the central nervous system	2	3	1	1	..	2	1	..	..	..	..	..	1	1
157e	Congenital malformations of the heart	112	16	41	12	20	4	51	..	..	..	1	..	42	12
157f	Other congenital malformations of the cardiovascular system	1	..	1	..	..	..	..	..	..	..	..	..	1	..
157g	Congenital malformations of the digestive system	22	5	13	5	6	..	3	..	..	..	..	..	13	5
157h	Congenital malformations of the genito-urinary system	5	..	2	..	2	..	1	..	..	..	..	..	2	..
157m	Other and unspecified congenital malformations	11	..	7	..	3	..	1	..	..	..	..	..	7	..

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE

BALTIMORE—1948

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
	XV—Diseases Peculiar to the First Year of Life														
158	Congenital debility (cause not stated)	5	5	4	5	1	..	..	..	1	..	..	..	5	5
159	Premature birth (cause not stated)	199	115	146	104	50	11	3	..	2	1	..	..	148	105
160a	Injury at birth, intracranial or spinal hemorrhage	56	19	32	18	22	1	2	..	..	..	..	..	32	18
160c	Other injuries at birth	21	6	14	5	7	1	..	..	..	..	1	..	15	5
	Other diseases peculiar to the first year of life														
161a	Asphyxia (cause not specified), atelectasis	37	18	27	17	10	1	..	..	..	..	1	..	28	17
161b	Infection of the umbilicus; pemphigus and other infections (non-syphilitic)	4	..	2	..	2	..	..	..	..	..	..	..	2	..
161c	Other diseases peculiar to the first year of life	15	11	7	11	7	..	1	..	..	..	..	..	7	11
	XVI—Senility														
162b	Without mention of senile dementia	13	1	13	1	..	..	..	..	1	..	..	..	14	1
	XVII—Violent or Accidental Deaths														
	Suicide by														
163b	Barbituric acid and derivatives	9	..	8	..	1	..	..	..	1	..	1	..	10	..
163g	Other solid and liquid poisons	1	..	..	..	1	..	..	..	..	..	..	..	..	..
163h	Illuminating gas	54	4	51	4	3	..	..	..	..	..	..	..	51	4
163m	Motor-vehicle exhaust gas	3	..	2	..	..	..	1	..	..	..	..	..	2	..
164a	Hanging or strangulation	25	4	23	3	1	..	1	1	1	..	..	..	24	3
164b	Drowning	3	1	3	1	..	..	..	..	..	..	1	..	4	1
164c	Firearms and explosives	31	3	28	2	3	1	..	..	1	..	..	..	29	2
164d	Cutting or piercing instruments	3	1	2	1	1	..	..	..	..	..	..	..	2	1
164e	Jumping from high places	15	3	14	3	1	..	..	..	1	..	..	..	15	3
164f	Suicide by crushing	1	..	..	..	1	..	..	..	..	..	..	..	..	..
164g	Suicide by other or unspecified means	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	Homicide by														
166	Firearms	10	42	7	40	3	1	..	1	1	1	..	..	8	41
167	Cutting or piercing instruments	4	37	4	34	..	3	..	..	1	1	..	..	5	35
168	Other means	12	11	11	11	..	..	1	..	1	..	..	..	12	11
169	Railway accidents	5	1	5	1	..	..	..	..	..	..	..	..	5	1
	Motor vehicle accidents														
170a	Collisions between automobiles and trains	1	..	1	..	..	..	..	..	..	..	..	..	1	..
170c	Automobile accidents (except collisions with trains or streetcars)	108	35	69	27	30	7	9	1	11	4	14	2	94	33
170d	Motorcycle accidents (except collisions with automobiles)	4	..	2	..	2	..	..	..	..	1	..	..	2	1

171a	Streetcar accidents (except collisions with trains or motor vehicles)	8	..	7	..	1	..	..	..	..	..	12	..	1	..	7	..	13	..	..	..	..	..	..	..	..	..	..	..	..	..
172	Water-transport accidents	..	..	..	..	..	..	..	..	..	..	2	..	1	..	3	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..
173	Air-transport accidents	5	..	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
175c	Agricultural accidents (except by machinery, vehicle, or animal)	1	1	..	1	1	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..
176	Other accidents involving machinery	1	2	..	2	1	..	..	..	..	1	..	..	..	..	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..
	Accidental absorption of poisonous gas	9	1	8	1	..	..	1	..	..	..	..	..	..	..	8	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
178a	Illuminating gas	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..
178b	Motor-vehicle exhaust gas	3	1	2	1	..	..	1	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
178c	Other carbon monoxide gas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
178x	Other poisonous gas	2	2	2	2	..	..	..	..	..	..	2	2	..	..	9	26	8	25	7	24	1	1	..	..	..	..	..	..	..	..
179x	Acute accidental poisoning by solids or liquids other than listed	8	25	7	24	1	1	..	..	1	1	11	14	15	13	10	13	5	..	..	..	..	..	..	..	..	..	..	..	..	..
180	Conflagration	15	13	10	13	5	..	..	..	..	..	7	8	8	8	7	8	1	..	..	..	..	..	..	..	..	..	..	..	..	..
181	Accidental burns (except conflagration)	8	8	7	8	1	..	..	..	..	..	19	29	26	28	15	26	1	..	10	2	3	3	1	..	..	..	..	..	..	..
182	Accidental mechanical suffocation	8	1	4	1	4	..	..	..	1	..	5	1	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..
183	Accidental drowning	..	1	..	1	..	..	..	..	..	..	165	16	170	17	147	15	17	1	6	1	16	1	2	..	..	..	..	..	..	..
184	Accidental injury by firearm	4	2	3	1	1	1	..	..	..	..	3	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
185	Accidental injury by cutting or piercing instruments	1	..	1	..	..	..	..	..	..	..	1	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
186a	Accidental injury by fall	..	2	..	2	..	..	..	..	..	..	4	2	4	2	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
186b	Accidental injury by crushing	5	1	4	..	1	..	..	1	1	..	1	..	6	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
188	Injury by animals (not specified as venomous or occurring in the course of agricultural and forestry operations)	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
190	Excessive cold	1	..	1	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
191	Excessive heat	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
193	Accidents due to electric currents (except lightning)	4	2	4	2	..	..	..	..	..	..	4	2	4	2	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
195b	Other accidents due to medical or surgical intervention	5	1	4	..	1	..	..	1	1	..	1	..	6	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
195c	Lack of care of the newborn	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
195d	Obstruction, suffocation, or puncture by ingested objects	1	..	1	..	..	..	..	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
195e	Other and unspecified accidents	5	5	3	5	1	..	1	..	..	..	..	..	3	5	3	5	1	..	1	..	..	..	..	..	..	..	..	..	..	..
198	Legal executions	13	1	5	1	5	..	3	..	1	..	..	..	6	1	5	1	5	..	3	..	1	..	..	..	..	..	..	..	..	..
	XVIII—Ill-Defined Causes of Death	1	2	..	1	..	..	1	1	..	..	..	..	1	2	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..
200a	Ill-defined cause	2	2	1	2	1	..	..	..	1	..	1	..	2	2	1	2	1	..	..	..	1	..	1	..	3	2	3	2	1	..
200b	Found dead (cause unknown)	5	..	4	..	..	..	..	..	1	..	..	..	5	..	4	..	..	..	..	..	..	..	1	..	4	..	4	..	..	..
200c	Unknown or unspecified cause	1	..	1	..	..	..	..	..	..	..	2	..	1	..	1	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..

TABLE NO. 11

RESIDENT AND RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN IMPORTANT CAUSES FOR TOTAL, WHITE AND COLORED POPULATIONS—1938-1948

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																		
1948	1	1	..	0.1	0.1	..	2	2	..	0.2	0.3	..	..	..	..	..	..	..
1947	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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	..
Recorded																		
1948	4	3	1	0.4	0.4	0.5	3	3	..	0.3	0.4	..	..	..	..	..	..	..
1947	3	2	1	0.3	0.3	0.5	..	..	..	..	..	..	..	..	..	..	..	..
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	..

Year	Whooping Cough						Diphtheria						Influenza					
Resident																		
1948	..	..	..	..	..	..	2	2	..	0.2	0.3	..	19	7	12	2.0	0.9	6.0
1947	10	6	4	1.1	0.8	2.1	5	4	1	0.5	0.5	0.5	30	15	15	3.2	2.0	7.7
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	1.0	0.8	2.0	3	2	1	0.3	0.3	0.5	102	72	30	10.6	9.4	15.1
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
Recorded	1	1	..	0.1	0.1	..	2	2	..	0.2	0.3	..	20	8	12	2.1	1.1	.60
							6	5	1	0.6	0.7	0.5	31	15	16	3.3	2.0	8.2

RECORDED																		
1948	1	1	..	0.1	0.1	..	2	2	..	0.2	0.3	..	20	8	12	2.1	1.1	.60
1947	11	7	4	1.2	0.9	2.1	6	5	1	0.6	0.7	0.5	31	15	16	3.3	2.0	8.2
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	1.5	1.3	2.5	7	6	1	0.7	0.8	0.5	106	76	30	11.0	9.9	15.1
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
	TUBERCULOSIS, ALL FORMS						PULMONARY TUBERCULOSIS						CANCER					
RESIDENT																		
1948	657	297	360	68.6	39.2	179.1	633	287	346	66.1	37.9	172.1	1,463	1,227	236	152.7	162.1	117.4
1947	718	310	408	75.8	41.2	210.3	676	294	382	71.4	39.0	196.9	1,486	1,237	249	156.9	164.3	128.3
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	83.6	52.6	202.5	755	387	368	78.4	50.7	184.9	1,393	1,189	204	144.7	155.6	102.5
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
RECORDED																		
1948	371	177	194	38.7	23.4	96.5	341	163	178	35.6	21.5	88.5	1,663	1,421	242	173.6	187.7	120.4
1947	465	210	255	49.1	27.9	131.4	423	191	232	44.7	25.4	119.6	1,683	1,421	262	177.7	188.7	135.1
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	54.7	36.5	124.6	474	257	217	49.2	33.6	109.0	1,586	1,378	208	164.7	180.4	104.5
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
	HEART DISEASE						BRONCHOPNEUMONIA						LOBAR PNEUMONIA					
RESIDENT																		
1948	4,033	3,286	747	421.0	434.1	371.6	152	97	55	15.9	12.8	27.4	179	88	91	18.7	11.6	45.3
1947	3,744	3,103	641	395.3	412.1	330.4	195	133	62	20.6	17.7	31.9	157	81	76	16.6	10.7	39.2
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	411.6	425.5	358.3	357	231	126	37.1	30.2	63.3	455	244	211	47.2	31.9	106.0
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

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—1938-1948

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																		
1948	4,075	3,340	735	425.4	441.2	365.7	158	101	57	16.5	13.3	28.3	182	90	92	19.0	11.9	45.8
1947	3,805	3,171	634	401.8	421.1	326.8	196	132	64	20.7	17.5	33.0	166	87	79	17.5	11.5	40.7
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	410.5	428.3	342.2	384	255	129	39.9	33.4	64.8	482	274	208	50.1	35.9	104.5
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
	Diarrhea and Enteritis Under Two Years						Chronic Nephritis						Premature Birth					
Resident																		
1948	14	9	5	1.5	1.2	2.5	765	462	303	79.9	61.0	150.7	253	148	105	26.4	19.5	52.2
1947	40	28	12	4.2	3.7	6.2	790	524	266	83.4	69.6	137.1	258	168	90	27.2	22.3	46.4
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	16.8	13.6	29.1	1,023	697	326	106.2	91.2	163.8	251	168	83	26.1	22.0	41.7
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
Recorded																		
1948	21	14	7	2.2	1.8	3.5	781	480	301	81.5	63.4	149.7	314	199	115	32.8	26.3	57.2
1947	54	41	13	5.7	5.4	6.7	778	517	261	82.1	68.7	134.5	329	226	103	34.7	30.0	53.1
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	19.2	16.6	29.1	1,032	695	337	107.2	91.0	169.3	304	210	94	31.6	27.5	47.2
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

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—1938-1948

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																		
1948	479	295	184	21.7	19.1	27.6	633	384	249	28.7	24.9	37.3	24	14	10	1.1	0.9	1.5
1947	552	364	188	23.0	20.5	30.3	785	507	278	32.7	28.5	44.9	26	10	16	1.1	0.6	2.6
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
Recorded																		
1948	624	423	202	21.6	19.5	28.0	845	571	274	29.2	26.3	38.0	27	17	10	0.9	0.8	1.4
1947	725	506	219	23.2	20.6	32.8	1,039	722	317	33.3	29.4	47.5	31	14	17	1.0	0.6	2.5
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

TABLE NO. 13

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1948

International Code No.	Disease	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	Age Not Specified
1	Typhoid fever	5	W	4	M	3						1							1					1					
					F	1																							
			C	1	M	1						1																	
5	Undulant fever	17	W	17	M	13									1	1	1	4	1	2		2	1						
					F	4											3		1										
6	Meningococcus meningitis	20	W	15	M	7	2	3					1					1											
					F	8	2			1		2		3															
			C	5	M	2							1			1													
					F	3		1	1							1													
8	Scarlet fever	341	W	285	M	155	1	6	11	10	9	88	18	3	3	2	1	3											
					F	130		3	9	16	15	67	13	5	1		1													
			C	56	M	21				3	6	6	4		1	1						1							
					F	35	4		6	2	5	12	2	1	1		1												
9	Whooping cough	604	W	317	M	146	14	17	13	11	21	62	6	2															
					F	171	26	8	16	17	23	70	8	1		1	1													
			C	287	M	152	51	23	17	14	11	36																	
					F	135	39	16	16	11	10	41	1																	
10	Diphtheria	46	W	36	M	14		1	1	2		3	3			1			2	1		1		1					
					F	22		2		4	2	5	3		3	1													
			C	10	M	6				1		4	1																
					F	4						1	1			2													
11	Erysipelas	7	W	7	M	2									1					1				2	1	1			
					F	5		1																					
12	Tetanus	5	W	2	M	2						1	1																
			C	3	M	1									1														
					F	2	1					1																	

13	Pulmonary tuberculosis	1,540	W	885	M	561	...	7	3	2	2	1	3	9	36	37	28	42	55	73	67	73	62	28	19	9	3	2	...
					F	324	...	4	1	3	3	1	3	24	43	57	44	39	20	21	15	13	14	8	5	4	1	1	...
			C	655	M	385	3	13	4	4	5	12	6	16	39	34	29	33	39	46	34	25	17	10	11	4	1	...	...
					F	270	3	6	5	5	2	11	10	39	46	42	26	19	17	14	13	1	5	4	2	...	...	...	...
14–22	Tuberculosis, other forms	41	W	15	M	10	...	...	...	...	1	2	...	...	1	...	...	...	...	2	...	...	...	2	1	1	...	...	...
					F	5	...	...	1	...	...	1	...	...	...	...	...	1	1	...	...	...	1	...	...	...	...	...	...
			C	26	M	14	...	1	...	1	...	1	1	1	2	2	1	1	...	1	...	...	2	...	...	...	...	...	...
					F	12	...	...	...	...	...	1	...	...	2	1	3	3	1	...	...	...	1	...	...	...	...	...	...
24	Salmonella infection	1	C	1	M	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Gonococcus infection	6,017	W	1,240	M	1,044	...	...	...	...	...	1	...	88	404	260	114	68	47	20	11	7	...	...	...	...	...	...	24
					F	196	...	...	...	2	...	5	4	33	74	47	15	7	6	3	...	...	...	...	...	...	...	...	...
			C	4,777	M	4,113	1	...	...	2	1	5	16	633	1,814	988	365	163	60	35	10	5	3	1	...	...	...	...	11
					F	664	1	2	8	6	7	19	30	233	221	83	31	16	3	1	1	...	...	...	...	...	...	...	2
25c	Gonococcic ophthalmia	8	W	3	F	3	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	5	M	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26a	Tularemia	3	W	2	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...
			C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
27a	Dysentery, bacillary	21	W	2	M	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	19	M	7	...	2	2	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	12	1	5	3	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27b	Dysentery, amebic	4	W	3	M	3	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
			C	1	M	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27c	Dysentery, unspecified	139	W	18	M	10	2	4	3	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	8	1	3	1	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	121	M	72	23	21	11	2	6	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	49	13	12	6	5	8	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Malaria	1	C	1	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Syphilis	4,745	W	786	M	489	1	...	...	...	...	1	2	23	90	64	48	65	52	36	37	28	20	11	5	1	2	...	3
					F	297	5	1	1	...	...	2	...	24	72	49	33	35	34	9	8	9	6	3	2	2	...	...	2
			C	3,959	M	1,813	21	4	4	3	1	4	8	119	446	354	242	200	112	106	76	54	25	18	5	...	2	...	9
					F	2,146	18	3	2	2	...	7	43	372	571	407	276	184	83	76	30	30	17	15	1	1	1	...	7

TABLE NO. 13—Continued

CASES OF REPORTABLE DISEASES CLASSIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1948

International Code No.	Disease	Totals					Age Groups																							
		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 Age	Not Specified
32a	Infectious hepatitis	6	W	2	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	4	F	4	...	...	...	...	...	...	...	...	1	2	1	...	...	...	...	...	...	...	...	...	...	...	...
32a	Weil's disease	1	W	1	M	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Influenza	54	W	35	M	22	2	2	1	...	...	3	...	1	2	2	1	2	1	...	1	...	2	...	1	...	1	1	...
					F	13	...	1	...	...	1	1	...	...	2	...	1	...	2	...	...	2	...	...	...	1	2	...	...
			C	19	M	12	2	1	...	...	...	...	...	...	...	1	1	...	1	...	2	1	1	...	...	2	...	...	...
					F	7	1	...	...	...	...	...	...	1	...	...	1	1	...	...	1	...	...	1	1	...	...	...	...	...
35	Measles	8,943	W	7,526	M	3,801	71	213	248	333	478	2,354	86	5	3	2	3	...	...	1	...	...	...	1	...	...	...	...	3
					F	3,725	84	242	244	346	419	2,248	101	15	9	7	5	1	1	1	...	...	1	...	1	...	...	...	...
			C	1,417	M	742	50	134	111	89	88	257	11	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	675	43	125	86	75	86	249	8	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
36	Poliomyelitis (paralytic cases)	24	W	15	M	13	...	2	1	...	...	3	5	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	9	M	5	...	...	3	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	4	1	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36a	Poliomyelitis (non-paralytic cases)	14	W	11	M	8	1	...	...	...	...	2	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	3	M	3	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	Acute infectious encephalitis (lethargic)	2	W	1	M	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
38d	German measles	94	W	83	M	39	4	8	2	5	2	15	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	44	5	8	3	3	1	21	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	11	M	7	...	1	...	1	...	3	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	4	...	1	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

38e	Chickenpox	2,451	W	2,222	M	1,140	55	73	49	87	85	730	37	10	4	2	2	2	2	...	1	...	...	...	1	...	...	...	...
					F	1,082	51	59	68	71	73	701	36	13	4	5	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	229	M	119	13	23	8	5	5	58	3	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
					F	110	13	12	12	6	11	50	3	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...
38f	Infectious mononucleosis	18	W	14	M	4	...	1	...	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	10	...	...	1	...	3	1	2	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	4	M	2	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
39b	Typhus fever	1	W	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
39c	Rocky Mountain spotted fever	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
44a	Chancroid	118	W	33	M	30	...	...	...	...	...	...	...	5	4	8	6	6	1	...	...	...	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	85	M	72	...	...	...	...	...	...	2	9	29	17	7	3	2	1	1	1	...	...	...	...	...	...	...
					F	13	...	...	...	...	...	...	1	1	4	3	2	1	...	1	...	...	...	...	...	...	...	...	...
42	Trichinosis	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
48c	Mumps	3,358	W	2,977	M	1,578	7	43	65	95	130	974	114	31	29	32	19	20	12	4	1	1	...	...	...	...	...	...	1
					F	1,399	5	23	48	88	101	870	112	36	29	32	26	9	7	4	4	1	1	...	1	...	1	1	...
			C	381	M	220	4	13	16	18	16	110	13	2	6	11	2	5	2	2	...	...	...	...	...	...	...	...	...
					F	161	...	6	10	9	14	82	20	2	8	4	1	1	1	3	...	...	...	...	...	...	...	...	...
44e, f	Other venereal diseases	74	W	1	M	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	73	M	37	...	...	...	...	...	...	...	3	8	4	6	7	1	3	4	...	...	1	...	...	...	...	...
					F	36	...	...	...	...	...	...	...	3	12	9	2	4	4	1	...	1	...	...	...	...	...	...	...
58a	Rheumatic fever	13	W	6	M	3	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	3	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	7	M	2	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	5	...	...	...	...	1	2	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
58d	Rheumatic heart disease	7	W	6	M	4	...	...	...	...	...	...	...	1	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...
					F	2	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
			C	1	M	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
69	Pellagra	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
78	Lead poisoning (non-occupational)	31	W	4	M	4	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	27	M	17	...	4	9	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					F	10	...	3	6	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE NO. 13—Continued

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1948

International Code No.	Disease	Totals					Age Groups																						
		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 Age	Not Specified
107	Bronchopneumonia	300	W	184	M	93	12	1	1	2	...	2	...	...	1	2	2	3	2	6	6	11	8	9	7	8	5	5	....
					F	91	16	...	...	1	1	3	1	1	.....	1	4	2	3	...	3	5	3	11	3	9	14	9	....
			C	116	M	67	17	2	...	...	...	.....	...	1	3	4	1	4	2	3	6	2	5	8	5	3	1	....	....
					F	49	10	...	...	...	...	1	1	1	4	4	1	3	3	2	1	4	5	2	1	1	..	4	1
108	Lobar pneumonia	407	W	186	M	124	...	1	...	...	...	2	2	3	8	7	9	4	15	17	12	8	11	7	7	6	2	3	....
					F	62	2	...	1	...	...	3	1	2	2	3	2	4	6	6	2	3	2	5	3	7	5	3	....
			C	221	M	145	3	...	...	...	...	3	2	8	7	18	14	16	20	20	9	9	5	5	5	..	1	....	....
					F	76	...	1	...	1	...	.....	2	6	10	2	12	13	3	9	12	1	3	1	..	..	..	....	....
109	Pneumonia, unspecified	89	W	49	M	26	5	1	...	...	...	2	1	1	1	...	...	1	3	1	3	...	4	2	1	..	..	....	....
					F	23	2	...	...	1	...	2	...	1	.....	3	3	1	3	...	1	1	1	1	..	1	1	1	....
			C	40	M	22	1	...	...	...	1	1	...	2	1	3	1	3	1	3	2	1	...	1	..	1	..	....	....
					F	18	3	...	2	...	...	1	...	2	1	1	2	...	1	...	1	2	...	...	..	2	..	....	....
115b	Septic sore throat	38	W	30	M	12	...	...	1	...	1	3	1	...	3	2	1	...	...	...	...	...	...	...	...	...	...	....	....
					F	18	...	1	...	...	2	6	...	2	5	...	...	...	1	...	1	...	...	...	...	...	...	....	....
			C	8	M	4	...	...	...	...	...	.....	...	2	.....	...	2	...	...	...	...	...	...	...	...	...	...	....	....
					F	4	...	...	...	...	...	1	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	....	....
119, 120	Diarrhea and enteritis	35	W	23	M	11	8	...	1	...	...	.....	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	....	....
					F	12	7	...	...	...	1	.....	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	1	....
			C	12	M	8	3	...	...	1	...	.....	...	1	.....	...	...	1	...	...	1	...	...	1	...	...	...	....	....
					F	4	3	...	...	...	...	.....	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	....	....

TABLE NO. 14

REPORTED CASES AND CASE RATES PER 100,000 POPULATION FOR CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1932-1948

Disease	Year	Reported Cases			Rate per 100,000 Population		
		Total	White	Colored	Total	White	Colored
Typhoid Fever (not including paratyphoid fever)	1948	5	4	1	0.5	0.5	0.5
	1947	11	6	5	1.2	0.8	2.6
	1946	10	7	3	1.1	0.9	1.6
	1945	11	6	5	1.2	0.8	2.7
	1944	15	11	4	1.6	1.5	2.2
	1943	20	19	1	2.1	2.5	0.5
	1942	31	24	7	3.3	3.2	3.9
	1941	35	21	14	4.0	3.0	8.3
	1940	23	15	8	2.7	2.2	4.8
	1939	24	14	10	2.8	2.0	6.1
	1938	51	35	16	6.0	5.1	9.9
	1937	68	40	28	8.0	5.8	17.5
	1936	49	32	17	5.8	4.7	10.8
	1935	69	58	11	8.3	8.6	7.1
	1934	81	58	23	9.8	8.6	15.1
	1933	53	46	7	6.4	6.8	4.6
	1932	85	64	21	10.4	9.6	14.2
Measles	1948	8,943	7,526	1,417	933.5	994.2	705.0
	1947	274	167	107	28.9	22.2	55.1
	1946	8,136	6,511	1,625	874.8	870.5	892.9
	1945	206	178	28	22.1	23.8	15.4
	1944	10,324	9,050	1,274	1,101.8	1,197.1	703.9
	1943	2,213	2,101	112	229.8	275.0	56.3
	1942	6,445	6,155	290	632.6	815.9	159.7
	1941	4,458	3,572	886	514.8	511.7	527.4
	1940	88	76	12	10.2	11.0	7.2
	1939	11,833	10,663	1,170	1,383.9	1,544.6	710.3
	1938	1,119	861	258	131.7	125.3	159.0
	1937	9,227	8,140	1,087	1,093.0	1,189.4	680.1
	1936	4,361	4,050	311	519.9	594.4	197.6
	1935	533	453	80	64.0	66.8	51.6
	1934	18,612	16,307	2,305	2,248.0	2,414.8	1,510.2
	1933	128	100	28	15.6	14.9	18.6
	1932	165	150	15	20.2	22.4	10.1
Scarlet Fever	1948	341	285	56	35.6	37.6	27.9
	1947	446	384	62	47.1	51.0	31.9
	1946	806	733	73	86.7	98.0	40.1
	1945	2,202	2,068	134	236.8	276.5	73.6
	1944	2,297	2,182	115	245.1	288.6	63.5
	1943	1,432	1,360	72	148.7	178.0	36.2
	1942	826	724	102	88.2	96.0	56.2
	1941	857	689	168	99.0	98.7	100.0
	1940	571	459	112	66.4	66.2	67.0
	1939	598	477	121	69.9	69.1	73.5
	1938	1,092	954	138	128.5	138.8	85.0
	1937	810	737	73	96.0	107.7	45.7
	1936	1,046	979	67	124.7	143.7	42.6
	1935	1,699	1,595	104	203.9	235.1	67.1
	1934	1,358	1,258	100	164.0	186.3	65.5
	1933	2,075	1,948	127	252.3	289.8	84.5
	1932	2,094	2,011	83	256.3	300.5	56.1

TABLE NO. 14—Continued

REPORTED CASES AND CASE RATES PER 100,000 POPULATION FOR CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1932-1948

Disease	Year	Reported Cases			Rate per 100,000 Population		
		Total	White	Colored	Total	White	Colored
Whooping Cough	1948	604	317	287	63.0	41.9	142.8
	1947	3,247	2,126	1,121	342.9	282.3	577.8
	1946	1,004	759	245	107.9	101.5	134.6
	1945	2,172	1,313	859	233.5	175.5	472.0
	1944	2,349	1,423	926	250.7	188.2	511.6
	1943	3,400	2,414	986	353.1	316.0	495.5
	1942	2,174	1,504	670	232.3	149.4	368.9
	1941	2,560	1,672	888	295.6	239.5	528.6
	1940	5,258	4,124	1,134	611.1	594.9	678.3
	1939	1,575	1,136	439	184.2	164.6	266.5
	1938	1,548	897	651	182.2	130.5	401.2
	1937	3,661	3,184	477	433.7	465.2	298.4
	1936	3,570	2,443	1,127	425.6	358.5	716.0
	1935	1,100	998	102	132.0	147.1	65.8
	1934	4,566	4,035	531	530.6	597.5	347.9
	1933	2,059	1,398	661	250.3	208.0	439.9
	1932	3,759	3,384	375	460.0	505.7	253.5
Diphtheria	1948	46	36	10	4.8	4.7	5.0
	1947	142	108	34	15.0	14.3	17.5
	1946	424	385	39	45.6	51.5	21.4
	1945	353	310	43	38.0	41.4	23.6
	1944	226	188	38	24.1	24.9	21.0
	1943	106	90	16	11.0	11.8	8.0
	1942	74	62	12	7.9	8.2	6.6
	1941	47	36	11	5.4	5.2	6.5
	1940	49	37	12	5.7	5.3	7.2
	1939	67	61	6	7.8	8.8	3.6
	1938	125	103	22	3.7	15.0	13.6
	1937	257	198	59	30.4	28.9	36.9
	1936	146	118	28	17.4	17.3	17.8
	1935	119	100	19	14.3	14.7	12.2
	1934	108	91	17	13.0	13.5	11.1
	1933	137	122	15	16.6	18.1	10.0
	1932	254	196	58	31.1	29.3	39.2
Pulmonary Tuberculosis	1948	1,540	885	655	160.7	116.9	325.9
	1947	1,491	844	647	157.4	112.1	333.5
	1946	1,468	867	601	157.8	115.9	330.2
	1945	1,872	1,216	656	201.3	162.6	360.4
	1944	1,870	1,076	794	199.6	142.3	438.7
	1943	1,901	1,043	858	197.4	136.5	431.1
	1942	1,631	865	766	174.3	114.7	421.8
	1941	1,842	885	957	212.7	128.5	569.6
	1940	1,474	755	719	171.3	108.9	430.0
	1939	1,430	678	752	167.2	98.2	456.5
	1938	1,613	875	738	189.8	127.3	454.8
	1937	1,755	1,012	743	207.9	147.9	464.9
	1936	1,497	862	635	178.5	126.5	403.4
	1935	1,708	982	726	205.0	144.8	468.4
	1934	1,372	811	561	165.7	120.1	367.6
	1933	1,375	880	495	167.2	130.9	329.4
	1932	1,187	720	467	145.3	107.6	315.7

APPENDIX

THE BASIC MEDICAL CARE CONTRACT

THIS AGREEMENT, made this 16th day of June, 1948, by and between the COMMISSIONER OF HEALTH OF BALTIMORE CITY, in his official capacity, (hereinafter called "Commissioner of Health") and the State of Maryland, acting by and through the Board of Regents of the University of Maryland, (hereinafter called "University of Maryland"), located at Lombard and Greene Streets, Baltimore, Maryland.

WHEREAS, Section 44B of Article 43 of the Annotated Code of Maryland (1947 Supplement), as enacted by Chapter 714 of the Laws of Maryland of 1947, among other things, provides for the transfer of certain funds of the State of Maryland to the Mayor and City Council of Baltimore and vests in the Commissioner of Health the power to contract with certain persons and institutions for the medical, surgical, hospital or other medical or nursing care of certain eligible persons in connection with the administration of a plan to care for indigent or medically indigent persons in the City of Baltimore; and

WHEREAS, the parties hereto are entering into this agreement in furtherance of the above mentioned plan.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH, That in consideration of the sum of one dollar ($1.00) and other good and valuable considerations, paid and passing from each of the parties hereto to the other, the receipt of which is hereby acknowledged, the parties hereto, for themselves and their heirs, personal representatives, successors and assigns, do hereby covenant and agree as follows:

1. For the purpose of this agreement, the term "Medical Care Clinic" shall mean an administrative facility associated with the organized outpatient department of the University Hospital, and the term "public assistance client" shall mean a person residing in Baltimore City and who is certified to the Commissioner of Health by the Department of Welfare of the Mayor and City Council of Baltimore as receiving assistance from said department at the time he is so certified.

2. The University of Maryland shall:

(A) Establish, organize, maintain and operate a Medical Care Clinic in or conveniently near to the existing organized outpatient department of the University Hospital and there shall be sufficient space, heat, light, water and other facilities, equipment and appurtenances in such Medical Care Clinic to permit all of the personnel thereof to function efficiently and properly and to perform all of the services and work to be done by, or in, the Medical Care Clinic in accordance with the provisions and requirements of this agreement.

(B) Provide and maintain at all times sufficient and competent personnel to perform all of the obligations, duties and functions to be performed by, or in, the Medical Care Clinic within a reasonable time, including, but not limited to, a medical director, who shall be in responsible charge of the Medical Care Clinic, and clerical assistance.

(C) Register all public assistance clients assigned to it and make and render all needed medical examinations of, consultation services and other treatments to, such clients, and furnish such reports as may be required, from time to time, by the Commissioner of Health in connection with the performance of this agreement.

(D) Have readily available within the building or buildings of the University Hospital, consultation service in the fields of medicine, surgery, obstetrics, pediatrics, eye, ear, nose, throat, gynecology, orthopedics, dermatology, genitourinary disease, psychiatry and neurology, dentistry and radiology, and clinical laboratory facilities; the Commissioner of Health with the consent and approval of the University of Maryland shall have the right, from time to time, to change or modify the aforegoing requirements in order to meet the requirements of any emergency or unusual situation or conditions.

(E) Make a general medical examination of, and formulate a program of medical care if found necessary for, each public assistance client assigned to the Medical Care Clinic whose eligibility for medical care will not expire until six months or more after the date when the client was assigned to the Medical Care Clinic, and furnish to the personal physician chosen by the client a copy or summary of the history and the matters and facts obtained as a result of the examination of the client, and a copy or summary of any program of treatment formulated for him.

(F) For all clients whose eligibility for medical care extends for periods of less than six months, the Medical Care Clinic will be responsible for emergency ambulatory medical service in the clinic only and these clients will not be referred by the Medical Care Clinic to a personal physician.

(G) Provide consultation services for any public assistance client upon the request of the personal physician chosen by the client, subject to the approval of the Director of the Medical Care Clinic, and furnish a copy or summary of the record of such consultation to the personal physician of the client.

(H) This contract shall not affect the arrangements now in existence covering the care of indigent in-patients.

(I) Acting through the Director of the Medical Care Clinic, make every reasonable effort to seek the cooperation of a sufficient number of physicians practicing in the area of Baltimore City from which public assistance clients will be assigned to the Medical Care Clinic under the provisions of this

agreement to provide adequate home and office medical care to such clients, and establish and maintain at the Medical Care Clinic a list of the physicians cooperating in providing such medical care from which any public assistance client may select his personal physician. The name of any physician duly licensed to practice medicine in the State of Maryland who desires to participate in providing home and office medical care to public assistance clients shall be placed on said list upon his request. If any public assistance client has a personal physician, he shall be instructed to continue the services of such physician, and if such client has not a personal physician, he shall be instructed to select one from the list of cooperating and participating physicians. In either case the Medical Care Clinic shall inform the selected physician of the client's registration with the Medical Care Clinic and request the physician's cooperation in furnishing home and office medical service.

(J) Appoint a "Medical Care Clinic Advisory Committee" which shall consist of not less than five members. Not less than two such members shall be appointed from among the physicians cooperating by rendering home and office medical care to public assistance clients and not less than two such members shall be appointed from the medical staff associated with the Medical Care Clinic, and one such member shall be the Director of the Medical Care Clinic who shall serve as Chairman of the Committee. Additional members may be appointed to the Committee from other professional groups participating in serving public assistance clients. The members of the Committee shall consult together and develop plans for the operation of the Medical Care Clinic and shall establish minimum standards for handling the various classes of cases occurring among the public assistance clients assigned to the Medical Care Clinic.

(K) Permit the authorized representives of the Commissioner of Health to examine the records of the Medical Care Clinic at any and all reasonable times during the hours when the Medical Care Clinic is open for business.

(L) Furnish reports of the activities of the Medical Care Clinic to the Commissioner of Health in such form and at such time or times as may be required by the Commissioner of Health.

(M) Not charge or accept any fee from any public assistance client for any service or aid rendered by the Medical Care Clinic.

(N) Set up a restricted fund in the accounts of the University of Maryland involving all material purchased from funds granted to the University of Maryland by the Commissioner of Health through the Mayor and City Council of Baltimore as hereinafter agreed.

(O) Place in a restricted fund all monies received from the Commissioner of Health through the Mayor and City Council of Baltimore in support of the Medical Care Clinic budget from which disbursements will be made

for salaries, honorariums, wages, dispensary fees to University Hospital and other unforeseen salary, operating and maintenance expenses.

3. The Commissioner of Health shall:

(A) On the effective date of this agreement assign to, and during the term of this agreement maintain on, the rolls of the Medical Care Clinic established and maintained by the University of Maryland under this agreement for services not less than 4,000 and not more public assistance clients than may be treated within the available facilities of the Medical Care Clinic during each year of this agreement.

(1) Assign all clients categorized by Paragraph 2 E above for a minimum period of six months.

(2) Assign all clients categorized by Paragraph 2 F above for a minimum period of three months.

(3) Assign all clients on the basis of a cross section of all public assistance clients without reference to the existing state of health of such clients.

(B) Acting through the Mayor and City Council of Baltimore, pay to the University of Maryland for the services rendered or to be rendered by it at the Medical Care Clinic under the terms and provisions of this agreement the following:

(1) The sum of $10.00 per year for each public assistance client assigned to the Medical Care Clinic by the Commissioner of Health. A payment of one-half of the said yearly sum of $10.00, or $5.00 for each of the 4,000 clients originally assigned shall be made on the effective date of this agreement. If and when additional assignments are made, payment will be made for such assigments at the rate of $5.00 for each such client at the end of the calendar month in which any such assignment is made. The remainder of the annual $10.00 charge, or $5.00 shall be paid for each such client at the end of the calendar month succeeding by six months the date on which the first half-yearly payment of $5.00 became due and payable.

If at the end of the period covered by this agreement the costs of operating the Medical Care Clinic (including in said costs such charges for overhead and depreciation as may be properly chargeable thereto) are less than $10.00 per year per capita, the University of Maryland will refund to the Commissioner of Health any amounts received by it over and above its costs; provided, however, that in no event will any amount in excess of $3.00 per capita per year be refunded, so that there will be a minimum charge of $7.00 per capita per year regardless of the cost to the University of Maryland.

The cost of operating the Medical Care Clinic shall be determined by the University of Maryland under accepted accounting practices, and the Commissioner of Health or his duly designated representative shall have the right and privilege to review all accounting practices or procedures

used by the University of Maryland in connection with said Medical Care Clinic.

(2) For dental services rendered, and for drugs dispensed to public assistance clients, the fees or charges shall be fixed on a fee-for-service basis in a schedule or schedules of fees for rendering such services which shall be mutually agreed to and established by the Commissioner of Health and the University of Maryland and which may be changed or modified from time to time by the Commissioner of Health and the University of Maryland acting in mutual agreement. The amount of money to be paid for performing dental services or dispensing drugs as aforesaid in any one year shall not exceed the amount of money available for such purposes during the particular year.

It is mutually understood and agreed that the University of Maryland shall not be required to furnish any service if there are no funds available to pay for the same, or if the University of Maryland has reasonable grounds to believe that it will not receive payment for such services in accordance with the terms of this agreement.

(C) Acting through the Mayor and City Council, agrees to grant the University of Maryland $6,000.00 for material to equip initially the Medical Care Clinic. It is further agreed that the material thus purchased shall become the property of the University of Maryland, provided the medical care program continues at the University of Maryland for one year or more. If the medical care program continues at the University of Maryland for less than one year said material shall become the property of the Baltimore City Health Department upon discontinuance of said medical care program.

4. Whenever any public assistance client selects a personal physician from the list of physicians cooperating in providing medical care for such clients as hereinbefore mentioned, the personal physician of such client shall be informed by the Director of the Medical Care Clinic that he will be paid by the Commissioner of Health, acting through the Mayor and City Council of Baltimore, at the rate of $7.00 per year for rendering home and office medical services to the client.

5. The term of this agreement shall be until August 31, 1949, commencing on the date first hereinabove written, and thereafter shall remain in full force and effect from year to year. Provided, however, that either party to this agreement may terminate this agreement at the end of any yearly term by serving a written notice to that effect on the other party at least six months prior to the proposed termination date. It is the intent of the parties hereto that this agreement shall be reviewed at the end of one year from the date hereof, to the end that the contract may be revised in the light of twelve months' experience.

6. It is understood and agreed that the Commissioner of Health is not entering into this agreement in his personal capacity and that he assumes no personal liability or responsibility under the terms and provisions of this agreement; that he is not acting as an agent or representative of the Mayor and City Council of Baltimore in entering into this agreement; that he is acting only in his official capacity as Commissioner of Health of Baltimore City in entering into this agreement in accordance with the provisions of Section 44B of Article 43 of the Annotated Code of Maryland (1947 Supplement), and that all payments to be made by him hereunder as Commissioner of Health are to be made by the Mayor and City Council of Baltimore out of funds received by it for the purpose from the State of Maryland in accordance with the provisions of Section 44B of Article 43 of the Annotated Code of Maryland (1947 Supplement).

IN WITNESS WHEREOF, The Commissioner of Health, acting in his official capacity, has herewith set his hand and seal, and the State of Maryland, acting by and through the Board of Regents of the University of Maryland has caused this agreement to be executed in its name by its President and its corporate seal to be hereunto affixed, duly attested by its Secretary, the day and year first hereinabove written.

WITNESS:

THOMAS D'ALESANDRO, JR.
Mayor

HUNTINGTON WILLIAMS, M.D.
(SEAL)
Commissioner of Health of Baltimore City

ATTEST:

STANFORD Z. ROTHSCHILD
Secretary

H. C. BYRD
President

SECOND INTERIM REPORT OF THE COMMITTEE TO STUDY THE MEDICAL CARE NEEDS OF BALTIMORE CITY

A Dental Care Program For School Children

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 member of society. Although dental caries, the principal and most prevalent of dental diseases, attacks nearly the entire population, there is wide variation in the dental health of individuals. A single tooth or several may be attacked at a given time, and since one attack confers no immunity to a subsequent attack, repeated dental examinations and treatment become essential. Adequate provision for dental care, therefore, represents a large and important aspect of the medical care requirements of any community. The Committee, consequently, devoted considerable time to the study of the dental care needs of the population. The present report presents the Committee's conclusions and recommendations relative to this phase of Baltimore's medical care needs.

At the request of the Committee's Chairman, the Surgeon General of the United States Public Health Service assigned Dental Surgeon Norman F. Gerrie to assist in the assembling and analysis of data that would give to the Committee a better understanding of the dental problem and its relation to the total medical care needs of the population. The material thus collected is too voluminous to present in detail herein, but it has been drawn on extensively in preparation of this report.

Classification of Dental Disorders

Dental disorders can be classified upon the basis of the treatment required as primary or secondary disorders. The former consists of cavities arising as the result of caries, accretion of calculus to the surfaces of the teeth, irregularities of the teeth causing malocclusion and pathological reactions to infections of the supporting tissues or gums. The loss of teeth that comprises the secondary disorder arises either from direct damage caused by the primary disease or is produced because of the radical treatment required when the primary disorder is neglected. The treatment of the secondary disorder is always the resort to some form of prosthesis. In Table 1 dental conditions have been classified under primary and secondary disorders, and the sequence of treatment required in relation to progressive severity is tabulated.

The most significant, as well as most prevalent, of dental diseases is dental caries. Caries attacks both deciduous and permanent teeth and may give rise to small or large cavities. Evidence of an attack is easily recognized since the cavity will remain, unless filled, or the tooth will have been lost. For this reason, the percentage of the population with

TABLE 1

THE SEQUENCE OF TREATMENT REQUIREMENTS IN RELATION TO THE PROGRESSIVE SEVERITY OF FIVE COMMON DENTAL DISEASES

DISEASE*	PRIMARY DISORDER (CONSEQUENT TO DISEASE)	PRIMARY TREATMENT REQUIRED		SECONDARY DISORDER (CONSEQUENT TO PRIMARY TREATMENT)	SECONDARY TREATMENT REQUIRED
Caries	Cavity(ies) in tooth	Filling(s)		..	..
		Crown		..	..
		Extraction		Edentulous area	Prosthesis
	Cavity(ies) and septic root	Root-canal therapy	Filling	..	..
			Crown	..	..
		Extraction		Edentulous area	Prosthesis
Calculus (tartar)	Accretions on the teeth	Prophylaxis		..	..
Malocclusion	Irregularity of teeth and/or jaws	Orthodontia		..	..
Pyorrhea	Pathology of the tissues supporting the tooth (teeth)	Prophylaxis; drug therapy; surgery		..	..
		Extraction		Edentulous area	Prosthesis
Vincent's Infection	Pathology of the tissues supporting the tooth (teeth)	Prophylaxis; drug therapy		..	..

* In order of prevalence.

decayed or filled deciduous teeth (DF) and the percentage of the population with decayed, missing and filled permanent teeth (DMF) are used as indices of the prevalence of dental caries in deciduous and permanent teeth, respectively.

Caries is known to begin early in life, making its appearance in the deciduous teeth of some children during the first year, soon after the teeth erupt. The number of children whose deciduous teeth are affected increases rapidly after the age of two years and reaches a maximum at eight years of age. Likewise, the percentage of the population whose permanent teeth have been attacked rises from 16 per cent at the age of six years to 97 per cent by sixteen years of age. In Tables 2 and 3 the percentage and number

of individuals who have had one or more attacks of dental caries, as measured by decayed and filled deciduous teeth and by decayed, missing and

TABLE 2

PER CENT AND NUMBER OF CHILDREN WHO HAVE ONE OR MORE DF (DECAYED OR FILLED) DECIDUOUS TEETH PRESENT, WHITE POPULATION, BALTIMORE, 1940

AGE (YEARS)	POPULATION	PER CENT OF POPULATION WITH DF TEETH	NUMBER OF CHILDREN WITH DF TEETH
Under 1	7,866	0.0	..
1	8,685	2.3	199
2	9,181	10.3	945
3	8,504	30.4	2,585
4	8,711	38.0	3,310
5	8,732	62.5	5,457
6	8,474	81.8	6,931
7	8,685	86.1	7,477
8	9,285	88.4	8,207
9	9,281	81.1	7,526
10	9,907	73.9	7,321
11	10,141	45.1	4,573
12	11,030	29.5	3,253
13	10,996	9.7	1,066
14	11,146	6.0	668
15	11,461	3.6	412

TABLE 3

PER CENT AND NUMBER OF INDIVIDUALS WHO HAVE ONE OR MORE DMF (DECAYED, MISSING OR FILLED) PERMANENT TEETH, WHITE POPULATION, BALTIMORE, 1940

AGE (YEARS)	POPULATION	PER CENT OF POPULATION WITH DMF TEETH	NUMBER OF INDIVIDUALS WITH DMF TEETH
ALL AGES....	692,705	86.3	597,811
Under 6	51,679	..	..
6	8,474	15.9	1,347
7	8,685	36.2	3,143
8	9,285	53.4	4,958
9	9,281	70.6	6,552
10	9,907	78.3	7,757
11	10,141	81.9	8,305
12	11,030	87.8	9,684
13	10,996	90.8	9,984
14	11,146	95·3	10,622
15	11,461	96.5	11,059
16	12,001	97.0	11,640
17 and over	528,619	97.0*	512,760

* Estimated.

filled permanent teeth, are calculated for the white population of Baltimore in 1940. These tables show clearly that few in the population reach adolescence without evidence of dental caries.

Estimated Dental Needs of Baltimore City

From data collected in many parts of the country and analyzed by Dr. Gerrie, it was possible to estimate the accumulated dental needs of the population of Baltimore. The results of these computations, given in Appendix Tables A and B, are summarized in Table 4. Although based

TABLE 4

ESTIMATED TOTALS OF SPECIFIED DENTAL SERVICES REQUIRED FOR INITIAL CARE, WHITE POPULATION, BALTIMORE, 1940

ITEM OF SERVICE	PER CENT OF POPULATION REQUIRING SERVICE	NUMBER OF POPULATION REQUIRING SERVICE	AVERAGE RATE OF REQUIRED SERVICE PER PERSON	NUMBER OF ITEMS OF SERVICE REQUIRED*
Deciduous teeth	8.6	59,930		
Fillings			3.8	264,881
Extractions			0.8	55,666
Permanent teeth	86.3	597,811		
Fillings			3.5	2,421,079
Extractions			2.0	1,373,686
Prophylaxes	77.7	538,019	1.3	699,424
Crowns	**	**	0.1	63,882
Bridges				
Fixed	14.7	101,835	1.4	145,101
Removable	5.9	40,888	1.3	54,300
Partial dentures	13.4	93,049	1.0	93,049
Full dentures				
Lower	9.3	64,340	1.0	64,340
Upper	13.7	95,063	1.0	95,063
Pyorrhea treatment	9.6	66,742	**	66,742***
Vincent's Infection Treatment	1.4	9,667	**	9,667***
Orthodontia	**	**	**	**

* Totals computed from age-specific rates.
** Data not available.
*** Minimum requirement.

on the white population, there is no evidence that the dental needs of the Negro population of the City would be proportionately any less. The total dental care needs of the population can, therefore, be considered one-fourth greater than those indicated in these tables.

The initial care that would be required to restore the full dental function in individuals represents a task far too large for any community to undertake. It would require more than 2,400 dentists, or nearly four times the number in practice in Baltimore, to care for the accumulated dental needs

of the population within a period of one year. The disparity between the estimated dental services required and those received annually is shown in Table 5.

It is apparent from Table 5 that the dental services received annually by the population provide for only a small portion of the services currently required. This accumulated dental need has arisen in part through neglect and in part through lack of suitable oral hygiene during childhood, adolescence and young adulthood. As a consequence, the professional efforts of dentists must be devoted largely to restorative dentistry, that is, the treatment of the secondary disorder which is the consequence of neglect of adequate dental hygiene in youth.

TABLE 5

ESTIMATED TOTALS OF SPECIFIED DENTAL SERVICES REQUIRED TO MEET ACCUMULATED NEEDS, AND ANNUAL RECEIPT OF SERVICES, WHITE POPULATION, BALTIMORE, 1940

ITEM OF SERVICE	TOTAL SERVICES REQUIRED	SERVICES RECEIVED ANNUALLY	DEFICIENCY
Prophylaxes	699,424	94,907	598,094
Fillings[a]	2,686,860[b]	383,803[c]	2,303,057[d]
Extractions[a]	1,429,352	254,825	1,174,527
Crowns	63,882	42,232	221,051
Bridges	199,401		
Partial dentures	93,049	*	*
Full dentures	159,403	12,216	147,187

[a] Deciduous and permanent teeth.
[b] Teeth requiring one or more fillings.
[c] Number of fillings.
[d] Minimum (The average carious tooth requires more than one filling.)
* Data not available.

Assuming that the initial care required by the population could be provided for, fillings and prophylaxes would form the principal services required by the population each year thereafter. Prostheses would be confined largely to denture adjustments and repairs. An estimate of these requirements has been summarized in Table 6. The requirements for fillings and prophylaxes in this situation would far exceed the volume of these services now received annually. Extractions, on the other hand, would be reduced to one-third of the present number.

From this summary and the tabulation of primary and secondary dental disorders in relation to sequence of treatment requirements in Table 1, it is obvious that the great defect in meeting the dental needs of the population of Baltimore has been the failure to meet the annual dental requirements for fillings. The public aspects of dental care, therefore, revolve largely around the provision for the early recognition of dental caries in childhood and the institution of effective treatment at that stage.

A survey of the practice of a sample of Baltimore's dentists during a particular week indicated that whereas one-third of the population of Baltimore is under 18 years of age, only about one-fifth of the services rendered by these dentists was to children. In many instances the services of the dentist were confined exclusively to adults. Furthermore, there exists in Baltimore's schools today only a very limited dental program,

TABLE 6

ESTIMATED TOTALS OF SPECIFIED DENTAL SERVICES REQUIRED FOR ANNUAL MAINTENANCE CARE, BY ITEM OF SERVICE, WHITE POPULATION, BALTIMORE, 1940

ITEM OF SERVICE	PER CENT OF POPULATION REQUIRING SERVICE	NUMBER OF POPULATION REQUIRING SERVICE	RATE OF SERVICE REQUIRED PER PERSON	NUMBER OF ITEMS OF SERVICE REQUIRED
Prophylaxes	55.5	384,174	1.21	463,521
Deciduous teeth				
Fillings	*	*	*	*
Extractions	*	*	*	*
Permanent teeth				
Fillings	52.9	292,319	3.40	1,189,615
Extractions**	8.8	48,462	1.77	85,959
Prostheses**	37.7	208,106	1.0	208,133
Full upper dentures				1,656
Full lower dentures				1,104
Partial dentures				17,666
Fixed bridges				1,656
Crowns				5,521
Complete denture remakes				11,042
Partial remakes				14,906
Denture repairs				43,614
Denture adjustments				110,968
Orthodontia	*	*	*	*
X-rays**	23.1	161,143	*	*

* Data not available.
** For ages above 16.

which is confined to emergency extractions. In contrast to many large cities, there are very few public dental clinics in Baltimore City. Except for the one associated with the dental school of the University of Maryland, all of these have limited facilities.

The greatest relative deficiency in dental care in Baltimore is, therefore, found among children and among persons with low income. These considerations led the Committee to recognize the need for the formulation of two specific programs:

(1) Inauguration as early as possible of a long-range, constructive program of dental care and hygiene in the schools of Baltimore,

making provision for dental treatment as well as for dental examinations and dental health education.

(2) Formulation of a program of limited dental care for those groups of the population unable to pay for emergency dental treatment, especially clients of the Department of Public Welfare.*

In addition to these two specific lines of approach, the Committee believes the dental profession of Baltimore should continue its efforts, in cooperation with other community leaders, to explore the means by which maintenance dental care can be furnished to groups of the population at reasonable rates on some form of prepayment basis.

Proposed School Dental Program

The dental care needs of the entire population can never be met on a practical and economical basis until the dental services required can be supplied on a current basis and thereby eliminate accumulation of dental needs. The attainment of such a goal must be evolutionary. The program should start with a specified group of the population that can be given complete initial care in the first year and such maintenance care as is required on an annual basis thereafter.

A constructive program of dental hygiene for children in the public and parochial schools could provide a start toward the attainment of this goal. A practical program would begin with a provision for the examination of all kindergarten and first-grade children in the public and parochial schools, together with treatment of those whose parents request such care. The following year a similar program would be followed. In addition, those children in the second grade who had received treatment the year before, either at the school dental clinic or by a private dentist, would be examined and offered such dental treatment as required. The program would be continued by the additon of all new entrants to school each year, and the groups previously examined would be given annually the required maintenance care.

Such a program should include the following principles:

(1) The administrative direction of the program should be under a full time dentist who has had training and experience in public health aspects of dentistry and in child dentistry.

(2) The program should provide dental treatment facilities as well as dental examinations and dental health education.

(3) If there must be limitations to the program due to lack of funds or personnel, such resources as are available should be applied on the basis of number of children of age groups chosen for care, rather than

* Specific recommendations for such a program were included in the plan for medical care of welfare clients that was presented in the *Interim Report of the Committee on Medical Care*, Maryland State Planning Commission, January, 1947.

on the basis of the number of services or types of treatment made available. Complete dental care should be provided to these groups on a continuing basis in preference to providing limited services for a large number of individuals.

(4) The program should begin with the youngest age group practicable and should provide continuity of care to this group through future years.

(5) The program of dental care for children should provide the following minimum services:
   a. Examination and diagnosis
   b. Prophylaxis
   c. Restoration of carious and injured teeth
   d. Pulp treatment
   e. Treatment of gingivitis and mouth infections
   f. Extractions

It is further recognized that any comprehensive program for dental care for children should make provision for orthodontia in cases where malocclusion creates a health hazard. The United States Children's Bureau recognizes that the provision for the treatment of this defect is an acceptable expenditure under its program for aid to crippled children. The school dental program should also make provision, in cooperation with dental specialists in this field, for the correction of these defects when required.

Programs similar to the one outlined herein have been inaugurated in several communities in recent years. During the first year of such programs around 30 per cent of the children participate fully in the program. This percentage gradually increases, so that at the end of ten years an estimated 70 per cent of the school children are in the maintenance program.

Estimated Manpower and Budget for the First Year

In 1940 there were 11,185 children of 5 and 6 years of age attending school in Baltimore. Of this number 3,500 might be expected to participate in the program for dental treatment during its first year.

The following budget is suggested for the first year:

1 public health dentist	$6,000
15 contract dentists, giving 3 hours service per day during school year at $1,500 each*	22,500
1 senior stenographer	1,600
2 senior clerks at $1,600 each	3,200
equipment	10,000
supplies	2,500
Total	$45,800

* This service may be provided in whole or part by making use of a smaller number of full time dentists or by employing dental hygienists, which was legalized at the last regular session of the Maryland Legislature, Chapter 891 of the Acts of 1947.

A summary of this budget and the estimated budgets that would be required for subsequent years, as the program includes a larger proportion of the school population and follows them through the upper grades, are given in Table 7. After the elapse of this period the budget would remain constant except for changes in the number of children enrolled in the schools.

The cost of the school dental program should be part of the health appropriation of the City. The suggested program substitutes a constructive preventive dental program for one that, as previously stated, is confined to emergency dental care consisting largely of extractions.

The dentists in private practice should be fully integrated into this school program. The program should emphasize the examination of all children in the classifications dealt with above. Following examination,

TABLE 7

ESTIMATED NUMBER OF DENTISTS AND BUDGET FOR SUBSEQUENT YEARS

YEAR	DIRECTOR	PART TIME DENTISTS (CONTRACT)	PROFESSIONAL SALARIES	CLERICAL SERVICES, EQUIPMENT AND SUPPLIES	TOTAL ESTIMATED BUDGET
1st	1	15	$28,500	$17,300	$45,800
2nd	1	23	41,000	20,400	61,400
3rd	1	30	52,000	22,100	74,100
4th	1	40	67,000	23,600	90,600
5th	1	51	84,000	22,100	106,100
6th	1	61	99,500	21,600	121,100
7th	1	74	119,000	21,600	140,600
8th	1	88	140,000	21,600	161,600
9th	1	98	155,000	21,600	176,600

parents should receive notification of the results of the examination and the recommended treatment. They should be informed in this notice that parents financially able to do so are expected to use the services of private dentists in securing the recommended treatment, but that the proposed dental service, within the limits of its resources, will provide recommended treatment to those unable to secure it otherwise. These children will form a large portion of the 30 per cent not included in the maintenance program in the schools. If they furnish the school dentist at least annually with a certificate from their private dentist indicating that the child has received a dental examination followed by such treatment as is required, these children could well be considered as participating in the school dental program. The cost of the services of the private dentist in these cases would be borne by the parents.

The children who continue to participate in such a program through the junior high school should have at that time no cumulative dental needs. They would be then in a position to become prospective subscribers to any prepayment plan for dental care that might be developed in the

interim by the dentists and other proponents of more comprehensive and adequate dental care for the population of Baltimore.

Recommendations

The Committee to Study the Medical Care Needs of Baltimore City believes that the program for school dental care proposed above is practical and is based on sound principles. It, therefore, recommends that:

(1) The Division of Dental Hygiene in the Baltimore City Health Department be enlarged under the direction of a full time public health dentist.

(2) An expanding program of dental care be inaugurated in the public and parochial schools of Baltimore City in accordance with the program outlined in this report.

Committee to Study the Medical Care Needs of Baltimore City

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APPENDIX TABLE A*

ESTIMATED NUMBER OF TEETH† REQUIRING FILLING AND EXTRACTION, BY AGE, WHITE POPULATION, BALTIMORE, 1940

Age Group (years)	Population	Number of Teeth Per Person Requiring Fillings	Number of Teeth Requiring Fillings	Number of Teeth Per Person Requiring Extraction	Number of Teeth Requiring Extraction
All ages.....	692,705	3.88	2,686,860	2.06	1,429,352
0–2	25,732	0.11	2,896	0.0	..
3–5	25,947	1.77	45,937	0.63	16,346
6–8	26,444	5.71	151,238	0.67	17,791
9–11	29,329	4.11	120,557	0.60	17,603
12–14	33,172	3.01	99,891	0.27	8,829
15–19	61,459	6.76	415,363	0.92	56,418
20–24	65,585	6.50	426,303	1.30	85,260
25–29	62,589	5.55	347,455	2.00	125,521
30–34	58,212	5.40	314,345	1.90	110,603
35–39	54,261	3.85	208,851	2.35	127,603
40–44	51,694	3.40	175,795	2.85	147,391
45–49	47,870	2.75	131,645	3.95	189,049
50–54	41,778	2.20	91,909	3.55	148,328
55–59	32,886	1.46	61,002	3.87	127,318
60–64	26,924	1.10	29,616	3.61	97,284
65 and over	48,823	1.31	64,057	3.15	154,008

* Based largely on data from *A Study of Dental Needs of Adults in the United States*, Economic Committee, American Dental Association, 1940.

† Deciduous and permanent dentitions.

APPENDIX TABLE B*

ESTIMATED PROSTHETIC REQUIREMENTS, BY AGE, WHITE POPULATION, BALTIMORE, 1940

Age Group (years)	Number of Crowns Required	Number of Bridges Required		Number of Dentures Required		
		Fixed	Removable	Partial	Full Upper	Full Lower
All ages.....	63,882	145,101	54,300	93,049	95,063	64,340
0–14	..	..	..	..	..	..
15–19	6,146	14,148	2,340	2,486	797	338
20–24	6,558	19,082	5,968	5,814	1,180	459
25–29	6,259	21,909	6,797	7,043	2,156	1,407
30–34	5,821	22,327	7,276	8,382	3,406	1,602
35–39	5,426	19,770	7,492	11,005	6,900	3,863
40–44	7,763	15,000	7,031	11,089	9,924	6,929
45–49	7,179	10,103	5,673	12,087	12,376	8,761
50–54	6,286	9,130	4,095	8,815	14,497	10,194
55–59	4,870	7,065	3,112	8,229	12,411	8,136
60–64	2,692	2,136	1,993	6,412	11,605	9,054
65 and over	4,882	4,431	2,523	11,687	19,811	13,597

* Based largely on data from *A Study of Dental Needs of Adults in the United States*, Economic Committee, American Dental Association, 1940.

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